



China Capacity Building for Enhanced Transparency Phase I

Part I: Project Information

GEF ID

10227

Project Type

MSP

Type of Trust Fund

GET

CBIT/NGI

CBIT

NGI

Project Title

China Capacity Building for Enhanced Transparency Phase I

Countries

China

Agency(ies)

FECO

Other Executing Partner(s):

Ministry of Ecology and Environment

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Focal Areas, Climate Change, United Nations Framework Convention on Climate Change, Paris Agreement, Capacity Building Initiative for Transparency, Nationally Determined Contribution, Influencing models, Strengthen institutional capacity and decision-making, Stakeholders, Civil Society, Academia, Non-Governmental Organization, Type of Engagement, Information Dissemination, Participation, Consultation, Partnership, Beneficiaries, Communications, Strategic Communications, Awareness Raising, Private Sector, Large corporations, Financial intermediaries and market facilitators, Gender Equality, Gender results areas, Participation and leadership, Access to benefits and services, Capacity Development, Gender Mainstreaming, Sex-disaggregated indicators, Capacity, Knowledge and Research, Knowledge Exchange, Conference, Workshop, Knowledge Generation, Training, Targeted Research, Knowledge Generation and Exchange, Gender-sensitive indicators, Peer-to-Peer, South-South, Field Visit, Seminar, Professional Development, Innovation

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 2

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

5/27/2020

Expected Implementation Start

3/1/2021

Expected Completion Date

3/1/2024

Duration

36In Months

Agency Fee(\$)

148,500

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCM-3-8	Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through capacity building initiative for transparency.	GET	1,650,000	1,437,000
Total Project Cost(\$)			1,650,000	1,437,000

B. Project description summary

Project Objective

Based on new requirements of the enhanced transparency framework under the Paris Agreement, to identify the capacities building needs of national GHG emission data management and transparency regime, to carry on the study of methodology, institution design, data system application and capacity building training at national, local and enterprise levels, and to improve the integrated management national platform for GHG information and emissions data, so as to better support the implementation of the national low-carbon development objectives and the implementation of Paris Agreement.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1 - Transparency-related institutional research and capacity building at national level	Technical Assistance	Identify the needs of domestic transparency capacity building, research on establishing China's domestic transparency systems, and carry out methodological research needed to fulfill the obligation.	1.1 National transparency-related system design and institutional construction 1.2 Research on methodologies for tracking and assessing progress of NDCs and estimating financial support 1.3 Capacity building training for fulfilling the transparency provisions Paris Agreement	GET	420,000	140,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2 - Transparency related institutional research and capacity building at local level	Technical Assistance	Improve review for local GHG emissions, research on establishing provincial and municipal energy-related carbon emission accounting methods and reporting systems, and carry out the capacity building for climate change staffs in the MEE.	<p>2.1 Improve the provincial joint review for local GHG inventory preparation</p> <p>2.2 Research on establishing an annual accounting method and reporting system for provincial and municipal energy-related carbon emissions</p> <p>2.3 Carry out transparency-related capacity building at the provincial, municipal and county levels</p>	GET	200,000	85,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 3 - Transparency related institution research and capacity building at enterprise level	Technical Assistance	Improve transparency-related systems on enterprise level, to support the construction of national carbon market, and carry out the capacity building for enterprises.	3.1 Support the transparency mechanism design and propose the technical specifications for data monitoring 3.2 Capacity building training for key enterprises and verifier	GET	150,000	85,000
Component 4 - Improve integration of existing transparency related databases	Technical Assistance	Based on the existing national inventory database and policy library, the domestic climate change and GHG transparency platform will be gradually improved, and carry out the docking among different levels and fields databases.	4.1 Improve China's climate change policy and measures database 4.2 Research on connection of databases between different levels and sectors 4.3 Develop the function to support technical expert review	GET	715,000	600,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 5 - Project monitoring and evaluation	Technical Assistance	Supervise the project progress, conducts the project mid-term evaluation and financial compliance review, etc.		GET	15,000	
Sub Total (\$)					1,500,000	910,000
Project Management Cost (PMC)						
				GET	150,000	527,000
Sub Total(\$)					150,000	527,000
Total Project Cost(\$)					1,650,000	1,437,000

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Government of People's Republic of China	In-kind	Recurrent expenditures	527,000
Recipient Country Government	Government of People's Republic of China	Grant	Investment mobilized	910,000
			Total Co-Financing(\$)	1,437,000

Describe how any "Investment Mobilized" was identified

The following are China's co-financing projects for CBIT as Investment Mobilized: 1). Project of grid emission factor analysis and query system construction (170,000 USD) This project is funded by China's government to research and propose a methodology for calculating emission factors for power grid to support regional greenhouse gas emission inventories, and to support CO2 emission calculation at sector and enterprise level. It will support the methodology development of "annual accounting method and reporting system for provincial and municipal energy-related carbon emissions" under output 2.2. 2). Project of reporting platform for enterprises on their GHG emissions (600,000 USD) This project is funded by China's government to develop the overall plan for the direct reporting system of greenhouse gas emission from key enterprises, including legal basis, policy means and management methods. The output from this project includes software system construction, safety system construction, basic software and hardware environment construction and deployment, and implementation of enterprise direct reporting system trial operation and related capacity building. This project will lay a solid foundation of Component 4, especially the integration of existing database. The output of this project will be part of the data platform integration. 3). Project of transparency system and non-CO2 emission projection on agriculture sector (140,000 USD) The project is funded by China's government to investigate the development of domestic and foreign practice of construction and operation of the greenhouse gas emission MRV system of the farming and breeding industry, and analyze the statistical data. It will put forward the MRV framework and indicator system on non-CO2 greenhouse gas emission from planting and breeding industry. The MRV framework will be part of the Component 1, the national transparency-related system design and institutional construction.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
FECO	GET	China	Climate Change	CBIT Set-Aside	1,650,000	148,500
Total Grant Resources(\$)					1,650,000	148,500

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required

PPG Amount (\$)

50,000

PPG Agency Fee (\$)

4,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
FECO	GET	China	Climate Change	CBIT Set-Aside	50,000	4,500
Total Project Costs(\$)					50,000	4,500

Core Indicators

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	700	700		
Male	800	800		
Total	1500	1500	0	0

Part II. Project Justification

1a. Project Description

describe any changes in alignment with the project design with the original pif

Based on the project description in the PIF, the project document updates and improves the project design for the following aspects to align with domestic and international transparency-related new requirements and recent work progress.

First, the Modalities, Procedures and Guidelines (MPGs) for the Enhanced Transparency Framework (ETF) under the Paris Agreement have been adopted with negotiations on the Common Reporting Tables (CRT) underway among Parties, providing more detailed reference for building the transparency implementation mechanism at the national level. In 2018, the Katowice Climate Change Conference convened in Poland basically agreed on the rules for implementing the Paris Agreement, including the adoption of MPGs for the ETF, with clarification of reporting obligations of Parties under the Paris Agreement and related arrangements for follow-up technical expert review and facilitative multilateral consideration of progress. Compared with the transparency requirements under the United Nations Framework Convention on Climate Change (UNFCCC), the reporting obligations under the Paris Agreement have been strengthened for developing country Parties, with comprehensiveness, completeness, and accuracy of reporting largely improved. This mainly involves using methodologies in full accordance with the 2006 IPCC (Intergovernmental Panel on Climate Change) Guidelines; preparing greenhouse gas (GHG) inventories, annually instead of biennially, providing GHG inventory reports with more detailed information in tabular format; promoting the transparency of information on nationally determined contributions (NDCs); improving the guidelines of reporting on support received; and encouraging the reporting of support to other developing countries in addressing climate change. In terms of technical review, developing country Parties will be subject to formal technical expert review, which is more rigorous than the technical analysis of Biennial Update Reports (BURs). If any significant and persistent issue found during the technical expert review, the Compliance Committee of the Paris Agreement will intervene to propose an action plan together with the Party. Regarding reporting format, developing country Parties will also need to present relevant information in a more standardized manner based on the CRT negotiation results.

Second, the transfer of the function of addressing climate change at the local level has basically been completed, which makes it imperative to building up personnel capacity as well as statistic and accounting mechanism. In the first half of 2018, the functions related to combating climate change have been transferred from the National Development and Reform Commission (NDRC) to the Ministry of Ecology and Environment (MEE) in China's governmental institutional reform. The advantage and expertise of MEE gained from long-standing pollutant control should be further given play, in order to establish technical specifications for GHG data monitoring at the enterprise level, and to explore data docking and sharing with the national unified database of stationary pollution sources and the environmental resource information center, so as to better support the formulation of GHG inventories and emission control action plans. Due to this institutional reform, local governments have also been adjusted accordingly. It is necessary to familiarize the staff of local governments and support agencies with the business of combating climate change as soon as possible, and to improve and strengthen the statistic and accounting mechanism at the local level, with a view to laying a sound foundation for supporting national response to climate change and promoting local low-carbon and climate-resilient transition.

Third, information on climate change at the enterprise level has attracted more attention from decision makers, which necessitates further efforts to strengthen related mechanisms and capacities. As actions to combat climate change continue to deepen, policy makers need more comprehensive and exhaustive information on climate change. On the one hand, information on enterprise-level response to climate change is essential to many policy measures, including steadily advancing the construction of the

national carbon market, carrying out climate investment and financing in an orderly manner, and successfully launching operations to peak regional and sector carbon emissions. On the other hand, financial institutions, investors, and buyers need more detailed information on climate change to support their business decisions.

In view of the above-mentioned background changes, project activities and outputs are adjusted accordingly, including a) refining all project activities and clarifying project outputs; b) strengthening capacity building activities at the local level in light of the new situation of governmental institutional reform; c) adding the research activities on enterprise GHG data monitoring based on the MEE's advantages, while expanding the coverage of verifiers; and d) developing the platform function of docking with the MEE's existing pollutant database. The specific changes and related information will also be elaborated in the subsequent corresponding sections.

Table 1 Refined project activities and outputs

PIF	PD
Component 1 Transparency-related institutional research and capacity building at national level	Component 1 Transparency-related institutional research and capacity building at national level
1.1 Domestic accounting, reporting, and assessment institutional design and system building	1.1 National transparency-related system design and institutional construction (1) Carry out the analysis of the requirements and gaps in fulfilling the transparency provisions of the Paris Agreement (2) Put forward suggestions on China's climate change institutional arrangements and working plans in fulfilling the transparency provisions
1.2 Research on methodologies for tracking progress of NDCs and estimating support needed	1.2 Research on methodologies for tracking and assessing progress of NDCs and estimating financial support (1) Research on methodologies for tracking progress of NDCs and evaluation of impacts of policies and measures (2) Research on methodologies on estimating financial support
1.3 Capacity building training for high level implementation of Paris Agreement	1.3 Capacity building training for fulfilling the transparency provisions Paris Agreement (1) Training for policy makers (2) Training for the national report preparation team (3) Capacity building for designated Chinese experts to participate in technical expert review under the UNFCCC
Component 2 Transparency-related institutional research and capacity building at local level	Component 2 Transparency-related institutional research and capacity building at local level

PIF	PD
2.1 Improve the guidelines for local GHG inventory preparation and provincial joint review	2.1 Improve the provincial joint review for local GHG inventory preparation (1) Improve common reporting tables for regional GHG inventory preparation (2) Develop guidance for quality management of regional GHG inventories
2.2 Research on establishing an annual accounting method and reporting system for provincial and municipal carbon emissions	2.2 Research on establishing an annual accounting method and reporting system for provincial and municipal energy-related carbon emissions (1) Conduct status analysis and investigation (2) Study and establish an annual accounting method for provincial and municipal energy-related carbon emissions (3) Study and establish reporting systems for the provincial and municipal energy-related carbon emissions
2.3 Carry out transparency-related capacity building at the provincial, municipal and county levels	2.3 Carry out transparency-related capacity building at the provincial, municipal and county levels (1) Capacity building for regional GHG inventory compilation and review (2) Carry out capacity building seminars and training for local government officials and technicians
Component 3 Transparency-related institutional research and capacity building at enterprise level	Component 3 Transparency-related institutional research and capacity building at enterprise level
3.1 Support the transparency regime design and revise the guidelines of key industries	3.1 Support the transparency mechanism design and propose the technical specifications for monitoring (1) Support the data monitoring and management for national carbon market (2) Study and propose technical specifications for GHG data monitoring at enterprise level
3.2 Capacity building training for key enterprises and third-party verifiers	3.2 Capacity building training for key enterprises and verifiers
Component 4 Improve integration of existing transparency-related data platforms	Component 4 Improve integration of existing transparency-related database

PIF	PD
4.1 Improve the existing policy database	4.1 Improve China's climate change policy and measures database (1) Sort out policy measures and propose a policy classification system (2) Summarize the deficiencies of existing policy database (3) Study and propose a policy database update and improvement plan
4.2 Research on connection of data platforms between different levels and sectors	4.2 Research on connection of databases between different levels and sectors (1) Upgrade and optimize the integrated management database of national GHG inventory and emission data (2) Conduct research on data linkage, verification, and analysis, etc. of national, provincial / municipal and enterprise GHG inventory database (3) Carry out data connection and sharing between the integrated management database of national GHG inventory and emission data and the national unified database of stationary pollution sources and the environmental resource information center (4) Improve the release function of the national integrated management database of GHG inventory and emission data
4.3 Develop the function to support technical review	4.3 Develop the function to support technical expert review (1) Study and propose the work plan and process to support technical expert review (2) Develop a list of background information and data needed for technical expert review (3) Develop the function to support technical expert review
Component 5 Project monitoring and evaluation	Component 5 Project monitoring and evaluation

1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description);

In December 2015, the Paris Agreement was ultimately adopted with the support of nearly 200 Parties at the 21st Conference of Parties to the UNFCCC. The Paris Agreement demonstrates the determination and confidence of countries around the world to cope with climate change. It reforms the global climate governance mechanism, and creates a new model of international climate change cooperation, which is centered on NDCs, based on enhanced transparency mechanism, and stimulated by global stocktake, as shown in Figure 1.

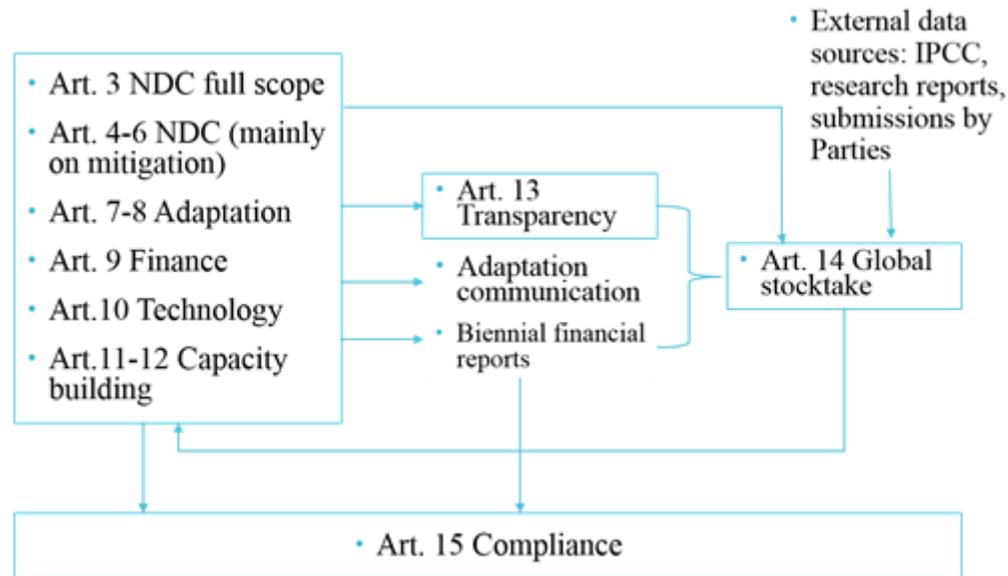


Figure 1 Schematic diagram of the Paris Agreement

In order to ensure the effective implementation of the Paris Agreement, the Parties have established an Ad Hoc Working Group on the Paris Agreement to formulate relevant implementation rules. In December 2018, the Katowice Climate Change Conference held in Poland adopted a package of decisions including the MPGs for the enhanced transparency framework under the Paris Agreement. According to the new MPGs, no later than 2024, China as a developing country Party shall submit the Biennial Transparency Reports as required with more comprehensive and detailed information and undergo technical expert reviews and multilateral considerations. By comparison with the transparency obligations under the UNFCCC, the enhanced transparency obligations of developing country Parties under the Paris Agreement are mainly reflected in mandatory reporting obligations, voluntary reporting obligations, technical expert reviews and multilateral facilitative considerations.

