

Introduction of Chinese First BTR and Expert Review

Good Practice and Experience Sharing

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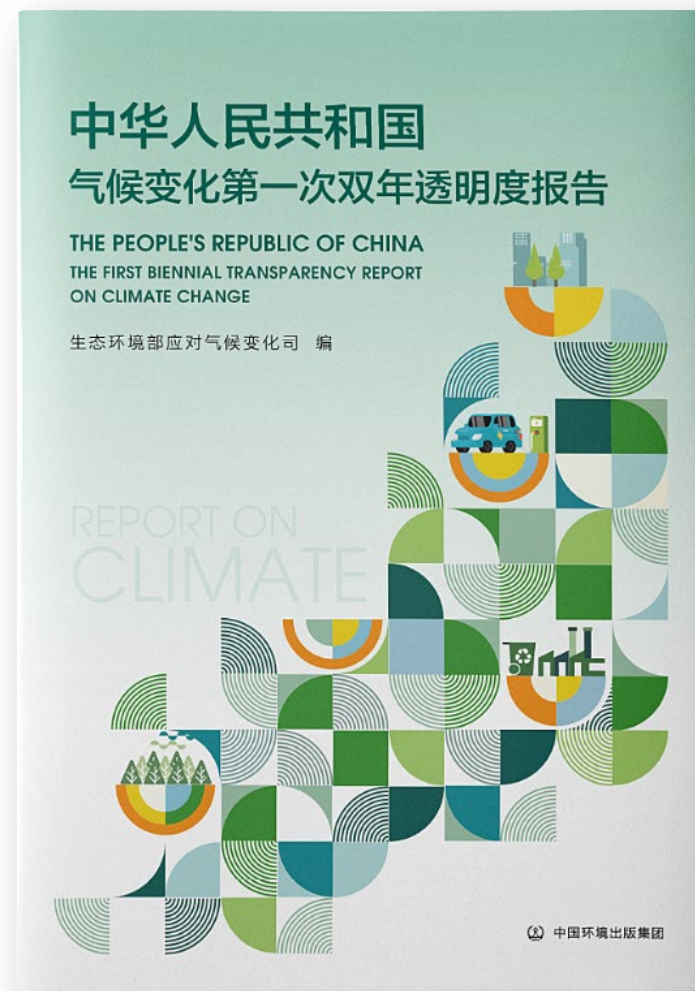
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Good Practice Sharing

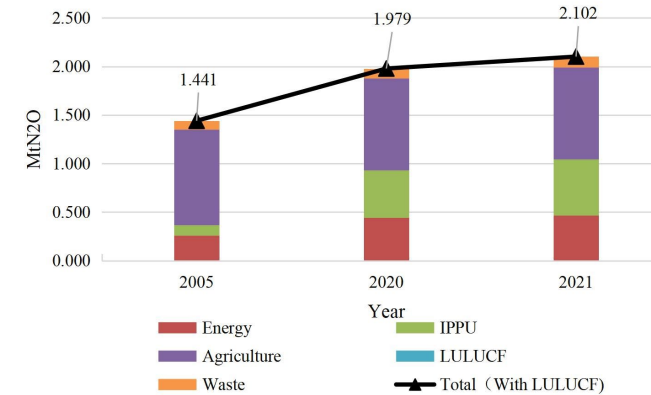
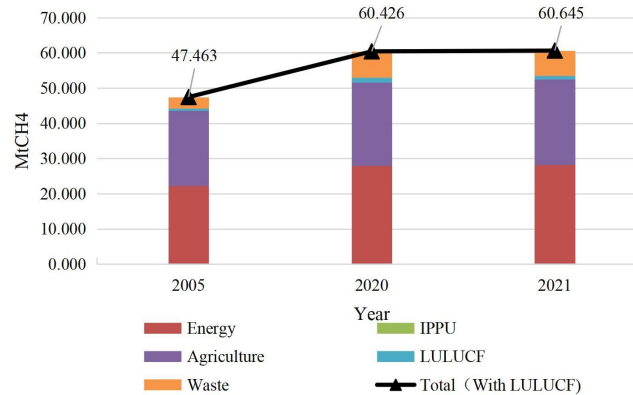
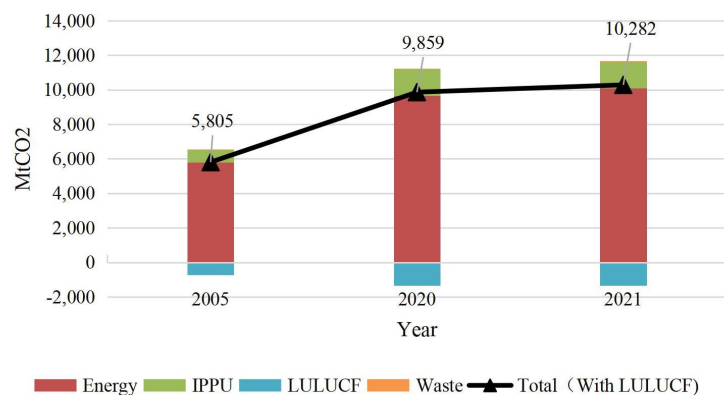
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Outlook for Future



