



BRI International Green Development Coalition  
2021 Policy Study Series

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# **Green Development Guidance for BRI Projects Phase III:**

## Study of China Overseas Investment Funds

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10<sup>th</sup>

## Abstract

In order to promote high-quality development in key areas of the BRI construction such as green infrastructure, green energy and green finance, the BRI International Green Development Coalition (BRIGC), together with the World Resources Institute, ClientEarth, the World Wide Fund for Nature and other domestic and foreign partners, has continued to carry out research on Green Development Guidance for BRI Projects and achieved positive results.

In 2019, the first phase of the project proposed a "red, yellow, and green light" classification system aimed at promoting green development of projects and reducing ecological environmental risks, to help financial institutions and enterprises avoid high-risk environmental projects. In 2021, the second phase of the project will provide operational guidance and application tools for the application practice of enterprises and financial institutions through the preparation of application manuals for enterprises and financial institutions, as well as green development guidelines for the railway and highway projects.

On the basis of the preliminary research, the third phase focuses on overseas investment cooperation funds. Through research and analysis of typical fund investment and financing models, support project types, and environmental management requirements, policy recommendations are proposed to promote fund greening. Due to its official background, investment and management methods, activity areas and other characteristics, the Overseas Investment Cooperation Fund provides financing support for enterprises in the investment and construction of the BRI project, playing the role of a national platform.

From the perspective of environmental management, some funds have established environmental management systems, but there are still some deficiencies in green finance support measures, environmental information disclosure, ESG system construction, etc. Among them, the China-ASEAN Investment Cooperation Fund has released the "Guidelines for Social Responsibility and Environmental Protection of Investment in the ASEAN Region", established a project classification system based on environmental and social impacts, and constructed a process for full lifecycle management. The China-Africa Development Fund has established a negative list of overseas coal power projects and projects that do not meet the environmental protection standards of the host country; In terms of process management, for projects that avoid major ecological and environmental risks in the process of project establishment, analyze the ecological environmental impact of the project in the process of review, and monitor the social benefits of project implementation in the process after investment.

From the perspective of the project portfolio supported by the fund, infrastructure, production capacity cooperation, mining and other projects are the main entities supported by the fund's investment and financing, providing assistance for the economic and social development of the host country. At the same time, "small and beautiful" projects such as green, environmental protection, livelihood, agriculture, and information are gradually receiving attention

Based on the research results, the report proposes suggestions to promote the high-quality development of overseas investment cooperation funds, including strengthening



BRIGC

collaboration between funds, establishing and improving ESG management systems, and increasing support for green and livelihood projects.

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## Chapter 1 Background

### I. Background and Significance

Since the Belt and Road Initiative (BRI) was proposed in 2013, "green" has been articulated as a basic requirement for the construction of the BRI. The State Council in 2015 issued the *Vision and Action for Promoting the Construction of Silk Road Economic Belt and 21st Century Maritime Silk Road*, which highlighted the concept of ecological civilization in investment and trade, cooperation on environment, biodiversity and climate change, and building of a green BRI. In 2017 and 2019, President Xi Jinping stressed that the construction of the BRI should take green as its underlying color and practice the new concept of green development. Since 2021, at the annual Boao Forum for Asia, the Leaders' Climate Summit and other key international occasions, Chinese leaders have repeatedly stressed the need to accelerate the construction of the Green BRI. Greening the BRI has also been a part of China's recent top strategy documents, such as *The Resolution of the CPC Central Committee on the Major Achievements and Historical Experience of the Party over the Past Century* adopted at the Sixth Plenary Session of the 19th CPC Central Committee, as well as the CPC Central Committee and the State Council documents of *Opinions to Completely, Accurately, Comprehensively Implement New Development Concept, Do a Good Job in Carbon Peaking and Carbon Neutralization* and the *Action Plan for Carbon Dioxide Peaking Before 2030*.

In the past ten years since its launch, the BRI has deepened the concept of green, low-carbon and sustainable development in its breadth and focus. In 2022, the Ministry of Ecology and Environment (MEE) and the Ministry of Commerce issued the *Guidelines for Ecological Environmental Protection of Foreign Investment Cooperation and Construction Projects* to further standardize and optimize the whole life cycle of eco-environmental and climate management of overseas investment projects. In the same year, the Development and Reform Commission (NDRC) and ministries jointly issued the *Opinions on Promoting Green Development of BRI*, stating 15 specific tasks needed to balance the role of government guidance and the main role of enterprises, and to integrate green and low-carbon concepts into the whole process of all areas of economic and social development in BRI. The China Banking and



**Insurance Regulatory Commission (CBIRC)** issued the *Green Finance Guidelines for the Banking and Insurance Industry*, which promotes financial institutions' role in green and low-carbon construction of the BRI in its requirement for the banking and insurance sector establishing and improving management systems and processes.

**The investment and operation of overseas projects is an important way for Chinese enterprises and financial institutions to participate in BRI construction.** The investment and management of overseas projects concerns the management of labor, equipment, technology, engineering and investment, which requires and tests the comprehensive capacity of the investor. In the past, the construction and operation of infrastructure and clean energy projects, such as the Mombasa-Nairobi Standard Gauge Railway and the China-Laos Railway, has provided a model for Chinese and foreign cooperation in green projects and the promotion of local sustainable development. Against this background, the "Green Development Guidance for BRI Project" series of studies ("Green Development Guidance" or GDG) aims to provide guidelines and practical case references for green development of overseas projects. This will also support the implementation of the "14th Five-Year Plan" tasks that underline green and low-carbon as one of the priorities of foreign investment cooperation, and the risk prevention of overseas projects.

## **II. The Green Development Guidance Study Series**

**The Belt and Road Initiative International Green Development Coalition (BRIGC) launched the "Green Development Guidance for BRI Projects" research project in 2019.** The research project focuses on BRI projects' impact on environment protection, in regard to biodiversity conservation, pollution and climate change, and develops a categorization mechanism ("green light system") for BRI projects from environmental perspective with a positive and negative list proposed and explores the green solutions for countries and projects jointly building BRI.

**The phase I** Baseline Study report was released in December 2020, proposing a "1 set of project classification system" and "9 recommendations" (referred to as "1+9" framework recommendations) to promote the green development of BRI projects and reduce the eco-environmental and climatic risks of the projects (Appendix 1). **The phase II** focuses on the application of the guidelines and launched the reports "Application Manual for Enterprises and Financial Institutions" and the "Green Development Guide for the Railway and Highway Sectors". The Application Manual

provides operational guidelines and application tools for project classification and management based on the needs of enterprises, financial institutions and other stakeholders involved in the BRI construction. It proposes action roadmaps for implementing the "1+9" framework. The railway and highway sector guidance goes to the specifics of construction principles, site selection, ecological and environmental impact, information disclosure and public participation, and builds green technologies and cases covering the three stages of project design, construction and operation and maintenance.

**The findings and recommendations from phase I and phase II have provided support to the draft and update of green BRI policies** and the governmental guidance:

(1) Regulating overseas coal power projects

Based on the impact of greenhouse gas emissions among other environmental aspects, the Phase I project proposed a classification system for BRI projects, **red flagging the coal power as the key regulated projects (red light projects)**. This proposed a base for further domestic and international discussion. In September 2021, President Xi Jinping announced at the UN General Assembly that China will step up support for other developing countries to develop green and low-carbon energy and would not build new overseas coal power projects. In 2022, the *Opinions on Promoting Green Development of BRI* further proposed to “completely stop the construction of new overseas coal power projects”.

(2) Enhancing assessment and support to green projects

The project classification system takes no significant harm in terms of environment, ecology and GHG emissions as the principle, and **proposes a list of green light projects as encouraged category**. This is in line with the recent industrial approach in China's guidance on foreign investment cooperation and green BRI construction. The principles of green projects are reflected in the Railway and Highway Sector Guidance, which is highly compatible with the 2022 *Guidelines for Ecological Environmental Protection of Foreign Investment Cooperation and Construction Projects* and the *Opinions on Promoting Green Development of BRI*.

(3) Improving project environmental management

The Application Manual in phase II provides operational guidelines for enterprises and financial institutions to **enhance the ecological and environmental management of overseas projects throughout the process**. It works in line with and contributes to the policies advancement in foreign investment cooperation and the deployment of carbon





neutrality goals (Appendix 2), particularly on adopting the highest of international or Chinese standards in BRI projects when the project host country lacks relevant standards or requires less, promoting the “hard connection” of infrastructure and “soft connection” of rules and standards, and building up a system for enterprises and financial institutions to manage the whole process of ecology and environment in overseas projects.

### III. Overview of the GDG Phase III

**Building on the Baseline and Application Manual of the first two phases, Phase III of the GDG research project focuses on China’s foreign investment cooperation funds** that are deeply involved in BRI investments and provides analysis and recommendations on the financing practices and daily environmental management systems. The purpose is to provide more targeted and operational guidelines for specific investors in BRI countries, to form replicable experiences, and build examples to support policy requirements such as “promoting voluntary guidelines and best experiences related to green investment and financing, and capacity building in the field of green finance” as proposed in the *Opinions on Promoting Green Development of BRI*. **Due to the nature, investment and management methods, and the regional focus, the BRI investment cooperation funds play a unique role** in promoting the development of green projects along the Belt and Road. In recent years, China has set up official funds such as Silk Road Fund, China-ASEAN Investment Cooperation Fund, China-Africa Development Fund, China-Latin America and the Caribbeans Cooperation Fund, China-Kazakhstan Capacity Cooperation Fund among others. These funds, providing financing support for project investment and construction, equity investment and acquisition and mergers and acquisitions, have facilitated enterprises with the opportunity to invest and build projects overseas, especially in specific regions of the BRI. These funds **have the advantage of long-term and large capital financing** as equity investor and developmental financier also in potentially higher risk projects. In their equity investment, they provide strong support for enterprises to obtain more diverse debt and equity financing while also exercising the guiding power as national platforms. These funds, on one hand, focus on overseas investments, which are more focused and more flexible in management compared to other banking and financial institutions. On the other hand, these funds can attract international co-investors to accelerate implementation of green development targets.

As such, collaboration and communication with Chinese and international stakeholders on the green finance for the BRI can help **cultivate, accumulate and scale-up the experience**. Moreover, these funds are established and guided by governments or state-owned developmental and policy banks, providing a basis for the recommendations and feedback from the funds to be **shared among a wider range of investors**.

The ambition of the research project is therefore to **provide targeted recommendations and advance implementation in support of the overarching goals of green BRI development through diversified financing**.

To achieve this target, **the Overseas Investment Cooperation Fund (OICF) Study analyzes current green investing experiences of Chinese and international development funds** to understand progress, challenges and further improvement ideas. The Chinese funds for the analysis were selected based on the following criteria: (1) the fund has supporting BRI construction in its task and business scope; (2) it has invested in BRI; (3) there's good information and data availability for analysis; (4) has established ecological and environmental management requirements; and (5) is established by the government. The analysis aims to provide information on four aspects:

1. **Investment portfolio analysis** using the project classification system proposed in GDG.
2. **Analysis on the environmental management system** benchmarking to the “1+9” action framework and application recommendation to financial institutions.
3. **Provision of recommendations with examples** from international cases that are referenceable to OICFs' application of “1+9” action framework in improving green transition.
4. **Discovery of priority work areas** to OICFs and the GDG study project itself to further coordinate among stakeholders and better fit into the demand of financial institutions based on interviews with the OICFs.

**The remaining report includes three more chapters: Chapter 2** analyzes the application of the BRI project green development “1+9” action framework for the targeted Overseas Investment Cooperation Funds (OICFs) including the China-ASEAN Investment Cooperation Fund, the China-Africa Fund, and the China-Latin America and the Caribbeans Cooperation Fund. In this chapter, based on an investment portfolio analysis using the GDG project classification system and an examination of the environmental management system of the OICFs, the challenges and areas of priority



are proposed. **Chapter 3** demonstrates international references from green investment and development funds against the “1+9” framework. **Chapter 4** provides recommendations for OFIC funds to accelerate green transformation and supports the further research and formulation of relevant guiding policies.

## Chapter 2 Overseas Investment Cooperation Funds in BRI

### I. BRI Investment Regional Landscape

China has been among top three overseas investor globally in the past few years, and the proportion investment along the Belt and Road was steadily increasing. In 2021, China's non-financial direct investment in countries along BRI increased by 14.1% (Figure 1). Among these destinations, developing countries and emerging economies in Southeast Asia, Africa, Latin America and other regions are undergoing fast social development, economic transformation and green recovery after the epidemic. As countries are releasing development potential, they show huge demand for investment in infrastructure construction and industrial development. To meet such demand is also an important part of the BRI international cooperation and investment. According to 2020 data, these regions and countries received \$35.7 billion direct investment from China, accounting for 23% of China's overseas investment total (Figure 2). Some regions surpassed the EU, the US and others and emerged as the major markets to Chinese investors.

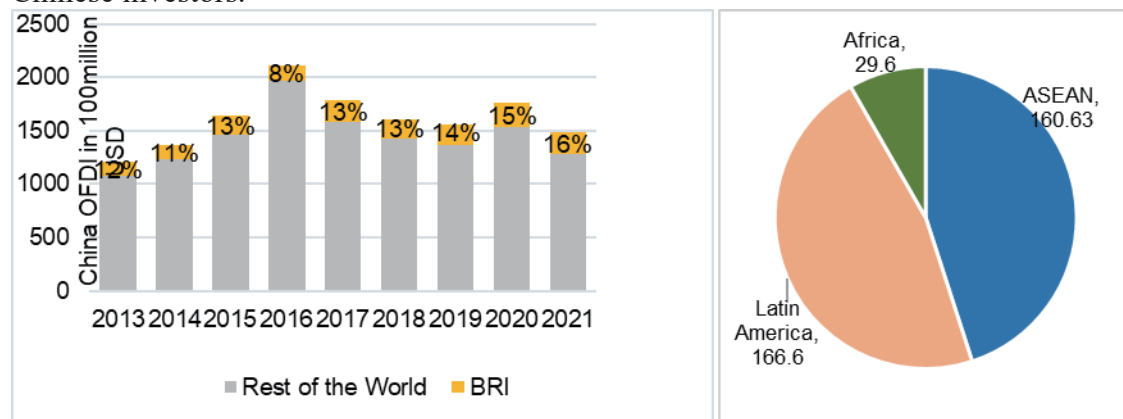


Figure 1 China's overseas investment in BRI participating countries from 2013 to 2021 (left)  
 Figure 2 China's 2020 investment in ASEAN, Africa and Latin America, in USD 100 million (right)

(Source: (MOFCOM, 2021) (MOFCOM, 2022))

Investment in BRI plays an important role in closing the gap in financing for infrastructure development in Southeast Asia, Africa, and Latin America. For example, between 2013 and 2021, 62% of China's total BRI investment in power generation infrastructure flowed to these countries and financed the construction of over 60GW of installed capacity (WRI, 2022).

