

## INDUSTRY-SPECIFIC

SUGGESTIONS ON THE FRAMEWORK FOR CLIMATE-RELATED INFORMATION DISCLOSURE

Timely

Accuracy

Standard

### **Abstract**

Climate-related information disclosure at corporate levels is key for addressing climate change. As the core element of climate information, carbon emission data is increasingly valued by all market entities. Various stakeholders are devoting efforts to promoting climate-related information disclosure these years, while enterprises are getting a better understanding of information disclosure. However, the climate-related information disclosure of high-emitting enterprises is greatly impeded due to the lack of systematic guidelines and infrastructure construction. Meantime, the weak and inconsistent carbon accounting carried out by financial institutions also limits the ability of investment and financing activities to promote green and low-carbon transition in industries. Based on the status quo of climate-related information disclosure within China, this paper proposes suggestions for climate-related information disclosure for key emission industries and financial institutions to provide relevant references for climate-related information disclosure in China.



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### Introduction

China's environmental information disclosure started from 2007, a far-reaching process. According to the history of environmental information disclosure system in China, as early as April 2007, the State Environmental Protection Administration had issued the Measures for the Disclosure of Environmental Information (for Trial Implementation), proposing that enterprises should, in the principle of combining voluntary disclosure and compulsory disclosure, accurately disclose corporate environmental information in time; the competent departments for environmental protection should establish and improve the environmental information disclosure system. In December 2014, the Ministry of Environmental Protection issued the Measures for the Disclosure of Environmental Information of Enterprises and Public Institutions, proposing that enterprises and institutions should truthfully disclose their environmental information in time in the principle of combining mandatory disclosure and voluntary disclosure; the competent department of environmental protection should establish and improve the working mechanism to guide and oversee the environmental information disclosure by enterprises and public institutions.

In recent years, carbon emission disclosure has gradually become an important part of environmental information disclosure in China. In May 2021, the Ministry of Ecology and Environment issued the *Environmental Information Legal Disclosure System Reform Plan*, which proposed to gradually establish and improve mandatory environmental information disclosure by enterprises, and required that entities (including key pollutant discharging units, the listed companies, and bond-issuing companies) which are required for implement mandatory clean production audits, should disclose corporate environmental information in annual reports and other relevant reports in accordance with laws and regulations, so as to implement their legal obligations for mandatory disclosure of environmental information. In December 2021, the Ministry of Ecology and Environment issued the *Measures on the Management of Mandatory Corporate Environmental Information Disclosure*, and subsequently issued a supporting document the *Standards for the Format of Mandatory Corporate Environmental Information Disclosure*, in which it is clarified that the legal disclosure of corporate annual environmental information should include information on carbon dioxide emission; for companies regulated by carbon markets, the disclosed information should also include the actual carbon dioxide emissions of the current year and the actual emissions of the previous year, compliance status, the compilation and release of annual greenhouse gas (GHG) emission reports, etc.

Different industries have different carbon emission sources and accounting scopes. The suggestions on climate-related information disclosure of different industries in accordance with industrial characteristics are of great significance for improving the information disclosure system in China. For different information disclosure requirements for high carbon emission industries and high value-added industries such as finance, we can not only constrain the emission behavior of high emission enterprises from the sources, a non-mandatory way to promote low-carbon production and operation of enterprises, but also guide the behavior of high value-added industries such as finance at the resource side, and provide incentives to the low-carbon behavior of downstream enterprises. Emissions from high-carbon-emitting industries are mainly Scopes 1 and 2, which can be calculated according to the emission accounting report guidelines for industries and enterprises issued by the authorities, to realize a relatively complete carbon emission disclosure of the production and operation of industries and enterprises; for high value-added industries such as finance, Scope 3 carbon emissions are a critical link to reflect the impact of financial institutions on the environment. The disclosure of Scope 3 carbon emission information is of great importance for regulators and stakeholders to learn about the impact of financial institutions' lending and investment activities on climate in a comprehensive and multi-dimensional manner, so as to allocate financial capital more efficiently and further promote the transformation into a low-carbon society.