1 Background

Submissions



National Communication	Biennial Update Report	Biennial Transparency Report
2004: 1st NC & 1994 Inventory 2012: 2nd NC & 2005 Inventory 2019: 3rd NC & 2010 Inventory 2023: 4th NC & 2017 Inventory	2017: 1st BUR & 2012 Inventory 2019: 2nd BUR & 2014 Inventory 2023: 3rd BUR & 2018 Inventory 2020: 4th BUR & 2020 Inventory	1st BTR: submitted in 2024, with the time-series GHG Inventories for 2020-2021



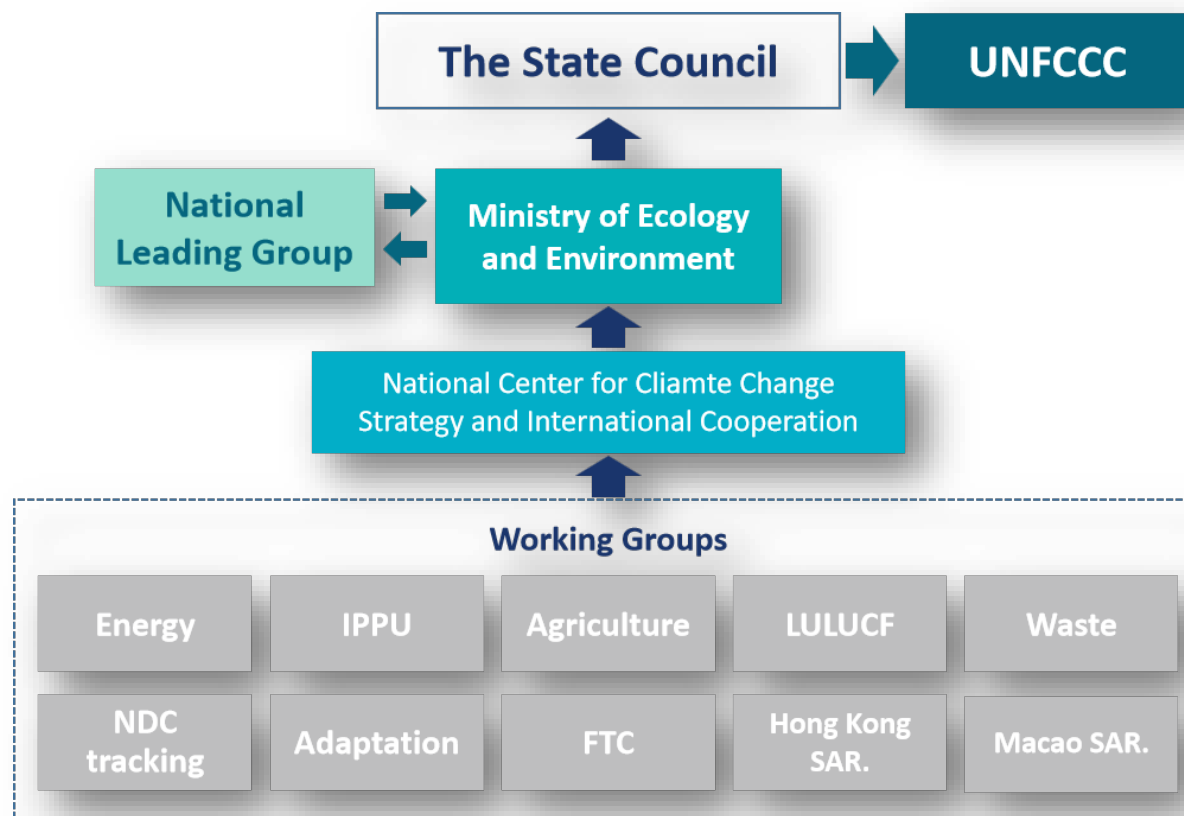
1 Background

In 2007, the State Council established the **National Leading Group on Climate Change and Energy Conservation and Emission Reduction** (referred to as national leading group), which serves as the high-level coordination mechanism for climate-related policies.

The **Ministry of Ecology and Environment** is responsible for coordinating climate change response and emissions reduction efforts, including the preparation of China's Nationally Determined Contributions and transparency reports.

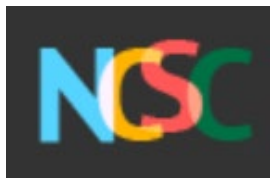
China's first Biennial Transparency Report was prepared under the leadership of the Ministry of Ecology and Environment, with the active participation of relevant ministries and strong technical support from research institutions and experts.

