



## **Enabling China to Prepare Its Fourth National Communication, and Biennial Update Reports on Climate Change**

### **Part I: Project Information**

**GEF ID**

10707

**Project Type**

EA

**Type of Trust Fund**

GET

**CBIT**

**CBIT No**

**Project Title**

Enabling China to Prepare Its Fourth National Communication, and Biennial Update Reports on Climate Change

**Countries**

China

**Agency(ies)**

UNDP

**Other Executing Partner(s)**

Ministry of Ecology and Environment

**Executing Partner Type**

Government

**GEF Focal Area**

Climate Change

**Taxonomy**

United Nations Framework Convention on Climate Change, Climate Change, Focal Areas, Enabling Activities, Influencing models, Strengthen institutional capacity and decision-making, Stakeholders, Civil Society, Academia, Non-Governmental Organization, Gender Equality, Gender results areas, Participation and leadership, Gender Mainstreaming, Capacity, Knowledge and Research, Capacity Development, Knowledge Generation

**Rio Markers**

**Climate Change Mitigation**

Climate Change Mitigation 2

**Climate Change Adaptation**

Climate Change Adaptation 1

<b>Type of Reports</b>	<b>Submission Date</b>	<b>Expected Implementation Start</b>	<b>Expected Completion Date</b>	<b>Expected Report Submission to Convention</b>
UNFCCC National Communications (NC)	12/8/2021	3/1/2022	3/1/2026	12/31/2022
UNFCCC Biennial Update Report (BUR)	12/8/2021	3/1/2022	3/1/2026	12/31/2024

**Duration**

48In Months

**Agency Fee(\$)**

433,790.00

**A. FOCAL/NON-FOCAL AREA ELEMENTS**

<b>Objectives/Programs</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
CCM-EA	GET	4,566,210.00	1,466,000.00
<b>Total Project Cost(\$)</b>		<b>4,566,210.00</b>	<b>1,466,000.00</b>

## **B. Project description summary**

### **Project Objective**

This project is to enable China to fulfill its commitments under the UNFCCC to prepare its fourth National Communication (4NC) and the third Biennial Update Report (3BUR) and the fourth Biennial Update Report (4BUR).

<b>Project Component</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>GEF Project Financing(\$)</b>	<b>Confirmed Co-Financing(\$)</b>
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Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. National greenhouse gas (GHG) inventory	1.1. Clearer understanding of the magnitude, trend and causes of the GHG emissions and removals from the different sectors, facilitated through an improved capacity to prepare time-series consistent inventories applying 2006 IPCC guidelines, and an improved national system for GHG inventory preparation.	<p>1.1.1. National GHG inventories for 2017 and 2018 for the 4NC and BUR3 with recalculation of historic GHG inventories applying the IPCC 1996 guidelines.</p> <p>1.1.2. National GHG Inventory 2020 for the BUR4 with recalculation of historic GHG inventories applying 2006 IPCC guidelines.</p> <p>1.1.3. Improved national GHG inventory database system and updated inventory database.</p> <p>1.1.4. Improved national system and mechanism for a sustainable GHG data collection, preparation and archiving process with extensive stakeholder engagement, smooth and timely data collection and coordinated and effective organization.</p> <p>1.1.5. Completed capacity building of relevant government departments in collecting required data and information for conducting and</p>	3,450,000.00	562,912.00

Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Impacts of vulnerability and adaptation to climate change	2.1. Better understanding of China's vulnerability to the threats of climate change and improved accuracy of prediction of impacts in the vulnerable sectors of the country.	<p data-bbox="748 359 935 569">2.1.1. Results of the updated analyses of climate change characteristics and future trends in China.</p> <p data-bbox="748 604 935 905">2.1.2. Report on the climate change impact and vulnerability assessments in agriculture, water resources, coastal zones, terrestrial ecosystems, human health.</p> <p data-bbox="748 940 935 1178">2.1.3. Report on the impacts of the frequency and intensity of extreme climate events and climate change related disasters.</p> <p data-bbox="748 1213 935 1388">2.1.4. Report on the effectiveness analysis on implemented adaptation actions.</p> <p data-bbox="748 1423 935 1734">2.1.5. Completed capacity building on collecting information and assessment of climate change impact and vulnerability from relevant departments.</p>	100,000.00	150,110.00

Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Policies and actions for climate change mitigation	3.1. Enhanced understanding of the appropriate policies to enable the proper planning and implementation of prioritized applicable and feasible climate change mitigation (CCM) actions for China.	3.1.1. Summary of national CCM policies and measures.	200,000.00	150,110.00
	3.2. Improved accounting of the results and impacts of implemented CCM actions through an improved national MRV system.	3.2.1. Refined methodology and related assumptions for assessing the impact and estimated emission reduction of CCM actions.		
		3.2.2. Report on the completed improvements in, and the operational performance of, the country's measurement, reporting and verification (MRV) system.		
		3.2.3. Completed capacity building for relevant government departments on assessment of the effectiveness of implemented CCM policies.		
		3.2.4. Completed impact assessment and emission reduction estimation of implemented CCM actions		

Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
4. National circumstances, related financial, technical, and capacity needs, and other relevant information	4.1. Enhanced capacity to determine, analyze, refer to, and articulate key national circumstances information in the national communication (NC) reports and biennial update reports (BUR).	4.1.1. Completed sets of vetted data/information on each pertinent indicator (e.g., natural resources, energy, environment, social and economic) that collectively characterize the country's national circumstances.	100,000.00	159,492.00
	4.2. Enhanced understanding and capacity to determine applicable, feasible and cost-effective CCM and climate change adaptation (CCA) technologies, techniques and measures, and the most suitable financial resources and financing options that can be applied to implement action that address CCM and CCA issues.	4.2.1. Report on capacity-building needs for the identification and determining applicable, feasible and cost-effective CCM&CCA technologies, techniques, and measures.		
	4.3. Further enhanced public awareness of climate change issues.	4.2.2. Report on capacity needs for determining financial resources and financial options for the implementation of appropriate CCM&CCA technologies, techniques, and measures.		
		4.2.3. Capacity building on collecting information on financing, technologies and capacity building needs from relevant departments.		
		4.3.1. Completed document on the results,		



Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
5. Communication of the GHG inventories, NCs, and BURs of the Hong Kong and Macao Special Administrative Regions (SARs) BURs	5.1. Better understanding of GHG emissions and sinks in the Hong Kong and Macao SARs, and improved capacities for NC, and BUR.	<p data-bbox="748 363 935 814">5.1.1. Completed workshops on coverage and implementation of Hong Kong and Macao SAR's GHG inventories for the year 2017, 2018 using the IPCC 1996 guidelines, and 2020 utilizing the IPCC 2006 guidelines.</p> <p data-bbox="748 852 935 1087">5.1.2. Completed workshops on assessment methodologies for Hong Kong and Macao's mitigation actions.</p> <p data-bbox="748 1125 935 1339">5.1.3. Completed chapters of Hong Kong and Macao NC and BUR in the 4NC, BUR3 and BUR4 Reports.</p> <p data-bbox="748 1377 935 1591">5.1.4. Updated GHG inventories in the Hong Kong and Macao SARs for years 2017, 2018, and 2020.</p> <p data-bbox="748 1629 935 1822">5.1.5. Updated supplementary information on climate change in the Hong Kong and Macao SAR's.</p>	50,000.00	65,673.00

Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
6. UNFCCC reporting obligations, e.g., NC and BUR	6.1. China's compliance to the reporting obligations to the UNFCCC.	<p data-bbox="748 359 938 604">6.1.1. Improved working mechanisms for the preparation of the required reports UNFCCC (4NC, BUR3 and BUR4) reporting.</p> <p data-bbox="748 638 938 848">6.1.2. Completed capacity building of relevant departments participating in the report preparation.</p> <p data-bbox="748 882 938 1058">6.1.3. Finalized and submitted 4NC, 3BUR, and BUR4 (Chinese &amp; English) to the UNFCCC.</p>	350,000.00	212,656.00

<b>Project Component</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>GEF Project Financing(\$)</b>	<b>Confirmed Co-Financing(\$)</b>
Monitoring and evaluation (M&E)	Monitoring and evaluation (M&E)	1. Inception workshop 2. Inception Report 3. Monitoring of indicators in the project results framework 4. GEF Project Implementation Report (PIR) 5. Supervision and oversight missions 6. Final project workshop 7. Independent Mid-Term Review (MTR) 8. Independent Terminal Evaluation (TE)	100,000.00	
		<b>Sub Total (\$)</b>	<b>4,350,000.00</b>	<b>1,300,953.00</b>
<b>Project Management Cost (PMC)</b>				
			216,210.00	165,047.00
		<b>Sub Total(\$)</b>	<b>216,210.00</b>	<b>165,047.00</b>
		<b>Total Project Cost(\$)</b>	<b>4,566,210.00</b>	<b>1,466,000.00</b>

**C. Source of Co-Financing for the Project by Name and by Type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Recipient Country Government	Ministry of Ecology and Environment	In-kind	Recurrent expenditures	1,366,000.00
GEF Agency	UNDP	In-kind	Recurrent expenditures	100,000.00
<b>Total Co-Financing(\$)</b>				<b>1,466,000.00</b>

**Describe how any "Investment Mobilized" was identified**

Not Applicable

**D. GEF Financing Resources Requested by Agency, Country and Programming of Funds**

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
UNDP	GET	China	Climate Change	CC STAR Allocation	4,566,210	433,790	5,000,000.00
<b>Total Gef Resources(\$)</b>					<b>4,566,210.00</b>	<b>433,790.00</b>	<b>5,000,000.00</b>

## **Part II. Enabling Activity Justification**

### **A. ENABLING ACTIVITY BACKGROUND AND CONTEXT**

Provide brief information about projects implemented since a country became party to the convention and results achieved

#### **Global environmental issues and previous work**

##### *Global Climate Problems*

According to the latest IPCC Assessment report, science has made great strides recently in determining which potential causes are actually responsible for the climate change that occurred during the twentieth century, providing strong evidence that greenhouse gas (GHGs) released to the atmosphere by human activities are the main cause of contemporary global warming.