In terms of mandatory reporting obligations, developing country Parties shall a) use the 2006 IPCC Guidelines for national GHG inventory preparation; b) report a consistent annual time series from 2020 onwards, covering the reference year for NDCs; c) have the latest reporting year as three years instead of four years prior to the submission of national inventory report; d) report at least three GHG; e) conduct key category analysis using a threshold no lower than 85 percent of the total emission; f) conduct uncertainty assessment, where qualitative methods can be used; g) conduct completeness assessment, which may be applied to only emission sources above 1,000 ktCO₂ eq; h) conduct quality assurance/quality control for GHG inventory preparation, where a general QC procedures could be used ; i) identify indicators selected to track the progress in implementing its NDCs; j) report qualitative and quantitative information to track the progress in implementing its NDCs; and k) report on the progress and impacts of mitigation policies and measures, which may include estimated carbon emission reductions and projections.

In terms of voluntary reporting obligations, developing country Parties should provide a) information related to climate change impacts and adaptation, as appropriate ; b) information on financial, technology transfer and capacity-building support provided to other developing country Parties; c) information on financial, technology transfer and capacity-building support needed and received; and d) information on report quality improvements and related capacity building needs.

In terms of technical expert review, centralized technical analysis were conducted for the Biennial Updated Reports of developing country Parties under the UNFCCC, to a degree of severity somewhat different from that for developed country Parties. Experts cannot directly make recommendations to reviewed developing country Parties. Under the ETF, in-country review of Biennial Transparency Reports can be conducted upon the request of developing country Parties. Experts can make recommendations if the report does not meet the mandatory requirements of the MPGs. If any significant and persistent issues found in the review, the Compliance Committee of the Paris Agreements can intervene to jointly propose a plan of action with the Parties concerned. Information on support provided by developing country Parties is also included in the scope of technical expert review.

In terms of facilitative multilateral consideration of progress, currently developing country Parties can choose to answer written questions received before oral reporting at their discretion. Under the ETF, developing country Parties should follow the corresponding time schedule to respond to written questions received. In addition, observers of the Paris Agreement can also observe the process of multilateral consideration.

The above-mentioned new requirements present great challenges for developing countries as following: First, the workload of national GHG inventory preparation has increased significantly. Developing country Parties are required to submit an annual national GHG inventory from 2024 onwards, which means more frequent reporting and more detailed information compared with current practices. This calls for dedicated agency and stable financing resources, as well as a normalized mechanism of data collection and sharing among relevant ministries. Second, there are higher requirements for the authoritativeness, timeliness, and completeness of information contained in the transparency reports. The reports involve many fields and sectors such as energy, industry, agriculture, forestry, finance, meteorology, health, publicity, and foreign aid. Departments in charge of climate change need to coordinate data and collect information across departments and to establish a routine working mechanism for effective participation of various departments. At the same time, the new guidelines have also raised the requirements for clarifying NDC and its progress tracking methodologies. Compared with the current requirements, it is obligated to clarify the reference level of NDC, the sectors and gases covered and corresponding methodologies, and to effectively track the progress of mitigation and adaptation actions to implement the NDC. Third, the submitted reports will be subject to tighter review requirements. International experts will make detailed recommendations and encouragements on the biennial transparency reports submitted by developing country Parties. The technical review is more stringent than the current technical analysis for BURs and may trigger the corresponding compliance mechanism. Fourth, requirements are enhanced for statistical system for information on international support. Developing country Parties are encouraged to provide more detailed information, such as project name, implementation year, implementation agency, funding or recipient countries, channels of support (bilateral, multilateral, etc.), status of support (committed, received), amount of funds (in domestic currency and in United States dollars), financial instruments (grants, loans, etc.), sectors (energy, transportation, industry, agriculture, forestry, etc.), types of support (mitigation, adaptation, cross-cutting etc.). However, most developing countries have not established corresponding statistical system for such information.

Non-Party stakeholders play a more prominent role in global climate governance. Based on the Lima-Paris Action Agenda, the Marrakech Partnership for Global Climate Action, and other institutional arrangements, the 2019 Chile-Madrid Climate Conference extended the mandate for non-Party stakeholders' cooperation and action to combat climate change under the UNFCCC. As climate actions continue to strengthen and deepen, many voluntary initiatives related to non-Party stakeholders have emerged globally, such as C40, Science-Based Targets, RE 100, etc. Both intergovernmental multilateral mechanisms and voluntary cooperative initiatives emphasize the transparency and credibility of climate actions by non-Party stakeholders and require local governments or enterprises to have well-established GHG statistics and accounting capacity. According to the Global Climate Action Portal (NAZCA), 10 883 sub-national governments (cities, states, and regions) and 4 914 stakeholders from business sector (companies and investors) have registered their climate commitments and/or initiatives, while the numbers for Chinese local governments and private sector are 16 and 434, accounting for 0.14% and 8.8% of the global total, respectively^[1]. Under the guidance of clear goals from the Paris Agreement, the global investors and enterprises have paid significantly more attention to physical risks and transition risk associated with climate change. The financial sector has recognized climate change as a major macro risk, set up investment objectives compatible with the 2°C and/or 1.5°C targets, and enhanced management of the portfolio GHG emissions. Large procurement companies have also noticed the potential risks of climate change to their supply chains and tightened the requirements for suppliers to respond to climate change. Through economic activities such as investment and procurement, such attention is transmitted to more enterprises beyond the boundaries of administrative jurisdiction. This puts forward higher requirements for enterprise carbon information management.

2) the baseline scenario and any associated baseline projects;

China has always endeavored to advance work on addressing climate change, and made positive progress on transparency^[2] which is essential to and in support of relevant objectives. The *Outline of the 12th Five-Year Plan for National Economic and Social Development of the People's Republic of China* clearly put forward "(we will) establish and improve the statistical and accounting systems for GHG emissions, enhance the authoritativeness and transparency of national GHG inventories, and promote the standardization and normalization of GHG inventory preparation". In order to implement these requirements, the State Council of China issued the *Work Program for Controlling GHG Emissions during the 12th Five-Year Plan Period* in November 2011. The document required building the GHG emission statistical and accounting system at national, local, and enterprise levels, and strengthening the assessment of progress towards emission intensity reduction targets in provinces (autonomous regions and municipalities) during the 12th Five-Year Plan (FYP) period. To ensure smooth task implementation, the Chinese Government has rolled out a series of policy documents, highlighted as below:

§ In May 2013, the NDRC and the National Bureau of Statistics (NBS) released the *Opinions on Strengthening Climate Change Statistics*, making it clear that all local governments and departments should attach high importance to the work on climate change statistics and should strengthen organizational leadership, perfect management system, increase capital investment and enhance capacity building. For the first time, China proposed a statistical indicator system for addressing climate change, covering 5 categories including climate change and impact, climate change adaptation, GHG emissions control, climate change finance, and climate change management, in which consists of 19 subcategories and 36 indicators, and on this basis, established a statistical reporting system for addressing climate change.

§ In November 2013, the NBS and the NDRC issued the *Notice on Launching Climate Change Statistical Operations* and studied and formulated the *Sectoral Statistical Reporting System for Climate Change (for Trial Implementation)*.

§ In January 2014, the NBS released the *Notice on Work Plan for Statistical Operations Related to Addressing Climate Change*, and studied and developed the *Form of Climate Change Statistics Requirements in Government Comprehensive Statistical System*. A leading group for climate change statistics was set up, comprised of 23 departments including the NBS and the NDRC, and a working mechanism that centers on government comprehensive statistics and cooperates with relevant departments was put in place.

Through above efforts, China has made significant progress in work on measurement, reporting and verification (MRV). A preliminary transparency system has been established during the 12th FYP period, covering "basic statistics, accounting and reporting, and assessment and verification" at national, local and enterprise levels. Responsibilities at different levels are clearly defined, as shown in Table 2. In October 2016, the State Council issued the *Work Program for Controlling GHG Emissions during the 13th Five-Year Plan Period*, which significantly raised the requirements for statistics, accounting, assessment and corporate information disclosure over the previous five years, as highlighted below:

§ Strengthen GHG emission statistics and accounting. Step up the statistical work on climate change, improve the statistical indicator system for climate change and the statistical system for GHG emissions, beef up statistics on energy, industry, agriculture, forestry, waste disposal, etc., and strengthen statistical basic work and capacity building. Intensify the research on calculation and monitoring methods for GHG emission factors in key areas such as heating, electricity, and coal industries, and perfect the accounting guidelines

for enterprise GHG emissions in key industries. Compile national and provincial GHG inventories on a regular basis, implement the data reporting system for GHG emissions of key enterprises (public institutions), and establish the GHG emission information system. Optimize the GHG emission measurement and monitoring system, and urge key emitters to improve the records of energy consumption and GHG emissions. Gradually establish and improve the annual accounting method and reporting system for energy-related carbon emissions at the provincial and municipal levels to improve data quality.

§ Establish the GHG emission information disclosure system. Publish on a regular basis the progress in achieving China's low-carbon development goals and implementing policy actions, create a platform for releasing information on GHG emission data, and study and build a national bulletin system for addressing climate change. Promote the disclosure of local GHG emission data. Promote the establishment of information disclosure system for enterprise GHG emissions, and encourage enterprises to actively disclose GHG emission information. Require state-owned enterprises, listed companies, and companies covered by the carbon emissions trading scheme to take the lead in publishing GHG emission information and emission control actions.

According to the above-mentioned requirements, a lot of practices on transparency have been carried out at the national, local and enterprise levels, and a group of departmental regulations and technical documents such as related methodologies have been formulated and published.

At the national level, according to the requirements of Article 4.1 and 12 of the UNFCCC and Decisions 17/CP.8, 1/CP.16 and 2/CP.17, China followed the relevant reporting guidelines and the IPCC guidelines to compile national GHG inventories to fulfill transparency-related obligations. So far, China has completed and submitted three National Communications (NCs) and two BURs, which contained GHG inventory data for 1994, 2005, 2010, 2012, and 2014. The guidelines and methodologies used include the UNFCCC *Guidelines for the Preparation of Biennial Update Reports from non-Annex I Parties*, the UNFCCC *Guidelines for the Preparation of National Communications from non-Annex I Parties, Revised 1996 IPCC Guidelines for National GHG Inventories, 2000 IPCC Good Practice Guidance and Uncertainty Management, and 2003 IPCC Good Practice Guidance for Land-use, Land-use Change and Forestry*. In terms of review, China underwent in 2017 the technical analysis of its first BUR by an international expert team, and participated at the end of 2018 in facilitative sharing of views. At COP 24, China shared the relevant content of its first BUR and answered questions on site. Currently, China is cooperating with international experts to complete the technical analysis of its second BUR. In order to strengthen the monitoring and analysis of progress towards targets proposed by the Nationally Appropriate Mitigation Actions (NAMAs), China has also conducted the accounting and monitoring of CO₂ emissions and carbon intensity reductions in energy activities, so that it can keep abreast of CO₂ emissions, assess the results of relevant policies, and at the same time, predict the short-term trend and target progress.

At the local level, in order to implement the work programs for controlling GHG emissions during the 12th and 13th FYP periods, complete the assessment of progress towards carbon intensity reduction targets, and promote the pilot of low-carbon provinces and cities, 31 provinces, autonomous regions and municipalities have compiled the GHG inventories for 2005, 2010, 2012, and 2014 following *Guidelines for Provincial GHG Inventories (For Trial Implementation)*. Assessments and joint reviews of these inventories have been conducted by the joint review expert team, which was created by national climate change department and composed of experts of national and local inventory compilation agencies and third-party organizations. At the same time, in order to effectively track the progress of local governments in achieving climate change targets, the national climate change authorities mobilized relevant departments and experts to conduct annual accountability assessments with regard to government fulfillment of carbon emission intensity (CO₂ emissions per unit of GDP) reduction targets in various regions, and published the assessment results to the society. Taking the opportunity of assessments, efforts have been upgraded at the local level to assess and track the progress in meeting carbon emission intensity targets.

At the enterprise level, since the carbon emissions trading pilot was launched in 2011, the seven pilot areas have established respective carbon emission accounting, reporting and verification systems. With such preliminary institutional arrangements catered to local realities, they have performed carbon market supervision, and organized compliance work

and law enforcement. From 2014 onwards, key enterprises were required to report GHG emissions data according to their energy consumption; enterprises covered by the carbon trading pilot enterprises were required to report GHG emissions and have them verified; some enterprises involved in the trading of voluntary emission reductions also need to conduct GHG emissions accounting of voluntary emission reduction projects. In 2014, the Chinese Government promulgated the *Interim Measures for the Administration of Carbon Emission Trading*, which clarified the idea of national carbon market construction. Following that, government departments developed and published enterprise GHG accounting methodology and reporting guidelines for 24 industries^[3], and several groups of accounting methodologies for voluntary emission reduction projects with reference to internationally accepted methodologies. In March 2019, the Department of Climate Change under the MEE convened a meeting to discuss the drafts of the *Measures for the Administration of Third-Party Verifiers for Carbon Emissions Trading (Trial)*, *Measures for the Administration of GHG Emissions Reporting by Key Emission Units (Trial)*, and *Measures for the Administration of Voluntary GHG Emission Reduction Trading*, which are expected to be released in the near future. Up to now, more than 8,000 companies have conducted carbon emissions reporting and verification, in 2013–2015, 2016–2017, and 2018 respectively.

Table 2 China's current transparency system on GHG emissions

	National	Provincial/Local	Enterprise
Basic statistics	Basic statistical system for GHG emissions and sector-specific parameter survey system	Basic statistical system for provincial GHG emissions	Energy consumption and GHG emissions accounting system
	Climate change statistical indicator system and sectoral statistical reporting system	Climate change statistical indicator system and statistical reporting system	GHG emissions monitoring plan
	Working mechanism, such as establishing the leading group on climate change statistics	Working mechanisms with regard to duty specification, accountability and etc.	
Assessment and verification	GHG inventory preparation and reporting on a regular basis and CO ₂ emissions accounting on a yearly basis	GHG inventory preparation and reporting on a regular basis at provincial level	GHG emissions accounting, reporting and verification system for key enterprises
	Data management system for GHG inventories	Data management system for GHG inventories (in some provinces)	Direct reporting platform / online reporting system for GHG emissions of key enterprises Compliance reporting for enterprises covered by the national carbon market and local pilot carbon markets
Assessment and verification	Assessment and publication on progress towards annual carbon intensity reduction targets	Data quality assessment and joint review system for provincial GHG inventories	Verification and certification system for voluntary GHG emission reductions

	National	Provincial/Local	Enterprise
	Technical analysis and facilitative sharing of views of the BURs from non-Annex I Parties	Measures for accountability assessment with regard to fulfillment of carbon emission intensity reduction targets	
		Indicators for accountability assessment with regard to fulfillment of carbon emission intensity reduction targets	
Information platform	National GHG Inventory Database System—A tool designed to normalize and standardize the preparation of national inventories, which supports departments involved to coordinate and complete inventory preparation tasks online, manages national and provincial-level GHG inventory data, and provides inquiry into inventory data of major countries and GHG related data released by major organizations.	System for Accountability Assessment of Provincial People's Governments with Regard to Fulfillment of Carbon Intensity Reduction Targets—It is designed to serve the annual accountability assessment with regard to fulfillment of carbon emission intensity reduction targets, including the presentation of assessment results and the storage of assessment materials.	Reporting System for Enterprise GHG Emissions Data—It aims to includes such features as GHG data reporting, accounting, and verification, data aggregation and analysis, in-depth mining, and data release to serve domestic climate change authorities, enterprises, and third-party verifiers, technical support organizations, the public, and other stakeholders

The Chinese Government has also carried out a lot of capacity building activities at the local and enterprise levels. During the 12th FYP period, through the capacity building project financed by the United Nations Development Programme (UNDP), China compiled the *Training Materials on Low-carbon Development and Provincial GHG Inventories*, and organized a series of training sessions on provincial capacity building for GHG inventories to support local governments to prepare GHG inventories. At the enterprise level, China provided capacity building training for various industries after publishing corporate GHG emission accounting methodology and reporting guidelines. Following the development of the enterprise direct reporting system, training was provided for nearly 2,000 key enterprises in 7 provinces. The most recent training on carbon allowance allocation and management was organized by the Department of Climate Change under the MEE from October to December 2019, encompassing 17 rounds in 15 cities. About 6,000 people participated in the training, including government officials in charge of carbon market, technical experts of supporting agencies, and representatives of key enterprises in the power generation industry. The training covered a) national carbon market construction and other climate change policies and future work arrangements; b) emission data submission management, allowance allocation, transaction management, allowance surrender, and compliance management by provincial competent authorities; and c) account opening management for registration system and transactions system, and carbon emission data reporting, allowance surrender and compliance of key enterprises, including allowance trial calculation and transaction simulation. A series of such training have further improved the participation capacity and management level of various entities in the national carbon emissions trading market, paving the way for the test of the national carbon market to ensure smooth market operation.

In the process of transparency compliance and system building, China has launched several international cooperation projects to fully learn from advanced international experience, as shown in Table 3.