<sup>&</sup>lt;sup>1</sup> According to the Green House Gases Protocol jointly released by WBCSD and WRI, GHG emissions are classified into three scopes by their sources. Scope 1 emissions are direct GHG emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).

Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.



# An overview of international experiences climate-related information disclosure

At present, there are two main models for promoting climate-related information disclosure internationally. One is the initiative-based voluntary climate-related information disclosure, which includes mainstream frameworks such as TCFD, SASB, CDP and GRI. These initiatives have their own characteristics. Specifically, TCFD has developed a framework applicable to multiple industries; SASB has designed frameworks and standards for different industries

specifically; CDP has adopted a questionnaire form and enriched the relevant contents based on TCFD; GRI covers more ESG-related topics. However, in general, the existing voluntary disclosures usually fail to provide sufficient and effective information, while the cost for financial institutions to obtain relevant data is high, resulting in the consistency and clarity of the current voluntary climate information disclosed by enterprises to be improved.

Table 1: Global mainstream voluntary climate-related information disclosure frameworks

|                        | TCFD  | SASB   | CDP  | GRI  |
|------------------------|---|--|--|--|
| Description            | Cross-sectoral<br>climate disclosure<br>framework   | Industry-specific<br>sustainablity<br>disclosure<br>framework  | Sector-specific<br>climate<br>questionnaire  | Cross-sectoral ESG disclosure framework with specthic standards for oil, gas and coal                  |
| Sector<br>Specificity  | Low   | High   | High   | Low  |
| Diselesure<br>Coverage | Four-part frame-<br>work covering<br>governance,<br>strategy, risk<br>management,<br>and metrics and<br>targets | Framework covers environment, social capital, human capital, business model and innovation, and governance | Questionnaire covers TCFD framework with additional categories on carbon pricing, emission methodlogy and verification, among others | Framework covers a wide array of ESG topics from emissions to workplace diversity to occupation health |

Another mode of climate-related information disclosure is mandatory climate-related information disclosure backed by government regulations. In order to ensure that climate change-related data is of sufficient quality to support various investment decisions, countries and regions such as the EU and Japan have established their own mandatory climate-related information disclosure systems based on the TCFD framework, but the coverage varies. For example, Japan requires disclosure by all

listed companies within the main board of the Tokyo Stock Exchange, while the UK requires disclosure by all listed companies with 500 or more employees. In terms of when the policies come into effect, mandatory disclosure has been implemented in Japan and the UK in April 2022, and in New Zealand from 2023, and the EU provides sufficient lead time for companies in the region to begin implementing the mandatory disclosure requirements by 2024.

Table 2: Countries and regions which implement mandatory climate-related information disclosure

| European Union  | Japan  | New Zealand  | United Kingdom   |
|---|--|--|--|
| Proprsed 2021   | Introduced November 2021   | Passed October 2021  | Finalized January 2022   |
| Incorporates TCFD   | Aligned with TCFD  | Aligned with TCFD  | Aligned with TCFD  |
| All large companies in EU<br>and all Eurpean stock-ex-<br>change listed companies | Companies listed on the<br>Tokyo Stock Exchang's<br>"Prime" market | All banke, credit unions,<br>building societies, and<br>investment managers with<br>more the NZ\$1 billion | Conpanies with > 500<br>employees publicly traded<br>in the UK |
| Reporting begins 2024   | Reporting begins April 2022  | Reporting begins 2023  | Reporting begins<br>April 2022                                 |

# The climate-related information disclosure work has been gradually advanced in China, and the participation of enterprises has increased

In the context of striving for the goals of carbon peaking and carbon neutrality, enterprises have gradually realized the importance of addressing the risks and challenges of climate change to their long-term development. In recent years, China has made some progress in climate-related information disclosure, and enterprises have continuously enhanced their awareness of climate-related information disclosure.

From the perspective of disclosure channels, there are two main modes of climate-related information disclosure for listed enterprises in China at this stage, one is to disclose through ESG reports and the other is to participate in the Carbon Disclosure Project (CDP).