Global warming has caused many adverse effects on the environment of human life, production and social activities. Global warming aggravates grassland soil erosion and desertification, and causes ocean thermal expansion and glacier melting, resulting in sea level rise. China's coastal provinces risk losing their territory and their people may become homeless and displaced. Global warming affects agriculture, one of the pillar industries for the low-income population of China, by increasing the instability of agricultural production that may threaten their financial security. Some crop yields will be reduced, causing larger application of chemical fertilizers and pesticide, that may increase the potential of both the economic cost and hazardous chemical pollution. Global warming may bring frequent climate disasters, such as excessive rainfall, extensive drought and persistent high temperature. Indigenous people who are extremely dependent on local natural climate may be unable to adapt to abrupt climate change or be directly hit by severe meteorological disasters and suffer serious losses of the basic needs, like the homes and food. Global warming also has adverse effects on human health. The frequent heat wave may cause mortality and certain diseases, especially the incidence rate of heart and respiratory diseases. The range of sensitive infectious diseases such as malaria and dengue fever may increase. Extreme weather events, such as drought, flood and storm, increase the mortality, disability and infectious disease, and increase the social psychological pressure.

The least developed provinces and regions in China are often the most affected by climate change. In these areas both the government and the people need to increase the capacities to cope with the potential climate disasters. It is reasonably foreseeable to improve the ability of local people to adaptation, so to minimize the adverse effects of climate change.

To achieve the objective of the Convention and fulfill the obligation of the Parties, China needs to collect and report reliable, transparent and comprehensive information on GHG emissions, climate actions and support (Article 12). By communicating information on GHG emissions and actions to reduce them, as well as on adaptation and means of implementation such as finance, technology transfer and capacity-building, the transparency and reporting system allows to understand ambition and progress on climate actions and support by Parties and informs the COP deliberation and guidance on these matters. The reporting requires China to submit timely national reports, in accordance with the principle of common but differentiated responsibilities and respective capabilities.

### *Previous Work*

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. The Chinese Government has successively completed the 2 national communication projects and have submitted the pertinent national communication reports to the UNFCCC (1NC report in 2004 and 2NC in 2012). Under the current "Enabling China to Prepare its Third National Communication (3NC) on Climate Change" Project, the Chinese Government prepared and submitted its first Biennial Update Report (BUR1) to the UNFCCC in early 2017 and submitted its 3NC and BUR2 in June 2019. The compiled provincial GHG inventories in 2005, 2010, 2012 and 2014 are also stated, as well as the ETS pilots, which have been operational for several years and the national ETS has just kicked off.

In terms of the review process, China underwent in 2017 the technical analysis of its first BUR by a UNFCCC Team of Technical Expert (TTE) and participated at the end of 2018 in facilitative sharing of views (FSV), which means China has fulfilled the first International Consultative Analysis(ICA) cycle. From September 2019 to March 2020, the UNFCCC secretariat conducted the technical analysis on the BUR2 of China. In consultation with China, TTE identified the following needs for capacity-building that could facilitate the preparation of subsequent BURs and participation in ICAs, which will mainly strengthen the institutional framework for the preparation of the GHG inventory.

The proposed project takes into consideration of the above-mentioned suggestions from the UNFCCC, as well to meet China's demands of capacity building in BURs. 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 CO<sub>2</sub> emissions and carbon intensity reductions in energy activities, so that it can keep abreast of CO<sub>2</sub> emissions, assess the results of relevant policies, and at the same time, predict the short-term trend and target progress. These

collectively, presents a solid foundation for the preparation and submission of the planned 4NC Report, BUR3 and BUR4. The coverage of the project will also remain the same as that of the 3NC Project.

### *Consistency with National Priorities*

As the world's largest emitter, China, with a strong sense of responsibility, in accordance with the provisions of the Convention and Kyoto Protocol and in conjunction with its national sustainable development strategy, has adopted a series of policies and actions on economic restructuring, development mode shift, energy efficiency improvement, energy conservation, renewable and nuclear energy development, energy mix optimization, and afforestation with significant achievements. Since the 11th Five-Year Plan (hereinafter referred as the 11th FYP) period, the Government of China has attached great importance to industrial restructuring, economic transformation, reduction of resource and energy consumption, reinforcing the guiding role of industrial policies and special plans. On the one hand, China has vigorously accelerated the development of the tertiary industry and encouraged the development of emerging industries; on the other hand, it has attached importance to restructuring the secondary industry so as to facilitate its optimization.

Committed to multilateralism, China has been playing an active part in global governance on environment and climate change. Following President Xi Jinping's announcement in September that China aims to have carbon dioxide emissions peak before 2030 and achieve carbon neutrality before 2060, on Dec 12 he set out the nation's further climate commitments as the world celebrated the fifth anniversary of the Paris Agreement. This has manifested China's resolute determination to proactively cope with climate change and stick to a green and low-carbon development path. Now, China is rolling out the road maps for peaking carbon emissions, aiming to achieve low-carbon transformation in a diversified and inclusive way.

The government of China is ambitious to reduce carbon emissions. The recent 14th Five-Year Plan, the government's highest authority national planning document, has combined advancing ecological civilization with a focus on reducing carbon emissions and promoted it to one of the most crucial issues in the next 5 years. According to 2021's government work report, China will reduce energy consumption and carbon dioxide emissions per unit of GDP by 13.5 and 18 percent, respectively, during the 2021-25. The report addresses measures should be taken to accelerate adjustments in the structure of industry, energy, transport and land use, while strictly controlling projects with high energy consumption and high pollution to promote the green development. 14 FYP mentions over the next five years, China has set to implement the binding targets for reducing carbon intensity and offer Chinese wisdom for promoting a fair and equitable system of global environmental governance for win-win cooperation. China will also improve its measuring and monitoring of carbon sinks.



Following central government's work toward the carbon neutrality, Hong Kong SAR and Macao SAR governments also set to capitalize on the trend to enhance the environmental protection and green technology industry with the innovative ability of people and the research edge of its universities and supporting policies from the government.

The given project is consistent with several Sustainable Development Goals (SDGs) as set by the United Nations General Assembly. It is relevant primarily to Goal 13: "Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy", but also to Goal 7: "Ensure access to affordable, reliable, sustainable and modern energy for all".

China's comprehensive and complicated reporting system urgently needs a capacity building project to strengthen its institutional and technical capacities of reporting at the national level. These challenges could be overcome by building a data collection mechanism that fit to the new requirements and improving its domestic capacity building.

The development of NC and BUR is a continual process that entails continual improvement of the capacity for developing national communications. The framework presents new challenges for many developing countries, including more frequent reporting with more detailed information, as well as more stringent review. This calls for enhanced domestic transparency mechanisms, stable institutional arrangements, and strengthened capacities on the compilation of GHG inventory and biennial transparency report. Therefore, financial and technical support is needed to conduct training and international exchanges, and to continually improve the technical level and comprehensive capability of the staff that are involved in developing national communications; besides, China's GHG database needs to be improved in order to effectively manage China's GHG inventory information, provide support to inventory data analysis and quality control, and to lay a sound foundation for the continuous development of national GHG inventory.

## **B. ENABLING ACTIVITY GOALS, OBJECTIVES, AND ACTIVITIES**

The proposal should briefly justify and describe the project framework. Identify also key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable. Describe also how the gender equality and women's empowerment are considered in project design and implementation

### **Project Justification**

### *Challenges that need to be addressed*

UNFCCC has set emission limits/targets/goals and monitor the progress in an open and transparent way. As actions to combat climate change continue to deepen, policy-makers need more comprehensive and exhaustive information on climate change. To report 4NC, 3BUR and 4BUR in higher quality, China needs to address stricter reporting requirements to the developing countries, fill the gaps in the management capacity and inter-ministerial collaborations and deal with the technical obstacles for transition to 2006 IPCC Guidelines.

China is faced with great barriers in the transparency of the GHG data and information reporting according to the Katowice Climate Change Conference convened in Poland in 2018. China needs to follow the new rules for implementing the Paris Agreement, including the adoption of Modalities, Procedures and Guidelines (MPGs) for the enhanced transparency framework, 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 UNFCCC, the reporting obligations under the Paris Agreement have been strengthened for China, 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 GHG inventories, annually instead of biennially, providing the 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 the formal technical expert review, which is more rigorous than the technical analysis of BURs. If any significant and persistent issue is 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.

The ministerial and local government capacities to deal with the climate change issues are lagging behind, compared to the strong ambitions of the central government of China. 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, 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, to lay a sound foundation for supporting a national response to climate change and promoting local low-carbon and climate-resilient transition.

Due to stricter data scope and additional emission sources are required, China is faced with technical challenges to compare and adjust based on the recalculation of historical data, to ensure data accuracy. A better data collection mechanism for GHG inventories, especially for non-Annex I parties under the UNFCCC convention, is needed now more than ever. According to the Katowice Climate Package, all parties are required to use the 2006 IPCC Guidelines for National GHG Inventories (hereunder referred to as "2006 IPCC Guidelines"). Therefore, China, as one of the non-Annex I parties, needs to improve its domestic capacity on the transition to use the 2006 IPCC Guidelines from the 1996 IPCC Guidelines for National GHG Inventories (hereunder referred to as "1996 IPCC Guidelines"). Current obstacles for transition to 2006 IPCC Guidelines include data missing for new categories, data inconsistency among different agencies, parameter missing for higher tier methods, as well as investigation insufficient under the current system. Data collection methods identified in this paper include not only primary data of specific investigation but also secondary data collection from government agencies and research institutions.

Moreover, in accordance with decision 2/CP.17 and with the support of GEF, China will continue to develop the 3BUR and 4BUR which would report China's basic circumstances, national GHG inventory, mitigation of GHG emission and the effects, constraints and gaps, related financial, technical and capacity needs, and other updated information for realizing the targets set forth in the UNFCCC. To develop the GHG inventory, China needs to conduct a special survey on part of activity data and on emission factors as well. However, the relevant capacity building to the executive stakeholders, including the ministries in the national leading group, local authorities, and key industry associations is still lacking.