Addressing the demand for cooperation and investment in Southeast Asia, Africa, and Latin America regions, several special equity funds have been launched since 2007, led by national developmental and policy banks. By the end of 2021, China Exim Bank leads and invested in 9 overseas investment and cooperation funds. In



addition to leading the China-Africa Development Fund, the China Development Bank also holds share in a number of funds involved in overseas investment and industrial cooperation. In these OICFs, the China-ASEAN Investment Cooperation Fund, the China-Africa Development Fund, and the China-Latin America and the Caribbeans Cooperation Fund are among the major ones, particularly in delivering the outcomes and pledges from the summit forums and high-level visits that feature BRI cooperation and development. By 2021, the cumulative investment in these funds exceeds USD 8 billion, and a total of USD 30 billion is planned to be raised.

**All three funds take energy, infrastructure construction and manufacturing capacity as their main investment areas, guiding and mobilizing private investment** from Chinese enterprises in the form of equity or equity plus debt financing. In addition to indirect investment via other overseas cooperation funds and performing fund management services, these funds mostly work directly on equity investment in BRI projects (Table 1).

**Table 1 Overview of the three overseas investment and cooperation funds**

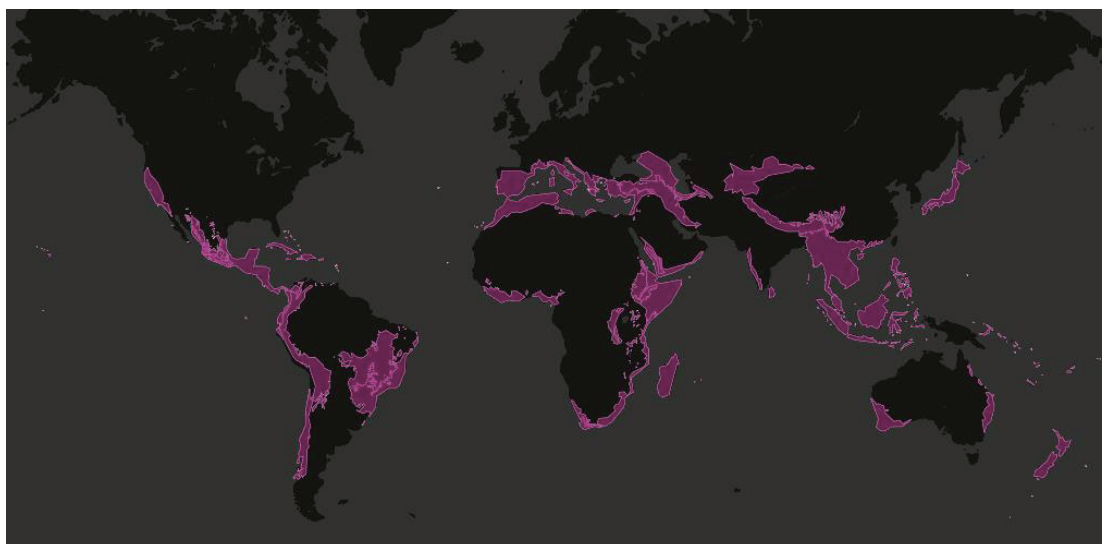
Fund	China-ASEAN Investment Cooperation Fund	China-Africa Development Fund	China-Latin America and the Caribbeans Cooperation Fund
BRI countries in the business covered region <sup>1</sup>	10 countries	52 countries	20 countries
Occasion of establishment	Implementing the outcomes of the 11 <sup>th</sup> China-ASEAN Leaders Meeting in 2009	Implementing the committed cooperation with Africa announced at the Beijing Summit Forum on China-Africa Cooperation	Implementing the outcomes of the 2014 China-Latin America and Caribbean Leaders Meeting
Year of operation	April 2010	June 2007	January 2016
Affiliation	Exim bank of China	China Development Bank	Exim bank of China
Source of funds	Exim Bank of China (Majority stockholder, 61% shareholding)	China Development Bank (Majority stockholder, 85% shareholding)	Exim Bank of China (Majority stockholder)
Investment approach	Non-controlling equity and quasi-equity financing	Government-guided and market-based equity financing; Management of bilateral third-party cooperation and development funds	Government-guided and market-based equity and debt financing
Main investment areas	Infrastructure, energy and natural resources investment in the ASEAN region	Sectors of agriculture and livelihood, capacity cooperation, infrastructure, energy and minerals, industrial parks, etc. in Africa	Energy resources, infrastructure, agriculture, manufacturing, science and technology innovation, information technology, and capacity cooperation in Latin America

(Source: Official websites of China-ASEAN Investment Cooperation Fund, China-Africa Development Fund, China-Latin America and the Caribbeans Cooperation Fund and the 2020 and 2021 annual reports from Exim Bank of China and China Development Bank. )

<sup>1</sup> BRI portal ([www.yidaiyilu.gov.cn](http://www.yidaiyilu.gov.cn)) shows that as of March 2022, a total of 149 countries have signed cooperation documents with China on jointly building the BRI.



**These three funds operate on the principle of aligning with the social, economic, and environmental development needs and sustainable development visions of the regions they serve.** This can be in support of the host countries' ambition to achieve near-zero emissions and in addressing environmental and biodiversity pressures for sustainable development. Almost all countries in the fund-covered regions have submitted nationally determined contribution (NDC) under the Paris Agreement and established net-zero emission targets or plans (WRI, 2022). Meanwhile, nearly half of the world's biodiversity hotspots are located in these countries and regions (Figure 33). Therefore, providing green financing that helps improving climate, ecological and environmental management, increasing support for low-carbon, green and sustainable projects, and supporting high-quality development in these regions in an environmentally friendly manner is not only consistent with the stated investment objectives of these OICF funds, but also is urgently needed to fulfill local sustainable development goals in the host countries.



**Figure 3 Biodiversity hotspots**

(Source: (WRI, 2022))

## **II. Environmental Management System Analysis**

Typically, funds have adopted specific environmental management systems, which might be developed specifically for the fund or applied from specific investors in the fund. Ideally, these environmental management policies are publicly accessible. Based on publicly available information of such management policies and systems, this report evaluates only two funds: the China-ASEAN Investment Cooperation Fund, and the

China-Africa Development Fund.

The Green Development Guidance, in its core, puts forward a "1+9" environmental management system for enterprises and financial institutions, as a baseline for reducing and managing environmental risks in financial portfolios. The following analysis compares the existing environmental management systems of China-ASEAN Investment Cooperation Fund and China-Africa Fund, analyzes the differences between each fund and the "1+9" proposal in terms of environmental management system. The analysis is not to serve as an evaluation of these funds' effectiveness in environmental management, but rather serves as the basis for making policy recommendations to improve environmental management.

**(1) China-ASEAN Investment Cooperation Fund**

The China-ASEAN Investment Cooperation Fund has published its *Reference Guideline* on Social Responsibility and Environmental Protection of Investment in ASEAN in 2014. The following paragraphs compare the published policy with the recommendations from the Green Development Guidance.

**(1) Lifecycle management**

In terms of the environmental and social life cycle management process of a project, the *Reference Guidelines* defines the process and key links of project search, project establishment, investment approval and investment disbursement (Figure 4).

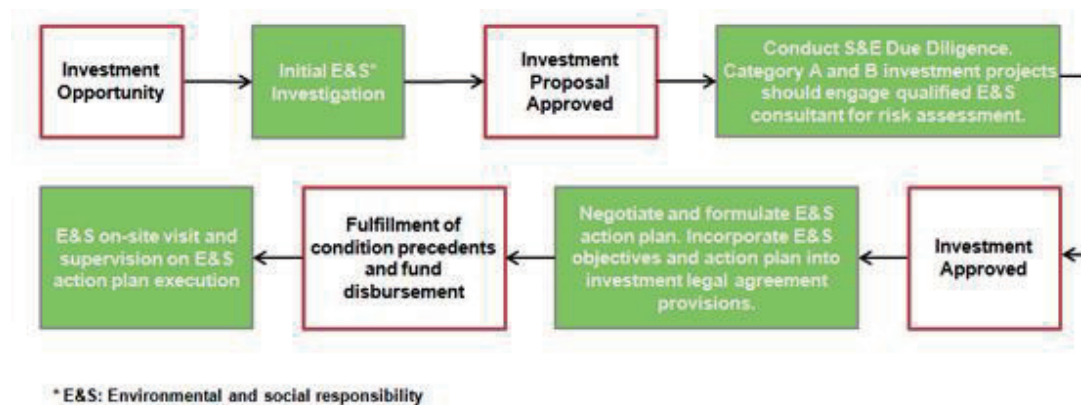


Figure 4 Operation process of China-ASEAN Fund business investment

(Source: (ASEAN, 2014))

**(2) Exclude harmful projects**

The *Reference Guidance* does not propose a list of negative items.





### **(3) Environmental Impact Assessment**

In the project environmental assessment process, the China-ASEAN Fund requires identifying and evaluating environmental and social risks and impacts of the project. They adopt multi-level mitigation measures to predict and avoid risks and impacts on employees, affected communities, and the environment. In cases where risks and impacts cannot be avoided, they aim to minimize them and provide compensation or offset for any remaining residual impacts. For Class A and B projects, enterprises are required to hire qualified professional environmental and social technical advisors to conduct project risk assessments during the environmental and social due diligence process, and develop action plans based on the assessment results to meet the environmental and social standards required by the investing company. During project implementation, the fund requires companies to establish a sound environmental and social management system (ESMS). It is suggested that when investing externally, companies should identify and manage environmental and social risks and impacts, clarify evaluation indicators during the investment process, and continue monitoring after investment, to promote sustainable operation and management and mitigate risks. If the regulations of the host country are inconsistent with the performance levels and measurement standards of the ESMS system, the project should adopt the stricter standard.

### **(4) Implement differentiated financial conditions**

In terms of project classification, the *Reference Guideline on Social Responsibility and Environmental Protection* of Investment in ASEAN has been divided into four categories: A, B, C and FI. Among them, Category A projects are projects with significant ecological environmental impact, Category B projects are those with certain environmental impact, and Category C projects are those with basically no ecological environmental impact. FI is an intermediary investment. The fund also provides a specific project catalogue within these categories. However, the *Guideline* does not elaborate on the basis or principle of classification.

**Table 2 Categorization of China-ASEAN Fund**

Category	Project List
<b>A</b>	<ul style="list-style-type: none"> <li>• Projects affecting indigenous residents</li> <li>• Projects causing serious occupational and health risks</li> <li>• Projects with high biodiversity impact on protected natural habitats or fields, including wetlands/coral reefs/mangroves.</li> <li>• Forestry operation project</li> <li>• Mining projects (open-pit and pit)</li> <li>• Dam and reservoir construction projects</li> <li>• Pesticide or herbicide projects for production or commercial use</li> <li>• Major irrigation projects or projects impacting the supply of water resources in a certain area</li> <li>• Projects that will bring domestic or hazardous waste disposal operations</li> <li>• Items of manufacturing, storage or transportation of dangerous chemicals above the threshold</li> <li>• Oil and gas development projects, including pipeline construction</li> <li>• Large-scale infrastructure projects, including the construction of berthing ports, loading and unloading ports, airports, roads, railways and large-scale transportation systems</li> <li>• Metal smelting, refining and casting projects</li> <li>• Large-scale thermal and hydraulic power generation projects</li> <li>• Cement processing and manufacturing (green space)</li> </ul>
<b>B</b>	<ul style="list-style-type: none"> <li>• Beer brewing industry</li> <li>• Cement manufacturing (renovation or expansion project)</li> <li>• Dairy industry</li> <li>• food processing</li> <li>• Construction industry factory</li> <li>• Medical project</li> <li>• Hotel/Tourism Development Projects</li> <li>• Mining (small-scale survey)</li> <li>• Metal smelting and plating</li> <li>• Renovation and reconstruction of original factory</li> <li>• Pulp and paper manufacturing</li> <li>• Textile production</li> </ul>
<b>C</b>	<ul style="list-style-type: none"> <li>• Software development</li> <li>• Consultant firm</li> <li>• Service industry</li> <li>• Technical support</li> <li>• Agency/Factoring Company</li> <li>• Registered company</li> <li>• Stock brokerage company</li> <li>• Microfinance banking</li> </ul>

(Source: Reference Guidelines for Social Responsibility and Environmental Protection in Investment in ASEAN Region by China-ASEAN Investment Cooperation Fund)

The *Reference Guidelines* also highlights differentiated management strategies for projects: The *Reference Guidelines* requires identifying and evaluating the environmental and social risks and impacts of the project, adopting multi-level mitigation measures to predict and avoid the risks and impacts on employees, affected



communities and the environment, or minimizing the risks and impacts if it is impossible to avoid them, and compensating or offsetting the residual impacts. For Category A and B projects, enterprises are required to engage qualified professional environmental and social technical consultants to conduct project risk assessment during the environmental and social due diligence investigation and work out action plans according to the assessment results to meet the environmental and social standards.

The *Reference Guidance* do not propose special support measures for green projects.

#### **(5) Establish an environmental and social management system (ESMS)**

According to the Fund's own environmental and social management system (ESMS), it is suggested that when investing abroad, enterprises should identify and manage the impact of environmental and social risks, make clear the evaluation indicators in the investment process, and carry out continuous supervision in the later stage of investment, so as to promote the investee company to avoid, mitigate and manage risks in a sustainable way. If the laws and regulations of the host country are inconsistent with the performance level and measurement standard calculated by ESMS system, the project shall adopt the stricter standard.

Furthermore the Fund's ESMS documents state that during the implementation of the project, relevant documents should be collected, including: the formulation of specific plans (main contents, relevant details, etc.), environmental impact assessment reports, various permits, and consultation records with residents or other stakeholders (such as media and non-governmental organizations, etc.).

#### **(6) Set up a grievance redress mechanism**

The *Reference Guidance* requires that complaints from affected areas and external opinions of other stakeholders be properly answered and managed. It is necessary to provide sufficient ways of participation, so that the affected communities can fully participate in the whole project cycle and ensure the disclosure and dissemination of relevant environmental and social information to them.

#### **(7) Covenants**

The *Reference Guidance* requires that all enterprises and projects invested by ASEAN investment funds should accept and implement the *Reference Guidance*. All enterprises that invest and operate projects in ASEAN can refer to the contents of the *Reference Guidance*, consciously abide by the obligations of investors, and carry out sustainable and responsible investment behaviors. However, no specific consequences for non-

conformity are mentioned.

### **(8) Reporting and disclosure**

The *Reference Guidance* requires enterprises to keep an eye on the social and environmental related behaviors of the invested company after investment, and to track and record the development of the project. After an enterprise invests, it should supervise and track the invested enterprise in the social and environmental aspects, including but not limited to online news search and management communication. After the investment, the invested enterprise shall be visited at least once a year, and the invested enterprise shall be inspected and verified according to the items listed in the action plan. The enterprise shall make an evaluation record and file it every year according to the collected information and investigation results.

### **(9) International cooperation**

The China-ASEAN Investment Cooperation Fund cooperates with the International Finance Corporation (IFC) of the World Bank and adopts the Performance Standards of IFC to establish an environmental and social management system (ESMS), which manages and assists the project companies to reach the international best practices, and constantly improves and promotes them according to the investment practice experience.

In summary, the China-ASEAN Investment Cooperation Fund has often corresponding provisions related to the "1+9" recommendations, with the exception of a lacking negative list and no special support measures for green and low-carbon projects.