From the development history of ESG in China, from 2018, when the Securities Regulatory Commission revised the *Guidelines on Governance of Listed* 

Companies to establish the basic framework of ESG information disclosure in China, to 2020, when the State Council issued the Guidance on Building a Modern Environmental Governance System to explicitly require enterprises to disclose environmental governance information, ESG-related policies in China have guided in the "carbon peaking" and carbon neutrality goals". The number and quality of ESG reports are on an overall upward trend. The ESG Rating Analysis Report (2020) of A-share Listed Companies shows that the number of ESG reports issued by A-share listed companies in China has increased from 371 to 1,021 from 2009 to 2020, and the overall ESG indicator disclosure rate of listed companies is also gradually increasing. The Environmental, Social, and Governance Reporting Guidelines issued by the Hong Kong Stock Exchange has made more specific requirements on the disclosure content of ESG reports and made it mandatory for listed companies to disclose.

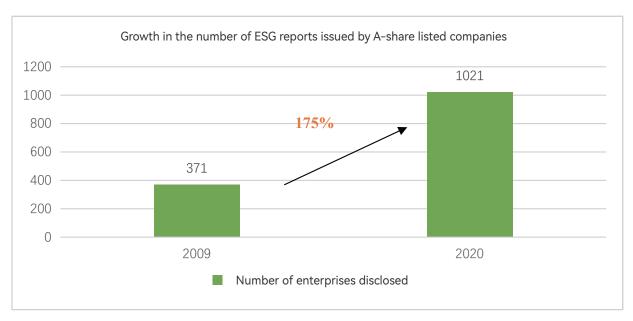


Figure 1: Growth in the number of ESG reports issued by A-share listed companies

Talking about the participation of Chinese enterprises in CDP projects, the participating enterprises cover industries with low scope 1 and scope 2 carbon emission levels, such as banking and insurance, as well as industries with high emission levels, such as metals and mining. The CDP 2020 China Listed Companies Report shows that 1,987 Chinese

companies were invited to make disclosures in the CDP while 1,349 disclosed their environmental information, compared to 664 in 2018 and 1,048 in 2019, an increase of 58% and 27% respectively, with the number of disclosed companies growing faster than the global average level.

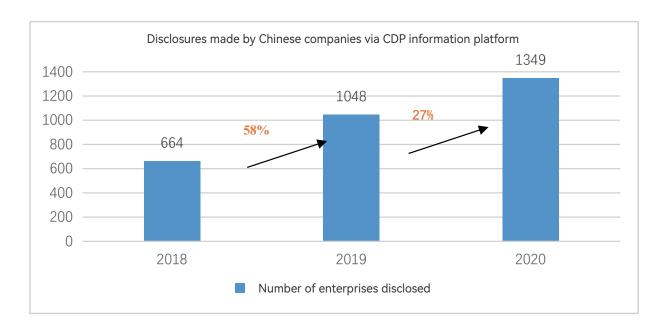


Figure 2: Comparison of CDP and CSR information disclosure of Chinese enterprises

# 3 Listed companies in China lack initiative in climate-related information disclosure, and the quality of disclosed data needs to be improved

In the context of striving for carbon neutrality in China, the performance of listed companies in low-carbon development has become an important factor for investors to make decisions, and the public has higher expectations for listed companies to disclose

their carbon emission data. However, few companies take the initiative to disclose carbon emission data, and the quality of carbon emission data disclosed varies considerably. In November 2021, the first domestic list focusing on carbon emissions of listed companies, "China Listed Companies Carbon Emissions Ranking (2021)", was released. According to the lists, few listed companies took the initiative to disclose carbon emission data. For example, among the 51 A-share listed companies on the list, only 4 companies actively disclose their carbon emissions. Since the Hong Kong Stock Exchange (HKSE) has stricter requirements for companies to prepare Environmental, Social, and Governance (ESG) reports, the disclosure of Hong Kong-listed companies is significantly better than of A-share listed companies: among 23 A+H-share listed companies in the list, only 3 companies have not disclosed information; among 26 H-share listed companies, only 3 companies have not disclosed information.