## **Description of the Project Framework**

### **Component 1: National Greenhouse gas (GHG) inventory**

This component is to enhance relevant stakeholders' understanding on the application of the 2006 IPCC guidelines for national GHG inventories, considering the capacity-building needs identified in the International Consultation and Analysis (ICA) that was done during the BUR2 preparation process. The national GHG inventories for years 2017 and 2018 are to be prepared using 1996 IPCC guidelines, and the GHG inventory for year 2020 using 2006 IPCC guidelines. The national GHG inventories for years 2017 and 2018 are to be included in the 4NC Report and 3BUR, while that for year 2020 are to be included in the 4BUR. Also included in this component is the GHG inventory recalculations for the years 2005, 2010, 2012 and 2014. This is to provide time-series consistency inventories. The updating of the national GHG inventory database and the establishment of a working mechanism that meets the requirements for a time series inventory every two years are also included under this project component. The main outcome that is expected to be realized from the outputs that will be delivered

under this project component is clearer understanding of the magnitude, trend and causes of the GHG emissions and removals from the different sectors, facilitated through an improved capacity to prepare time-series consistent inventories applying 2006 IPCC guidelines, and an improved national system for GHG inventory preparation.

<b>Gap and Implementation Limitation</b>	<b>Project Strategy Elements</b>	<b>Corresponding Project Outcome</b>
<p>? Lack of regular information collection mechanism and institutional framework</p>	<p>? Identify the stakeholders directly or indirectly involved in the project and the nature and scope of their interests.</p> <p>? Summarize how and when to consult stakeholders in project implementation</p> <p>? Disseminate information and explain any resource needs throughout the project/ project cycle to ensure stakeholder engagement is correct and meaningful.</p> <p>? Establish an accessible, transparent and responsive grievance mechanism for the project.</p>	<p>Outcome 1.3</p> <p>Outcome 6.1</p>
<p>? Limited scope of statistic data for IPCC coverage.eg. Lack of estimation of indirect GHGs (e.g. CO, NMVOCs and NOX);</p> <p>? Capacity needs to be strengthened in coordinating data from various sectors</p> <p>? No previous experience in applying IPCC 2006 guidelines, a new requirement for China after 2024.</p>	<p>? The given project will pay more attention to the quality of activity data. In the development of the GHG inventory, efforts will be made to verify the activity data of CO<sub>2</sub>, the key emission source, and the data of coal consumption in particular.</p> <p>? Compared to previous inventories, the GHG inventory to be developed by the 4NC Report and BURs will be more comprehensive.</p> <p>? Improve the methodology of the GHG inventory development, the GHG inventory to be submitted by 2024 will fully apply IPCC 2006 guidelines. In the new inventory, changes will be made with regard to the activity data of China's energy, industrial process, agriculture, LULUCF and waste compared to previous inventory, hence, it is necessary to conduct massive sample surveys on and statistical analyses of activity data; to further reduce the uncertainties of the GHG inventory, efforts have to be made to carry out research work such as field investigation relating to China's specific GHG emission factor data.</p>	<p>Outcome 1.1</p> <p>Outcome 1.2</p>

<b>Gap and Implementation Limitation</b>	<b>Project Strategy Elements</b>	<b>Corresponding Project Outcome</b>
<p>No up-to-date climate change vulnerability analysis, especially based on the results of the IPCC AR6 report</p>	<p>? Analyze the climate change impact and vulnerability assessments in agriculture, water resources, coastal zones, terrestrial ecosystems, human health, climate change characteristics and future trends in China.</p> <p>? Report on the impacts of the frequency and intensity of extreme climate events and climate change related disasters and the effectiveness analysis on implemented adaptation actions.</p> <p>? Conduct capacity building activities for relevant government departments on collecting climate data/information and assessment of climate change impact and vulnerability</p>	<p>Outcome 2.1</p>
<p>Lack of national capacity to quantitatively calculate the emission reduction effect of overlaps between different mitigation actions;</p>	<p>? A systematic summary of the adopted policies and measures, especially relevant policies on mitigation and adaptation will be provided.</p> <p>? In accordance with Decision 17 of COP 8, China will include a description of the planning and policies for the implementation of the UNFCCC, addressing: (1) policies and measures to facilitate adequate adaptation to climate change; (2) policy programs to mitigate climate change, including potential methodological issues.</p>	<p>Outcome 3.1</p> <p>Outcome 3.2</p>
<p>Technical gaps in developing guidelines and methodologies for estimating future mitigation and adaptation support needs, including a periodically updated database on technology that could be transferred and information on capacity-building events or workshops for BUR compilers.</p>	<p>? Build a comprehensive analytical framework to assess the mitigation and adaptation finance, technology, and capacity building needs in implementing China's New Nationally Determined Contribution and Mid-century Long Term GHG Low Emissions Strategy.</p> <p>? Conduct gap analysis for finance, technology, and capacity-building and in addressing the gaps and barriers to achieve the objectives of climate change mitigation and adaptation will be analyzed, based on the good practice from other countries and related capacity building.</p> <p>? Evaluate the finance, technology and capacity building support received from the Developed Parties and sources under UNFCCC. The scope of financial, technology and capacity-building support received for addressing climate change will be further defined in the NC and BURs and the support already received will be summarized in order to enhance understanding and update relevant information.</p>	<p>Outcome 4.2</p>

<b>Gap and Implementation Limitation</b>	<b>Project Strategy Elements</b>	<b>Corresponding Project Outcome</b>
? Ensure the consistency of information reporting among the mainland China, Hong Kong SAR and Macao SAR.	? The central government will include relevant information on climate change in the Hong Kong SAR and Macao SAR in China's 4NC and BURs in the project. The project will assist in enhancing their capacity building based on the existing effort and provide technical guidance as previous. Their reports will be included in China 4NC and BURs.	Outcome 5.1
<b>Outcome 1.1:</b> Clearer understanding of the magnitude, trend and causes of the GHG emissions and removals from the different sectors, facilitated through an improved capacity to prepare time-series consistent inventories applying 2006 IPCC guidelines, and an improved national system for GHG inventory preparation.		
<i>Outputs</i>	<i>Activities</i>	
1.1.1. National GHG inventories for 2017 and 2018 for the 4NC and BUR3 with recalculation of historic GHG inventories applying the IPCC 1996 guidelines.	1.1.1.1. Preparation of the national GHG inventories for 2017 and 2018 by applying the 1996 IPCC Guidelines.	
	1.1.1.2. Recalculation of the national GHG inventory for the year of 2005.	
1.1.2. National GHG Inventory for 2020 for the BUR4 with recalculation of historic GHG inventories applying 2006 IPCC guidelines.	1.1.2.1. Preparation of the national GHG inventory for 2020 by applying the 2006 IPCC Guidelines.	
	1.1.2.2. Recalculation of the national inventories of the years 2005, 2010, 2012, and 2014.	
1.1.3. Improved national GHG inventory database system and updated inventory database.	1.1.3.1. Improvement of the functions of the GHG database and update the national GHG inventories.	
1.1.4. Improved national system and mechanism for a sustainable GHG data collection, preparation and archiving process with extensive stakeholder engagement, smooth and timely data collection and coordinated and effective organization.	1.1.4.1. Establishment of procedures for archiving, quality assurance/quality control, and improvement planning with key experts.	
1.1.5. Completed capacity building of relevant government departments in collecting required data and	1.1.5.1. Design, organization and conduct of capacity building program for training and consultation on the preparation and conduct of GHG inventories.	

information for conducting and preparing GHG inventories.	1.1.5.2. Evaluation of the capacity building program.
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Component 2: Impacts of vulnerability and adaptation to climate change

This component is comprised of activities for updating of the climate change assessment of China and the impact and vulnerability assessments of climate change in key areas, and identification of strategies for climate change adaption and measures in key areas. The delivery of the expected outputs from this project component is expected to bring about better understanding of China's vulnerability to the threats of climate change and improved accuracy of prediction of impacts in the vulnerable sectors of the country.

<b>Outcome 2.1:</b> Better understanding of China's vulnerability to the threats of climate change and improved accuracy of prediction of impacts in the vulnerable sectors of the country.	
<i>Outputs</i>	<i>Activities</i>
2.1.1. Results of the updated analyses of climate change characteristics and future trends in China.	2.1.1.1. Data gathering on observed historical and current climate conditions and characteristics.
	2.1.2.1. Analysis of the climate characteristics and future trends at a country level.
2.1.2. Report on the climate change impact and vulnerability assessments in agriculture, water resources, coastal zones, terrestrial ecosystems, human health.	2.1.2.1. Compilation of information and conduct of impact and vulnerability assessments on China's ecosystems and human health.
	2.1.2.2. Review and verification of the results of the impact and vulnerability assessments (IVAs) on China's ecosystems and human health through consultations with key government decision makers and technical experts about the verified results of the IVAs; and collection of their feedbacks.
2.1.3. Report on the impacts of the frequency and intensity of extreme climate events and climate change related disasters.	2.1.3.1. Compilation of information and conduct of impact analysis on China's climate disasters.
	2.1.3.2. Review and verification of the impact analysis of the climate disasters through consultations with key governmental decision-makers and the technical experts; and collection of their feedbacks.

2.1.4. Report on the effectiveness analysis on implemented adaptation actions.	<p>2.1.4.1. Evaluation of the effectiveness impacts and risks of the improper implementation and non-implementation of CCA policies, as well as the potential social and environmental risks.</p> <p>2.1.4.2. Evaluation of the effectiveness of the implemented climate change adaptation (CCA) measures/actions.</p> <p>2.1.4.3. Identification of climate change adaptation opportunity areas, which can be fed into the evidence base and the strategic approach to deploying relevant climate-resilient CCA measures and policies.</p>
2.1.5. Completed capacity building for relevant government departments on collecting climate data/information and assessment of climate change impact and vulnerability.	2.1.5.1. Organization of a capacity building program that is comprised of training and consultation workshops on the impacts of, and vulnerability of the country to, climate change.
	2.1.5.2. Evaluation of the capacity building program.

### Component 3: Policies and actions for climate change mitigation

This component is to enhance the understanding on how China addresses climate change, particularly on mitigation actions and their impacts. The successful delivery of the planned outputs from this project component are expected to (a) Enhance the understanding of the appropriate policies to enable the proper planning and implementation of prioritized applicable and feasible climate change mitigation (CCM) actions for China; and (b) Improve the accounting of the results and impacts of implemented CCM actions through an improved national MRV system.