Table 3 International projects in support of domestic transparency system

Category	Title	Funders/Grant	Objective and content	Period
National capacity building for transparency	Enabling China to Prepare Its Third National Communication to the UNFCCC	Global Environmental Facility (GEF) 7,280,000 USD	Support China's third NC and first and second BURs to the UNFCCC	2015-2019
Capacity building for emissions trading scheme (ETS)	Establishment of National Registry System for Domestic Emissions Trading Scheme and Voluntary Carbon Emissions Reduction, and Relevant Capacity Building	United Nations Development Programme (UNDP) and Norway 4,060,000USD	Establish a national registry system for domestic ETS scheme and voluntary carbon emissions reduction	2012-2016
	EU-China Capacity Building for Emissions Trading Scheme	European Union (EU) 5,000,000 euros	Enhance the provincial governments capacity of carbon trading system arrangement and management.	2014-2017
	Partnership for Market Readiness	World Bank 8,000,000 euros	Support activities related to the ETS establishment, including block design, transparency system and personnel capacity building	2015-2018
Provincial capacity building for transparency	Provincial GHG Emissions Inventory Capacity Building and GHG Emissions Accounting Methodology for Enterprises of Key Industries	UNDP /Norway 3,000,000USD	Support local governments in preparing GHG inventories and developing accounting guidelines for enterprises	2012-2015
	Provincial Capacity Building for GHG Emissions Inventory Preparation	UNDP 280,000 USD	Prepare Training Materials on Low-carbon Development and Provincial GHG Inventories; and organize a series of training sessions on provincial capacity building for GHG inventories	2012-2014
Enterprise capacity building for transparency	GHG Emissions Accounting Methodology for Chinese Enterprises	UNDP /Norway 2,180,000 USD	GHG emissions accounting methodologies and reporting formats Guidelines for 20 industries	2012-2015
	GHG Accounting Methodology and Reporting Guidelines	Australia 100,000 AUD	Complete the GHG Emissions Accounting Methodology and Reporting Guidelines for Oil and Gas Enterprises, Petrochemical Enterprises, Coal Enterprises, and Independent Coking Enterprises	2013-2014

3) the proposed alternative scenario with a brief description of expected outcomes and components of the project;

Although China has currently initially constructed a transparency framework, there are still difficulties and challenges during the implementation phase.

On the national level, the challenges include improving the statistic indicator system of addressing climate change and the institutional system of accounting GHG emissions; designing and publishing the bulletin of addressing climate change; enhancing the normalized GHG inventory compilation; methodological research on tracking progress of NDCs and quantitative evaluation for policies and measures; strengthening and improving the mechanisms for monitoring and assessing provincial carbon intensity target achievements; and integrating and updating the existing systems and publishing of GHG emissions.

On the local level, the challenges include improving the assessment methodology and reporting mechanism of annual provincial-level and municipal-level GHG emissions; strengthening the emission factor monitoring of key categories in major industries and improving the quality of local GHG inventory compilation; and enhancing the assessment of carbon intensity targets on the local level.

On the enterprise level, the challenges include improving the assessment methodology and reporting mechanism of GHG emissions; research on accounting, reporting and assessment regulations of GHG emissions; enhancing the reporting tables and regulations of energy consumption and GHG emissions; and developing technical specification for enterprise GHG data monitoring.

Additionally, China's government has transferred the function of addressing climate change to the MEE at both national and provincial level. Therefore, it is necessary to further strengthen the coordinated monitoring, reporting and verification systems between GHG emissions and pollutants, and carry out a new round of institutional and technical capacity building on transparency for local governments due to the challenge of human resource and organizational restructuring.

Overall, China's comprehensive and complicated transparency system urgently needs a capacity building project to strengthen its institutional and technical capacities of transparency at the national, local and enterprise levels. However, transparency construction in China is a long-term task, it is difficult to solve all of the above challenges through only one project. Therefore, this project, as the first phase of the project on transparency capacity building, will be concentrated in the implementation of the higher priority activities under the Paris Agreement. In the future, China will gradually improve the transparency system at all levels by applying for follow-up projects.

Component 1 Transparency-related institutional research and capacity building at national level

China's current transparency system can meet the relevant requirements of the UNFCCC and the Cancun Agreement, including the preparation and submission of NCs and BURs and participation in relevant technical analysis and facilitative sharing of views. This component will focus on capacity building to meet the MPGs and reporting requirements for the ETF from the Paris Agreement, including status-quo analysis, gap identification and policy recommendations. The objective is to perform transparency-related obligations under the Paris Agreement in accordance with the relevant outcome of the Katowice Conference, including the regular preparation and submission of Biennial Transparency Reports and participation in technical expert review and facilitative multilateral consideration of progress. The activity will also conduct analysis on mitigation and adaptation actions in the NDCs, and propose indicators and methodologies for tracking NDCs. In addition, the activity will also review the current situation and explore the system for tracking financial support provided and received, and offer recommendations on designing a scheme for transparency system on financial support. After all above are completed, seminars will be held to consult the relevant departments and carry out capacity building for their officials and experts to ensure the effective implementation of the proposed plans.

Output 1.1 National transparency-related system design and institutional construction

(1) Carry out the analysis of the requirements and gaps in fulfilling the transparency provisions of the Paris Agreement Considering the new requirements (MPGs and reporting tables) from the ETF under the Paris Agreement, the project will identify the transparency capacity building needs and gaps in China, including i) gaps and needs of GHG data collection system to ensure the collection of data required for annual inventory preparation; ii) gap in current timeline and management arrangements for inventory preparation; iii) mechanism for tracking and publishing the progress of mitigation and adaptation components of NDCs, and gaps to meet the MPGs ; and iv) status-quo and gaps in collection of information on financial support provided and received.

(2) Based on the identified gaps and the MPGs of the Paris Agreement, the project will propose system design for GHG-related data management to enhance transparency for compiling national GHG inventories and tracking NDCs to better fulfill the obligation of the Paris Agreement. The specific content will include, i) drafting a proposal for China's GHG-related data management plan that supports annual inventory preparation. The proposal will strengthen the management and coordination of the implementation process to better reflect the status and progress of domestic response to climate change, to meet the data needs of national annual GHG inventory compilation, and to effectively support domestic climate policy formulation and evaluation; ii) drafting an annual work plan for GHG inventory and reporting team, which will clarify the personnel and funding arrangements for annual GHG inventory compilation and suggest data collection and coordination mechanism, inter-department coordination mechanism and annual inventory preparation schedule to normalize and institutionalize the annual GHG inventory preparation; and iii) drafting a proposal of departmental regulations for statistics, accounting, monitoring and reporting during the 14th FYP period. These regulations will clarify the requirements, responsible departments and timelines of activities, thereby providing relevant departments official guarantee for participating the preparation of GHG inventories and BTR to support China's implementation in MPGs. During the implementation of this activity, key stakeholders will be investigated and relevant departments consulted through seminars.

Targets:

- Analysis report of capacity building needs and gaps of China's climate change transparency system ;
- Institutional Arrangements and recommendation for China's GHG-related data management (including national GHG-related data management plan (proposal), annual work plan for national inventory and reporting team (proposal); "14th Five-Year" period GHG related data management department regulations (proposal), etc.).

Output 1.2 Research on methodologies for tracking/assessing progress of NDCs and financial support

MPGs have raised the requirements for clarifying features and progress tracking methodologies for NDCs. Although MPGs allow Parties to self-determine their indicators to track progress of NDCs, further requirements are adopted such as to clarify the base year value, sectors and gases, and methodologies for accounting quantified targets to ensure consistency. In addition, MPGs also require to report progress of mitigation and adaptation policies and measures, and encourage to report effects of GHG emissions reduction. China's BURs submitted so far include the effects of various mitigation measures pursuant to the UNFCCC guidelines, but there are still methodological inconsistencies and double counting issues. Therefore, further methodological study for mitigation measures is needed. In addition, methodological study for monitoring, assessment of adaptation measures, as well as financial support reporting is also needed to form an indicator system and progress tracking methodologies suitable for China's conditions.

(1) Research on methodology for tracking progress of NDCs and evaluation of policies implementation effects

Based on requirements of the MPGs, this project will conduct research to develop the indicator system for tracking the NDC progress and the methods for evaluating the NDC progress and policy implementation effects, and explore possible channels for publishing the NDC progress to improve transparency of actions. China's NDCs encompasses both mitigation and adaptation, as well as quantitative emissions control targets and qualitative policy measures. This project will conduct research on monitoring and evaluation methodologies for both mitigation and adaptation components.

For mitigation component, this project will develop quantitative assessment methods for key emission reduction policies, to further improve the consistency and refinement of methodologies to objectively evaluate the emissions reduction effects of different policies to support domestic decision-making and fulfill the obligation of reporting and review. In addition, this project will carry out research on methodology for tracking and evaluating the progress of measures on controlling non-CO₂ GHG. The specific activities will include: i) systematically reviewing and analyzing the quantitative assessment methodologies for existing emissions reduction policies and actions, and examining the applicability of these methodologies to major mitigation policies under China's NDCs; ii) analyzing the assessment indicators of emissions reduction policies and actions, and investigating the data needs and assessment approach of different indicators; iii) comparing international methodologies and databases, adopting appropriate methods and indicators to quantitatively evaluate the effects of China's major mitigation policies and actions.

For adaptation component, although the Chinese government attaches great importance to adaptation, the transparency system and technical capacity for adaptation actions remains weak and urgently needs to be strengthened. The adaptation component in the past NCs mainly relies on the existing official reports due to the lack of an independent assessment system for adaptation actions, so it was difficult to meet the detailed reporting requirements in the MPGs. In this regard, this project will carry out two innovative activities to make up for the gaps in the field of adaptation monitoring and evaluation (M&E): i) identify the key areas of China's adaptation to climate change, collect and review the existing monitoring data released by relevant departments in these areas that cover the adverse effects of climate change, responsive measures taken, and results of implementation, and construct an indicator system suitable for monitoring China's adaptation policies and measures; and ii) track the methods for evaluating the effects of international and domestic adaptation measures, and combined with the indicator system above, explore the methods applicable to China to support domestic decision-making and implementation.

Targets:

- Research report on indicators and methodologies to evaluate China's climate change mitigation policy and action;
- Research report on indicators and methodologies to evaluate China's climate change adaptation policy and action.

(2) Research on methodologies on tracking financial support

MPGs significantly raises the requirements for information completeness of support provided and received. China, as a developing country is encouraged to provide more detailed information on financial, technical and capacity building support provided to other developing countries through South-South cooperation and other channels, as well as support received from various countries and international agencies. Although reporting such information is not mandatory, China as a responsible developing country is willing to provide information to the international community as transparently as possible.

China has not yet established an information system for international financial support to deal with climate change. The information on support in the BURs is relatively sketchy, mostly based on qualitative description. The quantitative information is limited to project name, implementation year, and amount of funds. In addition, although China provides financial, technical and capacity building support to other developing countries through South-South cooperation, it has not yet established a common statistical system and categories like OECD countries, making it difficult to determine whether many foreign aid funds cover climate change. In order to meet the relevant requirements of MPGs, this project will look into the current situation and related practices of tracking financial support of major developed countries and international institutions through desk review, while investigating China's existing practices of reporting on finance. According to the enhanced requirements of the ETF, the project will define the scope and standards of tracking financial support in light of China's actual conditions, propose a statistical framework for tracking support provided and received by China, and offer recommendations on data collection, coordination mechanism, and reporting system for financial support.

Targets:

- Research report on China's transparency system for tracking financial support provided and received.

Output 1.3 Capacity building training for fulfilling the transparency provisions Paris Agreement

(1) Training for policy makers. The content of BTR involves many sectors such as energy, industry, agriculture, forestry, finance, meteorology, health, publicity, and foreign assistance. Given the enhanced requirements of the MPGs on authoritativeness, timeliness and completeness on BTR, climate change department need to collaborate with various departments for data sharing and information collection. This project will organize seminars and training sessions based on new requirements of the ETF and above research outcomes for officials from the MEE, NDRC, Ministry of Science and Technology, Ministry of Finance, Ministry of Natural Resources, Ministry of Agriculture and Rural Affairs, China International Development Cooperation Agency, NBS, National Energy Administration, and China Meteorological Administration, in order to enhance their capacity. These activities will include training on the Paris Agreement and the MPGs, as well as inter-ministerial exchanges on mitigation and adaptation methodologies.

(2) Training for the national report preparation team. Through the compilation of three NCs and two BURs, a group of experts on GHG inventory and officials familiar with implementation reports have been trained, but they are still unfamiliar with the new requirements of MPGs. This project will organize seminars and training sessions for team members for preparing China's national reports (including GHG inventory) in accordance with the new requirements of ETF and above research outcome on national transparency system. Domestic experts familiar with MPGs will be invited to provide training to ensure that the national team fully grasp the transparency requirements of the Paris Agreement and domestic system, methodologies, and specifications for compiling China's national implementation reports, to improve the quality of national reports.

(3) Capacity building for Chinese experts to participate in technical review under the UNFCCC. This project will organize seminars and training sessions for domestic experts, so as to comprehensively enhance the capabilities of Chinese experts to participate in technical expert review and multilateral consideration under the UNFCCC and the Paris Agreement.

Targets:

- Training programs, materials and activities for decision makers;
- Training programs, materials and activities for the national report preparation team;
- Training programs, materials and activities for Chinese review experts;
- Training summary.

Component 2 Transparency-related institutional research and capacity building at local level

Local inventories are an important part of the transparency framework of China's action. With the advancement of low-carbon pilot and early peaking of carbon emissions in some regions, local GHG inventory preparation and carbon emissions accounting have gained increasing prominence. The annual accounting methodology and reporting system for provincial and municipal carbon emissions need to be established and perfected; the monitoring of emission factors of key categories in key sectors, and the quality of GHG inventories need to be further strengthened. This project will improve the provincial joint review to better serve national inventory and carbon accounting. Taking into account the new requirements after the institutional reform, this activity will also conduct capacity building to assist local governments in the establishment and improvement of annual accounting methodology and reporting system for provincial and municipal energy-related carbon emissions and the normalized inventory preparation, to ensure the continuity of inventory preparation and carbon intensity accounting.

Output 2.1 Improve the provincial joint review for local GHG inventory preparation

(1) Improve common reporting tables of regional GHG inventories preparation. In the previous provincial joint reviews, the common reporting tables developed by the National Center for Climate Change Strategy and International Cooperation have been used to improve the comparability of provincial GHG inventories. Drawing on the experiences and revised regional guidelines, this project will develop common reporting tables for regional GHG inventories on the basis of provincial common reporting tables, so that these tables are suitable for regional GHG inventories and meet the requirements of updated guidelines. Moreover, the functions of calculation and data analysis will be refined to make common reporting tables more practical, standardized and user-friendly.

(2) Develop guidance for quality management for regional GHG inventories. QA/QC is important to GHG inventory preparation. The joint review carried out regularly by national authorities is an important part of QA/QC. In the process of previous two provincial joint reviews, there is a lack of systematic guidance on QA/QC of regional GHG inventories as QA/QC in the IPCC guidelines is too complicated for local compilers. Based on the experiences of two provincial joint reviews, this project will propose guidance for quality management for local GHG inventories suitable for China, update the joint review indicators for provincial GHG inventories, and construct an indicator system for local GHG inventory review and analysis to strengthen QA/QC of local GHG inventories.

Targets:

- Common reporting tables for regional GHG inventories;
- Guidance for quality management for local GHG inventories.

Output 2.2 Research on establishing an annual accounting method and reporting system for provincial and municipal energy-related carbon emissions

Due to the timeliness of data, local GHG inventories generally lag behind by two to three years, so they are difficult to meet the data needs for rapid assessment of the effects of controlling GHG emissions. In addition, the current binding targets for GHG emissions control at local level are all energy-related carbon emission intensity targets. Therefore, in order to effectively support the tracking, evaluation and early warning of GHG emissions at the provincial and municipal levels, it is imperative to establish an annual accounting methodology and reporting system for provincial and municipal energy-related carbon emissions. The specific activities will include:

- (1) Conduct status analysis and investigate. Investigations on energy consumption data at provincial and municipal levels in regards to timeliness and scope, as well as the current status-quo of energy-related GHG inventory preparation and region-specific emission factor research.
- (2) Taking into account data availability, a feasible annual accounting methodology for provincial and municipal energy-related carbon emissions will be suggested, with focus on solving the problems of power transfer across boundaries of different administrative regions and the disaggregation of local energy balance sheets. The methodology will be further improved based on trial calculation.
- (3) According to the data and schedule requirements for the assessment of GHG emissions control and tackling climate change actions at provincial and municipal levels, propose a reporting system for provincial and municipal energy-related carbon emissions.

Targets:

- Research report on annual accounting methodology for energy-related carbon emissions at provincial and municipal level;
- Reporting system for energy-related carbon emissions at provincial and municipal level (proposal).

Output 2.3 Carry out transparency-related capacity building at the provincial, municipal and county levels

Due to the transfer of functions of climate change, there is corresponding functional adjustment of local governments. It is necessary to familiarize the staff of local governments and technical agencies with the work of tackling climate change as soon as possible, and to improve and strengthen the accounting mechanism at the local level, laying a sound foundation for supporting national response to climate change and promoting local low-carbon and climate-resilient transition.