The reason is that although the number of companies disclosing climate information in China is increasing year by year, China has not issued policies and regulations on climate-related information disclosure and lacks unified disclosure platforms, while enterprises use inconsistent GHG accounting methods and carbon accounting standards and only a small number of them take the initiative to invite the third-party institutions for verification. Thus, there are no unified standards and regulations for climate-related information disclosure by listed companies in China, leading to the reluctance to disclose corporate climate-related information disclosure. In addition, there is room for improvement in the quality and comparability of disclosed data.

## The disclosure of Scope 3 carbon emissions is very important, facing great challenge at the present stage

Compared with the traditional high-carbon-emitting industries, high value-added industries such as finance have less direct GHG emissions, but accounting for carbon emissions related to their value chains can help guide financial institutions to invest in climate-friendly enterprises and projects. This is of great significance to reduce the investment in high-energy-consuming industries and promote the development of a green and low-carbon economy.

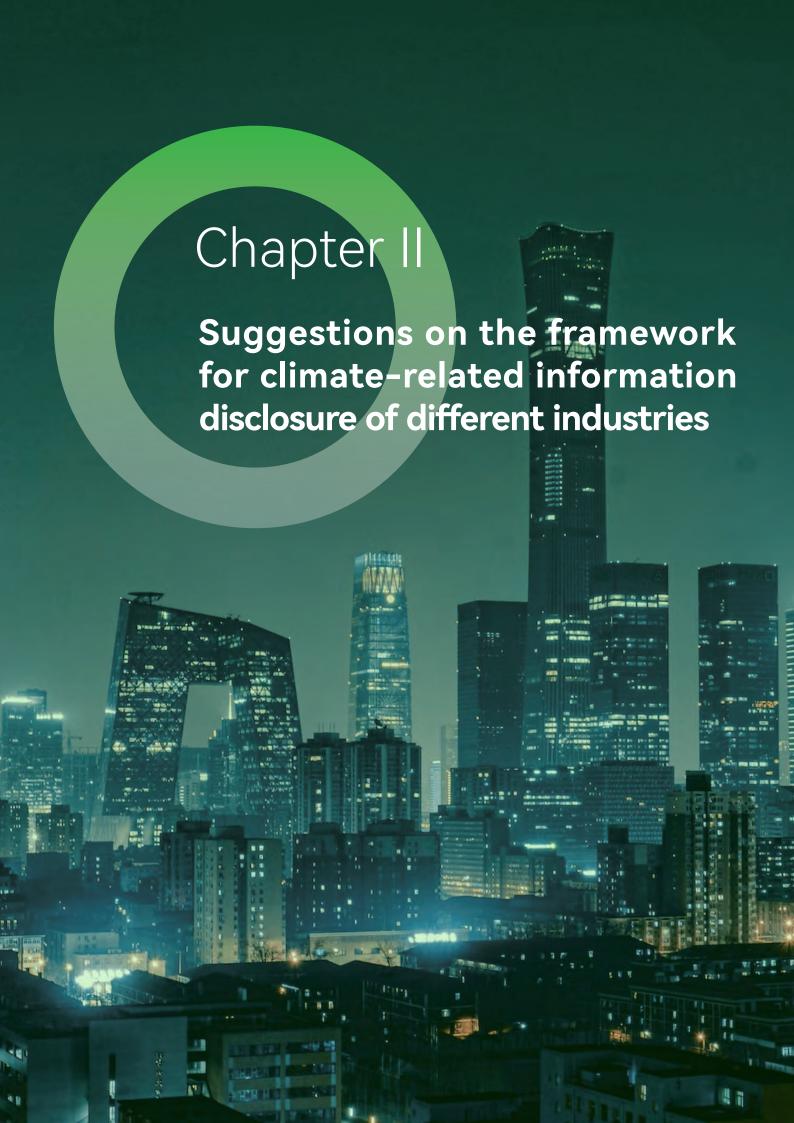
At present, the regulators have posed increasingly stringent requirements for the disclosure of environmental