<b>Outcome 3.1:</b> Enhanced understanding of the appropriate policies to enable the proper planning and implementation of prioritized applicable and feasible climate change mitigation (CCM) actions for China.	
<b>Outputs</b>	<b>Activities</b>
3.1.1. Summary of national CCM policies and measures.	3.1.1.1. Compilation and review of documents on implemented national climate change mitigation policies and actions.
	3.1.1.2. Conduct of stakeholder consultation to the relevant ministries on the CCM policy-making.
<b>Outcome 3.2:</b> Improved accounting of the results and impacts of implemented CCM actions through an improved national MRV system.	
<b>Outputs</b>	<b>Activities</b>



3.2.1. Refined methodology and related assumptions for assessing the impact and estimated emission reduction of CCM actions.	3.2.1.1. Conduct of seminars on methodologies for estimating GHG emission reductions from CCM actions.
	3.2.1.2. Development of an improved methodology for the assessment of the mitigation effects of climate change policies and actions.
3.2.2. Report on the completed improvements in, and the operational performance of, the country's measurement, reporting and verification (MRV) system.	3.2.2.1. Review of the status of the current MRV system in the country.
3.2.3. Completed capacity building for relevant government departments on assessment of the effectiveness of implemented CCM policies.	3.2.3.1. Conduct of capacity building workshops on the assessment of the effectiveness of implemented CCM policies.
	3.2.3.2. Evaluation of the capacity building program.
3.2.4. Completed impact assessment and emission reduction estimation of implemented CCM actions.	<p>Activity 3.2.4.1. Development of an improved procedure for the assessment of the effectiveness, impacts and risks (e.g., economic, environmental, social, etc.) of the CCM policies that the national and local governments implement.</p> <p>3.2.4.2. Assessment of the impacts, and estimation of the corresponding the GHG emission reduction from the enforcement, of government policies on CCM actions.</p>

Component 4: National circumstances, related financial, technical, and capacity needs, and other relevant information

This component is comprised of interventions to identify and evaluate key natural resources and social and economic indicators, and also formulate an institutional arrangement for NC and BUR preparation. The successful delivery of the planned outputs from this project component are expected to bring about: (a) Enhanced capacity to determine, analyze, refer to, and articulate key national circumstances information in the NC reports and BURs; (b) Enhanced understanding and capacity to determine applicable, feasible and cost-effective CCM and CCA technologies, techniques and measures, and the most suitable financial resources and financing options that can be applied to implement action that address CCM and CCA issues; and (c) Further enhanced public awareness of climate change issues.

<b>Outcome 4.1:</b> Enhanced capacity to determine, analyze, refer to, and articulate key national circumstances information in the national communication (NC) reports and biennial update reports (BUR).	
<i>Outputs</i>	<i>Activities</i>

4.1.1. Complete sets of vetted data/information on each pertinent indicator (e.g., natural resources, energy, environment, social and economic) that collectively characterize the country's national circumstances.	4.1.1.1. Conduct of a literature review and data gathering about China's national circumstances for use in the preparation of the 4NC Report and 3BUR & 4BUR.
	4.1.1.2. Conduct of stakeholder consultations on vetted data/information on each pertinent indicator.
<b>Outcome 4.2:</b> Enhanced understanding and capacity to determine applicable, feasible and cost-effective CCM and climate change adaptation (CCA) technologies, techniques and measures, and the most suitable financial resources and financing options that can be applied to implement action that address CCM and CCA issues.	
<b>Outputs</b>	<b>Activities</b>
4.2.1. Report on capacity-building needs for the identification and determining applicable, feasible and cost-effective CCM&CCA technologies, techniques, and measures.	4.2.1.1. Evaluation and reporting on the current status of capacity-building in the areas of climate change adaptation (CCA) and mitigation (CCM).
	4.2.1.2. Development of a comprehensive analytical framework for assessing the capacity building needs of the pertinent government ministries/departments.
4.2.2. Report on capacity needs for determining financial resources and financial options for the implementation of appropriate CCM&CCA technologies, techniques, and measures.	4.2.2.1. Conduct of gap analysis in achieving CCM and CCA objectives.
	4.2.2.2. Evaluation of the financial requirements and the capacity building needs on accessing financial resources to support CCM and CCA actions.
<b>Outcome 4.3:</b> Further enhanced public awareness of climate change issues.	
<b>Outputs</b>	<b>Activities</b>
4.3.1. Completed document on the results, conclusions, and recommendations of the implemented activities for enhancing public awareness about climate change issues.	4.3.1.1. Assessment of the implemented activities for enhancing public awareness about climate change issues.
	4.3.1.2. Evaluation of the summary of public awareness enhancement activities.
4.3.2. Completed report on GHG concentration, climate observation and monitoring in	4.3.2.1. Review of the progress on GHG concentration observation and monitoring in China and the world.

China.	<p>4.3.2.2. Conduct of an assessment on the progress made by the country in the area of systematic climate/weather observations.</p> <p>4.3.3. Completed capacity building for relevant government departments on collecting information and in assessing technologies, financing of technology applications.</p>
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Component 5: Communication of the GHG inventories, NCs and BURs of Hong Kong and Macao Special Administrative Regions (SARs)

This component is to deliver the completed GHG inventories, and the relevant NC reports and BURs of the Hong Kong and Macao SARs. These activities will produce all relevant information that are mainly covered in the reports, such as circumstances, inventory data, mitigation actions and their effects, adaptation policies and other information. With the successful delivery of such outputs will be about better understanding of GHG emissions and sinks in the Hong Kong SAR and Macao SAR, and their improved capacities for NC, and BUR.

<b>Outcome 5.1:</b> Better understanding of GHG emissions and sinks in the Hong Kong and Macao SARs, and improved capacities for NC, and BUR.	
<i>Outputs</i>	<i>Activities</i>
5.1.1. Completed workshops on coverage and implementation of Hong Kong and Macao SARs' GHG inventories for the year 2017, 2018 using the IPCC 1996 guidelines, and 2020 utilizing the IPCC 2006 guidelines.	5.1.1.1. Organization and conduct of meetings, teleconferences between mainland, and Hong Kong SAR and Macao SAR.
	5.1.1.2. Organization and conduct of capacity building training and workshop.
5.1.2. Completed workshops on assessment methodologies for Hong Kong and Macao's mitigation actions.	5.1.2.1. Organization and conduct workshops on assessment methodologies for Hong Kong and Macao's mitigation actions.
5.1.3. Completed chapters of Hong Kong and Macao NC and BUR in the 4NC Report, 3BUR and 4BUR.	5.1.3.1. Conduct of a literature review and data gathering about Hong Kong SAR's circumstances for use in the preparation of the 4NC Report and 3BUR & 4BUR.
	5.1.3.2. Conduct of reporting checks.
5.1.4. Updated GHG inventories in the Hong Kong and Macao SARs for years 2017, 2018, and	5.1.4.1. Preparation of the Hong Kong SAR's GHG Inventories for years 2017, 2018, and 2020.

2020.	5.1.4.2. Preparation of the Macao SAR's GHG Inventories for years 2017, 2018, and 2020.
	5.1.4.3. Review of the Hong Kong SAR's GHG Inventories for years 2017, 2018, and 2020.
	5.1.4.4. Review Macao SAR's GHG Inventories for years 2017, 2018, and 2020.
5.1.5. Updated supplementary information on climate change in the Hong Kong and Macao SAR's.	5.1.5.1. Conduct of knowledge sharing events.

Component 6: UNFCCC reporting obligations, e.g., NC and BUR

This component is to produce and submit China's 4NC and 3BUR, and 4BUR. The 3BUR is a summary of parts of the fourth national communication (4NC) of China and submitted together with 4NC to the UNFCCC, and the 4BUR is an integrated report. The submission of the 4NC, 3BUR and 4BUR manifests China's compliance to the reporting obligations to the UNFCCC. 3BUR and 4BUR are subject to International Consultation Analysis (ICA) process, relevant responding procedures would be followed.

<b>Outcome 6.1:</b> China's compliance to the reporting obligations to the UNFCCC.	
<b>Outputs</b>	<b>Activities</b>
6.1.1. Improved working mechanisms for the preparation of the required reports in UNFCCC (4NC, 3BUR and 4BUR) reporting.	6.1.1.1. Development a UNFCCC reporting improvement program.
	6.1.1.2. Conduct of coordination and discussion meetings.
6.1.2. Completed capacity building of relevant departments participating in the report preparation.	6.1.2.1. Assessment of the compliance of the current capacity building activities to the UNFCCC obligations.
	6.1.2.2. Organization and conduct of capacity building events.
	6.1.2.3. Organization and conduct of seminars/exchanges with other countries.
6.1.3. Finalized and submitted 4NC, BUR3, and BUR4 (Chinese & English) to the UNFCCC.	6.1.3.1. Preparation of the draft 4NC, 3BUR and 4BUR.
	6.1.3.2. Organization and conduct of stakeholder consultation and review meetings.

	6.1.3.3. Conduct of reporting checks.
	6.1.3.4. Finalization and submission of the 4NC Report, 3BUR and 4BUR.

**Partnerships and cooperation**

As the project outcomes meant to deliver a full picture of China’s climate change related situation, actions, achievements, and needs, 4NC would advocate the engagement of eligible partners at all levels during the implementation. The target partners include not only relevant domestic ministries, research institutions and universities, but also other international entities and agencies that would benefit China in improving its capacity on climate MRV. After President Xi Jinping’s announcement that China aims to have CO2 emissions peak before 2030 and achieve carbon neutrality before 2060 in 2020, a leading group for CO2 emissions peak and carbon neutrality has been established. The Working Group on Carbon Emission Statistics and Accounting was set up under the above newly leading group and MEE is the member of the leading group for CO2 emissions peak and carbon neutrality and the working group on Carbon Emission Statistics and Accounting. MEE, as the national authority for GHG inventory and UNFCCC compliance, will coordinate relevant partners and ensure the timely delivery of project outputs. The key partners of the project are the members of National Leading Group for Climate Change, Energy Conservation and Emissions (NLGCCECE) and the newly leading group for CO2 emissions peak and carbon neutrality. Before finalizing, the outputs of the project would be reviewed by all members of NLGCCECE.