## **(2) China-Africa Development Fund**

The fund was established in 2007 with an initial fundraising scale of \$5 billion, which was increased to \$10 billion by 2015. The China-Africa Development Fund is positioned to provide equity investment for Chinese companies' investments in Africa, not as the largest shareholder, and to exit equity at maturity. The China-Africa Development Fund's supported project sources are roughly divided into three parts, including projects arranged through official consultations between China and African countries, projects that meet the development needs of African countries, and market-oriented projects in Africa. So far, the China-Africa Development Fund has supported more than 70 projects with \$6.6 billion in 39 countries of Africa (including those that have exited).



In principal and according to Chinese policy ambitions, the China-Africa Fund “has always adhered to and promoted the implementation of the concept of green development”. In practice, the China-Africa Fund’ investment strategy focuses on economic development, industrialization, poverty reduction and promoting “African people’s livelihood”, as well as to improve Africa’s capacity for sustainable development. Few indicators guide environmental protection, ESG and other requirements, and there are no special and detailed guidance documents<sup>2</sup>.

The specific practices related to ESG include: **First**, in the project development link, actively contact domestic enterprises to invest in environmental protection related projects in Africa, which might include photovoltaic power generation and garbage power generation. **Second**, in the project review process, the local environmental impact assessment license of the project is regarded as one of the core criteria for investment decisions and the relevant Fund managers use good judgement to qualitatively evaluate the “greenness” of the investment. **Third**, in the implementation of the project, pay attention to guiding enterprises to use environmental protection technologies and equipment that meet the local development level, and actively fulfill the social responsibility of environmental protection and sustainable development. The Fund has no stated policy to provide structured oversight on the environmental practices of the investment company or require any environmental management systems.

### **(1) Lifecycle management**

The fund follows the requirements of its main owner, China Development Bank, which also approves all investment plans and decisions. In addition, a committee composed of important Chinese stakeholders such as the Ministry of Commerce, the Ministry of Finance, and the China International Development Cooperation Agency regularly provides opinions on environmental and social development needs. The institution has functional departments and personnel for prior and post investment management, ESG, and research, with work involves planning and managing the "greenness" of projects throughout their lifecycle. In terms of its own governance, the fund has not yet formulated clear policies to incorporate green performance into its performance evaluation and incentive system.

### **(2) Exclude harmful projects**

The China-Africa Development Fund has not established a project classification system

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<sup>2</sup> <https://www.cdb.com.cn/English/ywgl/zhjryw/zffzjyxgs/>

but has specified requirements that are not supported for some projects, similar to negative lists. These negative list requirements come from national policies, major shareholders (China Development Bank) and shareholders, and a guidance committee composed of multiple national ministries, usually without forming a unified requirement document.

### **(3) Environmental Impact Assessment**

The Fund has established procedures requiring an evaluation of the environmental impact of projects during the due diligence process for technology and environment. For large-scale projects with ecological requirements, there is an emphasis on specialized analysis and assessment. Currently, the evaluation required by the procedures is more of a qualitative judgment in investment decision-making.

### **(4) Implement differentiated financial conditions**

The China-Africa Development Fund has not established a classification system for environmental impact, but has requirements similar to positive and negative lists. From a positive perspective, the China-Africa Development Fund encourages consideration of green projects, including photovoltaics, hydropower, green appliances, and other projects. From a negative perspective, the China-Africa Development Fund does not support overseas coal-fired power projects, projects that do not meet China's requirements for exported project products, and projects that do not meet the host country's environmental protection standards, in accordance with relevant regulations of China Development Bank. For projects with significant ecological and environmental risks, measures will be taken not to support them during the project review process.

In terms of green finance support, the China-Africa Development Fund mainly guides and supports green projects, and proposes to expand support for green projects in the fund's development plan for the "14th Five-Year Plan". However, the fund has not formulated relevant measures for preferential financing for green projects. However, the degree of "greenness" of a project is a bonus point, and any environmental issues that arise must be explained, although the specific impact on investment decisions and conditions is not yet clear.

### **(5) Establish an environmental and social management system (ESMS)**

Although the China-Africa Development Fund has not established a systematic whole-process management process, it has basically established a project management process and system based on the relevant requirements of China Development Bank, including



screening projects that are not supported and have significant ecological and environmental risks in the project establishment stage; requiring projects to strictly comply with relevant environmental protection standards in the project evaluation stage; and monitoring and evaluating the social benefit indicators of projects in the post-evaluation stage, and conducting follow-up assessments.

For example, in 2011, Hisense Group and the China-Africa Development Fund cooperated to invest in the construction of a home appliance industrial park project in South Africa, with a total investment of \$40 million and an annual production of 400,000 televisions and refrigerators each. As one of the shareholders, the China-Africa Development Fund actively urged Hisense South Africa to fulfill its green responsibilities. **Firstly**, sustainable development goals were stipulated at the shareholder and board levels for the project. **Secondly**, Hisense South Africa was required to strictly comply with local laws, regulations, and customs, and fulfill its environmental protection and labor protection responsibilities. At the beginning of the project construction, the China-Africa Development Fund helped the project achieve environmental and social impact requirements, and Hisense South Africa did not have any legal disputes locally. **Thirdly**, the project's business and social responsibility performance were dynamically monitored and evaluated. The China-Africa Development Fund headquarters and South Africa representative office sent teams to conduct on-site investigations and verifications from time to time, and helped improve project management through audits and post-evaluations. At the same time, through various channels such as industry associations, local government departments, embassies, media, and social organizations, the China-Africa Development Fund understood the evaluation of the project by the South African people, communities, and peers, especially its ecological and environmental performance.

**(6) and (7) Set up a grievance redress mechanism and use covenants**

No specific measures announced.

**(8) Reporting and disclosure**

In accordance with the relevant requirements of China Development Bank, the China-Africa Development Fund incorporates ESG information into China Development Bank's information disclosure report. In addition, in 2020, the China-Africa Development Fund and the United Nations Office for South-South Cooperation jointly released the report "South-South Cooperation in Action: Investment Cooperation Promotes Sustainable Development in Africa", presenting the scope of the China-Africa



Development Fund's work in social responsibility, practical cases, and social benefits generated, as well as future work plans. However, only environmental protection measures for individual projects were presented, and no relevant policies were formulated for mitigating the ecological and environmental impact of projects and supporting green development.

### **(9) International cooperation**

In international financing cooperation projects, the Fund collaborates with other international financial and research institutions on environmental issues related to investment decision-making, financing design, and research.

## **III. Portfolio Analysis**

The following section analyzes the portfolio of selected funds that had either disclosed project information or where project information was otherwise publicly available. The analyzed funds include two of the funds analyzed above for their environmental management system, the China-ASEAN Investment Cooperation Fund (here Phase I) and the China Africa Development Fund. We further found portfolio information of the China Latin America and Caribbean Development Fund. By no do these fund analyses represent a complete list of projects nor a definitive environmental evaluation. The analysis serves to better understand opportunities in further scaling green investment priorities.

The basis for the project analysis was the *Green Development Guidance on BRI Projects (the "Green Light System")* that comprehensively considers the environmental dimensions of pollution, biodiversity and climate impacts of the project. The analysis also uses the traffic light system introduced in the Green Light System that provides a systemic project evaluation and a pre-filled taxonomy of projects in industries such as energy infrastructure, transportation infrastructure, manufacturing, mining, and agriculture. The traffic light system considers a two step-evaluation system based on project's general characteristics (first stage evaluation) and the project implementation and management (second stage).

In the first stage, "Red Light" (restricted category) projects as those that have significant negative impacts on one or more aspects of pollution, climate change and biodiversity, such as hydropower generation, coal-fired power generation (new coal-fired power plants and renovation and upgrading of existing coal-fired power plants), gas-fired power generation, railway construction (passenger railway and freight railway), mining





industry, petrochemical industry, industrial park construction and other projects. "Yellow Light" projects (general impact category) include projects such as garbage power generation, urban goods transportation with emission standards higher than Euro IV/National IV standards, etc. "Green light" projects (encouraged category) are projects that have no significant negative impact on major environmental objectives and contribute to at least one environmental dimension, such as solar photovoltaic power generation, wind power generation, afforestation and other projects (also green light project might be restricted, for example if they are located in or close to a key biodiversity area).

In the second stage, depending on the application of international best practices for mitigation, adaptation, and compensation strategies in environmental management of the project, the *Green Development Guidance on BRI Projects* highlights a classification adjustment mechanism. Thus, the project's general classification can be adjusted to "red/yellow", "red/green" or "yellow/green" projects.

### **(1) China-ASEAN Investment Cooperation Fund Phase I**

The analysis highlights ten projects in eight ASEAN countries invested by the China-ASEAN Cooperation Fund Phase I. The fund's investment volume ranged from tens of millions of dollars to hundreds of millions of dollars. The fund used diversified investment forms, including equity, quasi-equity and other related forms, and typically held less than 50% of ownership in its investments. The report classifies and identifies these projects by using the fund's own classification objectives and the classification system constructed by the *Green Development Guidance on BRI Projects*.

Among the projects supported by the first phase of China-ASEAN Investment Cooperation Fund, the fund provided equity investments in a shipping investment in the Philippines, an optical fiber communication project in Cambodia, a port project in Thailand and a "3-in-1 smart TV project" in Cambodia. The likely environmental impacts of Cambodia's optical fiber communication project and Cambodia's 3-in-1 smart TV project to be relatively minimal. The port projects in Thailand would likely have high potential environmental impacts should there be an infrastructure development component and they would accordingly belong to infrastructure projects (red), or Category A projects.

Similarly, the potash mine project in Lao, the nickel pig iron smelting project in

Indonesia, and the mining development project and cement project in Malaysia would be considered Category A projects with great potential impact on the environment, and also belong to the Red Light project in the *Green Development Guidance on BRI Projects*.

Thailand Biomass Power Generation Company's project is a large-scale thermal energy project of Category A, while in the *Green Development Guidance on BRI Projects*, it belongs to the waste energy utilization project with certain influence, that is, the Yellow Light project. In addition, due to the lack of detailed information, medical projects in Singapore are not classified (Table 3).



**Table 3 List of Projects Supported by China-ASEAN Investment Cooperation Fund Phase I**

No.	Project Name	Country	Year	Project Contents	Investment Classification <sup>1</sup>	Traffic Light Classification <sup>2</sup>	Traffic Light Classification explanation	Potential mitigation measures
1	Philippine shipping project	the Philippines	NA	Invested in the second largest shipping company in the Philippines, acquired another shipping company in the Philippines, and became the leading domestic passenger and cargo shipping company in the Philippines.	Category C: service industry	Red/yellow, red/green,	Shipping has high potential environmental risks through climate-related emissions in transport, and through pollution (e.g., oil spills, waste). Also, cargo shipping of fossil fuels would be considered environmental harmful.	To upgrade from red to red/yellow or red/green, the shipping company would need to apply strict environmental management, including fuel efficient or electric propulsion, utilization of green ports, no cargo shipments of fossil fuels, and proper waste recycling at open seas
2	Cambodia optical fiber communication project	Cambodia	NA	Invested in Cambodia Optical Fiber Communication Network Company to develop national optical fiber network and digital TV business.	Category C: service industry	Yellow	The project likely has little environmental risks (if fiber-optic cables infrastructure is not actively destroying biodiversity during construction) and has no positive environmental impact potential	NA
3	Thailand port project	Thailand	2019	Acquisition of terminal assets of Linchaban Port, the largest deep-water port in Thailand	Category A: infrastructure project.	Red/yellow, red/green	A deep sea port has high potential environmental risk during construction and during operation. During operation, for example, the	"Green" according to international standards in regard to biodiversity conservation,

						<p>risk of water pollution, emissions through burning of ship diesel and noise are high.</p>	<p>pollution, and emission control as well as environmental risk management (e.g., MARPOL, IMO, UNCLOS; provision of LNG for fueling, onshore-based power supply, mitigation of noise impact).          Mitigation measure: Strict protection of biodiversity and minimization of impacts on biodiversity (e.g., IFC PS6), strict pollution control by minimizing polluting emissions (e.g., in line with International Maritime Organization [IMO) emission control areas with sulphur content of fuel not exceeding 1% in line with Annex VI of the International Convention for the Prevention of Pollution from Ships); and prevention and emergency</p>
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								measure implementation for oil spills as well as ballast water treatment (MARPOL 73/78 Annexes I-VI).
4	Laos potash mine project	Laos	NA	Invested in Asia Potash Group, developed a potash mine project in Ganmeng Province, and plan to produce 3 million tons of potassium chloride.	Category A: mineral exploitation projects	Red/yellow	Risks include accidents with explosives as well as gases and dust for mineworkers and surrounding environment; heavy metals, acids, and other pollutants that contaminate water resources; land use change and long-term effects of erosion or chemical contamination and leaking containment ponds.	Application of international best practice sustainable mining standards, for example, IFC EHS Guidelines for Mining.
5	Nickel pig iron smelting project in Indonesia	Indonesia	NA	A ferronickel smelting project will be developed in cooperation with Shanghai Dingxin Investment Group Co., Ltd. and Indonesia Baxing Investment Company, with an annual output of 300,000 tons of ferronickel for export.	Category A: metal smelting project	Red/yellow	Wastewater and liquid waste may contain toxic substances presenting a risk to water and surrounding environment; disaster risks in plants include fires, explosions, and accidental release of toxic chemicals into the environment.	Application of international best practices (e.g., IFC, GB, ISO), for example, IFC EHS for Pharmaceuticals and Biotechnology Manufacturing.
6	Cambodia Three-in-One Smart TV Project	Cambodia	NA	Cooperate with domestic enterprises and Cambodian national TV station to invest in three-in-one smart TV project in Cambodia, and provide comprehensive information services	Category C: service industry	Yellow	The project likely has little environmental risks (if distribution infrastructure is not actively destroying biodiversity during	

				based on digital broadband network for Cambodia.			construction) and has no positive environmental impact potential	
7	Biomass power generation company	Thailand	NA	Thailand has invested in National Power Supply Public Company (NPS), with a total investment of 60 million dollars in the future, making it the largest green energy company in Thailand.	Category A: large-scale thermal energy projects	Red/Green	High risk of pollution through incomplete burning, high risk to biodiversity if biomass is pushing existing agriculture onto new lands with deforestation or similar	Strict pollution control, strict control of sources for biomass, e.g., according to EU Biomass in the Renewable Energy Directive <sup>3</sup>
8	Mining development project	Malaysia	NA	not in details	Category A: mineral exploitation projects	Red/yellow	Wastewater and liquid waste may contain toxic substances presenting a risk to water and surrounding environment; disaster risks in plants include fires, explosions, and accidental release of toxic chemicals into the environment.	Application of international best practice sustainable mining standards, for example, IFC EHS Guidelines for Mining.
9	Cement project	Malaysia	NA	no specific details	Category A: cement processing and manufacturing	Red/yellow	Wastewater and liquid waste may contain toxic substances presenting a risk to water and surrounding environment; disaster risks in plants include fires, explosions, and accidental release of toxic chemicals into the environment.	Application of international best practice sustainable cement Standards, and support of further development of such standards (e.g., CEN/TC 350 “Sustainability of

<sup>3</sup> [https://energy.ec.europa.eu/topics/renewable-energy/bioenergy/biomass\\_en](https://energy.ec.europa.eu/topics/renewable-energy/bioenergy/biomass_en)



								construction works”)
10	Medical project	Singapore	NA	no specific details	Category B: medical items	Red/yellow	Wastewater and liquid waste may contain toxic substances presenting a risk to water and surrounding environment; disaster risks in chemical plants include fires, explosions, and accidental release of toxic chemicals into the environment.	Application of international best practices (e.g., IFC, GB, ISO), for example, IFC EHS for Pharmaceuticals and Biotechnology Manufacturing.