- (1) Capacity building for regional GHG inventory compilation and review. Based on the outcome of Output 2.1 and 2.2, a training and certification mechanism of regional GHG inventory review will be built with reference to the operation mode of the UNFCCC expert certification practice, in an effort to improve the technical capacity of national and local experts participating in the regional review and ensure there are inventory specialists with professional and technical capabilities in each inventory sector. A platform will be constructed for exchanges among officials of local authorities, staff of statistical departments, and inventory experts, to effectively support the improvement of transparency capacities at provincial, city, and county levels.
- (2) Capacity building seminars and trainings for local government officials and technicians will be carried out in one or two regions. The training mainly includes GHG inventory system arrangement; climate change statistical system and the development; GHG inventory compilation methods and data needs; data collection mechanisms and requirements; sector-specific guidelines for local GHG inventories, activity level data collection, measurement of emission factors and related methodologies; quality assurance/control methods

for local GHG inventories; carbon intensity accounting methods at provincial and city levels; GHG data reporting via database; methodology for policy action tracking and quantitative assessment; and assessment methodology and reporting mechanism for tracking financial support.

Targets:

- Capacity building seminars and training programs, materials and activities for local government officials and technicians

Component 3 Transparency-related institutional research and capacity building at enterprise level

Enterprises are major GHG emitters. As carbon market gradually deepens, accounting methodologies and reporting guidelines for GHG emissions at the enterprise level need to be revised and updated. Especially after the transfer of climate change function, MEE should further give play to its advantage and expertise of long-term pollutant monitoring, establish technical specifications for monitoring GHG emissions at the enterprise level for key industries to better support the development of GHG inventories and emissions control actions.

Output 3.1 Support the transparency regime design and propose the technical specifications for monitoring

In China, the published enterprise GHG emissions accounting methodologies and national standards have not yet provided specific methods for monitoring GHG data. As a result, enterprises have no standards to follow for GHG data monitoring. In addition, compared with the traditional environmental monitoring with relatively complete monitoring technology system, such as environmental quality monitoring and pollution source supervision monitoring, GHG data monitoring is at a preliminary stage, in which there is neither mature technical support system nor professionals. Therefore, in order to further improve data quality and information disclosure for GHG emissions at the enterprise level, it is necessary to design a transparency regime that strengthens the relevant capabilities. The specific activities will include:

- (1) Support the transparency regime design of national carbon emission trading market to better serve its data monitoring and management; and explore the feasibility of using enterprise emission factors for national GHG inventory estimation.
- (2) Study and propose technical specifications for GHG data monitoring at enterprise level. Based on published 24 industry guidelines, investigation of basic GHG data monitoring capacity will be carried out in two or three qualified key industries of which technical specifications will be proposed for GHG data monitoring. The proposed technical specifications and data quality improvement requirements will be applied to one or two typical key enterprises.

Targets:

- Technical specifications for GHG data monitoring at enterprise level in key industries (proposal) (at least two industries);

Output 3.2 Capacity building training for key enterprises and verifiers

In order to better support the design of the MRV system at the enterprise level in the carbon market, based on relevant reporting and verification systems established by the competent climate departments, this project will carry out capacity building on transparency-related activities for enterprises and verifiers, including GHG emissions accounting and reporting guidelines, data reporting platforms, and data verification. This will assist enterprises in boundary clarifications, identification of key emission sources, and improvement of basic data monitoring / accounting capacity, so as to further improve the accuracy and transparency of enterprise-level data. At the same time, in combination with Activity 3.1, capacity building training will be provided in key enterprises on technical specifications for monitoring corporate GHG emissions. This training will cover 2-3 key industries (power sector, co-generation sector, cement sector), with 50-100 enterprises in each sector. The emission threshold for enterprise should be above 50 kt CO₂eq. Overall, there will be 150-200 enterprises trained from this project.

Targets:

- MRV capacity building training programs, materials and activities for emissions from key enterprises.

Component 4 Improve integration of existing transparency related database

China has actively pushed for MRV informatization by establishing systems for reporting, collecting and publishing GHG emissions data, including National GHG Inventory Database System, Reporting System for Enterprise GHG Emissions Data, Support System for Accountability Assessment of Provincial Governments with Regard to Fulfillment of Carbon Intensity Reduction Targets. Drawing on the relevant experience as well as the platform for pollutant discharge management, the project will establish a more intelligent and comprehensive database for domestic climate change transparency based on existing database, to enhance transparency for GHG emission and policy actions.

Output 4.1 Improve China's climate change policy and measures database

China's climate policies involve many fields such as energy, industry, transportation, housing, agriculture, and forestry. The current policy and measures database mainly includes climate policies during the 12th FYP period and needs to be further updated to include the various policies issued during the 13th FYP period. Based on the research results of this project, the module of quantitative analysis of mitigation actions will also be updated and open to public with permission from government. The specific steps will include:

- (1) Review China's climate policies and measures since the third NC, especially under the NDC framework, and propose an updated policy classification system based on analysis of diversified contents of various policies and measures.
- (2) Summarize the deficiencies of the existing policy database in terms of data management, query and analysis, especially the improvements needed to quantify the effects of emissions reduction actions in the BURs.
- (3) Propose the policy database update plan, and carry out system update design. Climate policies and measures will be updated in the database, quantitative analysis of emission reduction actions conducted, and climate policies and measures made public within the determined scope.

Targets:

- Upgrade plan of China's climate policies and measures database.

Output 4.2 Research on connection of data platforms between different levels and sectors

China has so far developed multiple data platforms, such as the National GHG Inventory Database System (including policy database and expert review database), the Reporting System for Corporate GHG Emissions Data, and the Support System for Accountability Assessment of Provincial People's Governments, and constructed an initial integrated management platform for national GHG inventory and emissions data. These different database have been tested, including a large number of data such as national inventories, local assessments, and enterprise submissions. However, the linkage for sharing between these database has not yet been achieved. Further research is needed to identify specific emission factors in regional and enterprise data that support national GHG inventory preparation. This project intends to further integrate existing database, including database of policies, actions and projects related to climate change, and to strengthen data sharing among different database to enhance the visibility of NDC actions.

In addition, the national unified database of stationary pollution sources and the environmental resource information center under the MEE contain a large number of real-time pollutant monitoring data. After the transfer of climate change functions, the linkage with this platform will facilitate integrated data management of GHGs and pollutants, which will improve the quality of GHG inventories to better support fulfilling the transparency provisions of Paris Agreement and relevant domestic decision-making. The specific activities will include:

- (1) The national GHG inventory and emission data management integrated database will be upgraded. Based on the national GHG inventory database, the module for provincial / municipal GHG emission information management will be developed, and the modules for international consultation and analysis and international emissions data management will be improved to support China's response to technical expert review and multilateral consideration;

(2) Research will be conducted on data linkage, verification and analysis of national and provincial / municipal GHG inventory databases and enterprise GHG emissions reporting system, to improve the basic data verification, emission factor data sharing, and data analysis and utilization of key source emissions in key industries;

(3) The national GHG inventory and emission data management integrated database will be linked with the national unified database of stationary pollution sources and the environmental resource information center under the MEE to realize data connection and sharing. The directory of stationary pollution sources will be aligned; and the GHG emissions data and related pollutant data at national, local, and enterprise levels will be linked. The function of linked data analysis and mining will be developed to further improve the data quality of national, local and enterprise GHG emissions;

(4) The information disclosure function of the national GHG inventory and emission data management integrated platform will be improved, so as to regularly publish or disclose GHG emission information at different levels and further improve the transparency of GHG emissions data at all levels.

Targets:

- Upgrade plan for the national GHG inventory and emission data management database;
- Working program for National, local, and enterprise GHG emission data docking and sharing.

Output 4.3 Develop the function to support technical expert review

China underwent in 2017 the technical analysis of its first BUR, and participated in facilitative sharing of views at the end of 2018, which won praise from all Parties. However, without established procedures and fixed personnel for technical analysis, it is difficult to meet the review enhanced requirements under the ETF. To this end, this project will focus on work in the following three aspects:

(1) Based on the analysis of relevant requirements of MPGs for the ETF, a work plan and process to support future biennial technical expert review will be proposed, including personnel and schedule arrangements, to ensure the normalized and institutionalized review.

(2) Considering the new requirements of MPGs and the experiences of technical analysis of the previous BURs, a list of background information and basic data to support the technical expert review will be drawn to form a working template;

(3) The plan of module to support technical expert review will be produced, and trailed on the basis of the prototype. The function of storing BTR related information and basic data will be integrated, including background information, basic data, correspondence with review experts, and checklist sent by the secretariat. The function will support the biennial technical expert review and ensure access to information of previous review in the case of personnel changes.

Targets:

- Function designed to support technical expert review of China under the ETF.

Component 5 Project monitoring and evaluation

Continuous monitoring and periodic review will be conducted for project execution, overall project management and related effectiveness evaluation, including schedule monitoring, mid-term review, and financial compliance review.

Project monitoring and evaluation will be performed by the project management office and FECO in accordance with established FECO and GEF procedures. This component will support monitoring, progress and evaluation activities, including semi-annual and annual implementation progress reports, with focus on mid-term and final independent evaluation of project effectiveness, efficiency and sustainability, so that appropriate measures can be taken to ensure with quality and quantity, the achievement of desired scientific and technical outputs. At the same time, project monitoring and evaluation can ensure the effective use of resources to enable Parties and other stakeholders benefit from

or be positively affected by the project. This will also improve the performance in the project implementation process by providing a set of methods for project design, implementation and management, to ensure that all project outputs meet the requirements of project design and have good quality.

Targets:

- M&E reports and conduct of mid-term review and final evaluation.

4) alignment with GEF focal area and/or Impact Program strategies;

CBIT is a trust fund specifically approved by the COP to support developing countries in fulfilling the transparency requirements of Article 13 of the Paris Agreement. China’s current climate change action and greenhouse gas statistical monitoring system mainly serves the requirements under the “Cancun Agreement”, which is not enough for meeting the new requirements under the Paris Agreement. In addition, China also needs to effectively strengthen the transparency mechanism and technical support for local and enterprise response for better implement the transparency provisions under the Paris Agreement.

To this end, China will continue to increase its transparency capacity for a long time. Although China has invested funds and manpower, carried out related projects, and local government have also set up projects to build transparency capacity and carried out capacity building training, but due to China’s large population and GHG emissions, the need for data and information collection is very complex and improving transparency is a protracted process that requires support from multiple sources. The CBIT project mainly plays three roles in this process:

First is to better support China to fulfill the transparency requirements of the Paris Agreement. China’s domestic projects mainly serve its own requirements. The CBIT project aims to improve China’s ability to fulfill the international requirements. It is also designed to meet the requirements in MPGs, which can assist China identify the needs of the institutional arrangements for fulfilling the provisions in a short period of time and carry out targeted capacity building. This project will also study the methodology for tracking progress of NDC and evaluating the effectiveness of policies and measures, which will improve the transparency of the implementation of NDC and contribute to domestic decision-making regarding climate change.

The second is to comprehensively drive national, local, and enterprise-level capacity-building efforts. China’s current transparency capacity-building projects are relatively scattered, only for some specific fields (such as the carbon emission market). CBIT projects can be used as a start to trigger capacity building at the national, local, and enterprise levels, establish relevant institutional mechanisms, and achieve sustainability.

The third is that when China participates in the CBIT project, it can better learn from and exchange international experience, carry out dialogue and exchanges with other developing countries that carry out CBIT, and can also gain project management and implementation experience from the GEF project management system.

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing;

The Paris Agreement puts forward higher transparency requirements for the Parties and call for enhanced transparency of climate change actions when implementing NDC. This project aims to strengthen China's capacity of transparency at all levels in addressing climate change. The table below compares the baseline scenario and the alternative scenario in regards to goals and requirements, institutional arrangements, technical support, and capacity building.

The co-financing project will support methodology development, database integration and transparency-related institutional design of CBIT project. The details could be found in the description of co-financing projects in Part I.

Table 4 Comparison between the baseline scenario and the alternative scenario

Baseline scenario	Alternative scenario
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Baseline scenario	Alternative scenario
National level – supported by Component 1	
<ul style="list-style-type: none"> · Goals and requirements <p>Fulfill with the transparency requirements of the UNFCCC and the Cancun Agreement, prepare and submit NCs and BURs, and participate in relevant technical analysis and facilitative sharing of views.</p>	<ul style="list-style-type: none"> · Goals and requirements <p>Fulfill with the transparency requirements under the Paris Agreement in accordance with the relevant outcome of the Katowice Climate Change Conference, prepare and submit the Biennial Transparency Reports on a regularly basis, and participate in technical expert review and facilitative multilateral consideration.</p>
<ul style="list-style-type: none"> · Institutional arrangements <p>The domestic statistics, accounting, and reporting system designed around the BURs is difficult to meet the requirements of annual inventory compilation, while the statistics and reporting systems for support provided and received are preliminary.</p>	<ul style="list-style-type: none"> · Institutional arrangements <p>Based on the MPGs and related reporting tables under the Paris Agreement, propose the domestic capacity building plan and institutional system design for enhanced transparency, including a draft proposal for GHG-related data management plan and regulations that supports annual inventory preparation, and a proposal for statistical and reporting system for financial support provided and received by China.</p>
<ul style="list-style-type: none"> · Technical support <p>The indicator and methodology for tracking and assessing progress of NDCs is not clear; lack of methodology for tracking financial support provided and received by China.</p>	<ul style="list-style-type: none"> · Technical support <p>Propose indicators and methodologies for tracking the progress of mitigation actions, and indicators and M&E system for tracking adaptation actions; and develop methodologies for monitoring and assessing financial support provided and received by China; research reports will be open to the international community and shared with other developing countries on the CBIT global platform. These methodologies can also help other developing countries to track their NDCs, mitigation & adaptation actions and monitor the financial support that they have provided and received.</p>
<ul style="list-style-type: none"> · Capacity building <p>Only climate change departments familiar with the transparency requirements of the Paris Agreement; few Chinese experts participate in the international review. Knowledge sharing on transparency activities is mainly focused on pre-Paris transparency provisions (Cancun Agreement).</p>	<ul style="list-style-type: none"> · Capacity building <p>Relevant departments all familiar with the enhanced transparency requirements of the Paris Agreement, exchange and share their own methodologies for monitoring and evaluating policies and actions to address climate change; provide capacity building training for qualified experts to increase China's participation in the review process under the UNFCCC. Knowledge from previous outputs will be shared through this activity.</p>
Local level – supported by Component 2	

Baseline scenario	Alternative scenario
<p>· Goals and requirements</p> <p>Assessment of progress towards carbon emission control targets, formulate low-carbon development strategies, etc.</p>	<p>· Goals and requirements</p> <p>Regulate the provincial joint review and improve the quality of provincial inventories to support local governments to develop climate change action targets, including emissions peaking, and facilitate the participation of local governments in international cooperation mechanisms for addressing climate change.</p>
<p>· Institutional arrangements</p> <p>Local governments regularly prepare greenhouse gas inventories and undergo joint review, without formal schemes in place</p>	<p>· Institutional arrangements</p> <p>Propose local inventory report, accounting, expert assessment and certification schemes</p>
<p>· Technical support</p> <p>There is a lack of quality assurance and quality control. The accounting methods for electricity import and export in various regions are not unified.</p>	<p>· Technical support</p> <p>Propose common reporting tables; propose quality management guidance for regional GHG inventories; suggest feasible accounting methods for annual provincial and municipal energy-related carbon emissions, with focus on solving the problems of power transfer across different administrative regions. In addition, the outputs would be shared with other developing countries who have similar physiographic and industrial production conditions with China's frontier provinces.</p>
<p>· Capacity building</p> <p>Officials and experts from local departments have not well understood transparency-related institutional arrangements, inventory accounting methods and data collection requirements after the transfer of function of addressing climate change. Knowledge sharing on transparency activities needs to be improved.</p>	<p>· Capacity building</p> <p>Select key regions to carry out capacity building seminars and trainings for local government officials and technicians. The training mainly includes GHG inventory system arrangement; climate change statistical system; GHG inventory compilation methods and data needs; data collection mechanisms and requirements; sector-specific guidelines for regional GHG inventories, activity data collection, emission factors measurement and estimation methodologies; QA/QC for regional GHG inventories; carbon intensity accounting methods; GHG data reporting via database. Knowledge from previous outputs will be shared through this activity.</p>
<p>Enterprise level – supported by Component 3</p>	
<p>· Goals and requirements</p> <p>Key enterprises report GHG emissions data on a regular basis, and enterprises covered by the carbon market conduct GHG emissions report and accounting.</p>	<p>· Goals and requirements</p> <p>Meet the multiple needs including GHG emissions management of key enterprise, carbon market, climate investment and financing, and local emissions peaking, with consideration given to relevant international initiative requirements.</p>