Two aspects will be taken into consideration while shaping the partnership strategy for this project. The first is to enhance the coordination and implementation capacity, and the second is to take full advantage of the technical support capacity and services of each partner.

In addition, the private sector will be engaged in the design and implementation of the main activities of the project. For example, a private printing company provides the reproduction services of the prepared national communications and biennial update reports. Like in the previous national communications project, the private sector will be engaged in the implementation of specific activities of this 4NC Project. In the preparation of national GHG inventory, capable and qualified private sector entities will be engaged in conducting the planned investigations and data gathering about activity data and emission factors. In the conduct of the planned studies on climate change mitigation and adaptation, selected private sector entities will be engaged to provide services.

China has also applied for funding for its Capacity Building Initiative for Transparency (CBIT). While this will focus on building and improving the working mechanism and technical capacity of the country in compiling inventory and biennial transparent report according to modalities, procedures, and guidelines of the enhanced transparency framework under the Paris Agreement, capacity building is a

common thread between this and the 4NC Project. The objective of the CBIT is to perform transparency-related obligations under the Paris Agreement in accordance with the relevant outcome of the Katowice Conference. The two projects will be coordinated in four ways. Firstly, during the development of annual work plans and specific activities since the project team members are from the same departments. Secondly, during the conduct of capacity building activities the two projects could be coordinated in the design, organization and conduct of these activities, to avoid duplicated work. Thirdly, during the conduct of institutional capacity building activities. For example, in proposing the MRV system or data management plan for GHG inventories, all provisions on NCs, BURs and BTR will be considered, and the ultimate goal is to fulfill the obligation of BTR and NCs, since the preparation of BURs will end in 2024. Fourthly, the 4NC Project is the basis of the CBIT project. The 4NC Project provides status-quo for (1) understanding current timeline and management arrangements for inventory preparation, (2) investigating the framework and functions of national GHG inventory database, (3) analyzing the assessment indicators of emissions reduction policies and actions, and the data needs and assessment approach of different indicators; and (4) designing a scheme for transparency system on financial support, . All of these are necessary for implementing the CBIT Project.

#### **Alignment of the project design with the original PIF (RCCEA)**

The designed project is based on the GEF-approved Request for Climate Change Enabling Activity (RCCEA) for the Enabling China to Prepare Its Fourth National Communication, and Biennial Update Reports on Climate Change Project (4NC Project). The project objective and components are as per the RCCEA. Except for minor change in the outcome of Component 1, all component outcomes and outputs are as per the GEF-approved RCCEA. Whereas in the RCCEA there are 3 interrelated outcome statements for Component 1, in the designed and developed 4NC Project, there is only one integrated outcome statement. The Outcome 1 statement is a combination of the original 3 interrelated outcome statements. For other changes from PIF/RCCEA to Project Document, please refer to Annex B.

#### **Key stakeholders**

The designated implementing partner of the 4NC Project, and the main project stakeholder, is the Ministry of Environment and Ecology (MEE). Hence, MEE will assume a leadership role throughout the entire project implementation phase providing guidance and supervision. It will be responsible for communication and coordination with UNDP, which is the GEF Agency for this project. It will all the relevant stakeholders of the project in the planning and implementation of the project activities, and it will gather, process, and manage information generated from the project activities (e.g., GHG inventories) and facilitate and coordinate the preparation of the 4NC Report and the 3BUR and 4BUR.

For details of the project's stakeholders, please refer to the Stakeholder Engagement Plan in Annex 7 of the 4NC Project Document.

## **Gender**

China has devoted itself to the promotion of gender equality and protection of women's rights and interests. We ensure that gender equality considerations are mainstreamed in the project and will enhance women's participation in every stage of the project. More female experts will be hired when recruiting the project team and female participants' number in important positions will be increased. The total number of female experts will account for more than 50% of the total number of project participants. At the same time, female experts will participate in the work of each sub-project.

The participation of women in the project will be further increased: more female experts will be involved in key tasks and the professional opinions of more female experts will be adopted. To ensure that women receive more professional support and assistance in the project, we will focus more on strengthening the training of female experts: women will have priority access to training and exchange opportunities.

China has always paid attention to equality between men and women in terms of remuneration and advocated equal pay for equal work. At present, women get the same salary and enjoy the same benefits as men in the same position.

On this basis, we will give more consideration to the contribution of women at work and are committed to providing more benefits for women in the project. Gender analysis and a gender action plan have been formulated 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.

## **Knowledge management**

The project will ensure extraction and dissemination of lessons learned and good practices to enable adaptive management and upscaling or replication at local and global scales. Results will be disseminated to targeted audiences through relevant information sharing fora and networks. The project will contribute to scientific, policy-based and/or any other networks as appropriate (e.g. by providing content, and/or enabling participation of stakeholders and beneficiaries).

As part of the knowledge management, the Project will communicate and disseminate a significant amount of information and knowledge related to climate change: GHG inventory; assessment of the impacts, vulnerability and adaptation policies and measures; GHG mitigation policies and measures; and national circumstances and other relevant information. This will be realized through workshops,

training, focus group discussions, interviews. The knowledge gained from this project will be key in informing future programming, beyond the life of this project.

## ANNEX B: CHANGES IN ALIGNMENT OF THE PROJECT DESIGN WITH ORIGINAL PIF

The table describes the alignment of the project design with the original PIF and complementarity to the GEF-funded CBIT project.

<b>GEF-Approved RCCEA/PIF</b>	<b>CEO ER/ProDoc</b>	<b>Justification/Comments</b>
<p>Outcome 1</p> <p>?Clearer understanding of the magnitude, trend and causes of the GHG emissions and removals from the different sectors.</p> <p>?Improved capacity to prepare time-series consistent inventories applying 2006 IPCC guidelines.</p> <p>?Improved national system for GHG inventory preparation.</p>	<p>Outcome 1.1</p> <p>Clearer understanding of the magnitude, trend and causes of the GHG emissions and removals from the different sectors, facilitated through an improved capacity to prepare time-series consistent inventories applying 2006 IPCC guidelines, and an improved national system for GHG inventory preparation.</p>	<p>The 3 outcome statements have been merged since these are inter-related. The 2<sup>nd</sup> and 3<sup>rd</sup> outcomes are the changes that must happen to achieve a clearer understanding of the magnitude, trend and causes of the GHG emissions and removals from the different sectors in China. This also facilitates the coordinated implementation under Component 1 of inter-related activities on (a) the conduct of the GHG inventory; (b) improving/updating the GHG inventory database and database system; (c) improving the GHG inventory process/methodology; and (d) capacity building in the conduct and preparation of GHG inventories.</p> <p>The proposed consolidated outcome statement not only makes the expected change clearer but essentially retains the same theme/premise and essence of the 3 original interrelated outcome statements.</p>
<p>Output 1.1.1</p> <p>Recalculation of the national inventories of the years 2005, 2010, 2012, 2014.</p>	<p>Output 1.1.1</p> <p>For the preparation of the 3BUR, the recalculation will only be done for the national inventory for the year 2005.</p>	<p>According to MPGs, parties should recalculate the base year of their NDC target. In this case, the recalculation will be done on the 2005 national GHG inventory, since 2005 is the base year of China's NDC.</p>



GEF-Approved RCCEA/PIF		CEO ER/ProDoc	Justification/Comments	
Indicative M&E Budget		Indicative M&E Budget	Better understanding of the extent of project results monitoring and evaluation enabled the project development team to consolidate some of the initially planned M&E activities and adjust the previously estimated M&E budget.	
<b>Type of M&amp;E activity</b>	<b>Budget , US\$</b>	<b>Type of M&amp;E activity</b>		<b>Budget, US\$</b>
Inception Workshop	3,000	Inception Workshop		10,000
Inception Report	10,000	Inception Report		0
Measurement of Success Indicators and Targets	5,000	Monitoring of project log frame (PRF) indicators.		10,000
Measurement of Success Indicators for Project Progress Performance	5,000	Project Board Meetings (Steering Committee Meetings)		20,000
APR and PIR	12,000	Mid-Term External Evaluation		30,000
Steering Committee Meetings	12,000	Final External Evaluation		30,000
Half Yearly Report and Technical Report	10,000	<b>Total indicative cost</b>		<b>100,000</b>
Mid-Term External Evaluation	25,000			
Final External Evaluation	25,000			
<b>Total indicative cost</b>	<b>107,000</b>			

GEF-Approved RCCEA/PIF	CEO ER/ProDoc	Justification/Comments
<p><b>Proposed Stakeholders:</b></p> <p>Ministry of Ecology and Environment;</p> <p>Ministry of Finance, Ministry of Foreign Affairs; Ministry of Science and Technology; Ministry of Agriculture and Rural Affairs; Meteorological Administration; National Bureau of Statistics</p> <p>National Center for Climate Change Strategy and International Cooperation; Member of the Chinese Delegation for Climate Change Negotiations; Experts for Review of UNFCCC Biennial Update Reports;</p> <p>Experts for Review of UNFCCC National Greenhouse Gas Inventories; Authors of the IPCC Guidelines for National Greenhouse Gas Inventories; Editorial Board Membership of the IPCC Greenhouse Gas Inventory Database; Environmental Protection Department of Hong Kong SAR; Macao Meteorological and Geophysical Bureau.</p>	<p><b>Identified Stakeholders:</b></p> <p>Ministry of Finance; National Development and Reform Commission; Ministry of Ecology and Environment; Department of Climate Change (MEE/DCC); Foreign Environmental Cooperation Center (FECO/MEE); Ministry of Science and Technology; Ministry of Agriculture and Rural Affairs; China Meteorological Administration; National Bureau of Statistics; National Center for Climate Change Strategy and International Cooperation (MEE); Environmental Protection Department of Hong Kong SAR; Macao Meteorological and Geophysical Bureau; United Nations Development Programme</p> <p>Other Stakeholders: Academic institutes, colleges, universities, and/or relevant individuals; Industrial associations related to data reporting in sectors; State-owned/private enterprises; CSOs</p>	<p>With the proper identification and formulation of the required activities that will deliver the 4NC Project's outputs, the project development team was able to identify the relevant stakeholders that will directly and/or indirectly participate in the implementation of the project activities. Further identification of project beneficiaries (e.g., participants in key capacity development activities) will be carried during the course of project implementation.</p>