information of financial institutions, especially the information on the impact of lending and investing activities on the environment. The accounting and disclosure of GHG emissions related to lending and investing activities are the basis for meeting regulatory requirements and achieving transparency via information disclosure, and are also the key to the scenario analysis, emission reduction target-setting and actions of financial institutions. During the decarbonization process of China, financial institutions may face certain transition risks of their loan investments in high-carbon industries, and the

accounting and disclosure of Scope 3 carbon emissions will help financial institutions accurately identify and quantify potential risks in investment and financing, and help financial institutions enhance risk management of possible asset losses. In July 2021, the People's Bank of China issued the *Guidelines on Environmental Information Disclosure for Financial Institutions*, which states the principles, disclosure forms, disclosure frequency, disclosed content, etc. that financial institutions shall follow in the process of environmental information disclosure, pushing environmental information disclosure by financial institutions through policy guidance into a new stage of evidence-based disclosure.

However, financial institutions still face the problems of unclear emission scopes and great difficulty in obtaining relevant data in environmental information disclosure. According to the participation of listed Chinese companies in CDP in 2020, the number of companies disclosing Scopes 1 and 2 emissions is 57 (about 92%) and 50 (about 80%) respectively, while the number of companies that disclose Scope 3 emissions is only 19 (about 30%). For financial institutions, Scopes 1 and 2 GHG emission sources are relatively certain, so it is easier to track data. However, Scope 3 mainly involves the disclosure of relevant data from entities invested and financed by financial institutions financing objects, or from accounting of industry data, so it is difficult to acquire data.

On the whole, after the targets of carbon peaking and carbon neutrality were proposed, the awareness and willingness of Chinese enterprises to disclose carbon emissions have been continuously enhanced, and great progress has been made in climate-related information disclosure. However, as the policies, regulations, guidelines on and infrastructure for climate-related information disclosure still needs to be improved, there is still room for improvement for the initiative of listed companies in China to disclose carbon information and the quality of the disclosure data. The disclosure of Scope 3 carbon emissions by financial institutions also needs to be explored. In this context, a framework of climate-related information disclosure for different industries is proposed in combination with the current status of China's climate-related information disclosure, providing guidance for climate-related information disclosure behavior of Chinese enterprises, guiding direction for the formation of climate-related information disclosure guidelines for different industries in the future, and laying the foundation for giving full play to the significance and role of climate-related information disclosure.



The focus on climate-related disclosures varies among industries. For high-carbon-emitting companies, their emissions and emission reduction potential are more concerned by investment institutions and some of these companies also disclosed carbon emissions and carbon footprints in the life cycle of their products. For financial institutions, due to the relatively low carbon emissions from their operations, the focus is on information disclosure of the invested enterprises, so as to promote enterprises to achieve carbon neutrality through the investment and influence of financial institutions. Therefore, it is of great significance to provide a clear and unified framework for climate-related information disclosure according to the characteristics of the industry to which a company belongs. For industries and companies involving Scope 3 emissions more, it is even more necessary to formulate an explicit calculation method for Scope 3 emissions to guide their climate-related information disclosure behaviors. Meantime, the provided framework for climate-related information-al mainstream disclosure standards, to offer a reference for multinational companies to disclose carbon information.

In order to form a framework for climate-related information disclosure for different industries, on the basis of proposing a general framework of suggestions for corporate climate-related information disclosure, specific disclosure indicators for subdivided industries are formed according to the disclosure priorities of high-carbon-emitting industries and high value-added industries such as finance. In addition, the framework will seek advice from market entities such as enterprises and competent departments. and will be advanced in a staged way after being perfected.

The general disclosure framework should typically include a description of the disclosed subject, information on carbon emissions, industrial characteristic indicators, and corporate actions to address climate change.