Institutional Arrangements



1 Background

Institutional Arrangements

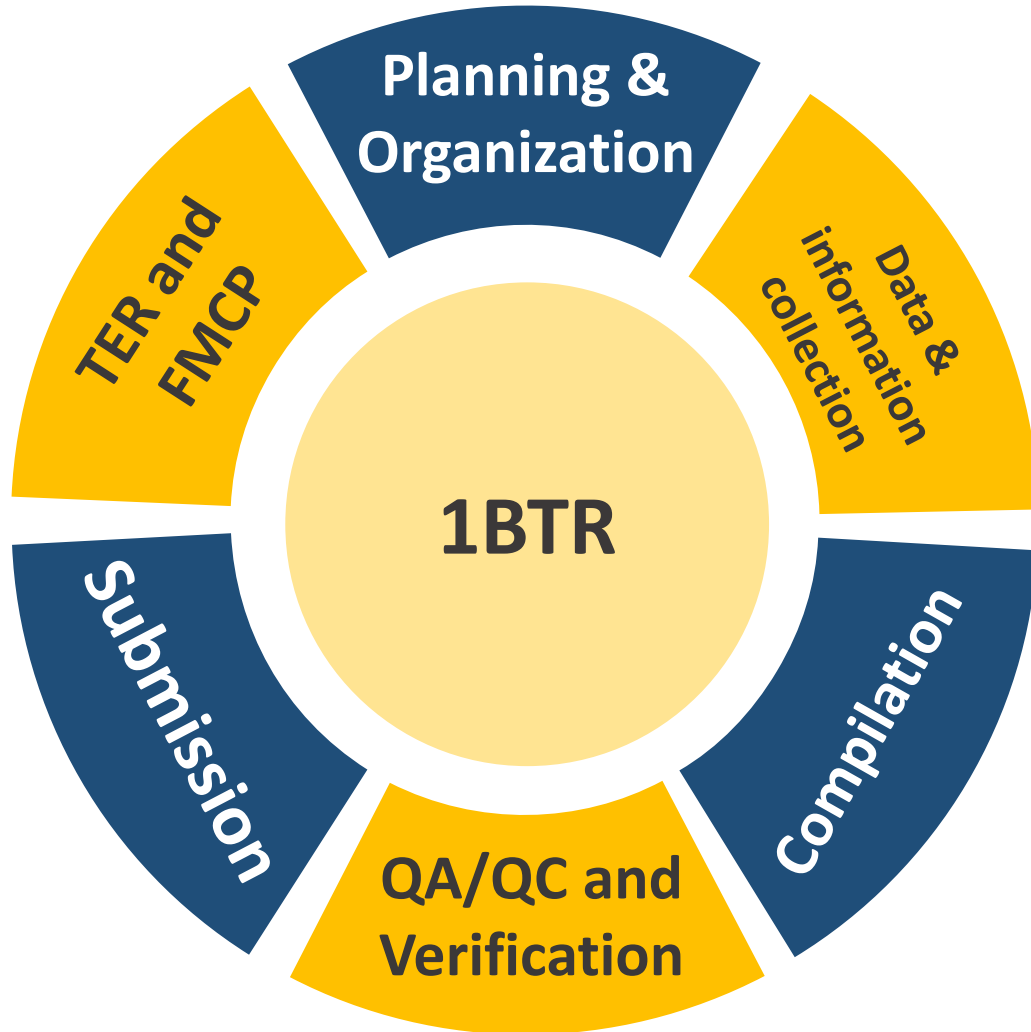


Sector	Lead and main participating organizations
Energy	NCSC; Energy Research Institute (ERI), National Development and Reform Commission (NDRC); Institute of Energy, Environment, and Economy (3E), Tsinghua University (TSU); China Building Materials Federation (CBMF); China Nonferrous Metals Industry Association (CNIA); China National Petroleum Corporation (CNPC); Sinopec Group; China National Offshore Oil Corporation (CNOOC); Shaanxi Yanchang Petroleum (Group) Co., Ltd. (YCPC); and PipeChina, etc.
IPPU	TSU-3E; Foreign Environmental Cooperation Center (FECO), MEE; College of Electromechanical Engineering, Qingdao University of Science and Technology; CBMF; China Petroleum and Chemical Industry Federation (CPCIF) and CNIA, etc.
Agriculture	Institute of Environment and Sustainable Development in Agriculture (IEDA), Chinese Academy of Agricultural Sciences (CAAS); Institute of Atmospheric Physics (IAP), Chinese Academy of Sciences (CAS); National Animal Husbandry Services; Animal Husbandry Technology Extension Stations in major farming provinces; China Agricultural University (CAU); Henan Agricultural University; Inner Mongolia Agricultural University (IMAU); Rural Energy and Environment Agency, Ministry of Agriculture and Rural Affairs (MARA); Satellite Application Center for Ecology and Environment, MEE; and Institute of Agricultural Resources and Regional Planning, CAAS, etc.
LULUCF	Ecology and Nature Conservation Institute, Chinese Academy of Forestry (CAF); Land Consolidation and Rehabilitation Center, Ministry of Natural Resources (MNR); China Institute for Geo-Environmental Monitoring; CAS-IAP; CAAS-IEDA; Institute of Ecological Conservation and Restoration, CAF; Research Institute of Forestry, CAF; and Academy of Inventory and Planning, National Forestry and Grassland Administration (NFGA), etc.