Baseline scenario	Alternative scenario
<ul style="list-style-type: none"> · Institutional arrangements <p>The MRV systems are not clear for enterprises covered by carbon emission trading scheme.</p>	<ul style="list-style-type: none"> · Institutional arrangements <p>Support the design of MRV systems for enterprises covered by carbon emission trading scheme.</p>
<ul style="list-style-type: none"> · Technical support <p>There is no technical specification for enterprise GHG data monitoring.</p>	<ul style="list-style-type: none"> · Technical support <p>Propose a draft of the technical specifications for enterprise GHG data monitoring, and apply it to typical enterprises on a trial basis.</p>
<ul style="list-style-type: none"> · Capacity building <p>Enterprises and verifiers are unfamiliar with upcoming MRV systems of national carbon emissions trading scheme. They are unclear about the relationship between enterprise GHG monitoring and accounting. Knowledge sharing on transparency activities needs to be improved</p>	<ul style="list-style-type: none"> · Capacity building <p>Train typical enterprises and verifiers to help them understand the MRV systems for enterprises covered by the carbon emissions trading scheme and the technical specifications for GHG monitoring. Knowledge from previous outputs will be shared through this activity.</p>
Data platform – supported by Component 4	
<ul style="list-style-type: none"> · Technical support <p>The policy and measure database does not have a sound classification system to support query and analysis; and it does not include the effects of emission reduction actions, or make the information public; different databases are not connected and the information from national unified database of stationary pollution sources and the environmental resource information center under the MEE are not used.</p>	<ul style="list-style-type: none"> · Technical support <p>Update the policy and measure database by inputting climate change policy measures based on the latest policy types, carry out quantitative analysis of emission reduction actions, determine the scope of disclosure and make them public;</p> <p>Upgrade and improve the national GHG inventory and emission data management integrated database; conduct data correlation, verification and analysis between different databases, improve the verification of basic data and sharing of emission factor data between subsystems, and the analysis and utilization of emission data of key sources in key industries; realize data connection and sharing between the national GHG inventory and emission data management integrated database and the national unified database of stationary pollution sources and the environmental resource information center under the MEE; improve the information disclosure of the national GHG inventory and emission data management integrated platform.</p> <p>The data platform will be open to the international community about China's work progress and achievements on climate change, especially concerning transparency.</p>
Budget	1,650,000 US dollars

6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF);

An enhanced climate transparency system of China will exert a very important positive impact on the world. First, enhancing capacity building on GHG inventory preparation and development on country-specific emissions factors will improve the frequency, completeness and accuracy for the inventory reports, which helps to better identify mitigation potentials. Second, prioritized actions by assessing the effect of different mitigation measures will better support the policy making process. Third, promoting the transparency of the information about GHG inventories and NDCs progress tracking in China will facilitate the dissemination of mitigation actions and effects to the international community and bolster understanding and mutual trust of the various parties. Fourth, enhancing reporting and assessments capacity of adaptation and support, so as to enhance China's ability to fulfillment transparency provisions on all elements. Fifth, China as the largest developing country will set a model of demonstration significance for other developing countries with regard to enhancing the institutional and technical transparency-related capacities.

Proposed project activities will provide important support for normalizing and institutionalizing the GHGs accounting and reporting platform in China. Through capacity building activities, China will further integrate existing database and systems, enhancing the cooperation among different government departments, and develop new methodologies, so as to better fulfill new transparency requirements of the Paris Agreement. As low-carbon development has been recognized as an important driver for promoting ecological progress, environmental protection, development transition and energy revolution in China, more transparent actions and effects will mainstream the low-carbon campaign and make it come into public view.

7) innovativeness, sustainability and potential for scaling up.

At present, China continues to strengthen and improve transparency systems and mechanisms while performing transparency operations at national, local and enterprise levels. On this basis, in-depth explorations have been conducted in many aspects, including climate change statistical indicator and basic statistical system, GHG emissions accounting and reporting system, and the CO₂ Emission per Unit of GDP Control Target Assessment System. For the purpose of effectively facilitating the project outputs, effective linkage at all levels of the governments, and maximum collection and coverage of data and information in various fields are expected by informationization. Through the development of above-mentioned systems, China's working platform for transparency will be built, on which transparency operations are conducted. The platform can be used to extend China's practices, share knowledge and information, and support personnel training.

Innovation: The Capacity Building Initiative for Transparency (CBIT) project is completely new in China. This project will promote mature work on transparency through system building and mechanism development and realize the informationization, automation and standardization of this work based on systematic development, which realize the integration of system building, mechanism development and platform support. This project will help to improve working mechanism in China's transparency system which will greatly enhance work stability regardless of personnel changes, and meanwhile provide a more efficient integrated working platform. Developing several methodologies on evaluating the effects of policies and tracking progress of NDCs is also innovative, which currently does not exist. In addition, efforts at local and enterprise levels will be promoted through a bottom-up approach, which will support, monitor and drive the work at the national level, including utilizing emission factors collected by regional stakeholders and enterprises to compile national GHG inventories.

Sustainability: The CBIT project is sustainable because it builds directly on government programmes and projects, especially the new requirements for implementation faced by developing countries after the Katowice Climate Conference. A comprehensive system of transparency related data platforms will be gradually built and improved to safeguard work sustainability in China. The system will realize the optimal allocation of resources through work integration and ensure continued smooth implementation by updating methodologies and data within the system. It will be optimized and upgraded with more features in Phase II. Capacity building will be carried out at regional and enterprise levels to raise the awareness of information reporting and promote work sustainability. In addition, project activities will be continuously improved based on the lessons learned and knowledge gained during project implementation to maximize project sustainability.

Potential for scaling up: The CBIT project strives for potential outreach through best practices of project implementation, and it will enhance replicability by identifying best practice activities. The methodologies and guideline developed at national level from this CBIT project can be used for GHG inventory preparation, carbon intensity methodology at local and enterprise levels such as support setting the science-based carbon intensity reduction targets for local government, and developing GHG control strategy at enterprise level. From an international perspective, this project will exert more immeasurable positive effects. By sharing China's new achievements and innovative experiences in transparency with the international community, it will help other developing countries with similar situations to improve transparency-related research and capacity building. This project also plans to further share best practices and lessons learned in the future through GEF related international cooperation and South-South cooperation platforms, to further strengthen the popularity of the project outputs to the general public, and increase interaction during and after the implementation of the project.

[1] Source: <https://climateaction.unfccc.int/views/total-actions.html>

[2] In China, climate transparency system mainly includes statistical, accounting, reporting, assessment, and verification.

[3] Including power generation, power grid, steel production, chemical production, electrolytic aluminum production, magnesium smelting, flat glass production, cement production, ceramic production, civil aviation, oil and gas, petrochemical, coking, coal, mining, non-ferrous metals, public building operations, paper or paper products, food & tobacco & alcoholic & beverages & refined tea beverages, fluorinated chemicals, mechanical equipment, electronic equipment, land transportation, and other industries.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.



1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Addressing climate change involves many social and economic sectors, and enhancing transparency of climate action requires support from all aspects. The steering committee of the project will be set up, comprised of the members of the National Leading Group to Address Climate Change, to provide guidance at the strategic level and promote the establishment of an integrated and coordinated transparency mechanism on climate change. The project team will conduct consultation and cooperation with ministries and commissions directly related to transparency compliance on relevant topics, and carry out corresponding capacity-building activities. Local governments will provide advises and suggestions based on their own experiences, strengthen transparency in addressing climate change at the local level, and participate in relevant capacity building activities. The state-owned enterprises and private sector will mainly provide suggestions on transparency mechanism and capacity building for enterprise climate actions, and participate in relevant capacity building activities. The civil society will provide intelligence supports through sharing international good practices and insights on transparency policy design and relevant methodologies. They have been consulted during the preparation of the PD, including the compilation and review of PD, on activities identification and development. They will be consulted in the implementation periods through interviews, workshops, and/or sub-granted projects. The methodologies from non-government organizations may also be incorporated in the outcomes, therefore CSOs with certain expertise will closely cooperate with the research team. The Foreign Environmental Cooperation Center (FECO) of the MEE as a GEF approved project implementing agency, will be responsible for implementation management of the project. Designated and commissioned by the MEE which is the project executing entity, the Chinese Research Academy of Environmental Sciences (CRAES) will be responsible for specific execution. The project management office is set under the CRAES. The technical support institutions include the National Center for Climate Change Strategy and International Cooperation (NCSC), Chinese Academy of Agricultural Sciences (CAAS), Chinese Academy of International Trade and Economic Cooperation (CAITEC), and Tsinghua University.

Table 5 Stakeholder Engagement Assessment

Institution	Role	Responsibilities
Members of National Leading Group to Address Climate Change	Steering committee	Studying and formulating major strategies, policies and measures for addressing climate change, developing a unified plan for addressing climate change, studying and deliberating international cooperation and negotiation strategy, coordinating and solving major issues in work to address climate change. Department of Climate Change of MEE will be the chief unit of PSC and provide guidance on project activities and subcontractors and be responsible for supervision during the project operation.
Ministry of Ecology and Environment (MEE)	Chair of steering committee	The Department of Climate Change, the major Chinese Government department responsible for climate change, is responsible for organizing the development of major strategies, plans and policies to address climate change and GHG reductions, participating in the international negotiations on climate change with the relevant departments, and being responsible for the compliance of the UNFCCC.

Institution	Role	Responsibilities
Ministry of Foreign Affairs (MFA)	Steering committee member	Responsible for handling diplomatic affairs related to global and regional security in multilateral relationship such as the United Nations. It takes charge of compliance issues in multilateral negotiations on climate change, which is closely related to the implementation of the Paris Agreement.
Ministry of Science and Technology (MOST)	Steering committee member	It is responsible for identifying the major plans and priority areas for science and technology development. It takes charge of negotiation on technology agenda items under the UNFCCC, and administrates and reports received technological support information. As a member of the steering committee of the project, it will participate in capacity-building training.
Ministry of Finance (MOF)	Steering committee member	GEF window agency and a member of the steering committee of this project that guides the application for and implementation of GEF projects. In this project, it is a key agency in need of coordination and capacity-building training. In addition, it takes charge of the negotiation on finance agenda items under the UNFCCC, and administrates and reports data on received financial support .
Ministry of Natural Resources (including National Forestry and Grassland Administration)	Steering committee member	Responsible for the statistics and release of basic data related to national GHG inventories such as forests, grasslands and wetlands. In this project, it is a key agency that need to be coordinated need to participate in capacity building training.
Ministry of Agriculture and Rural Affairs	Steering committee member	Responsible for adaptation-related agenda items in the climate change negotiation, responsible for statistics and publication of GHG emissions from agriculture sector as well as research and reports of adaptation to climate change. In this project, it is a key agency that need to be coordinated need to participate in capacity building training.
China International Development Cooperation Agency (CIDCA)	Steering committee member	Responsible for formulating foreign aid strategic guidelines, plans, and policies; coordinating major foreign aid issues and making recommendations; advancing foreign aid reform; preparing foreign aid programs and plans, determining foreign aid projects, and monitoring and evaluating their implementation. It is a key agency to be coordinated in this project as its work relates to and focuses on the design of South-South cooperation data statistics and reporting systems.
China Meteorological Administration (CMA)	Steering committee member	Responsible for meteorological monitoring, forecasting and early warning, and public service management, which is closely related to climate change science. It takes charge of the negotiation on capacity-building and gender agenda items under the UNFCCC, and administrates and reports information on received capacity-building support. It will participate in capacity-building training.
National Bureau of Statistics (NBS)	Steering committee member	Responsible for the collection and release of GHG-related data, and it is a key agency in need of coordination and participate in capacity-building training in this project.
National Energy Administration (NEA)	Steering committee member	Responsible for energy data collection and release, and it is a key agency in need of coordination and participate in capacity-building training in this project.

Institution	Role	Responsibilities
Local governments	Technical consulting/capacity building object	Responsible for combating climate change and enhancing GHG transparency at the local level, and will participate in capacity-building activities and provide local experiences
State-owned enterprises and private sector	Technical consulting/capacity building object	<p>The state-owned enterprises and private sector will be consulted during both the preparation and implementation periods of this project, focusing on views on transparency policy/regulations and capacity gaps, in order to support the research on institutional arrangements and methodologies as well as the design of capacity building activities for enterprises.</p> <p>They will participate in capacity-building activities and provide experiences at enterprise level.</p>
Civil society	Technical consulting/capacity building partner	<p>The civil society organizations will provide intelligence supports through sharing international good practices and insights on transparency policy design and relevant methodologies. They will be consulted during both the preparation and implementation periods through interviews, workshops, and/or sub-granted projects. They were consulted during the preparation of the PD, including the compilation and review of PD, on activities identification and development. The methodologies from non-government organizations may also be incorporated in the outcomes, therefore CSOs with certain expertise will closely cooperate with the research team.</p> <p>They will participate in capacity-building activities. And since the data and information will be more transparent through this project, they will have the chance to better understand China's GHG emissions data and its climate policies and measures.</p>
FECO of MEE	GEF project agency	On behalf of the GEF, it provides comprehensive support and supervision for project execution in project management and financial aspects throughout the whole project cycle.
Chinese Research Academy of Environmental Sciences (CRAES)	GEF Executing Entity (project management office)	Responsible for project design, project documentation, project framework and annual plan preparation, and establishing the project management office, and specifically, it take charges of the entire project execution, coordination and management.
National Center for Climate Change Strategy and International Cooperation (NCSC)	Technical support institution	NCSC is affiliated to the Ministry of Ecology and Environment and has carried out extensive research and support work at national, local and enterprise levels for GHG accounting and reporting methodology and basic statistical system. In this project, it is responsible for providing technical support for capacity building at national, local and enterprise levels and system platform upgrade.
Chinese Academy of Agricultural Sciences (CAAS)	Technical support institution	It has undertaken the United Nations negotiations on adaptation-related agenda items and the compilation of adaptation-related content of national reports. In this project, it is mainly responsible for providing technical support related to adaptation.

Institution	Role	Responsibilities
Chinese Academy of International Trade and Economic Cooperation (CAITEC)	Technical support institution	It is affiliated to the Ministry of Commerce and has extensive experience in the field of foreign aid. In this project, it is mainly responsible for providing technical support on reporting climate finance, as well as received and provided financial supports.
Tsinghua University	Technical support institution	As the technical support institution of this project, the university will participate in capacity-building activities for NDC-reporting related methodology development.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

Addressing climate change involves many social and economic sectors, and enhancing transparency of climate action requires support from all aspects. The steering committee of the project will be set up, comprised of the members of the National Leading Group to Address Climate Change, to provide guidance at the strategic level and promote the establishment of an integrated and coordinated transparency mechanism on climate change. The project team will conduct consultation and cooperation with ministries and commissions directly related to transparency compliance on relevant topics, and carry out corresponding capacity-building activities. Local governments will provide advises and suggestions based on their own experiences, strengthen transparency in addressing climate change at the local level, and participate in relevant capacity building activities. The state-owned enterprises and private sector will mainly provide suggestions on transparency mechanism and capacity building for enterprise climate actions, and participate in relevant capacity building activities. The civil society will share advanced experience with the project team and provide certain technical support in mechanism and standard design and capacity building. The Foreign Environmental Cooperation Center (FECO) of the MEE as a GEF approved project implementing agency, will be responsible for implementation management of the project. Designated and commissioned by the MEE which is the project executing entity, the Chinese Research Academy of Environmental Sciences (CRAES) will be responsible for specific execution. The project management office is set under the CRAES. The technical support institutions include the National Center for Climate Change Strategy and International Cooperation (NCSC), Chinese Academy of Agricultural Sciences (CAAS), Chinese Academy of International Trade and Economic Cooperation (CAITEC), and Tsinghua University.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

China has devoted itself to the promotion of gender equality and protection of women's rights and interests. Efforts will be further strengthened We will further strengthenby enhancing the active engagements of female workers in the endeavor on climate change, which is already extensive currently, including enhancing their participation (including work contents and salary levels), providing more training and assistance (at national, level and enterprise levels), and increasing their female participantsnumber in important positions.

In this project, both the we will increase the number of female participants and raise the importance of their participation will be paid attention to, with particular emphasis on skill training of for female members. Female workers will be made more involved in and capable of transparency capacity building at national, local and enterprise levels. We will also promote and strengthen the exchanges between female workers in China's climate change endeavor and various countries and organizations will be promoted and strengthened. With attention attached to women's rights and interests and gender equality issues, the rights and interests of women and vulnerable groups will be protected according to law, respectful ofin accordance to Goal 17 "Gender Equality" of the United Nations Sustainable Development Goals.