Note: 1 Identified according to Appendix IV: Classification of investment projects in *Reference Guideline on Social Responsibility and Environmental Protection of Investment in ASEAN* and by referring to the project contents. 2. According to the classification system of the first phase of *Green Development Guidance on BRI Projects*.

(Source: Website of China-ASEAN Investment Cooperation Fund )

According to the classification system established by the Fund, six of the ten projects in Phase I belong to Category A, one belongs to Category B, and three belongs to Category C. According to the Traffic Light System for BRI projects, there are seven “red/yellow” projects (two of those with a potential to become “red/green” depending on the investment’s environmental management), one pure “red/green” investment and two yellow projects. Again, the red/yellow and red/green projects have a high environmental risk without application of relevant mitigation standards, while the “yellow” projects have likely no positive environmental impact

Comparing the two classification systems, it can be seen that Category A projects are basically red light projects, while all Category C projects are yellow projects. Accordingly, the initial risk evaluation of investments is aligned, making the requirements towards implementation of projects according to environmental standards a key determinant for environmental performance of the investments.

## **(2) China-Africa Development Fund**

The China-Africa Development Fund divided its investing area as infrastructure, production capacity cooperation, mining, agriculture, health, culture, and media. However, this classification of projects is difficult to correspond with environmental impact. The invested projects and classification are analyzed in Table 4.

From the research on some projects, the main projects supported by the China-Africa Development Fund were infrastructure, production capacity cooperation, and mining, etc.





**Table 4 List of Projects Supported by China-Africa Development Fund ((partial)**

No.	Project name	Country	Year	Project contents	Traffic light classification <sup>1</sup>	Traffic light classification explanation	Possible mitigation measures
1	Ghana power plant project	Ghana	2008	China-Africa Fund and China Shenzhen Energy Group Co., Ltd. jointly invested in the construction of Ghana gas combined cycle power generation project. The total investment of the project was about 800 million USD, and the project financing was provided by China National Development Bank.	Red light	Gas-fired power plants have high greenhouse-gas emissions	NA
2	Hisense Home Appliances Park Project in South Africa	South Africa	2011	Hisense Group and China-Africa Fund jointly invested in the construction of a home appliance industrial park project in South Africa, with a total investment of USD40 million and an annual production of 400,000 televisions and refrigerators.	Red/yellow	Wastewater and liquid waste may contain toxic substances presenting a risk to water and surrounding environment.	Application of IFC ESH guidelines for semiconductors/other electronics manufacturing including recycling of waste combined with well-managed hazardous waste disposal, including oil and greases, solvents, and degreasing fluids, sludge from electroplating and wastewater treatment, insulating oil containing

							PCBs to improve efficiency and minimize environmental impacts.
3	FAW South Africa Production Base Project	South Africa	2012	China FAW and China-Africa Fund invested in the construction of KD truck assembly plant with an annual capacity of 5,000 vehicles in Kuha Development Zone, Nelson Mandela, South Africa, with a total investment of about USD80 million and an area of 87,000 square meters, including assembly workshop, refitting workshop, training center, etc.	Red/ye llow	High resource use; high energy use in production; high chemical use in conventional lacquering.	Application of sustainable practices including water-based lacquers; high percentage of recycling and careful disposal of hazardous waste; offset of emissions
4	Mozambique Agricultural Park Project	Mozambique	2011	Mozambique Agricultural Park Project is the largest rice planting project in China and one of the 13 key projects of capacity cooperation between China and Mozambique.	Red/ye llow	No environmental benefits through agriculture  High water use for rice and high with land use with land conversions	Ensure that agricultural park does proper waste-water treatment, water recycling and does not impede on key biodiversity areas.
5	China-Africa cotton project	Malawi, Mozambique, Zambia et al.	2009	China-Africa Fund, China Qingdao Ruichang and Qingdao HuiFu jointly invested in the establishment of China-Africa Cotton Industry Development Co., Ltd., and built or acquired cotton ginning plants, oil mills, spinning mills and seed companies in Malawi, Mozambique, Zambia and Zimbabwe to carry out cotton breeding and improved seed sales; Cotton planting, purchasing,	Red/ye llow	No environmental benefits through agriculture  High water use for cotton and	Ensure that agricultural park does proper waste-water treatment, water recycling and does not impede on key biodiversity areas.



				processing and selling; Sales of cottonseed oil and edible cottonseed oil; Sales of cotton by-products, low-grade cotton spinning and sales, etc.		high with land use with land conversions	
6	Laiji Free Trade Zone Project in Nigeria	Nigeria	2006	China-Africa Fund, China Railway Construction Corporation, China Civil Engineering Group and other units set up China-Africa Laiji Investment Co., Ltd. ("China-Africa Laiji" for short). In May of the same year, China-Africa Laiji jointly invested with Lagos State Government and Laiji Global Investment Co., Ltd. ("Laiji Global") to build Laiji Free Trade Zone.	Red/ye llow Red/gr een	High risk of environmental pollution and high use of electricity	Majority of electricity is green with a clear pathway for 100% renewable and full carbon offset for non-green energy; recycling of waste, wastewater, etc.
7	ICT port	Nigeria		TICT Port in Nigeria is the largest port in West Africa with an annual throughput of 473,000 TEUs engaged in import and export.	Red/ye llow Red/gr een	Ports have high potential environmental risk during construction and during operation. During operation, for example, the risk of water pollution, emissions through burning of ship diesel and noise are high.	"Green" according to international standards in regard to biodiversity conservation, pollution, and emission control as well as environmental risk management (e.g., MARPOL, IMO, UNCLOS; provision of LNG for fueling, onshore-based power supply, mitigation of noise impact). Mitigation measure: Strict

							<p>protection of biodiversity and minimization of impacts on biodiversity (e.g., IFC PS6), strict pollution control by minimizing polluting emissions (e.g., in line with International Maritime Organization [IMO) emission control areas with Sulphur content of fuel not exceeding 1% in line with Annex VI of the International Convention for the Prevention of Pollution from Ships); and prevention and emergency measure implementation for oil spills as well as ballast water treatment (MARPOL 73/78 Annexes I-VI).</p>
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8	Huaxin cement	Tanzania	2020	Cooperation with Huaxin cement to support technical transformation of existing local cement plants and improve the local cement production capacity.	Red/ye llow	High energy needs and heat emission from production in addition to dusts and fumes from combustion, in addition to environmental risks from extraction of raw materials	Application of best practices IFC EHS Guidelines for Cement and Lime Manufacturing and offsets for emissions.
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Note: 1. According to the classification system of the first phase of *Green Development Guidance on BRI Projects*.

(Source: Published information from China-Africa Development Fund website)

### (3) China-Latin America and Caribbean Development Fund

The areas supported by the China-Latin America Cooperation Fund mainly include six aspects: energy resources, infrastructure, modern agriculture, manufacturing, technological innovation, and information technology. The fund can adopt the modes of greenfield investment and brownfield investment. The China-Latin America Cooperation Fund has not disclosed its project classification management system, nor has it provided a list of supported projects.

The China-Latin America Cooperation Fund invested projects mainly consist of red or yellow light projects with significant environmental impacts, but there are also some information technology projects with relatively minor environmental impacts. The report identified five projects of the China-Latin America and Caribbean Development Fund and categorized them according to the traffic light system (Table 5).

**Table 5 List of Projects Supported by CLAC Fund (partial)**

No.	Project name	Country	Year	Content	Project type	Traffic light classification <sup>1</sup>	Traffic light classification explanation	Possible mitigation measures
1	Sao Simao Hydropower Plant	Brazil	2017	Equity stake of undisclosed size	Construction and operation of hydroelectric power generation	Red/Green	Specify carbon emission due to flooding (e.g., based on CBI: power density >5W/M2, estimated reservoir emission intensity <100g CO2e/kWh).  The ESG evaluation for this project was	Application of internationally relevant hydroelectric power EHS standards for mitigation hierarchy of environmental damage (e.g., IFC 2015)



					facilities		conducted by International Hydropower Association with good outcomes	Hydroelectric Power Standard).
2	Buritica Gold Mine	Colombia	2020	Co-investment with Zijin Continental goal for 100% equity stake	Construction and operation of ore mines	Red/yellow	Risks include accidents with explosives as well as gases and dust for mineworkers and surrounding environment; heavy metals, acids, and other pollutants that contaminate water resources; land use change and long-term effects of erosion or chemical contamination and leaking containment ponds.	Application of international best practice sustainable mining standards, for example, IFC EHS Guidelines for Mining.
3	Social Housing and Infrastructure	Suriname	2016	Equity and loan combination of USD 500 m over 3-5 years	Social housing	Yellow/green	Likely limited impact on environmental risk, but potential to upgrade	e.g., improve waste water treatment, improve energy mix (e.g., lower use of stoves and generators)
4	Public procurement modernization	Jamaica	2013	Joint grant support with EU and IADB	IT and process systems for public procurement	Yellow	Likely limited impact on environmental risk and no environmental benefits	
5	TCP	Brazil	2018	Joint	Ports and	Red/yellow	A port has high potential environmental risk	"Green" according to

	Container Terminals			investment with two other Chinese investors at 22,5% equity	adjoining facilities without services dedicated for fossil fuel transport, storage	Red/green	during construction and during operation. During operation, for example, the risk of water pollution, emissions through burning of ship diesel and noise are high.	international standards in regard to biodiversity conservation, pollution, and emission control as well as environmental risk management (e.g., MARPOL, IMO, UNCLOS; provision of LNG for fueling, onshore-based power supply, mitigation of noise impact). Mitigation measure: Strict protection of biodiversity and minimization of impacts on biodiversity (e.g., IFC PS6), strict pollution control by minimizing polluting emissions (e.g., in line with International Maritime
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#### **(4) Summary of portfolio analysis**

The analyses of the portfolios of the three funds highlight opportunities to improve environmental outcomes in particular of existing portfolios. The analysis highlighted how many investments included “red” projects that could be upgraded to red/yellow and red/green.

At the time of the investments, which often were more than 10 years ago, green development was less formalized than in 2022 and several green project implementation standards and guidelines were not yet developed. Accordingly, by improving specific sector guidelines for project implementation (e.g., infrastructure, manufacturing, mining), better environmental management standards can be integrated into day-to-day financing and operational aspects.

Furthermore, by providing more capacity and incentives to actually apply green investment and project implementation/management with local staff and in the headquarters on overall management requirements, it seems reasonable to expect that environmental risks even in red projects can be further reduced.



## Chapter 3 International Experiences

### I. Practices from four developmental financial institutions

To provide more actionable recommendations, this chapter uses the "1+9" action recommendations of the Green Development Guidance for BRI Projects (Appendix 1) as a framework, and selects several international best practices as application examples. These include practices from the World Bank, the first multilateral development financial institution to implement institutionalized management of environmental issues and with the largest number of member countries; the French Development Agency (AFD), a bilateral development financial institution; the Green Climate Fund (GCF), which specializes in serving climate objectives; the Multilateral Cooperation Center for Development Finance (MCDF), dedicated to infrastructure development in developing countries; and the Shandong Green Development Fund, which is relatively small in size and works closely with Chinese stakeholders. Although these cases include two different types of developmental financial institutions, banks and funds, the financial instruments and types they cover are consistent with and relevant to the overseas investment and cooperation funds that are the focus of this study.

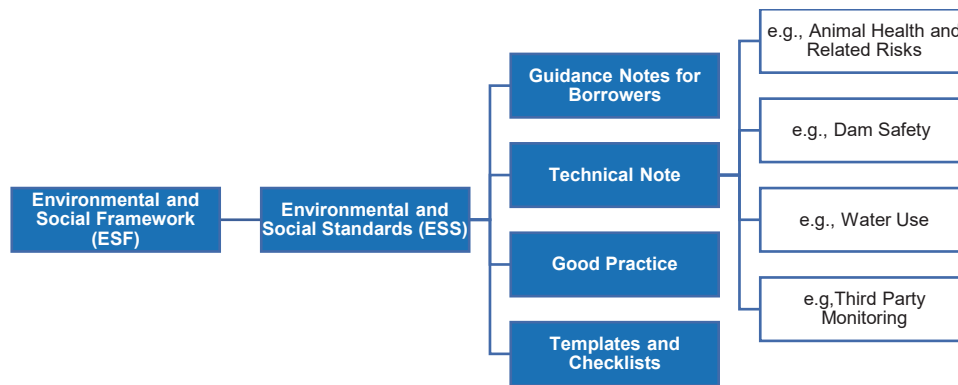
The case of the World Bank is highlighted to provide an example of how a single financial institution performs across the "1+9" recommendations (Table 66). Similar to other multilateral development banks, most of the World Bank's environmental policies are based on the Environmental and Social Framework (ESF) approved by its Board of Directors in 2016 and implemented from 2018 onwards. On one hand, it continues to develop more detailed documents to support the ESF (Figure 5); on the other, it also continues to enrich the content and scope of the framework in accordance with the changes and emergence of eco-environmental and climate challenges it faces. These responses to new trends and challenges are institutionalized to ensure that they are reflected in the group's documents in a timely manner, and updated according to formal process that allows for adequate expert and public consultation. For example, climate issues that were not emphasized in the 1950s are now specifically anchored in project classification, environmental and social frameworks, exclusion lists, differentiated management among others.



**Table 6 The “1+9” action framework and the World Bank practices**

“1+9” Action Framework	World Bank
Project Classification	The cornerstone document Environmental and Social Framework (ESF) establishes 10 Environmental and Social Standards (ESS) to refine policies and classify all projects into four categories of high risk, substantial risk, moderate risk, and low risk according to the criteria.
1. Lifecycle oversight	the ESF explicitly states that the ten Environmental and Social Standards apply to borrowers throughout the project life cycle.
2. Exclusion of harmful projects	The Environmental and Social Framework (ESF) does not have a separate list of exclusions. The specific exclusion requirements are reflected in sectoral policy documents for the different economic sectors, and the types of projects are specified in the Operations Manual.
3. Environment Impact Assessment	The ESS1 states the objective, scope, and requirements on assessing the environmental and social risks and impacts. It also provides guidance and templates for their clients’ compliance with those requirements.
4. Differentiated management	The ESS1 commits that 35% of financing from World Bank will be supporting climate actions, resulting in greater access to capital for green projects.
5. ESMS	The ESF and its 10 EES detail policy documents and set requirements for intermediary financial institutions (IFIs) and contracting parties involved in projects undertaken by borrowers.
6. Grievance Redress	ESS10 requires borrowers to establish grievance mechanisms that match the nature and scope of their program impacts, and suggests the minimum principles of accessibility, disclosure, standardization, and resolution that grievance mechanisms should follow.
7. Covenant	Includes standard contractual agreements reflecting the borrower's environmental obligations, making environmental performance attainment and damage repair legally binding.
8. Reporting and disclosure	ESS1 and 10 requires borrowers to disclose project information in an accessible and timely manner to stakeholders as part of engagement requirements. Information includes project purpose, duration, risks, impact, engagement process, consultation arrangements, and grievance mechanisms
9. International Cooperation	International cooperation and multi-stakeholder participation is practiced in World Bank’s proposing and revising policy and implementation documents, leading special action initiatives to address environmental and climate challenges and promoting international processes. For example, the World Bank leads the "Just Transition for All” initiative to support a smooth and equitable transition in coal-powered countries, and work with the World Resources Institute (WRI) to maintain the Paris Agreement NDC data tracking and sharing platform.