Waste	Chinese Research Academy of Environmental Sciences (CRAES); Research Center for Eco-Environmental Sciences (RCEES), CAS; China Association of Urban Environmental Sanitation (CAUES); Environmental and Sanitation Engineering Center (ESEC) under the Ministry of Housing and Urban-Rural Development (MOHURD); China Urban Construction Design & Research Institute Co., Ltd. (CUCD); Satellite Application Center for Ecology and Environment, MEE; China National Environmental Monitoring Centre (CNEMC); Institute of Urban Environment (IUE), CAS; Guangzhou Institute of Energy Conversion (GIEC), CAS; Institute of Process Engineering (IPE), CAS; Institute of Rock and Soil Mechanics (IRSM), CAS; TSU; Renmin University of China (RUC); Beijing Normal University (BNU); China Everbright Environment Group Limited; and Beijing Enterprises Water Group Limited (BEWG), etc.



1 Background

Compliance cycle



- China's compliance cycle can be divided into **6 stages**, including planning & organization, data & information collection, compilation, QA/QC and verification, submission, TER and FMCP;
- For BTR1, **32 ministries and departments** in total have participated in this process; over **300 experts** have drafted and/or conducted QA/QC and verification for the report; more than **100 meetings** have been held during this process.

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Brief the BTR1 of China

China's BTR1 includes 6 parts:

- ① National GHG Inventory;
- ② Progress in Implementing NDC;
- ③ Climate Change Impacts and Adaptation;
- ④ Finance, Technology and Capacity building needs and support received;
- ⑤ Information of HKSAR on Climate Change;
- ⑥ Information of MSAR on Climate Change.