**ANNEX C: RESPONSES TO PROJECT REVIEWS** *(Comments from Council at work program inclusion).*

**Exhibit B.1: Responses to GEF Council Comments (December 2020)**

Comment	Response
<b>Canada Comments</b>	
<p><i>? Projects such as this one, that support non-Annex I Parties meet their UNFCCC obligations by building institutional capacity for data collection and management, as well as monitoring and reporting on the implementation of actions, are well received by Canada.</i></p>	<p>Thank you for your support! The 4NC project will benefit China by better meeting its UNFCCC obligations. For example, through this project, China would improve its capacity in collecting and managing country-specific greenhouse gases data, as well as monitoring and reporting on the implementation of actions.</p>
<b>Germany Comments</b>	
<i>Suggestions for improvements to be made during the drafting of the final project proposal:</i>	
<p><i>? Germany welcomes this project but suggests to make the following changes: Increase transparency on reported data/information; reduce inconsistencies between different reporting years; clarify relation with other existing MRV systems (i.e. historic emission data collection for the preparation of the ETS).</i></p>	<p>We intend to add capacity-building activities, from better collecting data, adopting the <i>2006 IPCC Guidelines</i>, to recalculating the base year data. In addition, we would like to utilize the historic emission data collection for the preparation of the ETS for the GHG inventory verification. Therefore, to improve the capacity, increase the transparency and reduce inconsistencies.</p>
<p><i>? We suggest to consider the consistent use of the most recent IPCC guidelines, also for the recalculation of inventories to ensure data consistency. According to the PIF, China intends to use 1996 IPCC guidelines for the national GHG inventories for years 2017 and 2018. Only for the year 2020 China intends to use 2006 IPCC guidelines.</i></p>	<p><i>The national GHG inventories for years 2017 and 2018 are supposed to be finalized by 2022, we are still facing challenges to make the transition from using 1996 IPCC Guidelines to 2006 IPCC Guidelines.</i></p>
<p><i>? The section on the domestic MRV system could be explored in more detail: The PIF refers to the domestic MRV system to support the preparation of the NC and BUR. However, little information on details is provided.</i></p>	<p>Revised. We have provided more information regarding the domestic MRV system in PD, on page 30.</p>
<p><i>? We note the limited amount of co-financing compared to similar GEF proposals for similar projects in other countries (e.g. India and Indonesia). Further avenues to ensure adequate co-financing and project sustainability should be explored.</i></p>	<p>Thanks for reminding us. China will ensure adequate co-financing and project sustainability during implementing the 4NC project. Also, according to GEF's <i>2018 UPDATED CO-FINANCING POLICY</i>, <i>?co-Financing is encouraged for all Enabling Activities?.</i> Thus, there is no mandatory requirement for a co-financing ratio.</p>

Comment	Response
<i>? We further suggest to engage with the following projects:</i>	
<i>o Capacity Building to support the establishment of a National Emission Trading Scheme (ETS) in China (Extension phase 2020-2022: Sino-German Cooperation on Emissions Trading Systems, Carbon Market Mechanisms, and Industry related N2O Mitigation)[1]<sup>1</sup>.</i>	Agreed. The outputs of <i>Capacity Building to support the establishment of a National Emission Trading Scheme (ETS) in China</i> will benefit the 4NC project from investigating country-specific emission factors, especially the IPPU sector.
<i>o Initiative for Climate Action Transparency (ICAT): ICAT builds up capacities to strengthen national MRV systems and establish institutional arrangements[2]<sup>2</sup>.</i>	Agreed. The outputs of <i>ICAT</i> will benefit the 4NC project by better identifying current obstacles that China is facing in front of gathering activity data and emission factors that are fit to the <i>2006 IPCC Guidelines</i> .
<b>Norway/Denmark Comments</b>	
<i>General comments:</i>	
<i>? The project is highly relevant to China especially in the context of China?s recently announced target to aim for carbon neutrality in 2060 and to achieving the objectives of the UNFCCC and the Paris Agreement.</i>	Thank you for your comments. Information that relevant to carbon neutrality in 2060 will be elaborated in the reports.
<i>? The project will enhance China?s understanding of the appropriate policies to enable proper planning and implementation of climate change mitigation actions.</i>	Thank you for your comments. Agreed.
<i>? There is a continued need for improved data quality and data sets for emissions from different sectors, and this project will contribute to that. It is positive that the baseline for the project partly builds on recent analysis from the UNFCCC secretariat. The project will also provide relevant information on GHG emissions and sinks in Hong Kong and Macao Special Administrative Regions.</i>	Thank you for your comments. We indeed keep improving our data quality and data sets.

Comment	Response
<p><i>? We welcome that the project involves different ministries such as the Ministry of Ecology and Environment, the Ministry of Finance, the Ministry of Science and Technology, the Ministry of Agriculture, etc. This sectoral coordination shows ownership of the project by the government. The project partners could however be challenged to further define the main parties for the project steering committee and other entities for project implementation and management.</i></p>	<p>To effectively strengthen the leadership of climate change and energy conservation and emission reduction, China established the National Leading Group for Climate Change and Energy Conservation and Emission Reduction in June 2007. The Premier of the State Council is the leader of the working group. The group is characterized as high level, inclusiveness of many institutions, and strong coordinating capacity. Its main functions include formulating major national strategies for addressing climate change, uniformly deploying solutions to climate change, and coordinating major issues in addressing climate change. The Ministry of Ecology and Environment is nominated by State Council to take a lead in addressing climate change. We have illustrated in PD, at Annex 9.</p>
<p><i>? We welcome the fact that the project will implement measures to ensure that women gain equal opportunities to engage in the design and implementation of the project activities. It is also positive that the National Circumstances chapter of the 4NC will include gender-disaggregated data.</i></p>	<p>Thank you! We ensure that gender equality considerations are mainstreamed in the project and will enhance women's participation in every stage of the project. Actually, the majority of experts that participated in 4NC PIF preparation are female. More female experts will be hired when recruiting the project team and female participants' numbers in important positions will be increased. Gender analysis and a gender action plan have been formulated and gender-sensitive indicators will be incorporated into the project's logical framework. In the mid-term and final evaluation of the project, women's participation and benefits will be assessed.</p>
<p><i>? It is positive that the project will build on findings and recommendations from previous NC and BUR work. For example, the project will consider the recommendations on transparency identified in International Consultation and Analysis (ICA) of BUR1 and BUR2.</i></p>	<p>Thank you! We treasure the suggestions provided by international experts a lot, to better implementing the 4NC project. Also, we keep actively sharing and discussing with other parties about the lessons and experiences of previous NC&amp;BUR work.</p>
<p><i>? China will use the 2006 IPCC guidelines in the preparation of the National GHG Inventory for the BUR4. Considering that the IPCC has adopted the ?2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories?, why will the 2019 Guidelines are not used?</i></p>	<p>According to paragraph 20 of <i>MPGs</i>, ?Each Party shall use the 2006 IPCC Guidelines, and shall use any subsequent version or refinement of the IPCC guidelines agreed upon by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA)?. The 2019 Refinement to the 2006 IPCC Guidelines is the latest update for the IPCC Guidelines. However, according to the UNFCCC reporting Guidelines for National GHG Inventories, the Guidelines have to be adopted by the Conference of Parties first, and the COP still had not adopted the 2019 Refinement. If there are any new updates, China will make adjustments according to the requirements as soon as possible.</p>

Comment	Response
<p>? The national GHG inventories for years 2017 and 2018 will be prepared using 1996 IPCC guidelines, and the GHG inventory for the year 2020 will be prepared using 2006 IPCC guidelines. What is the reason for distinguishing the use of Guidelines among GHG inventories?</p>	<p>The national GHG inventories for years 2017 and 2018 are supposed to be finalized by 2022, we are still facing challenges to make the transition from using 1996 IPCC Guidelines to 2006 IPCC Guidelines.</p>
<p>? In the project proposal, it is stated that the 4NC will cover the same sectors as the 3NC, namely: i. energy, ii. industrial processes, iii. agriculture, iv. land-use, land-use change and forestry, and v. waste. Has the possibility of including new sectors for 4NC been assessed?</p>	<p>Shall we ask what are the possible new sectors? Same as other parties, we assess the emissions from five sectors according to the requirements of UNFCCC and guidelines of IPCC. However, it is likely that ?iii. Agriculture? and ?iv. Land-Use, Land-Use Change and Forestry? would be combined as ?Agriculture, Forestry and Other Land Use (AFOLU)?.</p>
<p>? Will the same five sectors covered in the Fourth National Communication be analyzed in the assessment of Adaptation and Climate Change?</p>	<p>In the Chapter regarding Adaptation, there would be a focus on the <b>impact and vulnerability assessments</b> of climate change in areas including agriculture, water resources, coastal zones and offshore resources and environment, forests and other natural ecosystems, human health, and infrastructure.</p>
<p>Specific comments:</p>	
<p>? China?s national carbon market, expected to become operative shortly, is mentioned in the project document and has potential to strengthen the quality of data also in China?s greenhouse gas inventory. The project partners could be challenged on how to integrate these emissions data in the work on the inventory as the national carbon market gradually will expand to new sectors.</p>	<p>Thank you. We intend to utilize the data of the national carbon market for verification reference approach, as well as investigation for country-specific emission factors, before integrating these emissions data in the work on the GHG inventory.</p>
<p>? The financing proposed for this project is \$4,566,210. This implies a reduction from the amount approved for the project GEF ID 4882 which allocated \$7,280,000 to cover the same type and number of reports and led to the preparation of China's Third National Communication and first two Biennial Update Reports. What is the reason for this reduction?</p>	<p>Thanks to the support from GEF, China has been improving its domestic capacity in MRV. Due to the reason that the 4NC project is in the STAR pool, China make a new budget based on the number of necessary activities during the 4NC period, for saving the budget for other national projects in STAR.</p>