Table 3: Suggestions on a general framework for corporate information disclosure

| Disclosure elements                  | Disclosure indicators                               | Disclosed contents   |
|--------------------------------------|---|--|
|                                      | Basic information of enterprises                    | Enterprise name (or other economic organization), unified social credit code (organization code), industry classification, address of production and business premises, legal representative, time of establishment, and name and product code of main products.   |
| Description of the disclosed subject | Accounting<br>boundary and scope<br>of disclosure   | Determine the accounting boundary and scope following the national GHG emission accounting guidelines for different industries.  |
|                                      | Important changes<br>in production and<br>operation | Include 1) merger, separation, closure or relocation of enterprises; 2) changes in geographic boundaries; 3) closure of major production and operation systems or new project production; 4) changes, including accounting boundaries, emission sources, etc., compared with the previous year; 5) changes including accounting boundaries, emission sources, etc., compared with the base year. |

| Continued Table 3 | : Suggestions on a gene | ral framework for corp | orate information disclosure |
|-------------------|-------------------------|------------------------|------------------------------|
|-------------------|-------------------------|------------------------|------------------------------|

| Disclosure elements                                 | Disclosure indicators   | Disclosed contents  |
|---|---|---|
|   | Carbon emissions  | Annual change of total carbon emissions, the annual change of carbon emission intensity (carbon emission per unit of product), description of the data source of activity level, description of the data source of emission factor, etc.  |
| Information on carbon emissions                     | Participation in the carbon market                                    | Mandatory data reporting and submission for carbon market, surrender of allowance and compliance, etc. Voluntary carbon market transactions, cancellation of emission reductions, etc.  |
| Industrial character-<br>istic indicators           | Energy consumption<br>level/carbon emission<br>performance            | Carbon emissions from the production of industrial enterprise, and comparison with industry benchmark value/industry advanced value.  |
| Corporate action on<br>addressing climate<br>change | Measures taken to<br>control carbon<br>emissions and their<br>effects | Implemented/planned implementation of carbon emission reduction measures and carbon reduction amount, internal organization, system construction and management system for carbon emission control.   |
|   | Climate-related risks<br>and opportunities                            | Risks from climate change (carbon emission reduction costs, etc.), as well as opportunities from climate change (such as new technologies, new products and services, and institutional or technological changes related to climate change that bring potential competitive advantages to companies). |
|   | Sustainable development concepts                                      | Concept, goals, culture, etc. of corporate sustainable development  |

## Suggestions and characteristic indicators for information disclosure in high carbon emission industries

In general, key emission entities should use the GHG accounting methods and reporting guidelines for various industries issued by the government as the standard for quantitative information disclosure, and reflect the effectiveness of corporate carbon emission and carbon emission management through changes in indicators such as the total amount and intensity of carbon emissions during the year. At the same time, it is necessary to strengthen the connection and coordination with the latest requirements of national corporate environmental information disclosure and the annual report disclosure requirements of listed companies, referring to the international mainstream

disclosure framework indicators. The disclosed contents should be enriched in the fields of energy conservation and carbon reduction targets, climate risk management, and sustainable development strategies, reflecting a comprehensive view of enterprises to address climate change.

For the characteristics of emission behavior and actions to address climate change for high-carbon-emitting industries, the following table provides suggestions on the characteristic indicators of the power industry, steel industry, petrochemical, and chemical industries under the general framework of carbon emission disclosure.

Table 4: Suggestions on characteristic indicators of the information disclosure framework for high-carbon-emitting industries