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Inventory

- **Gases:** CO₂, CH₄, N₂O, HFCs, PFCs, SF₆
- **Sectors:** Energy, IPPU, Agriculture, LULUCF, Waste
- **Method:** 2006 IPCC GL + 2013 Wetland Supplementation GL
GWP from AR5

Major Contributor

77%
Energy Sector

Emission from Energy Sector is about 11,007 Mt

The energy sector is currently the largest source of emissions.

Emissions Trend**Total Emissions (2021)**

12,999

Include LULUCF (Mt CO₂eq.)
Comparing 2020 increase 4.3%

14,314

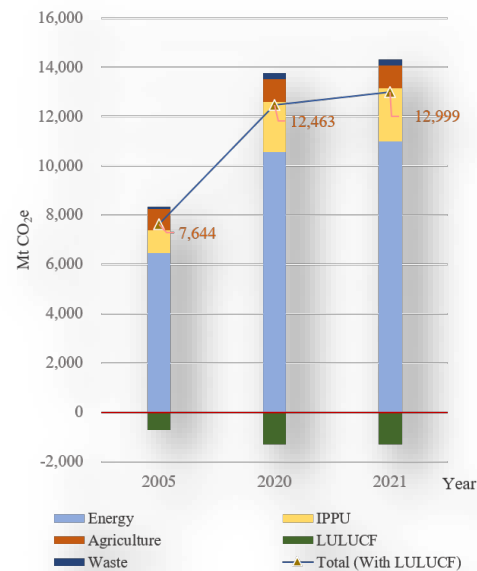
Exclude LULUCF (Mt CO₂eq.)
Comparing 2020 increase 4.0%

1,315

LULUCF Sink
(Mt CO₂ eq.)

-4.2~4.5%

Uncertainty

**Sectors****Gases**

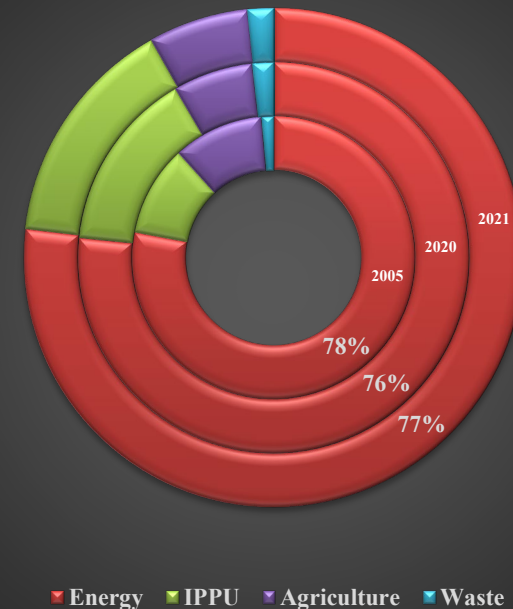
2021

CO₂: 80%

CH₄: 13%

N₂O: 4%

F-Gases: 3%



2030 targets



carbon peak before 2030



Carbon emissions per unit of GDP decreased over 65% compared to 2005



Non-fossil energy accounts for ~25%



Forest stock volume over 6 billion m³ compared to 2005



Wind power + solar installed capacity over 1.2 billion kilowatts

Progress

■ **CO₂ emissions in 2021 reached 11.62 billion tons**

■ **In 2021, it fell by 50.9%**

■ **Reached 17.9% in 2023**

■ **Reached 19.493 billion m³ in 2021.**

■ **Reached ~1.28 billion kilowatts by October 2024.**

The Guiding Opinions on Coordinating and Strengthening Work Related to Addressing Climate Change and Eco-Environmental Protection**1+N policy system**■ “1+N”Policy Framework

- **1** Top-level design opinions (2021.10)
- **N** Peaking Action Plan + Key Area Implementation Plan

■ Key institutional advancements

- **2024.07** Opinions on Comprehensive Green Transformation

■ **Ten Carbon Peak Actions**

- ① **Energy Green and Low-Carbon Transformation Action**
- ② **Energy-saving, carbon-reduction, and efficiency improvement actions**
- ③ **Carbon peaking action in the industrial sector**
- ④ **Urban and rural construction carbon peaking action**
- ⑤ **Green and low-carbon transportation initiatives**
- ⑥ **The circular economy supports carbon reduction efforts**
- ⑦ **Green and low-carbon technological innovation actions**
- ⑧ **Actions to consolidate and enhance carbon sink capacity**
- ⑨ **Green and low-carbon nationwide action**
- ⑩ **Phased and orderly carbon peaking actions in each region**