The project will ensure equal participation of women and men among the key stakeholders and make sure that gender equality is considered in all project stages and project components. Female researchers and experts will be involved in the design of the project. Gender analysis and a gender action plan have been formulated during the PPG phase, and gender-sensitive indicators will be incorporated into the project's logical framework. In mid-term and final evaluation of the project, women's participation and benefits will be assessed. References shall be made to the Guidelines on Gender Equality of GEF as to further mainstream gender in transparency work.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women

Does the project’s results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

The private sector is an important stakeholder in this project. As an important implementer of climate actions, the data and information of the private sector on climate change provides an important basis for policy development and performance evaluation, as well as an important support for business decisions such as investment and procurement. The first-hand emission factors obtained in the GHG accounting process also serve as important references for the compilation of local and national GHG inventories. Therefore, establishing a sound transparency system and enhancing the enterprise (including state-owned enterprises) capacity on climate change will be indispensable for improving national climate-related transparency. The project intends to strengthen the engagement and contribution of the business sector (including state-owned enterprises and private sector) through the following arrangements:

First, the transparency status quo of enterprises in climate change actions will be investigated to identify challenges, gaps and problems. Surveys on GHG emission monitoring, accounting and reporting will be carried out among key enterprises and national and local pilot carbon trading companies, to understand the needs of mechanism development and capacity building for increasing transparency in enterprise climate change actions;

Second, suggestions from enterprises and domestic and foreign consulting agencies will be extensively solicited, in order to establish transparency systems and methodologies that can support various policy objectives and reduce the reporting burden of enterprises

Third, transparency capacity building for enterprises will be strengthened. Capacity building for key enterprises and listed companies will be carried out, including the use of GHG emissions accounting and reporting guidelines, and reporting data through the platform. According to relevant policies and regulations, determine the list of qualified enterprises and organize the training by region or industry to improve the transparency capacity building of enterprises. This training will cover 2-3 key industries (power sector, co-generation sector, cement sector), with 50-100 enterprises in each sector. The emission threshold for enterprise should be above 50 kt CO₂eq. Overall, there will be 150-200 enterprises trained from this project.

Fourth, a sound reporting system and online database for corporate climate change actions will be established to strengthen information collection and disclosure. A user-friendly transparency database for enterprise climate change actions will be strengthened to serve national and local policy objectives, strengthen their data management and disclosure, and a database of measured emission factors will be created based on corporate reports.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

5.1 potential social and environmental risks:

According to FECO’s Environmental and Social Safeguard Framework, an environmental and social impact screening process was completed in the project concept stage/eligibility assessment stage (see Annex D). Based on the screening results, the project does not include site pilots or demonstrations, and may cause minimal or no adverse environmental and social impacts. An environmental and social impact assessment registration form was compiled and completed in the PPG phase (Annex D). No further ESIA document is needed for the project.

During project implementation, FECO and the executing agency are responsible for ensuring that minimal or no adverse environmental and social impacts will be caused by the project. FECO must address compliance concerns and other grievances through FECO’s Accountability and Grievance Mechanism, if any compliance or grievance were received.

5.2 There may be risks in terms of institutions, inter-sectoral coordination, technology, and personnel in project implementation. Risk levels, potential impacts and response measures are as shown in Table 6.

Table 6 Risks in project implementation

Risk	Level	Possible impacts	Response measures
Institutionalized risk	Low	Due to COVID-19, the global and national economic growth slow down, thus the work of climate change and the transparency maybe despised. Absence of legal guarantee for the establishment and implementation of the transparency system, and failure to incorporate the established system and mechanism into the national statistics / policy systems	Make full use of the existing statistical indicator system and data collection channels, as well as maintain communication and coordination with the statistical departments in the beginning of project implementation; in close combination with the priorities of the 14 th Five-Year Plan, report timely to high-level leaders to seek for the greatest policy support; follow closely the introduction of relevant laws and regulations to ensure clear transparency requirements in the legislation
Inter-sectoral coordination risk	Low	Failure to integrate transparency into work of other industries and sectors and to obtain data about key indicators	Highlight the new transparency requirements of the Paris Agreement and the responsibilities and obligations that China needs to assume in the future at the meeting of the leading group members, clarify the importance of the work on transparency and incorporate the key indicators into sectoral work systems; integrate GHG measurement and reporting into sectoral planning in order to obtain data on key indicators such as industry and construction; raise awareness and capability of governmental officials through training; and hold cross-sectoral coordination meetings on a regular basis.

Risk	Level	Possible impacts	Response measures
Technical risk	Low	System security risks, and technical barriers encountered in system development, leading to failure to achieve expected outputs	Fully assess the feasibility of various outputs and set limited targets before the start of the project; assign risk ratings in the early stage of system development; work closely with system developers to determine the schedule and roadmap for system development as soon as possible; and shorten iteration cycle and make improvements and fix loopholes in a timely manner.
Personnel risk	Low	Lack of personnel continuity and stability	Train special personnel that are specifically responsible for inventory preparation and emission reduction quantification methodology development, design the plan for national inventory and reporting office, and specify the responsibility to avoid duplication of work; improve the standardization of relevant professionals and skills through certification mechanism, and enhance the capacity of experts through standardized training.
Climate change risk	Low	The climate change risk is low to this project as the activities is focused on institutional management and capacity building.	Raise the awareness of climate change risk at different level, to increase the visibility of this project to policy makers, technical experts, private sector and CSO stakeholders. Knowledge on climate risks and response measures will be shared during capacity building activities.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

The implementation of this project will emphasize and support strong coordination, and strive to avoid duplication of work between various transparency research projects currently being implemented in China. The project plan will be completed within three years (2021-2024) to improve China's transparency capacity to support the reporting and review of its first biennial transparency report at the end of 2024.

This project will establish a Project Steering Committee (PSC), which is composed of the relevant member units involved in the Climate Change Leading Group and the project executing agency (CRAES) and GEF agency (FECO). The members of the project steering committee should be as consistent as possible, but new members can be admitted as appropriate. The project steering committee meeting is held once a year and is organized and chaired by CRAES. The main purpose of the project steering committee meeting is to coordinate and manage the entire project activity at a macro level, approve the project work plan, review the project progress, and approve the main project deliverables. Through this mechanism, (i) strengthen coordination among ministries on transparency compliance, communicate and implement the results submitted by the project in a timely manner; (ii) when formulating a work plan, the priorities of the project steering committee will be considered; (iii) The project steering committee will be consulted when considering new activities of the project; (iv) the project steering committee will review the annual progress and output, including project reports and materials; (v) project results and achievements will be submitted to the relevant agency of the project steering committee.

The project will be conducted under the guidance of the Department of Climate Change (DCC) of MEE . As the chief unit of PSC, the DCC will provide guidance on project activities and subcontractors and be responsible for supervision during the project operation. DCC will appoint a senior officer to be the Chair of PSC. The achievements of the project need to be submitted to the DCC for review before being released to the public.

The project will be implemented by the Foreign Environmental Cooperation Center (FECO) of MEE, and the Chinese Academy of Environmental Sciences (CRAES) will be responsible for the project execution on behalf of the MEE. As an implementing agency, FECO will be responsible for the overall coordination and supervision of the project, providing guidance, support and supervision for the entire process of project implementation, including grant payment, procurement and financial supervision, project monitoring and evaluation, etc., to ensure that the project implementation process conforms to GEF management requirements and achieving project goals. FECO will work closely with the executing agency. As an executing agency, CRAES will be specifically responsible for project executing and management, and receive, use and manage project grant funds as required. CRAES will set up a project management office (PMO), specifically responsible for the daily management of the project, hiring project personnel according to the provisions of the project document, selecting institutions or individual experts to undertake relevant consulting tasks, coordinating project stakeholders, monitoring and evaluation of project activities, etc. CRAES will appoint a senior official as the National Project Director (NPD) to oversee the operation of the PMO and ensure the functional interaction of the PMO with all partners and relevant partners. CRAES will also hire a chief technical advisor (CTA) monitor the project progress and provide technical advise from the very beginning to the end of the project executing, to ensure a consistency advisory towards the project targets.

The PMO will also maintain liaison and work closely with all partner agencies, including consulting international agencies and experts to better gain and share international experience. The PMO is responsible to FECO and PSC for the quality, timeliness and effectiveness of the activities carried out and the use of funds. The PMO will formulate an annual work and budget plan at the beginning of each year, which will be approved by the PSC. These plans will provide the basis for allocating resources for planned activities. The PMO will further produce an annual progress report (APR) for submission to the PSC. These reports will summarize the progress made by the project and the expected results, explain any significant differences, detail the necessary adjustments, and become the main reporting mechanism for monitoring project activities. The domestic and international experts and institutions that signed the contract will provide technical support to the PMO. The recruitment of experts or institutions of this project will be completed by the project office after consultation with FECO.

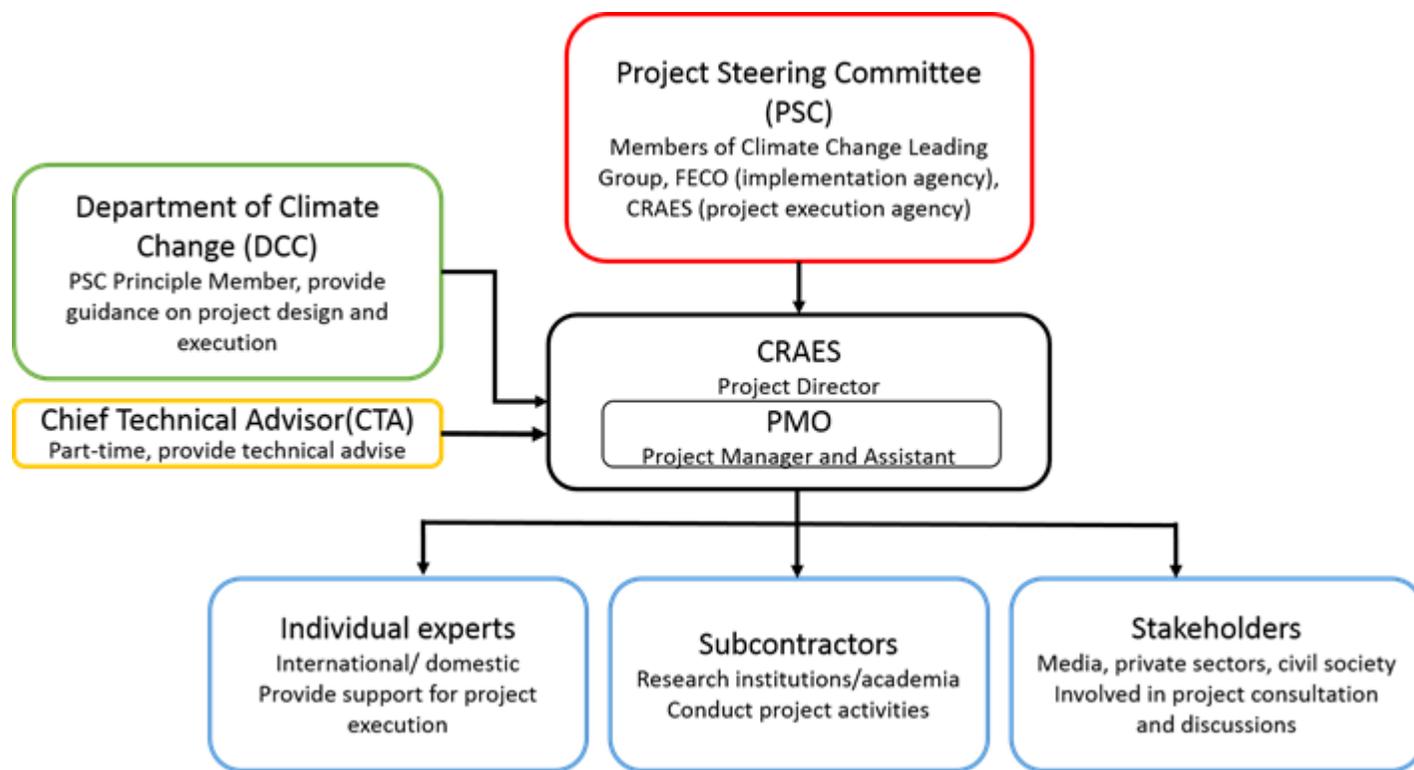


Figure 2. Project management and coordination framework

Coordination with other transparency projects:

China has carried out a number of projects on transparency, such as Enabling China to Prepare Its Third National Communication to the UNFCCC and the upcoming Enabling China to Prepare Its Fourth National Communication to the UNFCCC (national level), Provincial Capacity Building for GHG Emissions Inventory Preparation, and GHG Emissions Accounting Capacity Building of Enterprises (local level), and Establishment of Emissions Trading Scheme in China (enterprise level). These projects, basically implemented individually, lack overall coordination in project information communications and result display. The CBIT project will, through system development and construction, will provide an initial management mechanism for China's transparency projects.

More specifically, the CBIT project will be carried out on the basis of existing projects. It will be closely coordinated with existing domestic projects, including the integration of existing data platforms and improving the quality of existing databases. It will also be linked to international cooperation projects. For example, capacity building at the enterprise level will draw reference from the achievements of the World Bank PMR projects, so as to promote the linkage between China's transparency projects as well as the exchanges and communication between China and the international community in this field. The established system will help China to achieve the vertical interaction, horizontal connectivity and

sustainable development of work on transparency. As GEF has financed activities related to capacity building for national inventory preparation, the project will focus on building and improving the working mechanism and technical capacity for compiling inventory and biennial transparent report, rather than supporting inventory preparation itself, to ensure different focus of the CBIT project and the GEF grant for communication capacity building. Other GEF-funded MRV-related projects, such as CRESPP, target at project-level MRV activities, which is different than the national transparency system and methodology research on GHG emissions and NDC under this project. The application can not only integrate the resources of existing transparency projects in China, but also help to increase the added value and maximize the benefits of each project.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

The Chinese Government attaches high importance to addressing climate change. Accelerating ecological progress comes down in the continuous line with addressing climate change. It is a major initiative to actively respond to global climate change and maintain global ecological security. As emphasized by President Xi Jinping on many occasions, "addressing climate change is not at others' request but on our own initiative." The Report to the 18th National Congress of the Communist Party of China (CPC) put forward low-carbon development as an important content and the basic approach for building an ecological civilization. The 19th CPC National Congress proposed that China should take a driving seat in international cooperation to respond to climate change, and become an important participant, contributor, and torchbearer in the global endeavor for ecological civilization. The meeting also made it clear to get actively involved in global environmental governance and fulfill the commitments on emissions reduction; and to foster new areas and drivers of green and low-carbon growth, promote a sound economic structure that facilitates green, low-carbon, and circular development, build an energy sector that is clean, low-carbon, safe, and efficient, and encourage simple, moderate, green, and low-carbon ways of life. As highlighted by General Secretary Xi Jinping in an important speech at the National Environmental Protection Conference, green development is an inevitable requirement for building a high-quality modern economic system and a proactive national strategy addressing climate change will be implemented.

The Chinese Government fully recognizes that actively responding to climate change, controlling GHG emissions, and improving climate change adaptation capacity are of great importance to both the internal and international imperatives. The endeavor offers an important platform for getting involved in global governance and building a community of shared future for mankind, and represents an important starting point for pursuing high-quality development and building an ecological civilization. It also brings a major opportunity to force economic development pattern change and economic restructuring and to promote coordinated progress towards high-quality economic development and high-level environmental protection. Based on the above-mentioned understanding, China has continued to upgrade its national climate change goals and policies, reflecting the increasing determination and efforts to deal with climate change. In terms of climate change mitigation, in 2009, China proposed to reduce CO₂ emissions per unit of GDP by 40–45% in 2020 compared with 2005 level. In 2015, China further pledged in the *Enhanced Actions on Climate Change—China's Intended Nationally Determined Contributions* (hereinafter referred to as the NDCs), to peak carbon emissions around 2030 and strive to peak early together with targets for CO₂ emissions per unit of GDP and the share of non-fossil energy in primary energy consumption. In terms of climate change adaptation, China published the *National Strategy for Adapting to Climate Change* and the *National Plan on Climate Change (2014–2020)* in 2013 and 2014 respectively, which clarified the main goals and tasks for adapting to climate change by 2020. The policies and measures to comprehensively improve the capacity of adapting to climate change were outlined in the NDCs. Currently, China is preparing *China's Progress Report on Intended Nationally Determined Contributions* and the *Mid-century Long-term Low Greenhouse Gas Emissions Development Strategy* in accordance with the requirements of the relevant provisions of the Paris Agreement and the relevant decisions of the Paris Conference and will submit them to the UNFCCC Secretariat in 2020, and it will conduct follow-up assessments and adjustments in accordance with relevant requirements. At the same time, China is currently working on the preparation of the 14th Five-Year Plan. There is an urgent need to accurately analyze the new situations and new features of current work on climate change, and to identify the gaps between China's emissions control policies and actions and the requirements listed in its NDCs, and also the deficiencies and challenges in China's GHG emissions control efforts, so as to promote the governance system in launching policies and actions and other supporting capacities.

The design and implementation of the CBIT project activities will provide appropriate technical support to facilitate the compliance of the transparency provisions of the Paris Agreement, tracking the progress of relevant NDCs targets, and scientifically formulate China's goals, priorities and policy measures of addressing change during the 14th FYP period and beyond.

From the perspectives including assessment of the progress of NDCs targets and science-based formulation of mid- and long-term climate change goals and tasks, the CBIT project will help China to develop and improve the NDC policy database and to develop methodologies for NDCs progress tracking and policy effects assessment. These efforts will enable China to better assess the effectiveness of existing policies in the field of mitigation and adaptation and to identify possible directions for upgrading existing policies or proposing new policies. This will provide great technical support for formulating the climate change planning and enhancing implementation during the 14th FYP period and updating the NDCs and mid-century climate change goals and tasks.