| Disclosure                                 | Disclosure   | Power gener-  | Steel industry   | Petrochemical and   |
|--|--|---|--|---|
| elements                                   | indicators   | ation industry  | Steel madstry  | chemical industry   |
|  | Accounting boundary and scope of disclosure                              | Scopes 1 and 2  |  |   |
| Description of the disclosed subject       | Important changes in production and operation                            | production; 2) Changes in accouprevious year;   | nting boundaries, emission   | operation system or new project<br>in sources, etc. compared with the<br>in sources, etc. compared with the   |
| Information on carbon emissions            | Carbon emissions   | <ol> <li>Annual changes in carbon emission intensity (carbon emission per unit of product produced);</li> <li>Explanation of emission factor data (data source, update of emission factor per unit product), etc.</li> </ol>  |  |   |
|  | Participation in the carbon market                                       | Carbon market data compliance and relat   |  | on, surrender of allowances,  |
| Industrial<br>characteristic<br>indicators | Energy consumption<br>level/carbon emission<br>performance               | Coal consumption of power supply in thermal power plants, carbon emission per unit of power supply, non-fossil fuel energy power generation and emission reduction, etc.  | Carbon dioxide<br>emission per ton of<br>steel, iron-steel<br>ratio, etc.  | Comprehensive energy consumption per unit of chemical products (alkene, polyethylene, purified terephthalic acid, etc.), power consumption per unit of chemical products (purified terephthalic acid, etc.), comprehensive carbon emissions from processing per unit of product (crude oil, etc.), etc. |
| Corporate action on<br>climate change      | Measures taken to<br>carbon emissions<br>reductions and their<br>effects | 1) Substitution of high-quality fossil fuels; 2) Upgrading and transformation of combustion efficiency and emission control of machine units; 3) Grid-connected renewable energy power generation and installed energy storage; 4) Effectiveness of carbon asset management, etc. | 1) Upgrading of combustion efficiency and emission control of steelmaking equipment; 2) Energy consumption from new energy by steelmaking equipment; 3) Effectiveness of carbon asset management, etc. | 1) Upgrades of thermal efficiency and emission control of reaction equipment; 2) Use of renewable energy by reaction equipment; 3) Effectiveness of carbon asset management, etc.   |

Continued Table 4: Suggestions on characteristic indicators of the information disclosure framework for high-carbon-emitting industries

| Disclosure<br>elements             | Disclosure<br>indicators                      | Power gener-<br>ation industry  | Steel industry  | Petrochemical and chemical industry  |
|------------------------------------|---|---|---|--|
| Corporate action on climate change | Climate-related<br>risks and<br>opportunities | 1) Transition plan at corporate level 2) The trends of the international energy market; 3) The replacement of renewable energy power generation, energy storage and grid and related cost changes; 4) Demand for carbon neutrality at the corporate and regional levels, etc. | 1) Transition plan at corporate level; 2) The launch time of the EU CBAM and related specific arrangements; 3) Updates and challenges of high-efficient and low-carbon steelmaking technologies; 4) Demand for carbon neutrality at the corporate and regional levels, etc. 5) Industrial clusters and the potential for collaborative emission reduction with other industries, etc. | 1) Transition plan at corporate level; 2) The trends of the international energy and petrochemical raw material markets; 3) Updates and challenges of high-efficient and low-carbon refining and reaction technologies; 4) Demand for carbon neutrality at the corporate and regional levels, etc. 5) Industrial clusters and the potential for collaborative emission reduction with other industries, etc. |

## 2 Suggestions and characteristic indicators for carbon emission information disclosure by financial institutions

In order to reflect the guiding role of investment and financing behaviors by the financial industry on the emission reduction behavior of downstream enterprises and industries, financial institutions should actively, standardize and completely disclose the information on Scopes 1 and 2 GHG emissions, and promote the information disclosure of Scope 3 GHG emissions in accordance with the principle of gradual and orderly progress. On this basis, the table below provides suggestions on the characteristic indicators of the financial industry under the framework of carbon emission disclosure.

Table 5: Suggestions on characteristic indicators of the information disclosure framework for the financial industry