Covering dimensions

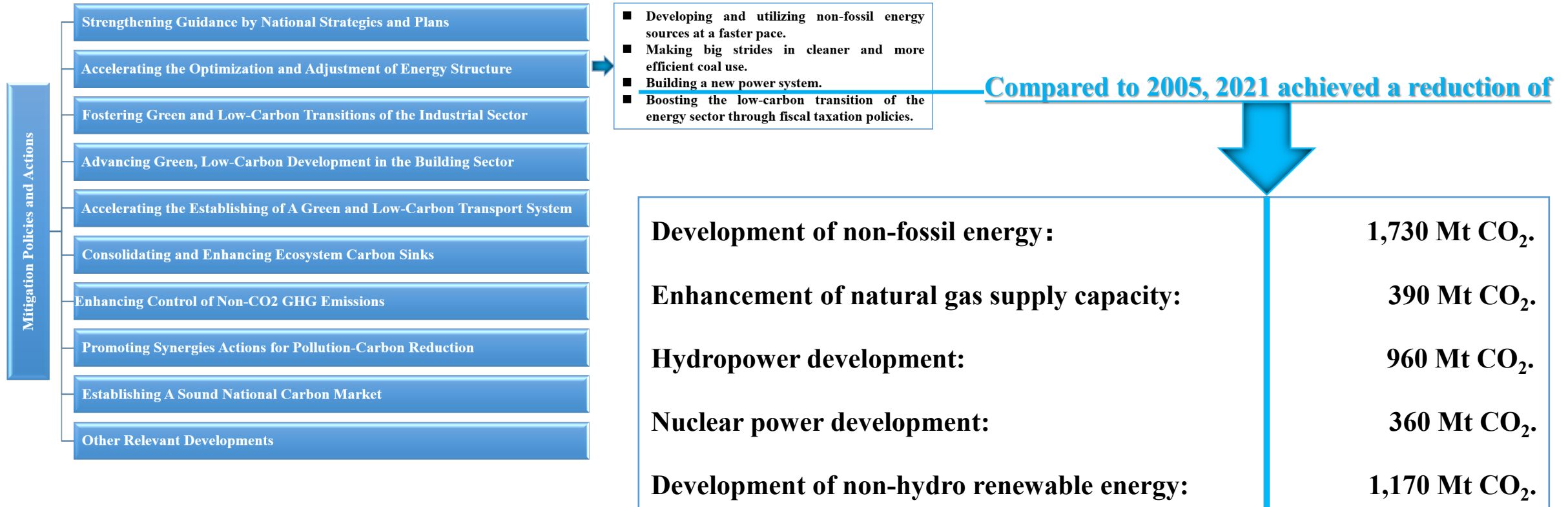
Energy, industry, urban and rural areas, transportation, technology, carbon sinks, and public participation

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Brief the BTR1 of China

Main Content – PaMs



Effects of Mitigation Policies and Actions

3 Review Process and its Conclusion

Centralized Review & TERT

Format: Centralized Review, flexibility applied; focusing on GHG Inventory and NDC tracking;

Written Questions: Starts on 20 August 2025, over 80 questions received;

Review Week: 15—19 September 2025

Technical Expert Review Report: Currently Under preparation

Technical Review Officers: Vitor Gois Ferreira, Davor Vesligaj

Technical Expert Review Team

Expert	Party	Area of Review
Veronika Ginzburg	Russian Federation	GHG Energy, lead reviewer
Julien Jabot	Norway	GHG IPPU
Hiromi Yoshinaga	Japan	GHG general, GHG Agriculture
Juan Luis Martin Ortega	El Salvador	GHG LULUCF
Mayra Rocha	Brazil	GHG Waste, lead reviewer
Orlando Ernesto Rey Santos	Cuba	BTR general, PaMs
Yusuf Serengil	Türkiye	Tracking progress of NDC