(Source: Authors collected from open sources.)



**Figure 5 The World Bank Environmental and Social Framework (ESF) and supporting package**

(Source: Authors collected from open sources.)

**The French Development Agency (AFD) applies a combination of World Bank standards and its own environmental policy to different scenarios.** Specifically, in accordance with the 2005 Paris Declaration on Effective Aid, agreed upon by donors for coordinated action, AFD applies the World Bank's current environmental and social operational standards within this framework. In addition to these standards, AFD has developed an Environmental and Social Risk Management Policy for AFD-funded Operations, which sets out additional principles and requirements for AFD involved projects. Reviewing against the GDG “1+9” action framework, in addition to the requirements aligned with the World Bank's, the AFD sets its own requirements for project exclusion lists and differentiated project financing and management conditions to serve its 100% Paris Agreement alignment commitment. For example, it has developed the Sustainable Development Analysis and Opinion Mechanism (Figure 6). With this analysis and rating system, AFD assesses all it financed projects to ensure the positive impacts of projects get optimized and stay away from projects with negative impact on one or more dimensions of sustainable development. During this assessment, it excludes projects that may negatively impact one or more aspects of sustainable development and provides training and capacity building to its partners. This assessment applies also to bilateral funds that AFD is involved in, such as the South African Green Fund, resulting in a broader scope of activities related to AFD are aligned with the environmental requirements of AFD and contribute to its objectives.

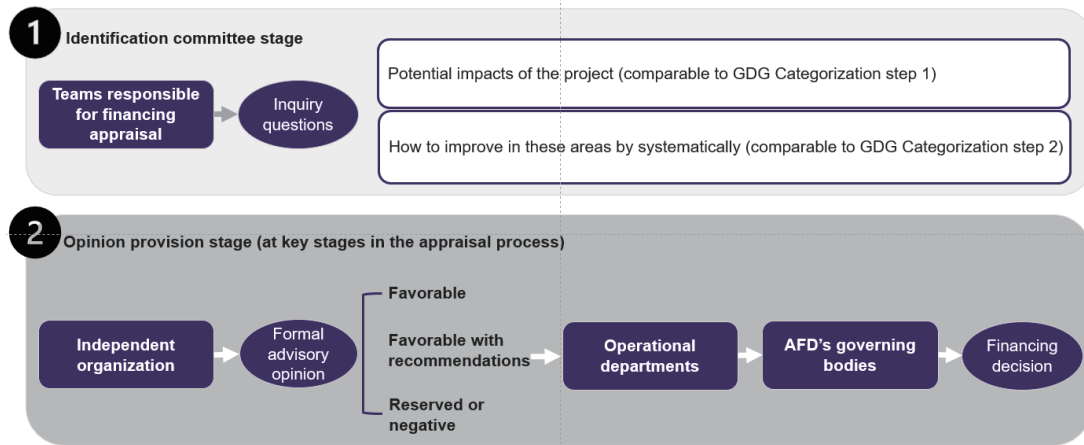
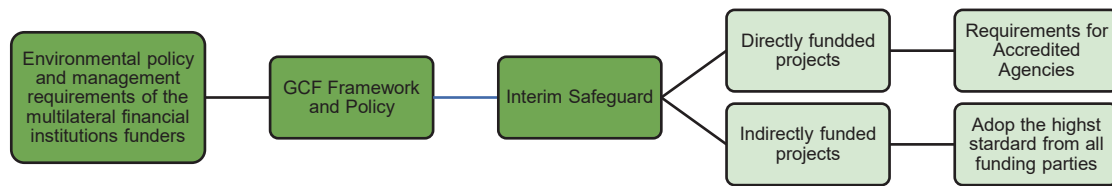


Figure 6 The AFD Sustainable Development Analysis and Opinion Mechanism

(Source: Authors collected from open sources.)

**During the first years after its initiation, the Green Climate Fund (GCF) relies on International Finance Corporation (IFC) standards for its financed projects and extends it to project implementing agencies.** The GCF was first proposed at the Copenhagen Climate Change Conference COP15 in 2009 and established as part of the financial mechanism, a key outcome from the Copenhagen Accord. The GCF is designed to run \$100 billion per year with funding from developed countries and administered by the World Bank. Based on the environmental policy and management requirements of the multilateral financial institutions funders, the GCF has developed its own two core documents, the Environmental Social Management System (ESMS) (2017) and the Environmental and Social Policy (2018). Detailing these two documents in practice, GCF continues to use the IFC Environmental and Social Performance Standards (E&S) as interim environmental (and social) safeguards (Figure 7). These requirements and standards apply to all projects in which the GCF is involved, such as the Shandong Green Development Fund. In addition, as the GCF works through Accredited Agencies, attention is paid to the implementation of environmental requirements by the Agencies and the support in coordination and monitoring between implementation and the GCF policies. For example, apart from the GCF's own grievance mechanism, it also requires a grievance mechanism at the implementing agency level.



**Figure 7 The GCF environmental management package**

(Source: Authors collected from open sources.)

**The Multilateral Center for Development Finance (MCDF) uses a model that combines the policies of the Asian Infrastructure Investment Bank (AIIB) and its own.** Established in 2020, the MCDF's secretariat is chaired by the AIIB, and its core social and environmental policies mostly adopt AIIB ones. At the same time, as a multilateral organization focused on supporting countries and financial institutions to develop high-quality infrastructure, the MDFC has specific arrangements in three areas of selection of criteria, information disclosure and capacity building, in order to balance the efficiency of investment management with the quality of implementation. For example, flexibility is provided in the criteria by requiring all partners to comply with the standards endorsed by the international financial institutions in the MCDF's governing documents. Further, the MCDF helps sub-lending intermediary financial institutions, such as the Exim Bank of China, strengthen and implement environmental and social management systems (ESMS) through technical assistance programs to improve their own capacity for standards implementation and systematization. At the same time, the MCDF policy sets relatively stricter standards for information disclosure transparency, requiring project partners to disclose relevant information once a year in accordance with the Results Framework of the MCDF Finance Facility, and providing channels for external parties to request additional information.

**The Shandong Green Development Fund case shows how a dedicated multi-stakeholder fund has been established to structure and manage a “1+9” framework benchmarkable action plan through a fund manager, building on the existing requirements of each funder.** The fund was launched in 2019 by the Asian Development Bank (ADB) and co-financed by KfW, AFD and the GCF to reach \$1.35 billion. Its environmental policy is shaped by a consultative decision of the parties, adhering to the requirement of each funder to follow standards consistent with those of the multilateral development banks (MDBs) themselves for their funded activities,





selecting the highest of the parties' requirements for implementation. For example, regarding the "exclusion list" for projects with significant environmental impact, Shandong Fund adheres all the Asian Development Bank's List of Prohibited Investment Activities, the AFD's List of Prohibited Investment Activities, and the KfW's Exclusion List and Sectoral Guidelines. In practice, the fund manager, China International Capital Corporation (CICC), has agreed to continuously update the fund's policies in accordance with the requirements of projects host country China, the sponsor ADB and other parties in accordance with its contractual obligations. For example, the fund's environmental management system was prepared by CICC on behalf of ADB. The Shandong Fund's project categorization based on the projects' greenness are linked to different preferential investment conditions, both for debt and equity investments, in favor of projects with good environmental performance (Table 7).

**Table 7 Indicative Terms and Conditions of the Shandong Green Development Fund**

Category based on greenness	Debt financing			Equity financing	
	Maximum funding	Maximum tenor (years)	Indicative interest rate based on average lending rate of PBOC	Maximum funding	Exit Strategy
Transformational	67%	10	↓ Discounted	50%	<10 years
Advanced benefits	50%	8	In line	30%	<10 years
Good practices	25%	5	↑ Premium	0	NA

Note: PBOC = People's Bank of China

(Source: (ADB, 2020))

The above cases from several multilateral/bilateral development banks and development funds provide examples for China's OICFs to further improve their environmental performance at the strategic, management and project levels by referring to the GDG "1+9" action framework of the. These policies and management in action shows how OICFs can further improve the environmental performance in building a green BRI.

- The implementation of the "1+9" action framework should start from and be based on developing a comprehensive "Environmental (and Social) Policy" framework document**, supported by action and technical support documents for each specific action line.
- The core and supporting documents for environmental and green development can draw on the existing foundation of international best practice**, which is common to both international agencies and development funds. Such as evaluating against the GDG "1+9" framework, the GCF, the MCDF and

Shandong Fund all adopted and integrated policies from existing ones of the multilateral financial institutions represented by the World Bank among others. This not only avoids duplication or conflict of requirements, but also facilitates cooperation with international investors.

3. **The OICFs can develop its own environmental (and social) framework, and institutionalize it to ensure that its contents are reflected and updated in its extension documents, and strengthen the communication and interaction with stakeholders.** Although the examples in this chapter mostly follow the requirements of funders when they have environmental management requirements, they mostly highlight their own strategies, particular mandate and features by publishing their own environmental frameworks. In addition, for OICF funds, developing environmental frameworks at the level of specific funds rather than at the level of regulatory/managing bodies, such as at the funder developmental bank level, allows for the flexibility and helps reduce the complexity of the frameworks.
4. **The environmental framework should offer broad and systematic coverage that ensures it is guiding and binding** on the OICF's project implementing agencies, partners, and clients and their main contractors and suppliers. For example, the cases in this chapter all emphasize the policy convergence of environmental management and implementation gaps for intermediary financial institutions (IFIs), partner institutions, clients, and client-related parties to jointly raise awareness of environmental and governance risk management and improve the ability work in an coordinated manner.
5. **Smaller funds can take advantage of their flexibility and take the lead in innovation, such as using the “1+9” action framework, to pilot best practices.** The Shandong Fund, for example, has tried to provide practical support to green projects by developing industry-specific project evaluation indicators and linking the differentiated financing conditions and dynamic classification to management of projects in different categories.

For a more detailed analysis of best practices, please see Appendix 3.

## **II. The Fund-led innovations in financing carbon neutralization**

In recent years, developmental financial institutions have played an active role in accelerating international processes on climate, biodiversity and other environmental issues, and practicing and driving innovation in project management and financing.



Especially in achieving the Paris Agreement climate target and supporting developing countries in delivering their NDC on carbon neutral and net-zero, several financial institutions and funds are exploring the new models and innovation in their business.

According to the IMF's estimation, since the global financial crisis in 2008, the scale of funds involved in sustainable investment has increased substantially, accounting for about one-third of the assets held by non-bank financial institutions. In Europe, they accounted for about 45% of the total assets under management by the end of March 2021 (EFAMA 2021).

However, even though sustainable and ESG investment is becoming the mainstream of global capital market investment strategy, sustainable investment fund still accounts for only a small part of the investment fund field, but it is growing rapidly. Among all the funds defined for green and sustainable investment, the total assets managed through sustainable investment funds are few, but they have more than doubled in the four years from 2017 to 2020, reaching USD3.6 trillion in 2020, accounting for 7% of the whole investment fund industry. Among them, funds strictly used for climate change-related investments only account for USD130 billion.<sup>4</sup>

The growth of total assets managed by sustainable investment funds means that green transformation, including climate change response, will be mainstreamed into investment decisions. More and more institutional investors and asset management companies have also proved their commitment to sustainable development and low-carbon economic transformation efforts in various forms, including pricing green investment and low-carbon transformation. There are indications that further expanding the scale of the sustainable investment fund will strongly support the successful transition of the global economy to a green and low-carbon future.

**With the paradigm shift of the capital market towards the goal of green transformation,** sustainable investment funds are increasingly playing the role of aggregators, bringing different capital **from public and private sectors** to supplement the role played by the government and the market in the field of green transformation. Among them, the public capital absorbed by the sustainable investment fund includes multilateral grants such as the Green Climate Fund (GCF), bilateral aid funds, climate investment funds of multilateral development financial institutions, and fiscal expenditures of the state and local governments. Private capital mainly comes from

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<sup>4</sup> <https://blogs.imf.org/2021/10/04/how-investment-funds-can-drive-the-green-transition/>

private equity, venture capital, charitable capital, and the greening of enterprises.

Funds (especially those with green or sustainable investment mission) can promote and support the green transformation of the economy in the following main ways.

**1. Inciting and Redistributing Funds**-Funds focusing on climate investment or green transformation can pool capital from the private sector or developed countries, and transfer it transparently to countries and societies that need capital support to deploy the funds, technologies and production capacity needed to achieve a just transition. For example, as the most important climate funding mechanism under the *United Nations Framework Convention on Climate Change*, the Green Climate Fund (GCF) was finally established at the COP16 held in Cancun in 2010, partly to support and urge developed countries to fulfill their annual commitment of 100 billion dollars. GCF was initially funded by donations from 12 developed countries, and was open to all developing countries under UNFCCC. Through the ever-evolving portfolio structure and strategies, GCF supported the project construction related to climate change mitigation, technology opening and transfer, capacity building, and assistance in the development of national greenhouse gas reports.

In addition, international public funds with experience in global climate governance, such as GCF and Green Environment Fund (GEF), also promote domestic public funds in the project location to increase investment and financing in the field of climate change through mixed financing and guidance mechanism. For example, in November 2019, the Green Climate Fund (GCF) approved to invest USD100 million to support the Green Development Fund project of the Asian Development Bank in Shandong Province, China. The project will adopt the GCF investment framework to demonstrate a new way of mobilizing private sector, institutions and businesses to mitigate and adapt to climate change, and leverage the climate financing of several climate subprojects through co-financing with the German Bank for Reconstruction and Credit and the French Development Agency.

**2. ESG Integration**-Green funds will generally make portfolio decisions based on their preference for sustainable development and assessment of risks and opportunities, which will prompt more funds to flow to green and sustainable projects. When establishing a green investment framework, the fund usually makes certain requirements on project screening, impact assessment, data collection, information disclosure, and connection with relevant policies and standards. In the field of equity and creditor's rights, investors also increasingly adopt specific labels provided by



professional institutions (such as green, transformation and sustainability, etc.) to ensure the credibility and externality of their investments. For example, facing the environmental impact and "green-washing" accusations from the outside world, Larry Fink, CEO of BlackRock, the world's largest fund management company, made a high-profile commitment in 2020 to put environmental management at the core of the company's nearly USD9 trillion asset investment method, and declared that it had achieved the goal of fully integrating about 5,600 active portfolios and investment consulting strategies with ESG, with the related assets reaching USD2.7 trillion. As part of the responsibility of the signatory, the asset management companies and asset owners who signed the Principles for Responsible Investment (PRI) promised to actively incorporate environmental, social and governance (ESG) elements into the investment analysis and decision-making process. The number of global signatories has also increased rapidly from about 1,400 institutions in 2015 to over 7,000 in 2022.