On implementation of the Paris Agreement, the CBIT project will help China to identify the needs of transparency system at multiple levels, including national, local, and enterprise levels, and to significantly improve the capacities of Paris Agreement implementation through the development of methodologies catered to China's national conditions, construction of data platform, providing training and also capacity building in other aspects.

On the one hand, the CBIT project will be designed in strict accordance with the requirements "to improve the GHG emission statistics and accounting systems and technical capacity" mentioned in China's strategies and plans concerning climate change, including:

- To perfect the systems for statistics and accounting, evaluation and assessment, and accountability, and improve the system of carbon emissions standards, specified in Section 1 "Effective Control of Greenhouse Gas Emissions" in Chapter 46 "Actively Responding to Global Climate Change "of the *Outline of the 13th Five-Year Plan for National Economic and Social Development of the People's Republic of China*.
- To establish and improve the basic GHG emissions statistical system, and strengthen GHG emissions accounting, proposed in Section 1 "Improve the GHG Statistical and Accounting System" in Chapter 9 "Strengthen Capacity Building" of the *National Plan on Climate Change (2014-2020)*.
- Article 13 "Improve the Statistical and Accounting System for GHG Emissions" in Part 2 "Policies and Measures to Implement Enhanced Actions on Climate Change" of the *Enhanced Actions on Climate Change—China's Intended Nationally Determined Contributions*.
- Article 2 "Strengthen the Statistics and Accounting of Greenhouse Gas Emissions" and Article 3 " Strengthen the Information Disclosure System for Greenhouse Gas Emissions" in Part 8 "Strengthen Basic Capacity Support" in the *Work Plan for Controlling Greenhouse Gas Emissions during the 13th Five-Year Plan Period*.

On the other hand, the Chinese Government attaches great importance to adapting to climate change, and places equal emphasis on mitigation and adaptation as noted in the *National Plan on Climate Change* Plan and the NDCs. However, the transparency system and technical capacities for adapting to climate change remain premature and urgently needs improvement. The CBIT project will include activities contributive to "building the database of key parameters of the monitoring indicator system for China's policies and measures to adapt to climate change" and "developing the monitoring indicator system and assessment methodologies for China's policies and measures to adapt to climate change in key areas". The efforts will facilitate the progress tracking and assessment of targets and major activities on climate change adaptation set forth in major strategies such as the *National Strategy for Adapting to Climate Change*, *National Strategy for Addressing Climate Change*, and the NDCs. The outputs will also effectively make up for the gaps in China's climate change policy system and technical indicator system and greatly enhance China's capacity of adapting to climate change.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

Acquiring and sharing knowledge and lessons learned are an important part of this project and an important means to ensure the sustainability and scalability of project achievements. Knowledge management will be implemented in all project components. In specific, knowledge management and sharing includes research on methodologies and guidelines and construction of database platforms, such as activities on methodology and guideline research including Output 1.2 (Research on methodologies for tracking and assessing progress of NDCs and estimating financial support) and Output 2.1 (Improve the provincial joint review for local GHG inventory preparation).

For output 1.2, quantitative assessment methods for key emission reduction policies will be developed to further enhance methodological consistency and accuracy. They can be used to objectively evaluate the emission reduction effects of different policies to support implementation reporting and domestic decision-making. Meanwhile, research on methodologies for non-CO₂ GHG emission tracking and assessment will be conducted to help measure the effects of non-CO₂ GHG mitigation policies, measures and actions. In the field of adaptation, a monitoring indicator system and assessment methodology which are suitable for China's climate change adaptation policies and measures will be proposed to support domestic decision-making and implementation. In terms of financial support provided and received, this project will investigate the current situation and related practices of financial support from major developed countries and international institutions, identify the needs and gaps based on the system and technical capacity requirements for enhanced transparency, and define the scope and statistical standards of financial support. These methodologies will be directly used in the preparation of China's first Biennial Transparency Report, and above mentioned research reports will be open to the international community and shared with other developing countries on the CBIT global platform. With common features, these methodologies can also help other countries to track their NDCs, mitigation & adaptation actions and monitor the financial support that they have received.

For output 2.1, joint review on provincial GHG inventory will be improved. Methodology and mechanism will be proposed to use region-specific emission factors of local GHG inventories to improve the transparency of national GHG inventories. Common reporting formats for local GHG inventories will also be developed and improved. Quality management guidance suitable for China's conditions will be studied and proposed to strengthen quality assurance and quality control of local GHG inventories. These guidelines have high regional applicability and practicality as they integrate China's recent experiences in local inventory preparation and joint review. By sharing the provincial emission factors with the international community through the CBIT global platform, they will help other developing countries, especially those who share the boundaries with China, or have similar physiographic and industrial production conditions, to prepare their GHG inventories and perform quality control on the data.

Activities on database construction are under Component 4 (Improve integration of existing transparency related database). In specific, Output 4.1 (Improve the existing policy database) will update the module for quantitative analysis of mitigation actions, and simultaneously promote GHG inventory database and publish the latest progress of policies and measures to the public. Output 4.2 (Research on connection of database between different levels and sectors) will optimize the function of national GHG inventory and emission data management integrated database to support regular information release or disclosure of GHG emissions at different levels and further improve the transparency of GHG emission data at all levels. Based on this platform, a comprehensive management tool will be developed for China's GHG-related information, which facilitates knowledge sharing domestically and internationally. Upon completion, the comprehensive tool will be open to all stakeholders and provide corresponding services. It will also be used to show the international community about China's work progress and achievements on climate change, especially concerning transparency. In addition, all capacity building outputs will share knowledge among participants at national, local and enterprise level. In this way, the knowledge management tool can systematically and effectively collect, archive and manage knowledge of climate change. First, climate change data and information can be timely collected and summarized, providing adequate and accurate data sources and information bases for the relevant work. Second, training can be organized, related materials can be collected and archived, which could help to optimize the training content and smooth the training program. Third, the released climate change documents and achievements can be brought under information management and made available, visualized and extensible.

The budget and timeline for “knowledge management approach” is shown in Table 7. Specific timeline and budget could be referred to the Annex B and Annex C.

GEF Outputs	Knowledge management approach	Budget allocation (USD)	Timeline
1.2 Research on methodologies for tracking and assessing progress of NDCs and estimating financial support	Knowledge sharing will be conducted through training/ seminars and publication and dissemination of deliverables	1500	Year 1, 2, 3
1.3 Capacity building training for fulfilling the transparency provisions Paris Agreement	Knowledge sharing will be conducted throughout this activity.	100000	Year 1, 2, 3
2.1 Improve the provincial joint review for local GHG inventory preparation	Knowledge sharing will be conducted through training/ seminars and publication and dissemination of deliverables	500	Year 1
2.3 Carry out transparency-related capacity building at the provincial, municipal and county levels	Knowledge sharing will be conducted throughout this activity.	100000	Year 1, 2, 3
3.2 Capacity building training for key enterprises and verifiers	Knowledge sharing will be conducted throughout this activity.	100000	Year 2, 3
4.1 Improve China’s climate change policy and measures database	Knowledge sharing will be conducted through training/ seminars and dissemination of deliverables	1500	Year 3
4.2 Research on connection of databases between different levels and sectors	Knowledge sharing will be conducted through training/ seminars and dissemination of deliverables	1500	Year 3

Upon of the project completion, all the training materials related to capacity building activities supported by this project can also be shared with the international community on the CBIT global platform to help other developing countries to carry out capacity building activities. Attending workshop and events of CBIT global platform is included the budget of travelling under activities (details could be found in the Annexes).

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Project monitoring and evaluation will be conducted in accordance with established FECO and GEF procedures and will be provided by the PMO and FECO. The Project Results Framework (PRF) provides performance and impact indicators for project implementation along with their corresponding means of verification.

The monitoring and evaluation (M&E) plan includes: Inception Report, Project Implementation Reviews (PIR), Project Terminal Report, Semi-annual Progress report, Progress Monitoring Report, Supervision Report, Mid-Term Review and Final evaluation etc. The following sections outline the principal components of the M&E Plan and indicative cost

estimates related to M&E activities. The project's M&E Plan will be presented and finalized in the Project's Inception Report following a collective fine-tuning of indicators and the full definition of project staff M&E responsibilities.

Inception Phase

A Project Inception Workshop (IW) will be conducted within the first 6 months of project start, with the full project team, relevant government departments and co-financing partners. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goal and objective, as well as finalize preparation of the project's first annual work plan on the basis of the logistic framework. In addition, the Inception Workshop will consider and review a Sustainability and Exit Plan for the project, which will be reviewed at regular intervals during project implementation. The purpose and objective of the IW will be to: (i) introduce project staff with the FECO staff responsible for GEF implementation to smooth out any procedural issues that may occur; (ii) provide a detailed overview of GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, mid-term review (optional) and final evaluations. The IW will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed in order to clarify for all, each party's responsibilities during the project's implementation phase.

Monitoring Events

A detailed schedule of project review meetings will be developed by the project management team, and FECO, in consultation with project implementation partners and stakeholder representatives. Such a schedule will include: (i) tentative time frames for Project Steering Committee Meetings and (ii) project-related M&E activities. Day-to-day monitoring of implementation progress will be the responsibility of the Project Manager based on the project's AWP and its indicators. The Project Manager will inform FECO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

The measurement of certain indicators will be undertaken through subcontracts or retainers with relevant institutions. Periodic monitoring of implementation progress will be undertaken by FECO through quarterly meetings with the Executing Agency, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

Annual Monitoring will occur through the Project Steering Committee meetings. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to PSC meetings at least once a year. The first such meeting will be held within the first six months of the start of full implementation.

When preparing annual project review, the Project manager will prepare a GEF PIR/ and submit it to PSC members at least two weeks prior to the PSC for review and comments. The Project Manager will present the PIR to the Project Steering Committee, highlighting policy issues and recommendations for the decision of the PSC participants. Separate reviews of each project component may also be conducted if necessary. The PSC has the authority to decide to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

The terminal PSC meeting is held in the last month of project operations. The PMO is responsible for preparing the Terminal Report and submitting it to FECO. It shall be prepared in draft at least two months in advance of the terminal PSC meeting in order to allow review, and will serve as the basis for discussions in the PSC. The terminal meeting considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation of formulation.

Project Reporting

The PMO in conjunction with the project implementation team will be responsible for the preparation and submission of the following reports that form part of the monitoring process.

A Project Inception Report will be prepared at least one month before the Inception Workshop and finalized immediately following the Inception Workshop after consolidating all the stakeholders' comments. It will include a detailed First Year/ Annual Work Plan divided into semi-annually timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan will include the dates of specific field visits of the FECO or consultants (if needed). The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12-month timeframe. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. When finalized, the report will be circulated to project counterparts who will be given a period of three weeks in which to respond with comments or queries. Prior to this circulation of the IR, FECO will review the document.

Semi-annual Progress Reports (SAR) are short reports outlining main updates in project progress and will be provided half a year to FECO by the project team.

The Project Implementation Review (PIR) is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from on-going projects. Once the project has been under implementation for a year, a Project Implementation Report must be completed by the project team and submitted to FECO for comments, after finalized will send to MEE for clearance.

The Project Terminal Report (PTR) are the report that the project team would prepare during the last three months of the project. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met (or not achieved), structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

Progress Monitoring Report (PMR) needs to be completed by the project team and the project manager. Progress in the implementation of a project is measured by the achievement of milestones. A milestone is "a scheduled event representing progress towards the achievement of project outputs, outcomes and higher level results". For each component there should be at least one milestone. Milestones will be collected periodically every six or twelve months. The Progress Monitoring Template requires reporting by results which will be based in logical framework indicators and by output/activity which can be milestone oriented. FECO will provide the Progress Monitoring Template.

Monitoring Reports (MR) should contain three aspects, including: results, implementation and finance. It will be developed by FECO based on PMR submitted by the project team.

For more details, please see Project Monitoring and Evaluation Guideline of FECO.

Independent Evaluations, Financial Reporting and Audits

The project will be subjected to at least two independent external evaluations as follows: a mid-term review and final evaluation. The Mid-Term Review will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. The review will pay close attention to achievement of indicators identified in the project document and subsequent AWP. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the Mid-Term Review will be decided after consultation between the stakeholders to the project document. The Terms of Reference for this Mid-Term Review will be prepared by the FECO.

An independent Final Evaluation will take place three months prior to the terminal Project Steering Committee meeting and will focus on the same issues as the Mid-Term Review. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by FECO.

Financial Reporting and Audits: CRAES will provide certified periodic financial statements and an annual audit of the financial statements relating to GEF funds according to the established procedures set out in relevant Programming and Finance manuals. The Audit will be conducted according to FECO financial regulations, rules and audit policies by the legally recognized auditor of the Chinese government.

Detail of the project's monitoring and evaluation of the Project Document summarized below in table 7.

Table 7 Plan for Monitoring and Evaluation

Type	Responsible Parties	Budget (US\$)	Time Frame
Inception Workshop	Project team, FECO	1,000	Within first six months of project start up
Inception Report	Project team, FECO	None	Submit draft two weeks before the IW and finalize immediately following IW
Semi-annual progress reports	Project team	None	Semi-annually
Progress Monitoring Report	Project team	None	Semi-annually
PSC Meeting	PSC members	None	Annually
PIR	Project team, FECO	None	Annually

Monitoring Report	FECO	None	Annually
Mid-Term Review	FECO, external consultants (i.e. review team)	3,500	At the mid-point of project implementation
Mid-Term Workshop	FECO, CRAES	1,000	At the mid-point of project implementation
Final Evaluation	FECO, external consultants	3,500	At the end-point of project execution
Terminal Report	Project team, FECO	None	At least one month before the end of the project
Closing workshop	Project team, FECO	1,500	
Audit	External auditors	4,500 (1,500/year)	Annually
TOTAL indicative COST		US\$ 15,000	
<i>Excluding project staff payments and travel expenses</i>			

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The CBIT project implementation can bring significant socio-economic benefits to China in promoting and coordinating related work on climate change, strengthening international cooperation and exchanges on transparency with other developing countries, and reducing domestic emissions of other environmental pollutants, detailed as follows:

1. The project will explore the sharing and docking of GHG emission data and other environmental pollutants emissions data at local and enterprise levels, which is important for reducing the frequency and improving the efficiency of local and enterprise reporting of emissions with different categories.
2. Considering the large differences in the level of economic and social development and the structure of emissions sources among different regions of China, the guidelines for local GHGs accounting developed under the CBIT project will be highly representative. They are of high significance as guidance and reference for formulating GHG accounting guidelines and methodologies suitable for different conditions of developing countries.
3. The CBIT project will provide data support for China to advance and deepen the carbon market construction and expand its sectoral coverage of carbon market, thus contributing to the realization of emission reduction targets at lower socio-economic cost.

4. A group of experts will be trained and a series of effective practices for enhanced transparency will be identified through the CBIT project, which will be very conducive to China's exchanges and cooperation on transparency with other countries under South-South cooperation.
5. In light of certain homology between China's GHG emissions and other pollutant emissions represented by air pollutants, the CBIT project will create the co-benefit of reducing other pollutant emissions, while improving China's transparency system and technical capacities that lay a better foundation for future in-depth work on GHG emissions reduction.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification *

PIF

CEO Endorsement/Approval

MTR

TE

Low

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

According to FECO's Environmental and Social Safeguard Framework, an environmental and social impact screening process was completed in the project concept stage/eligibility assessment stage. Based on the screening results, the project does not include site pilots or demonstrations, and may cause minimal or no adverse environmental and social impacts. An environmental and social impact assessment registration form was compiled and completed in the PPG phase. No further ESIA document is needed for the project.

During project implementation, FECO and the executing agency are responsible for ensuring that minimal or no adverse environmental and social impacts will be caused by the project. FECO must address compliance concerns and other grievances through FECO's Accountability and Grievance Mechanism, if any compliance or grievance were received.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
CBIT ESS appraisal and Registration Form	CEO Endorsement ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

GEF Component	GEF Outcome	GEF Outputs	Activities	Indicator/Target	Risks and measures
Component 1 - Transparency-related institutional research and capacity building at national level	Identify the needs of domestic transparency capacity building, research on establishing China's domestic transparency systems, and carry out methodological research needed to fulfill the obligation.	1.1 National transparency-related system design and institutional construction	(1) Carry out the analysis of the requirements and gaps in fulfilling the transparency provisions of the Paris Agreement; (2) Put forward suggestions on China's GHG-related data management institutional arrangements and working plans in fulfilling the transparency provisions.	<ul style="list-style-type: none"> - Analysis report of capacity building needs and gaps of China's climate change transparency system ; - Institutional Arrangements and recommendation for China's GHG-related data management (including the GHG-related data management plan (proposal), annual workplan for national GHG and reporting team (proposal); "14th Five-Year" period GHG related data management department regulations (proposal), etc.). 	<p>Risks: unable to guarantee the establishment and implementation of the transparency system from the level of laws and regulations, unable to incorporate the final institutional mechanism into the national statistical / policy system; unable to incorporate transparency into other industries and departments, and difficult to obtain data on key indicators such as industry and construction</p> <p>Measures: make full use of the current statistical indicator system and data collection channels, do not start afresh, and maintain communication and coordination with the statistical department from the beginning of the project; closely integrate with the national "14th Five-Year Plan" key work, and do timely to high-level decision makers to strive for maximum policy support; closely track the promulgation of relevant laws and regulations to ensure that the climate change legislation work clearly defines the relevant requirements for transparency At the meeting of the leading group member, the new requirements for</p>
		1.2 Research on methodologies for tracking and assessing progress of NDCs and estimating financial support	(1) Research on methodologies for tracking progress of NDCs and evaluation of impacts of policies and measures; (2) Research on methodologies on estimating financial support.	<ul style="list-style-type: none"> - Research report on indicators and methodologies to evaluate China's climate change mitigation policy and action; - Research report on indicators and methodologies to evaluate China's climate change adaptation policy and action; - Research report on China's transparency system for tracking financial support provided and received. 	