| iniancial industry                                  |   |   |  |
|---|---|---|--|
| Disclosure elements                                 | Disclosure indicators   | Financial industry indicators   |  |
|   | Accounting boundary and scope of the disclosure                   | Scopes 1, 2 and 3   |  |
| Description of the disclosed subject                | Important changes in production and operation                     | <ol> <li>The establishment, merger, and closure of branches;</li> <li>Changes in investment and financing objects (enterprises, projects, and consumers);</li> <li>Classification of assets for investment and financing and changes in emission calculation methods, etc.</li> <li>Changes in accounting boundary and investment emissions compared with the previous year and the base year respectively.</li> </ol>                                  |  |
| Information on carbon emissions                     | Carbon emissions  | 1) Annual changes in carbon emission intensity (emission per unit of investment capital); 2) Description of the source of data for calculating emissions from investment projects and explanations of relevant calculations; 3) Reports on avoided and removed emissions; 4) Accounting reports on investment project emission data;  |  |
|   | Participation in the carbon market                                | Scale and revenue of the investment in the carbon markets (including mandatory and voluntary emission reduction)  |  |
| Industrial character-<br>istic indicators           | Energy consumption<br>level/carbon emission<br>performance        | 1) The carbon emission level of buildings and houses; 2) Carbon emissions related to daily business activities (physical activities); 3) Economic emission intensity of investment and financing behaviors (for a certain investment portfolio, sector or type of assets, different emission calculation methods used for different investment objects and asset types), etc.;  |  |
| Corporate action on<br>addressing climate<br>change | Measures taken to reduce<br>carbon emissions and their<br>effects | 1) Commitment to carbon neutrality in business activities; 2) Participation in climate investment and financing projects, such as climate-related credit and bond issuance, transition bond underwriting, etc.; 3) Commitment to the scale of investment and financing related to climate change mitigation and adaptation and the establishment of relative systems; 4) Relevant plans for low-carbon investment and financing development paths, etc. |  |
|   | Climate-related risks and opportunities                           | 1) Transition risks of invested high-carbon-emitting projects; 2) Revenue potential of low-carbon and emission reduction projects; 3) Promotion of ESG investment philosophy; 4) Improvement of relevant policies and systems such as climate-related information disclosure, carbon emission accounting, and climate investment and financing standards.   |  |

Currently, due to the great difficulty of obtaining data on Scope 3 emissions, most financial institutions only disclose Scopes 1 and 2 carbon emissions. Therefore, it is particularly necessary to provide guidance for the methodologies to obtain data on Scope 3 emissions. For the acquisition of basic data on Scope 3, financial institutions first need to obtain the emission information of investment and financing objects (enterprises or projects) when conducting Scope 3 carbon accounting, and then further calculate the carbon emissions and carbon emission reductions of corresponding investment and financing activities. In terms of data sources, for enterprises including the legally determined major energy-consuming entities, key emission entities, and entities regulated by the carbon trading system, financial institutions can now directly quote the data from the carbon emission verification reports and carbon emission reduction assessment reports issued by third-party institutions. With the introduction of climate-related information disclosure guidelines based on the carbon market in the future, financial institutions can directly obtain data on corporate carbon emissions on the national carbon market data reporting and submission platform, which will enhance the accuracy, reliability and standardization of overall climate information data. For enterprises without carbon emission verification reports and carbon emission reduction assessment reports, the enterprise shall provide data on carbon emissions that comply with relevant standards and regulations, and appropriately provide information on the main business revenue, the output of main products (services), main energy types and their consumption, to facilitate financial institutions to verify carbon emissions.

For Scope 3 greenhouse gas emissions, financial institutions can take a step-by-step approach to gradually expand the scope of disclosure starting from certain industries. For example, the disclosure can be expanded from the energy industry to the transportation and building materials industries, finally achieving full industry coverage. In addition, Scope 3 emissions shall be reported separately, taking into account the possibility of double counting. At the same time, financial institutions are encouraged to explore the establishment of digital platforms to better consolidate relevant data in investment and financing activities, so as to further improve the efficiency of accounting and disclosure.

### INTRODUCTION

#### **About EDF**



Founded in 1967 and headquartered in New York, Environmental Defense Fund (EDF) is one of the world's leading environmental organizations. EDF has more than 3 million members and a staff of more than 1000 professionals. Areas that EDF works in include: climate and energy, oceans, ecosystems, health, etc. EDF has been working in China since 1991. In 1997, according to China's overseas NGO law, EDF registered and became the first foreign NGO under the supervision of China's Ministry of Environmental Protection.

#### **About SEEE**



Established on August 5, 2008, Shanghai Environment and Energy Exchange Co. Ltd. (SEEE), approved by the Shanghai Municipal People's Government, is the first professional environment and energy trading platform in China. To achieve the targets of carbon peak and carbon neutrality of China, while ensuring the orderly construction and operation of China's national carbon market, SEEE promotes carbon trading, carbon financing and innovative work in other green and low-carbon fields.



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