The increasing popularity of investing in sustainable funds means that companies with high ESG and sustainability ratings can get more funds, thus promoting the issuance of green bonds and stocks, and rewarding more initiatives to improve market transparency.

**3. Conscientious stewardship and shareholder education**-Funds can influence the strategy of enterprises through management, and support the change to more corporate policies consistent with transformation. Usually, investors exert influence through direct contact with the company's management or indirect participation in the voting of the board of directors (proxy voting), so as to improve the concrete measures, actual influence and related disclosure of business entities in sustainable development. In addition, a special climate or green investment fund can promote the participation and education of shareholders and investors. For example, in early 2021, as part of the increasingly common climate change strategy, radical investors shocked the energy and investment industries by winning the board seat of Exxon Mobil. In the discussion on conscientious management, PRI also pointed out that participation and voting are the two most widely used tools for investors to exert influence on invested companies. Other commonly used means include resolutions/proposals, serving on the board of directors, supplier supervision/negotiation, assisting in research and public dialogue, and litigation.

**4. Improve the market feasibility of early technologies**-For new low-carbon technologies or green investment projects in emerging market countries, by bearing the potential losses of early technologies, green funds can play the role of cornerstone

investors, so that the remaining investors can get a better risk-adjusted return, and thus crowd-in other capital unwilling to bear the corresponding risks to the green field. At present, the capital market already includes specialized venture capital and private equity funds, open financial institutions and guarantee entities, etc. to provide necessary financial support for technology in different marketization stages. Governments, public institutions, enterprises and financial institutions and other fund holders can also accelerate the market feasibility of new and transformative technologies by injecting capital into the Climate Fund.

**5. Promote just transformation**-A specific fund can be set up to solve the structural contradictions that may be caused by ambitious low-carbon transformation. For example, as part of the EU's Green New Deal, the EU has set up a series of tools such as the just transformation fund to mitigate the potential transformation impact brought by the green transformation, including some painful social consequences.

**6. Solving the maturity mismatch**-Limited investment cycle is a constraint that most private and public funds cannot effectively finance green transformation activities. Most of the fund's principal and profit must be returned to the investor within a certain period (5-15 years), while economic activities and green projects with significant environmental externalities usually need longer-term financial support. However, there is still a huge funding gap in the early stage when entrepreneurs of climate and environment-related science and technology projects start to transform their research findings into new start-up companies. In recent years, more and more patient capital and evergreen fund have been used to solve the problem of maturity mismatch of green project financing. These funds promise to set a longer investment time limit, or reinvest all (or most) of the proceeds into the fund that promotes green transformation, thus providing longer financial support for the project in the whole cycle. For example, the \$2 billion Breakthrough Energy Ventures funded by Bill Gates is invested in a 20-year cycle. MIT's "tough tech" incubator project assumes that it will not see a return within 12 to 18 years. Kiko Ventures, which raised \$450 million in the first phase, was launched in June 2022, becoming the first evergreen climate fund.

Although investment funds can promote the green transformation of the economy, the macro background, relevant standards and guidelines related to the transformation are also crucial. To make the fund an effective driving force for green transformation, policy makers, regulators and market self-regulatory organizations need to work together to formulate specific standards and transparency standards that financial





institutions should follow, so that they can establish credible and sustainable labels for each category of financial instruments. It is necessary to establish clear measurement and disclosure standards, and promote the improvement of climate-related information infrastructure (data, disclosure, sustainable financial classification standards, etc.) of investment funds, so as to ensure that the relevant labels can fairly reflect the investment objectives of the funds, so as to help stakeholders evaluate the quality of intervention and prevent "greenwashing" behavior. Adequate transparency and impact assessment will further enhance market confidence and further promote the flow of funds to sustainable funds.

In addition, in different markets, industries and regions, different green transformation paths may represent opportunities, and may also bring potential risks to enterprises and investors. In order to effectively promote economic transformation through green funds, policy makers also need to assess and formulate pragmatic regulatory frameworks and supportive policies, and encourage investment funds to conduct scenario analysis and stress tests.

### **3. Examples of funds and development banks efforts in green transitions**

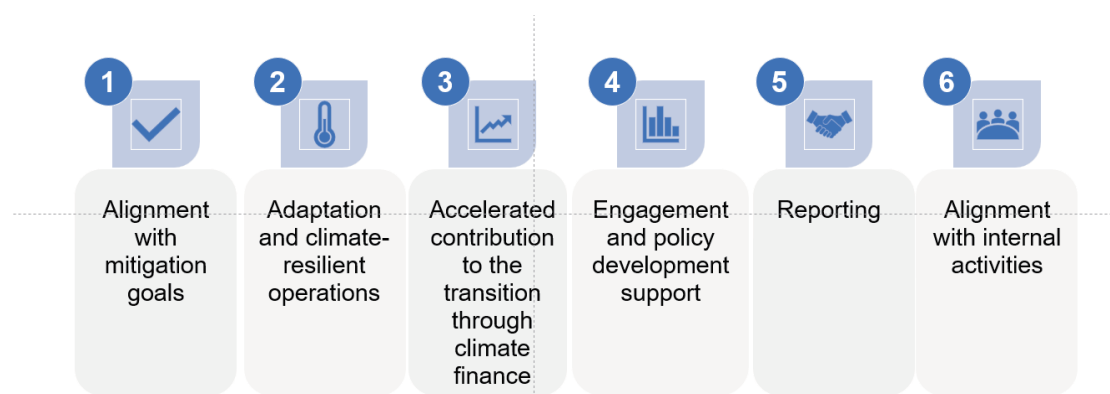
**There's a significant financing gap in fulfilling the green transition needs where developmental finance have a role to play.** The Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), published in November 2021, highlighted that limiting global temperature rise to 1.5°C will require a rapid and far-reaching transition in land, energy, industry, buildings, transport, and urban systems, and by extension. With over 140 countries had announced or are considering net zero targets, covering 90% of global emissions, the implications of the climate targets for the investment community are enormous – investors no longer question if a shift will happen, but rather how quickly it will happen and how to bring it about.

**Additional impetus for the green transition activities of the investment funds can be attributed to a series of global initiatives.** Such as the UN Principles for Responsible Investment and Climate Action 100+ which set sustainability targets and action plans for their signatories. The Glasgow Financial Alliance for Net Zero (GFANZ), launched in 2021, is now joined by more than 450 companies, banks, insurers, and investors with combined assets over US\$130 trillion, with an ambition to working together to achieve the objective of the Paris Agreement 1.5°C target.

**The forming of a science-based and agreed standard for “transition finance” is**

**one pathway to deal with** assets and projects with no clear pathway for a zero-carbon future. It is particularly important to manage the transition and avoid an uncontrolled transition, as we are already seeing declining market share and restricted access to financing for some of those industries. This trend is expedited by the likes of the Science Based Targets initiative (SBTI) which aims to promote science-based target setting in terms of transitioning to a zero-carbon economy, and Transition Pathway Initiative (TPI) which benchmarks company transition plans. Additionally, the transition finance label is gaining traction among select fund managers and market actors in general as a tool for investors to identify appropriate activities, despite the lack of widely accepted definitions and issues on stringency of the existing standards. Some in the market are therefore calling for a “transition taxonomy”, or a clear definition of what should be considered as credible transition activities, which serves as a tool specifically for high-carbon emission entities and sectors to support their transition.

**Increasingly, the community of development banks are also throwing their hat into the ring that based on the classification of projects and corresponding management, providing targeted support to transition.** The MDBs have now developed an approach to demonstrate that their direct investment operations will be fully aligned with the Paris goals, with six building blocks (Figure 8). In Oct 2021, the MDBs also announced their commitment to five High-Level Principles for a just transition and their intention to further develop financing and policy strategies which support transitioning away from the use of fossil fuels while promote economic diversification and inclusion.



**Figure 8 The six building blocks of developmental finance’s transition approach**

(Source: Authors from open resources.)





For example, several banks have explored in this area and issued their own definitions of transition bonds, including the developmental banks such as the AIIB, and commercial banks such as the BNP Paribas, DBS Bank, HSBC and Crédit Agricole CIB, Bank of China and China Construction Bank. These targeted supports are typically sustained by an accompanied Transition Bond Framework. Among the early movers,

#### **CASE - the AIIB-Amundi Climate Change Investment Framework (CCIF)**

In September 2020, the Asian Infrastructure Investment Bank (AIIB) and the asset manager Amundi launched the AIIB-Amundi Climate Change Investment Framework (CCIF). The framework, which is endorsed by the Climate Bonds Initiative (CBI), aims to translate the three key objectives of the Paris Agreement - namely climate change mitigation, climate change adaptation and low-carbon transition, into actionable metrics which support an investor to assess an issuer's level of alignment with the Paris goals. As its first implementation case, the framework underpins the AIIB Asia Climate Bond Portfolio, which focuses on investing in the corporate bonds from the emerging market countries.

**Fundamentally, the CCIF aims to establish the financial rationale to incorporate climate considerations** for the mainstream investors and to identify the appropriate investment metrics for portfolio construction. The assumption is that a successful execution of the framework would demonstrate a market feedback loop which further incentivizes climate winners and disincentivizes climate losers and enable financial markets to price in climate risks and extra financial impacts.

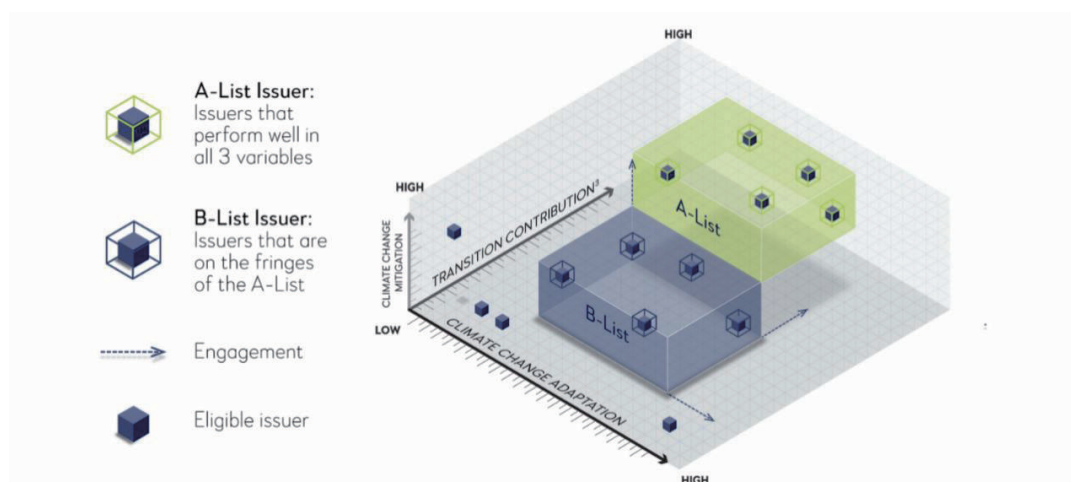
**At the core of the CCIF's methodology is the creation of a set of specific investment metrics that to assess a company's commitment to the achievement of the Paris Agreement objectives.** For instance, metrics such as a company's direct (Scope 1) and indirect (Scope 2 & 3) carbon emissions and its geographical location are used in part to assess the company's level of risk exposure and risk management effort for both physical and transition risks. Similarly, the percentage of a company's green revenue stream is used as a metrics to assess the firm's effort to embrace low-carbon and climate resilient technologies/ activities.

**In the AIIB Asia Climate Bond Portfolio, which is the first demonstration case of the CCIF, detailed metrics are employed** to classify the portfolio companies to three classes.

DBS Bank published its Sustainable and Transition Finance Framework and Taxonomy in June 2020, which is the world's first taxonomy covering transition finance.

- list issuers, or the climate “champions”;
- list issuers, or future climate champions with effective engagement; and
- The ineligible issuers.

**The goal is to target the engagement of B-list issuers to help them transition to A-list credentials**, therefore further drive the integration of climate change risks and opportunities into the firm’s business practices. The engagement and capacity building from the AIIB portfolio plays important sporting role in helping issuers moving in the right direction toward the three variables and showing significant effort to improve (currently mitigating physical and transition risk and transitioning to a low-carbon and climate-resilient business model). As it turns out, successful operationalization of the investment metrics heavily relies on qualified data providers and a tailored investment strategy to achieve dual objective of financial return and impact.



**Figure 9 AIIB Amundi Climate Change Investment Framework provides transformational financial support**  
Source: (AIIB, 2021)

**Another example is the financing for accelerated low-carbon replacement of projects in the high environmental and climate impact category**, led by development finance and cooperative funds. For projects under this category, support products and facilities to end the project's operating life early have been developed to provide incentives and financial support for the decommissioning relying on the designed set of impact pricing, monitoring and management approaches that leverage the management and capital advantages of the developmental funders.



## CASE

### The “Renewable Alternatives Retiring Coal Power” Financing Facility Innovation by Inter-American Development Bank, China-LAC Cooperation Fund and the CTF

The early decommissioning of the Tocopilla coal power plant and shifting to renewable energy in Antofagasta, Chile was supported by developmental fund. The coal power plant units, started operation in the 1980s, has an installed capacity of 268 MW and is owned by French corporation the ENGIE Energy Group. The coal power plant services the electricity to three major mining companies in the Antofagasta region.

With the Chilean government announcing the Climate Action and the Coal Decommissioning Plan 2019-2024, which calls for the early decommission of approximately 1.4 GW of coal-fired power by 2024, and the ENGIE Group's revealing of carbon target to “reduce greenhouse gas emissions by 80% by 2030 compared to 2017 levels and fully exit the coal power sector by 2027”, the decommissioning of the Tocopilla units came to attention of several stakeholders. Providing financial support and innovative models to facilitate accelerated retirement of coal plants, and the region's transition through substitution of renewable energy sources have become a common challenge for all parties involved.

To this end, the Inter-American Development Bank’s Investment arm IDBI, the China-Latin America and the Caribbeans Cooperation Fund (CLAC Fund) and the CTF Trust Fund have jointly established the “Coal Decommission” loan program, which is a first attempt to create a special hybrid concessional loan (AB-loan) program by linking coal decommissioning emission reductions with financing incentives for renewable alternatives (错误!未找到引用源。 ) .