Question Types, How they were addressed, and Lessons Learned

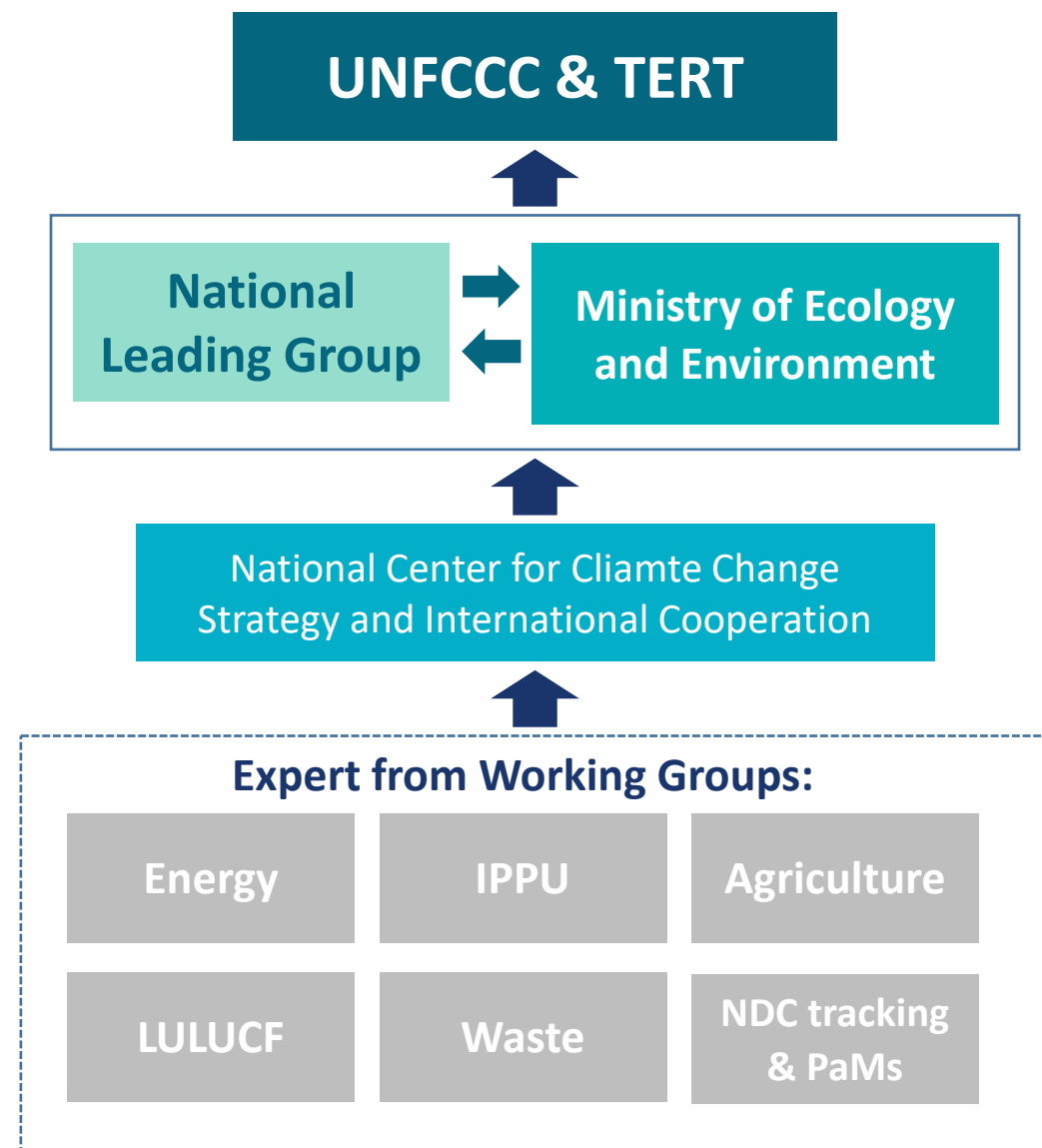
Question Types	How they were addressed	Lessons Learned
<u>Request for explanation and clarification</u>		
Reporting Scope: e.g. information required under certain provisions not included in the BTR.	Identify corresponding provisions, trace the missing information based on the archived records generated during the preparation of the 1BTR, and provide explanations to the experts.	Mostly because such provisions are not applicable to China, or required information are not mature enough to be included due to constraints in methodologies or activity data. The lessons learned here are for provisions that are not applicable or where challenges exist in reporting certain information, provide explanations or responses to these issues instead of simply ‘skipping’ them.
Methodologies, AD, EF: e.g. further elaborate GHG inventory methodologies/accounting approaches, methods in collecting activity data or emissions factors etc.	Conduct in-depth exchanges with the TERT to jointly identify the sources that lead to confusion, and provide targeted explanations or supplementary information accordingly.	The lessons learned here are: Incorporate information provided during the TER into subsequent BTRs to further enhance transparency.
Notation Keys: e.g. Rational in applying different notation keys.	Engage in thorough communication with experts to jointly determine the use of notation keys in light of China’s national circumstances.	The lessons learned here are: Improve the application of notation keys in subsequent BTRs drawing on exchanges with experts.
<u>Request for supplementary information</u>		
Data or information sources etc.	Provide corresponding online links for open data/information sources.	The lessons learned here are: Provide publicly available links in subsequent BTRs drawing on exchanges with experts.