Comment	Response
<p><i>? The project states that the draft reports of the 4NC and BUR3 and BUR4 will be presented to stakeholders for their review and comments. We do not find CSOs in the list of stakeholders provided on page 21 of the funding proposal. Will CSOs/NGOs be included in this project?</i></p>	<p>Yes. CSOs/ NGOs are engaged in our project, especially in raising public awareness, as well as policy consultation.</p>

**Exhibit B2: Responses to GEFSec Comments (October 2021)**

Comments & Responses	Reference
<p><b>Part 2: Enabling Activity Justification</b></p>	
<p><b><u>Comment:</u></b></p> <p><i>Are the achievements of previously implemented enabling activities cited since the country(ies) became a party to the Convention?</i></p> <p><b><u>Response:</u></b></p> <p>Yes. The 4NC RCCEA states some of the major achievements from the previous NC projects such as the following:</p> <p>Under the current "Enabling China to Prepare its Third National Communication (3NC) on Climate Change" Project, the Chinese Government prepared and submitted its first Biennial Update Report (BUR1) to the UNFCCC in early 2017 and submitted its 3NC and BUR2 in June 2019. Through efforts in the past decade, a permanent management agency, an established and operational experts' team and project-based working mechanism for preparing implementation reports such as NCs, as well as the database of national GHG inventories and related information, have been in place. The compiled provincial GHG inventories in 2005, 2010, 2012 and 2014 are also stated, as well as the Emission Trading System (ETS) pilots, which have been operational for several years and the national ETS has just kicked off. In addition, there is also the establishment of emission factors for specific sub-sectors such as coal combustion in power, cement, iron and steel that can also be utilized by other countries with the same circumstances as China. These collectively, presents a solid foundation for the preparation and submission of the planned 4NC Report, BUR3 and BUR4.</p>	<p>RCCEA: Part II, Sec. A; Para 3, p. 5</p>



**Comment:**

*These are well summarized. However, information on the most recent International Consultation and Analysis processes for the BURs and identified capacity-building needs and areas of enhanced transparency could be elaborated considering these are later mentioned in the project activities as areas where this EA will work on.*

**Response:**

Identified capacity-building needs are among the activities of the proposed 4NC RCCEA. From September 2019 to March 2020, UNFCCC secretariat conducted the technical analysis on the BUR2 of China. In consultation with China, a Team of Technical Expert identified the following needs for capacity-building that could facilitate the preparation of subsequent BURs and participation in ICAs:

Strengthening the institutional framework for the preparation of the GHG inventory:

- ? Preparing national inventories on an institutionalized basis rather than on a project basis,
- ? Collecting inventory data and coordinating data from various sectors,
- ? Enhancing national capacity associated with the estimation of indirect GHGs (e.g. CO, NMVOCs and NO<sub>x</sub>),
- ? Enhancing national capacity to quantitatively calculate the emission reduction effect of overlaps between different mitigation actions,
- ? Enhancing national capacity to identify, quantify and report on financial support needed and received, particularly to provide more data or information sources on financial support received, and,
- ? Enhancing national capacity to develop guidelines and methodologies for estimating future mitigation and adaptation support needs, including a periodically updated database on technology that could be transferred and information on capacity-building events or workshops for BUR compilers.

In addition to those identified during the technical analysis, China reported the following capacity-building needs in its BUR:

- ? Strengthening national capacity to prepare the GHG inventory and the inventory report for the purpose of the BUR, including establishing an institutionalized system for the preparation of GHG inventories, including local GHG inventories,
- ? Strengthening capacity to conduct statistics work and MRV, including strengthening research into local EFs and improving the technology skills and competence of the inventory compilers,
- ? Strengthening national capacity to address areas related to climate change adaptation,
- ? Strengthening national capacity related to finance, personnel, and intergovernmental coordination, and,
- ? Strengthening national capacity to improve education and training in addressing climate change and raising public awareness.

RCCEA: Part I,  
Sec. B, pp. 2-3

Part II; Sec. B,  
p. 5; Sec. C,  
pp. 9-12



**Is the project framework sufficiently described?**

*Overall, the project framework is sufficiently described, and we found several areas of enhancement that have been previously identified that will be pursued with this project. Please address the following comments:*

**Comment:**

*Please comment on China's plans to prepare its first Biennial Transparency Report (BTR) to be submitted by December 2024 under the Paris Agreement in consideration of the plans presented in this project to prepare and submit its fourth BUR by the same date. Please confirm if China intends for its fourth BUR to be its last and if it is planning on embarking on another report preparation for the BTR at the same time and how it may address the potential duplication of efforts.*

**Response:**

China is now applying for a CBIT project to build its capacity in preparing BTRs. The country initially intended to include preparing its first BTR under the proposed 4NC Project but was informed that GEF is still in the process evaluating support needed for preparing BTRs. Thus, China will apply for additional support on reporting its first BTR to fulfill the new provisions of MPGs after GEF has decided the amount for supporting BTR preparations. The fourth BUR will be the last BUR. China now plans to submit a joint report combining fourth BUR and first BTR to avoid duplication of efforts.

**Comment:**

*As the structure of the project is based on areas of work and not the different reports, please clarify the estimated amount of resources that would be allocated to each of the different reports.*

**Response:**

The project is designed to build capacity to prepare 3 national reports. So the whole project is not divided into separate reports. According to the reporting components, the preparation of the 4NC report will cost US\$ 1,588,740, while preparation of the two BURs (3BUR and 4BUR) will cost US\$ 2,977,470. The preparation of each BUR will approximately be the same.

RCCEA: Part I,  
Sec. B

**Comment:**

*Please include a reference to the CBIT project under development by FECO and on plans to establish coordination with the CBIT project activities once they begin implementation.*

**Response:**

The CBIT and 4NC Projects will focus on different activities. The CBIT project will focus on building and improving the working mechanism and technical capacity of the country in compiling inventory and biennial transparent report according to MPGs requirement, rather than supporting compiling NC and BUR, to ensure different focus of the CBIT project and the GEF grant for communication capacity building. It 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. It 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. Nonetheless, there is a common thread between the 2 projects, which is capacity building.

Hence, the two projects will be coordinated in three ways. First, during the preparation of annual work plans and planning of capacity building activities since the project team members are from the same departments. Second, during the conduct of capacity building activities the two projects could be coordinated in the design, organization and conduct of these activities, to avoid duplicated work. Third, during the conduct of institutional capacity building activities. For example, in proposing the MRV system or data management plan for GHG inventories, all provisions on NCs, BURs, BTR will be considered, and the ultimate goal is to fulfill the obligation of BTR and NCs, since BUR preparations will be ended in 2024.

RCCEA: Part II, Sec. C; Last para, p. 12

**RECOMMENDATION**

**Is CEO clearance/approval recommended?**

**Comment:**

*Please address comments.*

**Response:**

The project proponents have already adequately addressed the comments and are looking forward to the GEF CEO approval of the proposed 4NC RCCEA.

[1] The project supports the establishment and further refinement of the Chinese national ETS, including support on MRV procedures in accordance with the requirements of international reporting (relevant rules, IPCC, NDC). ([https://www.international-climateinitiative.com/en/details/project/capacity-building-to-support-the-establishmentof-a-national-emission-trading-scheme-ets-in-china-11\\_I+\\_002-319](https://www.international-climateinitiative.com/en/details/project/capacity-building-to-support-the-establishmentof-a-national-emission-trading-scheme-ets-in-china-11_I+_002-319)).

[2] At national, regional, and global levels, the project finances activities that have an immediate and long-term impact and improve the administrative, legislative, and institutional MRV infrastructure in developing countries. ([https://www.international-climate-initiative.com/en/details/project/initiative-forclimate-action-transparency-15\\_I\\_252-453](https://www.international-climate-initiative.com/en/details/project/initiative-forclimate-action-transparency-15_I_252-453)).

### **C. DESCRIBE THE ENABLING ACTIVITY AND INSTITUTIONAL FRAMEWORK FOR PROJECT IMPLEMENTATION**

Discuss the work intended to be undertaken and the output expected from each activity as outlined in Table A

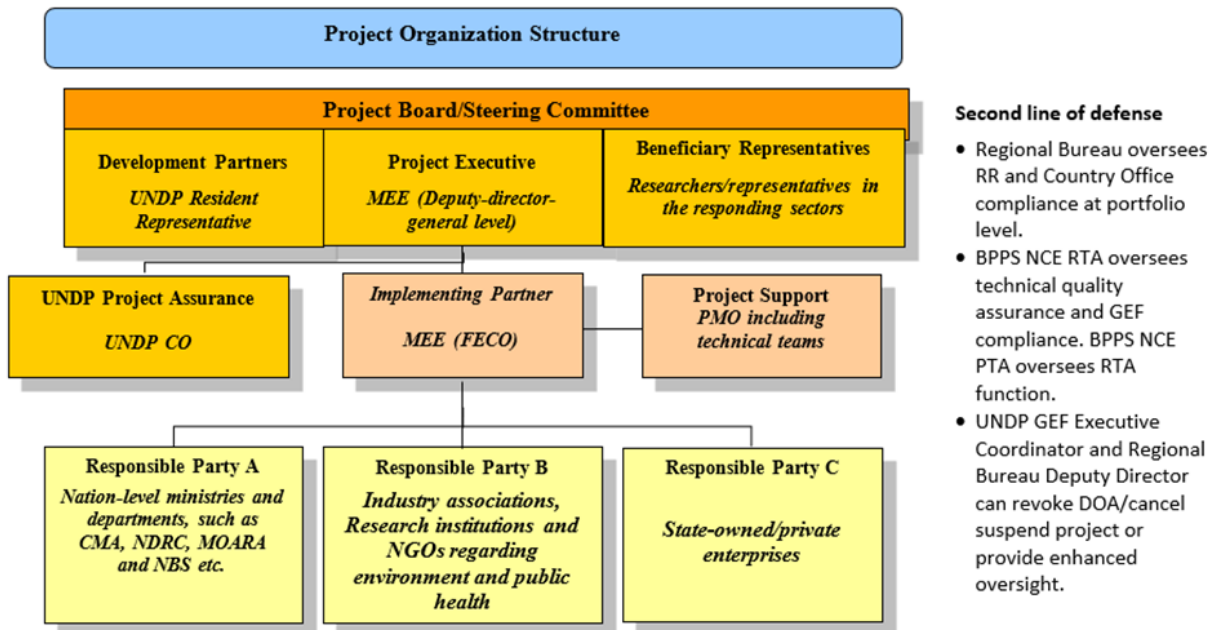
The 4NC Project will be implemented following UNDP's National Implementation Modality (NIM), per the Standard Basis Assistance Agreement between UNDP and the Government of China, and the Country Programme. The Implementing Partner for this project is the Ministry of Environment and Ecology (MEE), which is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