**Table 8 The financial arrangement for the Tocopilla “Renewable Alternatives Retiring Coal Power” project**

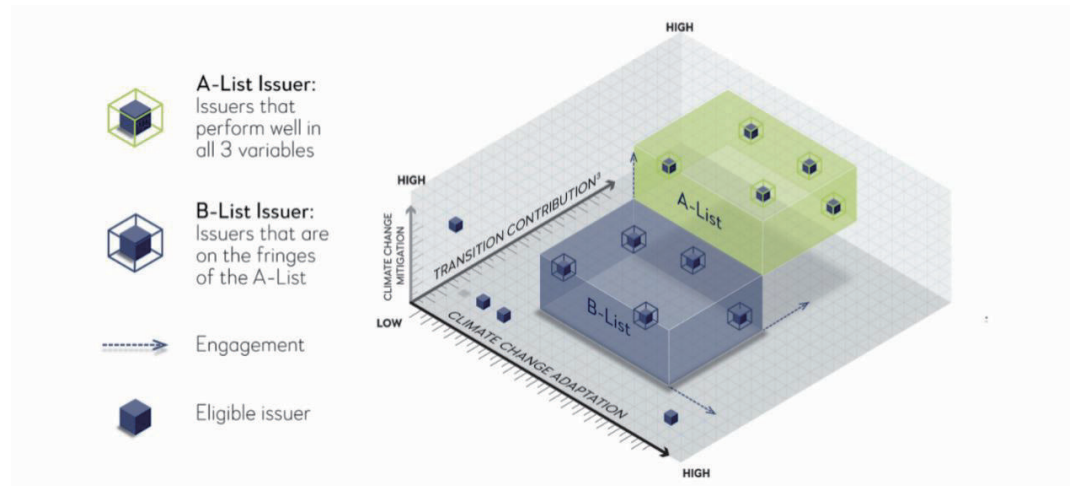
Source	\$mn	Term
<b>Total</b>	<b>125</b>	Signed in Dec 23, 2020, fully disbursed in Aug 27, 2021
<b>A loan subtotal</b>	<b>110</b>	<b>Interest rate:</b> floating, libor+50~350bp <b>Tenor:</b> 12 years
IDBI A loan	74	<b>Payment:</b> Amortized, payable in 16 installments of varying amounts beginning on June 15, 2025, ending on Dec 15, 2032. <b>Admin:</b> IDBI as administrator of CLAC Fund
CLAC Fund	36	
IDBI B loan	15	<b>Interest rate:</b> fixed, 1.000% p.a.
CTF (Blended with grant element)		<b>Tenor:</b> 12 years <b>Payment:</b> Bullet, payable in one installment on December 15, 2032. <b>Admin:</b> IDBI as implementing entity of CTF trust fund

Source: website of IDBI, Annual Report 2021 from ENGIE, and news release from legal consultants to the project.

**Eligibility:** The loan will be used exclusively by ENGIE to cover the costs associated with the design, construction, operation and maintenance of the renewable energy alternative generation program, the Calama Wind Farm located in Antofagasta Province, to replace the decommissioned coal power generation.

**Concessionary terms:** The Tocopilla coal-fired power plant early decommissioning project is calculated to bring climate benefits of approximately 1.2 million tons of CO<sub>2</sub> emissions

reductions. Since no local carbon market has been established, the pricing of economic benefits of emission reductions have been developed specifically for the project by IDBI in collaboration with technical consultant with reference to the ENGIE Group's own Group-wide simulated carbon price. Such benefits are directly reflected in the concessional terms of the loan.



**Figure 10 The design of Renewable Alternatives Retiring Coal Power facility**  
 (Source: the 2022 Climate Report, Investor Presentation 1H 2021, and Annual Report 2021 from ENGIE, the website of IDBI and CTF)



## Chapter 4 Findings and Policy Recommendations

### Research Findings

**Over the past two decades, China has established and operated several foreign investment cooperation funds**, such as the China-Africa Development Fund, China-ASEAN Investment Cooperation Fund, and China-Latin America Cooperation Fund. These funds have provided effective financing resources and platforms for promoting foreign investment cooperation, and have provided strong support for regional development. For example, the first phase of the China-ASEAN Investment Cooperation Fund supported \$1 billion worth of projects, and has completed project exits, while the second phase of the fund is now in operation. The China-Africa Development Fund has fully leveraged the synergies of "investment + loans" with the China Development Bank, and has supported over 70 projects in 39 African countries, with a total investment of over \$6.6 billion, covering areas such as capacity cooperation, infrastructure, energy and mineral resources, agriculture and people's livelihoods, promoting industrialization and sustainable development in Africa, and driving Chinese enterprises to invest and finance in Africa by over \$31 billion.

**In terms of project environmental classification**, the China-ASEAN Investment Cooperation Fund has established a project classification system based on environmental impact, while the China-Africa Development Fund has constructed a negative list of unsupported projects. From the perspective of the supported project areas, the China-ASEAN Investment Cooperation Fund, China-Africa Development Fund, and China-Latin America Cooperation Fund support projects in infrastructure, capacity cooperation, mining, and other types of projects. With the further development of global green development trends, these funds are actively adjusting their support strategies, increasing support for green development, green energy, information technology, and social livelihoods, and the trend of greening the supported projects is gradually emerging.

**In terms of project environmental management**, the China-ASEAN Investment Cooperation Fund has established guidelines for environmental and social management, with a relatively complete project environmental management system. Currently, the China-ASEAN Investment Cooperation Fund is carrying out its second phase of operations, and will increase support for energy resources, including renewable energy,



and information and communication projects. At the same time, it also focuses on sustainable development and environmental, social, and governance (ESG) standards. However, there is currently no information available on the update of the environmental management guidelines. Although the China-Africa Development Fund has not yet established a systematic project environmental management process, it has specific requirements for supporting green projects, project approval, review, and post-evaluation, and has specific cases in project environmental management and social responsibility practices.

**In terms of information disclosure**, the China-ASEAN Investment Cooperation Fund has publicly disclosed its project environmental management guidelines, while the China-Africa Development Fund has published its social responsibility report. In terms of project support, the China-ASEAN Investment Cooperation Fund, China-Africa Development Fund, and China-Latin America Cooperation Fund have all published the names and related content of some supported projects through case sharing, news reports, social responsibility or fund achievement reports, but none of the three funds have fully disclosed the complete list of supported projects and their contents on their official websites.

### **Policy Recommendations**

**Attach importance to the role of funds in promoting high-quality development of foreign investment cooperation.** Foreign investment cooperation funds have the characteristics of supporting concentrated areas and regions, and long-term deep cultivation. They should be used as a guiding force to promote high-quality development of foreign investment cooperation, and play a demonstrative role in leading green and high-quality development. At the same time, funds can unite various financial institutions, enterprises, and social forces to work together, leverage more extensive social resources to invest in foreign investment cooperation and project development, and promote the economic and social development of the host country through high-quality foreign cooperation projects, and help the host country to achieve sustainable development goals.

**Accelerate the construction of ESG management systems for foreign investment funds.** In recent years, ESG has become a lever for foreign investment enterprises and financial institutions to carry out environmental and social governance, and is also an important area for overall environmental and social management of supported projects. The China-Africa Development Fund, China-ASEAN Investment Cooperation Fund,

etc. have regarded the construction, improvement, and operation of the ESG system as an increasingly important area of fund governance, and have arranged special departments and personnel responsible for it. It is recommended that foreign investment funds accelerate the improvement of ESG management systems, clarify the departments and personnel responsible for ESG in fund decision-making, management, and operation, establish and improve ESG management systems, processes, and relevant guidelines, actively carry out ESG training and capacity building activities, incorporate ESG implementation into assessments, and promote ESG information disclosure and communication.

**Improve the environmental management of the entire process of supported projects.** According to the guidance of promoting high-quality foreign investment cooperation and the requirements of the "Green Finance Guidelines for the Banking and Insurance Industry," foreign investment and financing projects should further strengthen the environmental management of the entire process. It is recommended that funds revise the system of project environmental management, further refine the environmental management requirements for important links such as project establishment, evaluation, signing, and post-management, especially in project screening, project environmental impact analysis, project environmental impact monitoring and disposal, etc., by strengthening capacity building and introducing environmental experts, and solving concerns about ecological and environmental protection through effective ecological and environmental protection measures.

**Promote funds to explore green financial support measures.** Although in recent years, funds have formulated guiding policies and measures to encourage and support green environmental protection and people's livelihood projects, the specific level of these measures is not enough. It is recommended that funds refer to the relevant catalogs of green projects at home and abroad, refine support measures for green projects, increase support for green projects, and provide preferential financing for green projects, etc., to increase support for green people's livelihood projects, and actively provide new impetus for green development in the host country.





## Appendix

### **Appendix 1 Green Development Guidance for BRI Projects “1+9” action framework**

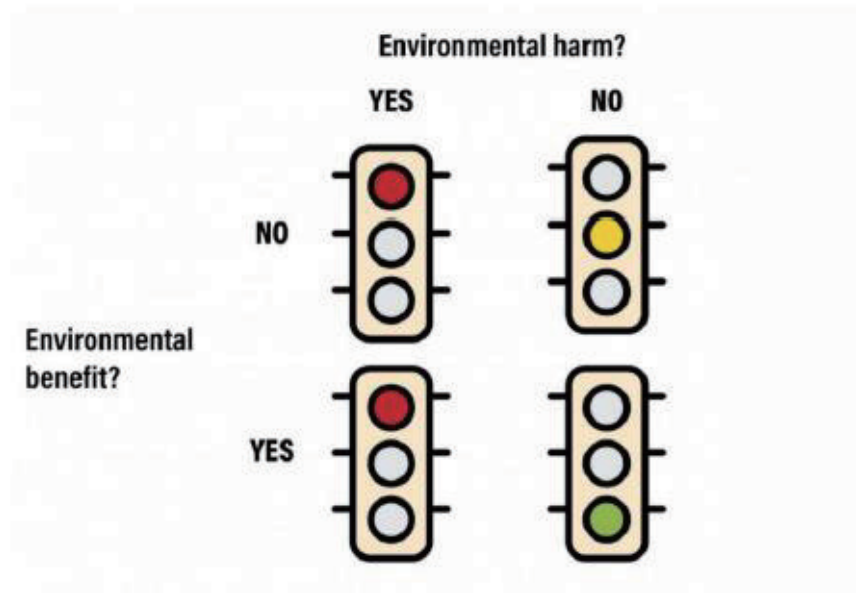
#### **1. Green Development Guidance: “1+9” recommendations**

The “1 + 9” recommendations in the Green Development Guidance for BRI Projects focus on reducing climate and eco-environmental risks in financing overseas project. The principles of the Guidance set out a clear path to follow to allow different parties involved in overseas project finance to reduce environmental risk, reduce costs of project implementation, accelerate project permission and accelerate international cooperation throughout all project phases. By applying the Guidance, financial institutions and project developers are therefore reducing their risks beyond the often insufficient and dynamic local requirements. The Guidance consists of:

##### **(1) A Color-Coded Project Classification Mechanism**

A mechanism to classify BRI projects based on environmental benefits and negative impact evaluation is proposed in the Guidance, with preliminary lists illustrated by sector examples. The classification is aligned with international standards and best practices, such as the Equator Principles (EP) that require signatory banks to differentiate projects by environmental risks as A, B, C, and finds ground in China’s emerging efforts, such as the China Banking and Insurance Regulatory Commission (CBIRC) Green Credit Statistics System which encourages banks to differentiate financed projects according to their environmental risks.

The classification of BRI projects investigates three major environmental objectives of pollution prevention, climate change mitigation, and biodiversity conservation. Based on positive and negative impact, projects are divided into “3+1” categories with the first three of (Figure 11):



**Figure 11 The Color-Coded Classification Mechanism for BRI Projects**

(Source: (BRIGC, 2021))

- Green projects - encouraged projects: Projects in this “encouraged category” have no significant negative impact on any environmental aspect of climate change mitigation, pollution prevention, and biodiversity protection, and positively contribute to at least one environmental aspect, particularly if they support international environmental agreements and conventions. Projects such as renewable energy development and utilization (solar and wind power plants, etc.) fall into this category.
- Yellow projects - environmentally neutral projects with moderate impacts: Projects in this category “Do No Significant Harm” (DNSH) to any environmental aspect, and any residual environmental harm can be mitigated by the project itself through affordable and effective measures within reasonable boundaries. Yellow projects include waste-to-energy projects and urban freight transportation with emission standard above Euro IV/national IV standards (or similar local applicable one).
- Red projects - projects requiring stricter supervision and regulation: Projects at risk of causing “significant and irreversible” environmental damage or major negative environmental impacts in one or more aspect of climate change mitigation, pollution prevention, and biodiversity protection. Red projects include coal-fired power, petrochemical, and mining and metal smelting projects.

For project developers and investors to be able to account for varied environmental and



climatic conditions of BRI participating countries, the classification process considers two major factors regarding environmental risks:

- The inherent characteristics of projects that are similar to each project of a specific type; and

The implementation characteristics specifically the application of mitigation and compensation measures to effectively avoid environmental impacts along project lifecycle. This color-coded classification also sets a fourth “transferred category” to provide a flexibility, which encourages projects to “upgrade” their category and allows them to consider local considerations in the respective countries by applying environmental management with measures to mitigate or compensate for potential environmental risks. Projects can be labeled as “red/yellow” or “red/green” with appropriate management.

## **(2) The 9 Recommendations**

The 9 recommendations focus on different aspects of project finance:

**Recommendation 1:** Green overseas investment practices address all project phases, from project initiation through project evaluation, financing, construction, operation, reporting and transfer/closure

**Recommendation 2:** Provide exclusion list of projects not available for funding to exclude those of significant and irreversible environmental impact and have no effective measures to mitigate, referencing the practices from finance institutions and supervisory bodies

**Recommendation 3:** Environmental (and Social) Impact Assessment (EIA/ESIA) depending on the project’s perceived risks, where “red”, “red/yellow”, “red/green”, and high-risk “yellow” projects should obtain an independent EIA assessment based on international best practices

**Recommendation 4:** Differentiated conditions, for example to reduce financing cost and approval times for “red/green” and “green” projects

**Recommendation 5:** Environmental and Social Management System for project company required to ensure mitigation measures are implemented and reported

**Recommendation 6:** Grievance redress mechanism provided to the affected stakeholders for full lifecycle management, enabling direct communication of environmental issues between affected stakeholders and financial institutions and complementing the other communication channels.

**Recommendation 7:** Integration of covenants related to breach of environmental

and social agreements between the financial institution and the project company to exercise remedies to rectify environmental management

**Recommendation 8:** Public reporting of environmental performance of project

**Recommendation 9:** International cooperation on improving environmental performances

These recommendations are relevant for different parties in the project financing lifecycle.

## 2. Roadmap for financial institutions

By setting out a detailed roadmap the Guide helps financial institutions embed the “1 project classification mechanism” and “9 recommendations” (Figure 12) into the lifecycle management of financed project, to improve environmental performance, reduce the climate and eco-environment related risks, and gaining more traction from a wide range of stakeholders in the pursuit of climate and sustainability goals.

- **Financial institutions should involve themselves as early as possible in the project development**, to closely work with the project owner to better understand the project’s environmental risks long before the final project design decisions are made. This allows financial institutions to reduce transaction cost in designing contracts and establishing reporting requirements due to a more common understanding and knowledge of project specific environmental risks. This requires financial institutions to work closely with the client to share the FIs’ environmental risk appetite (e.g., specific project types excluded), the requirements for environmental management, and the reporting requirements. As financial institutions’ decision-making largely depends on the result of environmental due diligence including the project’s classification (i.e., “red”, “yellow”, “green”), the FI needs to set up standards and procedures to share expectations and evaluate and audit the classification.
- **Financial institutions offer differentiated conditions for projects in different categories.** Accordingly, financial institutions need to internally define and communicate with the client both differentiated terms of financing (e.g., lower interest rates for “green” projects), environmental impact assessment requirements, environmental and social management system requirements, loan covenant that include environmental management considerations, as well as reporting and disclosure requirements where “red”, “red/yellow” and “red/green” projects would



have higher reporting requirements than other projects.