GEF Component	GEF Outcome	GEF Outputs	Activities	Indicator/Target	Risks and measures
					transparency in the "Paris Agreement" were emphasized, as well as China's future obligations and responsibilities, the importance of transparency-related work was clarified, and key indicators were included in the work system of various departments; increase awareness and ability through training of personnel from different government departments; regularly hold cross-departmental work coordination meetings.
		1.3 Capacity building training for fulfilling the transparency provisions Paris Agreement	(1) Training for policy makers; (2) Training for the national report preparation team; (3) Capacity building for designated Chinese experts to participate in technical expert review under the UNFCCC.	<ul style="list-style-type: none"> - Training programs, materials and activities for decision makers; - Training programs, materials and activities for the national report preparation team; - Training programs, materials and activities for Chinese review experts; - Training summary; - At least 40% female experts include in the roster of approved experts. - The percentage of female trainees shall be at least 40% 	
Component 2 - Transparency related institutional research and capacity building at local level	Improve guidelines for local GHG emissions, research on establishing provincial and municipal carbon emission accounting methods and reporting systems, and carry out the capacity building for climate change staffs in the MEE.	2.1 Improve the provincial joint review for local GHG inventory preparation	(1) Improve common reporting tables for regional GHG inventory preparation; (2) Develop guidance for quality management of regional GHG inventories.	<ul style="list-style-type: none"> - Common reporting tables for regional GHG inventories; - Guidance for quality management for local GHG inventories. - At least 35% female experts include in the roster of approved experts. 	Risks: Lack of mechanisms and funds to ensure that local governments regularly compile greenhouse gas inventories; there is no guarantee that local inventories can be effectively applied after the completion of local inventory preparation and effectively serve local decision-making on climate change
		2.2 Research on establishing an annual	(1) Conduct status analysis and investigation;	- Technical specifications for	Measures: Publish notice on regular compilation of local inventory and

GEF Component	GEF Outcome	GEF Outputs	Activities	Indicator/Target	Risks and measures
		accounting method and reporting system for provincial and municipal energy-related carbon emissions	(2) Study and establish an annual accounting method for provincial and municipal energy-related carbon emissions; (3) Study and establish reporting systems for the provincial and municipal energy-related carbon emissions.	monitoring GHG emissions at enterprise level in key industries (proposal) (at least two industries); - Disclosure system for GHG emissions at enterprise level (proposal).	provincial and municipal accounting data at the national level, as well as to guide and urge local governments to establish special financial funds; strengthen central and local exchanges to promote local inventory data to peaking targets, non-CO ₂ emission control and carbon intensity assessment
		2.3 Carry out transparency-related capacity building at the provincial, municipal and county levels	(1) Capacity building for regional GHG inventory compilation and review; (2) Carry out capacity building seminars and training for local government officials and technicians.	- MRV capacity building training programs, materials and activities for emissions from key enterprises; - The percentage of female trainees shall be at least 35%	
Component 3 - Transparency related institution research and capacity building at enterprise level	Improve GHG accounting and reporting guidelines and transparency-related systems on enterprise level, to support the construction of	3.1 Support the transparency mechanism design and propose the technical specifications for monitoring	(1) Support data monitoring and management of national ETS (2) Study and propose technical specifications for GHG data monitoring at enterprise level;	- Technical specifications for monitoring GHG data at enterprise level in key industries (proposal) (at least two industries);	Risks: The role of the GHG accounting and monitoring at enterprise level is not yet clear, and it is difficult to guarantee the effective implementation of monitoring technical specifications and information disclosure management measures; enterprise personnel are not fixed, coupled with
		3.2 Capacity building training for key	Capacity building training for key enterprises and verifiers	- MRV capacity building	

GEF Component	GEF Outcome	GEF Outputs	Activities	Indicator/Target	Risks and measures
	national carbon market, and carry out the capacity building for enterprises.	enterprises and verifiers		<p>training programs, materials and activities for emissions from key enterprises;</p> <p>- The percentage of female trainees shall be at least 35%</p>	<p>irregular file archiving, personnel turnover The continuity of work has an impact; the enterprise lacks a systematic assessment and supervision mechanism</p> <p>Measures: Strengthen communication with relevant departments, clarify the application scenarios of monitoring and accounting; add relevant content of data and document management during training; carry out related work in conjunction with the overall deployment of the carbon market</p>
Component 4 - Improve integration of existing transparency related database	Based on the existing national inventory database and policy library, the domestic climate change and GHG transparency platform will be gradually improved, and carry out the docking among different levels and fields data platforms.	4.1 Improve China's climate change policy and measures database	<p>(1) Sort out policy measures and propose a policy classification system;</p> <p>(2) Summarize the deficiencies of existing policy database;</p> <p>(3) Study and propose a policy database update and improvement plan.</p>	<p>- Upgrade plan of China's climate policies and measures database.</p>	<p>Risks: system security risks, technical obstacles encountered during system development, resulting in failure to obtain the expected output</p> <p>Measures: fully evaluate the feasibility of each output of the system before the project starts, set achievable goals; conduct risk grading in the early stage of system development; work closely with the project development unit to determine the project development schedule and roadmap as soon as possible; shorten iteration cycle, improve and repair loopholes in time</p>
		4.2 Research on connection of data platforms between different levels and sectors	<p>(1) Upgrade and optimize the integrated management of national GHG inventory and emission data;</p> <p>(2) Conduct research on data linkage, verification, and analysis, etc. of national, provincial / municipal and enterprise GHG inventory database;</p> <p>(3) Carry out data connection and sharing between the integrated management database of national GHG inventory and emission data and the national unified database of</p>	<p>- Upgrade plan for the national GHG inventory and emission data management integrated database;</p> <p>- Working program for National, local, and enterprise GHG emission data docking and sharing.</p>	

GEF Component	GEF Outcome	GEF Outputs	Activities	Indicator/Target	Risks and measures
			stationary pollution sources and the environmental resource information center. (4) Improve the release function of the national integrated management platform of GHG inventory and emission data.		
		4.3 Develop the function to support technical expert review	(1) Study and propose the work plan and process to support technical expert review; (2) Develop a list of background information and data needed for technical expert review; (3) Develop the function to support technical expert review.	- Function designed to support technical expert review of China under the ETF.	
Component 5 - Project monitoring and evaluation	Supervise the project progress, conducts the project mid-term review, final evaluation and financial compliance review, etc.			- The delivery of M&E reports and conduct of mid-term review and final evaluation.	<p>Risks: The inception report, project implementation reviews, semi-annual report, mid-term review and final evaluation are not developed in high quality. The mid-term review and final evaluation are not conducted in time</p> <p>Measures: the implementing agency will closely cooperate with the PMO, keep following up the project progress; the steering committee will take its function of supervision, to make sure the M&E reports and mid-term review and final evaluation can be conducted and submitted on schedule with high quality.</p>

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

NA

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

FECO was informed by GEF CEO in the 57th Council Meeting last year to suspend any disbursement of GEF funds from the GEF projects we implement till the GEF Secretariat complete the Initial Assessment for FECO regarding FECO's eligibility as a GEF Project Agency. (This Initial Screening results from FECO's institutional adjustment last year and we are still waiting for the result of the assessment from the GEFSEC right now). According to the CEO's required, we haven't paid any GEF funds to our executing agency since last December, including this CBIT project.

Therefore, although this project has been developed and the project document has been prepared, no PPG was paid to CREAS from FECO.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

NA

ANNEX E: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

中华人民共和国



ANNEX F: Project Budget Table

Please attach a project budget table.

GEF Component	GEF Outcome	GEF Output	Budget description	Amount year1 (USD)	Amount year2 (USD)	Amount year3 (USD)	Subtotal (USD)	Total (USD)
Component 1 - Transparency-related institutional research and capacity building at national level	Identify the needs of domestic transparency capacity building, research on establishing China's domestic transparency systems, and carry out methodological research needed to fulfill the obligation	1.1 National transparency-related system design and institutional construction	Contractual Service	43500	18000	0	61500	
			Conference/Workshops/Seminars	500	500	0	1000	
			Consulting Service-individual experts	1000	1000	0	2000	
			CTA(part-time)	2500	1000	0	3500	
			Subtotal	47500	20500	0	68000	
		1.2 Research on methodologies for tracking and assessing progress of NDCs and estimating financial support	Contractual Service (Methodology for Mitigation)	32000	28000	20000	80000	
			Contractual Service (Methodology for Adaptation)	30000	30000	20000	80000	
			Contractual Service (Methodology for Financial Support)	60000	10000	10000	80000	
			Conference/Workshops/Seminars/Trainings/Knowledge sharing	500	500	500	1500	
			Consulting Service-individual experts	1000	1000	1000	3000	
			CTA(part-time)	2500	2500	2500	7500	
		Subtotal	126000	72000	54000	252000		
		1.3 Capacity building training for fulfilling the	Contractual Service	26500	28300	43700	98500	
			Consulting Service-individual experts	500	500	500	1500	

GEF Component	GEF Outcome	GEF Output	Budget description	Amount year1 (USD)	Amount year2 (USD)	Amount year3 (USD)	Subtotal (USD)	Total (USD)
		transparency provisions Paris Agreement	Subtotal	27000	28800	44200	100000	420000
Component 2 - Transparency related institutional research and capacity building at local level	Improve guidelines for local GHG emissions, research on establishing provincial and municipal carbon emission accounting methods and reporting systems, and carry out the capacity building for climate change staffs in the MEE	2.1 Improve the provincial joint review for local GHG inventory preparation	Contractual Service	15500	17000	13000	45500	
			Conference/Workshops/Seminars/Training/Knowledge sharing	500	0	0	500	
			Consulting Service-individual experts	1000	0	0	1000	
			CTA(part-time)	1000	1000	1000	3000	
			Subtotal	18000	18000	14000	50000	
		2.2 Research on establishing an annual accounting method and reporting system for provincial and municipal energy-related carbon emissions	Contractual Service	14550	15500	15450	45500	
			Conference/Workshops/Seminars	0	500	0	500	
			Consulting Service-individual experts	0	1000	0	1000	
			CTA(part-time)	1000	1000	1000	3000	
			Subtotal	15550	18000	16450	50000	
		2.3 Carry out transparency-related capacity building at the provincial, municipal and county levels	Contractual Service	37000	37000	19000	93000	
			Travel	1000	1000	500	2500	
			Consulting Service-individual experts	2000	1500	1000	4500	
			Subtotal	40000	39500	20500	100000	200000
Component 3 -	Improve GHG	3.1 Support the	Contractual Service	20700	17800	7000	45500	

GEF Component	GEF Outcome	GEF Output	Budget description	Amount year1 (USD)	Amount year2 (USD)	Amount year3 (USD)	Subtotal (USD)	Total (USD)		
Transparency related institution research and capacity building at enterprise level	accounting and reporting guidelines and transparency-related systems on enterprise level, to support the construction of national carbon market, and carry out the capacity building for enterprises	transparency mechanism design and propose the technical specifications for monitoring	Conference/Workshops/Seminars	500	0	0	500			
			Consulting Service-individual experts	1000	0	0	1000			
			CTA(part-time)	1000	1000	1000	3000			
			Subtotal	23200	18800	8000	50000			
		3.2 Capacity building training for key enterprises and verifiers	Contractual Service	10000	66000	18000	94000			
			Travel	0	1000	1000	2000			
			Consulting Service-individual experts	0	2000	2000	4000			
			Subtotal	10000	69000	21000	100000	150000		
		Component 4 - Improve integration of existing transparency related database	Based on the existing national inventory database and policy library, the domestic climate change and GHG transparency platform will be gradually improved, and carry out the docking among different levels	4.1 Improve China's climate change policy and measures database	Contractual Service	30600	30200	30200	91000	
					Conference/Workshops/Seminars/Knowledge sharing	500	500	500	1500	
Consulting Service-individual experts	1000				1000	1000	3000			
CTA(part-time)	1500				1500	1500	4500			
Subtotal	33600				33200	33200	100000	100000		
4.2 Research on connection of databases between different levels and sectors	Contractual Service			159000	175000	165500	499500			
	Conference/Workshops/Seminars/Knowledge sharing			500	500	500	1500			
	Travel			500	1000	500	2000			
	Consulting Service-individual experts			500	500	500	1500			

GEF Component	GEF Outcome	GEF Output	Budget description	Amount year1 (USD)	Amount year2 (USD)	Amount year3 (USD)	Subtotal (USD)	Total (USD)
	and fields data platforms		CTA(part-time)	3500	3500	3500	10500	
			Subtotal	164000	180500	170500	515000	515000
		4.3 Develop the function to support technical expert review	Contractual Service	30600	30200	30200	91000	
			Conference/Workshops/Seminars	500	500	500	1500	
			Consulting Service-individual experts	1000	1000	1000	3000	
			CTA(part-time)	1500	1500	1500	4500	
			Subtotal	33600	33200	33200	100000	100000
Component 5 - Project monitoring and evaluation	Supervise the project progress, conducts the project mid-term evaluation and financial compliance review, etc.		Conference/Workshops/Seminars	1000	1000	1500	3500	
			Consulting Service-individual experts	2000	2000	3000	7000	
			Travel	500	1000	1500	3000	
			Translation and Interpretation	500	500	500	1500	
			Subtotal	4000	4500	6500	15000	15000
							Total	1500000
		PMO	Equipment Procurement Cost	7500	5000	2000	14500	
			Translation and Interpretation service	1000	1000	1000	3000	
			Administrative costs	1000	1000	1000	3000	
			Audit	1500	1500	1500	4500	

GEF Component	GEF Outcome	GEF Output	Budget description	Amount year1 (USD)	Amount year2 (USD)	Amount year3 (USD)	Subtotal (USD)	Total (USD)
			Office supplies	1500	1200	1200	3900	
			Urban transport costs	700	700	700	2100	
			Mailing Costs	850	800	850	2500	
			Project Manager Costs	22000	22000	22000	66000	
			Project Assistant Costs	16000	16000	16000	48000	
			Others	850	800	850	2500	
			Subtotal	52900	50000	47100	150000	150000
							Total Budget	1650000

Budget Note

BUDGET NOTES	
1: Contractual service	Contractual service with institutions, universities, etc; overall technical support to all project activities, technical support for delivery of all outputs.
2: Travel	Travel: Pro rata travel for project staff, including all travel related charges including attending CBIT global coordination platform events if necessary, such as international and domestic flight costs, terminal expenses, automobile costs, allowance and accommodation.
3: Conference/Workshops/Seminars /Knowledge sharing	Key planning, consultation and training meetings, including but not limiting to: inception workshop, mid-term workshop, project closing workshop, meetings of the PSC; technical workshops, workplan meetings, training meetings, publication of deliverables, dissemination of products. The cost accrued for the meeting could be supported, e.g. printings, sites, travel, food and accommodation, translation, interpretation, and other relevant fees.

4: Consulting service-individual experts	Consulting service-individual experts including consulting work with contracts and temporary consulting work;
5. CTA consulting fee	Consulting fee for hiring a part-time chief technical advisor
5: Project management	Project management including Miscellaneous of administration, mailing & phone & fax & networking, transportation, etc. Editing, design and printing of reports, forms, training materials and awareness materials and salary of project manager and project assistant.
6: Fund allocation regulations	<p>a. The GEF funds are directly pooled and specially earmarked for the implementation of the activities listed in the Project Document, which shall not include administration or management fees in CRAES (not as the project executing agency but as an independent institute) or any forms of taxes.</p> <p>b. All fund disbursements shall only follow the project annual workplan and budget approved by GEF project Agency (FECO) and proration of funds to other qualified contracted parties outside CRAES shall not be limited to the 40% or any other proportions of the total funds (even such a limitation is a general rule of CRAES).</p> <p>c. The contracting parties shall include individuals and institutions, organizations, universities and NGOs. Individual Consultants also can be employed by the project in line with FECO's procurement procedures.</p>
7: Definition of year	the year is the calendar year
8: Audit	Audit shall be implemented in each project year, which includes all audit service fees.



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