4 Good Practices Sharing

Building on the institutional arrangements for report preparation, efficiency has been improved in responding to questions and communicating with TERT: During the preparation of the 1BTR, China further refined its transparency institutional arrangements, incorporating relevant competent line ministries and technical institutions into the working system. Such system enables China to promptly verify information with relevant authorities or request supplementary information upon receiving questions from the TERT.

leveraging the data platform to systematically archive TER-related records. With support from the GEF CBIT project, China has developed its transparency review platform. The platform advances digitalization of TER and FMCP, enables collaborative work among all stakeholders, and supports end-to-end archiving of all review and consideration processes. This arrangement helps strengthen transparency capacity retention and prevent the loss of institutional memory.

Questions & Lesson Learned



4 Good Practices Sharing

Best Practice Experience

01 Report preparation period

- **Early Start and Early Coordination:** Start drafting work 18-24 months in advance, leaving ample time for cross-departmental coordination.
- **Inter-agency SOP:** Establish documented standard operating procedures (SOP), clarifying the responsibilities and delivery milestones of all inventory compilers.
- **Detailed technical documentation:** Fully documenting every methodological decision step, ensuring process traceability and verification.

02 Review Response Period

- **Proactive communication:** Proactively submit methodological explanations before review to reduce misunderstandings and the risk of rework.
- **Issue Ledger:** Establish a Close Loop Corrective Action Tracking (CLAR) mechanism to achieve closed-loop problem management and assign responsibilities to individuals.
- **Personnel stability:** The core team participates throughout the process, avoiding key knowledge gaps and information loss.

03 Institutional guarantee period

- **Ongoing Training:** Regularly conduct practical training in list preparation and review to enhance the team's professional capabilities.
- **Data governance:** Build an integrated data management platform to support report preparation and quality control.
- **Knowledge Management:** Establish internal knowledge bases and case databases to accumulate review experience and best practices.

Coordination mechanism

- **Cross-departmental work: covering development and reform, industry and information technology, energy, transportation, construction, agriculture, etc**
- **Joint list preparation: a triad of statistics, technology, and expert teams**
- **Quality assurance/quality control (QA/QC) process: a three-level audit system, Cross-validation.**

Institutional features

- **A work model of "unified leadership, division of responsibilities, and expert support. "**
- **An inter-agency information sharing platform**
- **A long-term stable technical team**

5 Outlook for Future

Focus on infrastructure enhancement, build an industry-level emission factor database, and consolidate the foundation for accounting data. Using Satellite remote sensing technique assists LULUCF calculations, expanding the application of lower-tiers methods.

Conduct further capacity-building in accepting TER, including Encourage domestic experts to actively participate in TER expert training, as well as participate in TER of other Parties, transparency workshops etc. Rely on Enabling Activity Projects or CBIT projects supported by GEF, to conduct domestic capacity building activities etc.

Further improve the TER and FMCP data platform: Platform performance will be further improved to foster wider-ranging collaboration and greater work efficiency. The mechanism can further raise the awareness of relevant stakeholders and help them better understand the process and objectives of TER and FMCP.

Terima
Kasih

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