- **For all categories alike, financial institutions should apply environmental oversight** along the participated project lifecycle, including providing a grievance and response mechanism as a direct communication channel for local affected stakeholders to report environmental grievances directly to the financial institutions. Such grievance mechanism enhances the grievance mechanism of project company and complements the financial institutions’ risk alert system.
- **Chinese financial institutions can tap on their growing experience and footprint in global project finance to take an active role in setting standards.** The Guidance is harmonized across many existing standards and pushes the frontier of global project finance in emerging markets by integrating standards applied successfully within China, a largest emerging economy itself. Drawing on the project classification, the holistic environmental evaluation, and the inclusions of responsibilities and aligned actions across stakeholders, Chinese financial institutions, together with regulatory stakeholders, can contribute to improving global standard setting for financing green overseas projects.

Self-evaluation Results	Project Classification	Lifecycle oversight	Exclusion of harmful projects	Environment Impact Assessment	Differentiated management	ESMS	Grievance Redress	Covenant	Reporting and disclosure	International Cooperation	
	<ul style="list-style-type: none"> <li>• Provide Incentives for Self-Evaluation</li> <li>• Evaluate and Verify Client's Self-Evaluation</li> <li>• Match Project Classification to Differentiated Management</li> </ul>	<ul style="list-style-type: none"> <li>• Internal setup to apply green development guidance throughout project cycle</li> </ul>	<ul style="list-style-type: none"> <li>• Provide exclusion list of projects whose environmental risks are not acceptable</li> </ul>	<ul style="list-style-type: none"> <li>• Require independent and publicly available EIAs based on international and/or Chinese standards</li> </ul>	<ul style="list-style-type: none"> <li>• Worse financing conditions for "red" projects</li> </ul>	<ul style="list-style-type: none"> <li>• Require regular reporting from the ESMS</li> </ul>	<ul style="list-style-type: none"> <li>• Establish a transparent and easy-to-access grievance mechanism</li> <li>• Set a goal to respond to received complaints through its grievance mechanism</li> </ul>	<ul style="list-style-type: none"> <li>• Use Covenants</li> <li>• Take relevant measures, in extreme cases declare bankruptcy of the project, to rectify mismanagement</li> </ul>	<ul style="list-style-type: none"> <li>• Strict (frequent and standardized and detailed) report on KPIs or environmental impact data</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental information sharing to support global data repositories on climate and biodiversity</li> <li>• Participate in global cooperation initiatives</li> <li>• Take active role in setting global standards on green project financing</li> </ul>	
					<ul style="list-style-type: none"> <li>• Better financing conditions for "red/green" projects</li> </ul>						<ul style="list-style-type: none"> <li>• Relatively relaxed reporting requirement</li> </ul>
					<ul style="list-style-type: none"> <li>• Better financing conditions for "green" projects</li> </ul>						

Figure 12 Embedding the Guidance into Project Lifecycle by Financial Institutions

(Source: (BRIGC, 2021))

**Adopting the recommendations in the Application Guide requires the financial institutions to both build up in-house capacity and mobilize external resources. A**

functioning set of “1+9” recommendations embedded in financial institutions would rely on the participation across decision makers and functions of due diligence/appraisal, environmental and social management, risks control, legal affairs, compliance, and key business units. Help from independent consultants is desired, e.g., to verify the project’s evaluation, environmental due diligence, and grievance cases.



**Appendix 2 Green Development Guidance for BRI Projects “1+9” action framework benchmarked to policy documents**

Green Finance Guidelines for the Banking and Insurance Industry (2022 no.15)	Green Development Guidance for BRI Projects “1+9” action framework									
	Project Classification	1. Lifecycle oversight	2. Exclusion of harmful projects	3. Environment Impact Assessment	4. Differentiated management	5. ESMS	6. Grievance Redress	7. Covenant	8. Reporting and disclosure	9. International Cooperation
Chapter I General Provisions										
Article 1										
Article 2										
Article 3										
Article 4										
Article 5										
Chapter 2 Organizational Management										
Article 6										
Article 7										
Article 8										
Article 9										
Article 10										
Chapter III Policy System and Capacity Building										
Article 11										
Article 12										

Article 13										
Article 14										
Article 15										
Article 16										
Article 17										
<b>Green Finance Guidelines for the Banking and Insurance Industry (2022 no.15)</b>	<b>Green Development Guidance for BRI Projects “1+9” action framework</b>									
	<b>Project Classification</b>	<b>1. Lifecycle oversight</b>	<b>2. Exclusion of harmful projects</b>	<b>3. Environment Impact Assessment</b>	<b>4. Differentiated management</b>	<b>5. ESMS</b>	<b>6. Grievance Redress</b>	<b>7. Covenant</b>	<b>8. Reporting and disclosure</b>	<b>9. International Cooperation</b>
Chapter IV Investment and financing process management										
Article 18										
Article 19										
Article 20										
Article 21										
Article 22										
Article 23										
Article 24										
Article 25										
Chapter V Internal Control Management and Information Disclosure										
Article 26										





Article 27										
Article 28										
Chapter 6 Supervision and Administration										
Article 29										
Article 30										
Article 31										
Article 32										
Article 33										
Article 34										

(Source: (CBIRC, 2022))

**Appendix 3 International practice analysis against the GDG “1+9” action framework**

Case	Phase I and II recommended practice	World Bank	Shandong Green Development Fund	Green Climate Fund	Multilateral Center of Development Finance (MCDF)	Agence Francaise de Development (AFD)
<b>Project classification</b>	The use of a mechanism to classify BRI projects based on environmental benefits and negative impact evaluation	World Bank Environmental and Social Standards (ESS): World Bank environmental and social policy for investment project financing: "The bank will classify all projects into four categories: High risk, substantial risk, moderate risk, and low risk"	Projects are classified both by the ADB's Safeguard Policy Statement as well as by the fund's Green Climate Assessment Guidelines	The GCF's ESMS requires projects to be classified by environmental and social risk in accordance with the fund's Environmental and Social Safeguards	The MCDF categorizes projects through the AIIB's Environmental and Social Policy as A,B,C, and FI (financial intermediary) based on type, nature, location, sensitivity and scale.	The AFD applies the World Bank's categorization: World Bank Environmental and Social Standards (ESS): World Bank environmental and social policy for investment project financing: ""The bank will classify all projects into four categories: High risk, substantial risk, moderate risk, and low risk""



<p><b>1. Lifecycle oversight</b></p>	<p>Green overseas investment practices address all project phases, from project initiation through project evaluation, financing, construction, operation, reporting and transfer/closure</p>	<p>World Bank Environmental and Social Framework explicitly states that the ten Environmental and Social Standards apply to borrowers throughout the project life cycle</p>	<p>The fund's ESMS includes policies covering the lifecycle of supported projects, including semi-annual monitoring reports from the fund manager</p>	<p>The ESMS requires the GCF and financial intermediaries to manage and monitor environmental and social performance across projects' lifespan</p>	<p>The MCDF follows this AIIBs Environmental and Social Policy, which emphasizes oversight through the project life-cycle such as in the possibility of recategorizing projects dynamically.</p>	<p>AFD is aligned with the World Bank's Environmental and Social Framework, which explicitly states that the ten Environmental and Social Standards apply to borrowers throughout the project life cycle</p>
<p><b>2. Exclusion of harmful projects</b></p>	<p>Provide exclusion list of projects not available for funding to exclude those of significant and irreversible environmental impact and have no effective measures to mitigate, referencing the practices from finance institutions and supervisory</p>	<p>No explicit exclusion list. Excluded project types can be identified from the World Bank Operations Manual: Operational Policies on different economic sectors</p>	<p>The fund simultaneously applies the ADB Prohibited Investment Activities List, the AFD Prohibited Investment Activities List, and the KfW Exclusion List and Sectoral Guidelines</p>	<p>The GCF's Administrative remedies and exclusion policy specifies how partners are excluded if engaging in prohibited practices. No specific list of project types for exclusion</p>	<p>As the MCDF secretariat is hosted by the AIIB, the MCDF adheres to the AIIB Environmental and Social Framework: Environmental and Social Exclusion List</p>	<p>The AFD applies its own exclusion list: Exclusion list for AFD Group in foreign countries</p>

	bodies					
<b>3. Environmental impact assessment</b>	Environmental (and Social) Impact Assessment (EIA/ESIA) depending on the project’s perceived risks, where “red”, “red/yellow”, “red/green”, and high-risk “yellow” projects should obtain an independent EIA assessment based on international best practices	World Bank Environmental and Social Standards (ESS) 1: Assessment and Management of Environmental and Social Risks and Impacts	All project considered for funding from the fund must provide environmental impact assessments in accordance with Chinese regulations that simultaneously meet the ADB Safeguard Policy Statement. The fund provides a template	The ESMS requires all accredited entities to carry out Environmental and Social Impact Assessments (ESIA)	The MCDFs Governing Instrument of the Finance Facility requires environmental assessment of both partners and projects in accordance with accredited international financial institutions' standards	The AFD follows the World Bank Environmental and Social Standards (ESS) 1: Assessment and Management of Environmental and Social Risks and Impacts
<b>4. Differentiated management</b>	Differentiated conditions, for example to reduce financing cost and approval times for “red/green” and “green” projects	World Bank commits 35% of financing to climate action, resulting in greater access to capital for green projects	The fund provides better financing terms to projects labelled as 'transformatively green'	The ESMS provides different requirements for impact assessment depending on the risk category of the project	Projects are managed differently according to their categorization through the AIIB's Environmental and Social Policy	AFD loans are differentiated according to list of variables including its environmental and social circumstances



<p><b>5. Environmental and social management system</b></p>	<p>Environmental and Social Management System for project company required to ensure mitigation measures are implemented and reported</p>	<p>World Bank Environmental and Social Standards (ESS) 1: Assessment and Management of Environmental and Social Risks and Impacts</p>	<p>The fund manager (CICC) prepared an ESMS primarily relying on the ADB's policies but also drawing from AFD, KFW, and GCF</p>	<p>The GCF has developed its own ESMS broad operational framework that allows the GCF to incorporate environmental and social considerations into its decision-making and operations</p>	<p>In line with the AIIB's provisions, the MCDF requires partners to put in place a suitable ESMS in accordance with accredited international financial institutions' standards</p>	<p>The AFD applies the World Bank Environmental and Social Standards (ESS) 1: Assessment and Management of Environmental and Social Risks and Impacts</p>
<p><b>6. Grievance redress</b></p>	<p>Grievance redress mechanism provided to the affected stakeholders for full lifecycle management, enabling direct communication of environmental issues between affected stakeholders and financial institutions and complementing the</p>	<p>World Bank Environmental and Social Standards (ESS) 10 requires borrowers to provide grievance mechanisms</p>	<p>The fund manager provides a grievance redress mechanisms in accordance with the ADB Safeguard Policy Statement for the fund as a whole and for each sub-project</p>	<p>The GCFs' Environmental and Social Policy requires accredited entities to establish grievance mechanisms that work independently and in collaboration with GCF's own grievance mechanism</p>	<p>The MCDFs governing documents do not explicitly establish its own grievance mechanism though its partners are required to meet the AIIB Environmental and Social Policy</p>	<p>The AFD applies the World Bank Environmental and Social Standards (ESS) 10 requires borrowers to provide grievance mechanisms</p>

	other communication channels.					
<b>7. Covenant</b>	Integration of covenants related to breach of environmental and social agreements between the financial institution and the project company to exercise remedies to rectify environmental management	World Bank includes standard covenants reflecting environmental obligations of borrowers	Covenants cover both Chinese regulations and ADB practices	The ESMS requires accredited agencies to manage and rectify potential environmental and social impacts arising from projects	The MCDF Results Framework provides avenues to assess and improve on lacking performance	The AFD applies the World Bank includes standard covenants reflecting environmental obligations of borrowers
<b>8. Reporting and disclosure</b>	Public reporting of environmental performance of project	World Bank Environmental and Social Standards (ESS) 1 and 10 requires environmental information disclosure	The fund manager (CICC) manages a system for all sub-projects to report semi-annually. The fund manager also reports on the implementation of the ESMS system itself. The system has a publicly accessible dashboard with	The GCF carries out monitoring and reporting functions for all accredited agencies at both activity and aggregated levels	The MCDF's Policy on Information Disclosure requires partners to disclose to the MCDF which will release an annual report in accordance with its Results Framework	Disclosure requirements are part of the AFDs Evaluation Policy applied to both the AFD itself and its partners



<p><b>9. International cooperation</b></p>	<p>International cooperation on improving environmental performances</p>	<p>World Bank organizes numerous international multistakeholder events promoting climate finance, such as its Annual Meeting. World Bank discloses project level data through publicly accessible databases.</p>	<p>relevant data. With the participation of several national and multinational actors the project is a case of international cooperation. ADB uses the case to develop similar funds elsewhere with international partners</p>	<p>The GCF finances projects with a wide range of partners across the world and is, in this way, existing as an international cooperation mechanisms in itself</p>	<p>As a multilateral institution working both with countries and financial institutions the MCDF is international at the core of its mandate and facilitates partners' efforts to engage in international cooperation</p>	<p>The AFD actively works with both countries, financial institutions and multilateral organizations such as the Green Climate Fund, and is leading the Finance in Common Initiative.</p>
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(Source: Authors compiled from public documents of the listed entities.)

## References

- ADB. (2020). *Shandong Green Development Fund Project Administration Manual*.
- AIIB. (2021). *Working Paper on Climate Change Investment Framework*.
- ASEAN. (2014). *Reference Guideline on Social Responsibility and Environmental Protection of Investment in ASEAN*. Retrieved from [http://www.china-asean-fund.com/files/publication/20140709150739\\_166.pdf](http://www.china-asean-fund.com/files/publication/20140709150739_166.pdf)
- BRIGC. (2021). *Green Development Guidance for BRI Projects Phase II Task 1 Application Guide for Enterprises and Financial Institutions*.
- CBIRC. (2022). *Green Finance Guidelines for the Banking and Insurance Industry*. Retrieved from [http://www.gov.cn/zhengce/zhengceku/2022-06/03/content\\_5693849.htm](http://www.gov.cn/zhengce/zhengceku/2022-06/03/content_5693849.htm)
- MOFCOM. (2021). *2020 Statistical Bulletin of China's Outward Foreign Direct Investment*.
- MOFCOM. (2022). *China's Investment and Cooperation in BRI, 2021*.
- WRI. (2022). *Biodiversity Hotspots*. Retrieved from Resource Watch.
- WRI. (2022). *China Overseas Finance Inventory (COFI) Database*.
- WRI. (2022). *Climate Watch*. Retrieved from [https://www.climatewatchdata.org/data-explorer/net-zero-content?net-zero-content-categories=netzero\\_target&net-zero-content-countries=All%20Selected&net-zero-content-indicators=All%20Selected&page=1](https://www.climatewatchdata.org/data-explorer/net-zero-content?net-zero-content-categories=netzero_target&net-zero-content-countries=All%20Selected&net-zero-content-indicators=All%20Selected&page=1)