The 4NC Project will be governed by a Project Board (PB). This board will be made up of representatives from: MEE, beneficiary representatives from various sectors, including academia, NGOs, governmental offices, industries and private sector; and the UNDP-Beijing Country Office (CO). The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value for money, fairness, integrity, transparency, and effective international competition. In case consensus cannot be reached within the Board, the UNDP Resident Representative (or their designees) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

The MEE will establish a Project Management Office (PMO) in FECO/MEE and recruit its personnel for the management of project activities. The PMU will be headed by a Project Manager (PM) who has the authority to run the project on a day-to-day basis on behalf of MEE within the constraints laid down by the Project Board. The Project Manager will be different from MEE's representative in the Project Board, and his/her primary responsibility is to ensure that the project produces the results specified in

the ProDoc, to the required standard of quality and within the specified constraints of time and cost. The Project Manager will inform the Project Board and the UNDP Project Assurance team of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted. The Project Manager will remain on contract until the Terminal Evaluation report and the corresponding management response have been finalized and the required tasks for operational closure and transfer of assets are fully completed. Figure 1 shows a schematic of the Project Organization Structure.

In case of project implementation period extension, the UNDP Resident Representative and the UNDP-GEF Executive Coordinator must approve this. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and only if the following conditions are met: one extension only for a project for a maximum of six months; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the UNDP Country Office oversight costs in excess of the CO's Agency fee specified in the DOA during the extension period must be covered by non-GEF resources.



**D. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT**

This proposed project was designed after reviewing the other on-going and prepared projects dealing with climate change to increase cost-effectiveness and enhance consistencies with various national development priorities and programmes undertaken at national and local levels, mainly UNDP NDC support programme and CBIT initiative and Initiative for Climate Action Transparency funded by the donors such as the Children's Investment Fund Foundation, German and Italian Environmental Ministries and UNEP. The project design was also based on the recommendations and the lessons learned from the past NC preparation projects, particularly the 3NC Project. In addition, the design of the proposed project involved continuous coordinated planning and discussions between UNDP and MEE, the national partner for these projects. These guarantee high synergy and void duplication of initiatives and maximize cost-effectiveness.

**E. DESCRIBE, DESCRIBE THE BUDGETED M & E PLAN**

<b>Monitoring and Evaluation Plan and Budget:</b>			
<b>GEF M&amp;E Requirements</b>	<b>Responsible Parties</b>	<b>Indicative costs (USD)</b>	<b>Time frame</b>
Inception Workshop	MEE, UNDP-China, PMO	10,000	Within 60 days of CEO endorsement of this project.
Inception Report	PMO, UNDP-China	None	Within 90 days of CEO endorsement of this project.
Monitoring of project results framework (log frame) indicators.	PMO, UNDP CHINA, GEF-UNDP	2,500 per year	Annually
Project Board Meetings	MEE, UNDP-China, PMO	5,000 per year	Annually
Independent Mid-term Review (MTR)	PMO, UNDP CHINA	30,000	One and half a year after project start up
Independent Terminal Evaluation (TE)	PMO, UNDP CHINA GEF-UNDP Asia-Pacific Regional Coordination Unit, External Consultant (Evaluation Consultant)	30,000	At the end of project implementation

<b>TOTAL indicative COST</b>	<b>100,000</b>	
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**F. EXPLAIN THE DEVIATIONS FROM TYPICAL COST RANGES (WHERE APPLICABLE)**

N/A

### Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

#### A. Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

<b>Focal Point Name</b>	<b>Focal Point Title</b>	<b>Ministry</b>	<b>Signed Date</b>
Xiang Peng	GEF Operational Focal Point	Department of International Economic and Financial Cooperation, Ministry of Finance	9/28/2020

**B. Convention Participation**

<b>Convention</b>	<b>Date of Ratification/Accession</b>	<b>National Focal Point</b>
UNFCCC	7/11/1992	Mr. Li Gao

**ANNEX A: Project Budget Table**

**Please attach a project budget table.**

<b>Expenditure Category</b>	<b>Detailed Description</b>	<b>Component (USDeq.)</b>									<b>Total (US Deq.)</b>	<b>Responsible Entity (Executing Entity receiving funds from the GEF Agency)</b>	
		<i>Component 1</i>	<i>Component 2</i>	<i>Component 3</i>	<i>Component 4</i>	<i>Component 5</i>	<i>Component 6</i>	<i>Sub-Total</i>	<i>M &amp; E</i>	<i>PM C</i>			
<b>Contractual Services? Individual</b>	Project management personnel to include: (a) Project Assistant : \$42,000/year; (c) Project Financial Assistant :(part of the salary) at \$8,000/year										200,000	200,000	FECO, MEE



Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C		
Contractual Services? Company	One subcontract for developing National GHG inventory from energy activities, industries process, agriculture, LULUCF and Waste.	2,150,000						2,150,000			2,150,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C		
Contractual Services? Company	Subcontracts for capacity building of relevant government departments in collecting required data and information for conducting and preparing GHG inventories	695,000						695,000			695,000	FECO, MEE
Contractual Services? Company	One subcontract for improving and updating national inventory database system.	400,000						400,000			400,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)	
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C			
Contractual Services? Company	Subcontracts for capacity building for relevant government departments on collecting climate data/information and assessment of climate change impact and vulnerability.		90,000						90,000			90,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C		
Contractual Services? Company	Subcontracts for capacity building for relevant government departments on assessment of the effectiveness of implemented CCM policies.							185,000			185,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C		
Contractual Services? Company	Subcontracts for capacity building for relevant government departments on collecting information and in assessing technologies, financing of technology applications, and capacity building needs for technologies.				95,000			95,000			95,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C		
Contractual Services? Company	One subcontract for supporting China's compliance to the reporting obligations to the UNFCCC, including improving working mechanisms for the preparation of the NC and BUR, capacity building of relevant departments participating in NC and BUR preparation, also including compiling, finalizing and submitting 3BUR,						350,000	350,000			350,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)	
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C			
International Consultants	International consultants to conduct MTR and TE, including the meeting, travel, food and shelter, accommodation, sub-total: \$40,000								-	40,000		40,000	UNDP

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C		
Local Consultants	Local experts in GHG inventory, V&A, GHG projection, mitigation, etc. for review documents, provide suggestions, assess reports (daily rate \$200/day ?10 days, 10 people per year, total \$80,000)	80,000						80,000			80,000	FECO, MEE



Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)	
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C			
Local Consultants	Local experts in GHG inventory, V&A, GHG projection, mitigation, etc., will be convened to assist Hong Kong and Macao SAR governments to finish the NC and BUR report, including review documents, provide suggestions, assess reports, etc. \$200per day ? 20 days, 10 persons for year 1 and year 3, total \$40,000.					40,000		40,000				40,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)	
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C			
Local Consultants	Local consultant to provide technical support to Project Implementation Report, including translation and interpretation, etc. \$2500/year, sub-total: \$ 10,000								-	10,000		10,000	FECO, MEE
Local Consultants	National consultants to conduct MTR and TE, including the meeting, travel, food and shelter, accommodation, sub-total: \$20,000									20,000		20,000	UNDP

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C		
Trainings, Workshops, Meetings	Meetings and workshops for supporting National GHG inventory from energy activities, industries process, agriculture, LULUCF and Waste.	15,000						15,000			15,000	FECO, MEE
Trainings, Workshops, Meetings	Meetings and workshops for the Impacts of vulnerability and adaptation to climate change		10,000					10,000			10,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)	
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C			
Trainings, Workshops, Meetings	Meetings and workshops for Mitigation policies and actions for climate change. 4 times, \$100/person for 25 people, sub-total: \$ 10,000.			10,000					10,000			10,000	FECO ,MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)	
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PMC			
Trainings, Workshops, Meetings	Meetings and workshops for supporting Hong Kong SAR and Macao SAR developing GHG inventories, BUR and NC report. 5 times, \$100/person for 20 people, sub-total: \$ 10,000.					10,000		10,000				10,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)	
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PM C			
Trainings, Workshops, Meetings	Project inception workshop: US\$10,000 and Annual Project Board meeting US\$5,000 x 4 = US\$20,000, sub-total: \$30,000								-	30,000		30,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PMC		
Travel	Travel costs for: (1) Domestic travel for National Technical Advisor at US \$2,500/mission for 2 times, sub-total: \$5,000; (2) Experts travel to Hong Kong SAR and Macao SAR to exchange progress and outcome with local government. US\$ 25,000 /mission, sub-total: \$50,000; (3) International exchange activities	110,000						110,000			110,000	FECO, MEE

Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PMC		
Travel	Travel costs for domestic travel for National Technical Advisor at US \$1,000/mission for 5 times, sub-total: \$5,000.			5,000				5,000			5,000	FECO, MEE
Travel	Travel costs for international and domestic travel. Domestic travel for local consultants at US \$2,500/mission for 2 times, sub-total: \$5,000.				5,000			5,000			5,000	FECO, MEE



Expenditure Category	Detailed Description	Component (USDeq.)									Total (US Deq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)	
		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6	Sub-Total	M & E	PMC			
Other Operating Costs	Miscellaneous expenses such as courier, messenger services								-		210	210	FECO ,MEE
Other Operating Costs	Annual audit costs, \$4,000/year, sub-total: \$ 16,000.								-		16,000	16,000	UNDP
Grand Total		3,450,000	100,000	200,000	100,000	50,000	350,000	4,250,000	100,000	216,210	4,566,210		