



China

Facilitative Multilateral Consideration of Progress

First Biennial Transparency Report

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National Center for Climate Change Strategy and International Cooperation (NCSC)

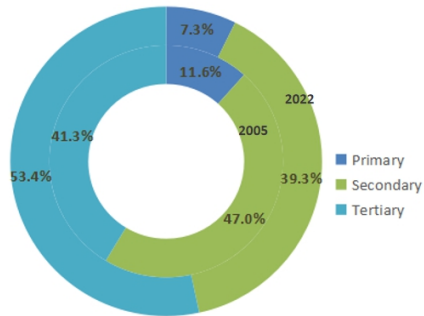
13th June 2026

National Circumstances

Population (2022): 1.412 billion

Economic:

- GDP (Trillion): 121.0 RMB
- GDP (per capita): 85,698 RMB
- Industrial structure has been continuously optimized



Climate characteristic:

- Complex and diverse;
- Frequently extreme weather events, with significant upward trend from 1961 to 2022;

Temperature:

- Significant upward trend (1901-2022): 0.16°C per decade;
- Expected to keep rising;

Precipitation:

- Increasing trend (1961-2022): 4.9 mm (0.8%) per decade;
- Expected to keep rising;

Energy Resources:

- Rich in coal, deficient in oil, limited in natural gas;
- Rich in hydropower resources (some of the largest in the world); Abundant wind and solar power resources;
- By 2025, China has built the world's largest renewable energy system, all electricity demand growth met by new renewables.

中国地图

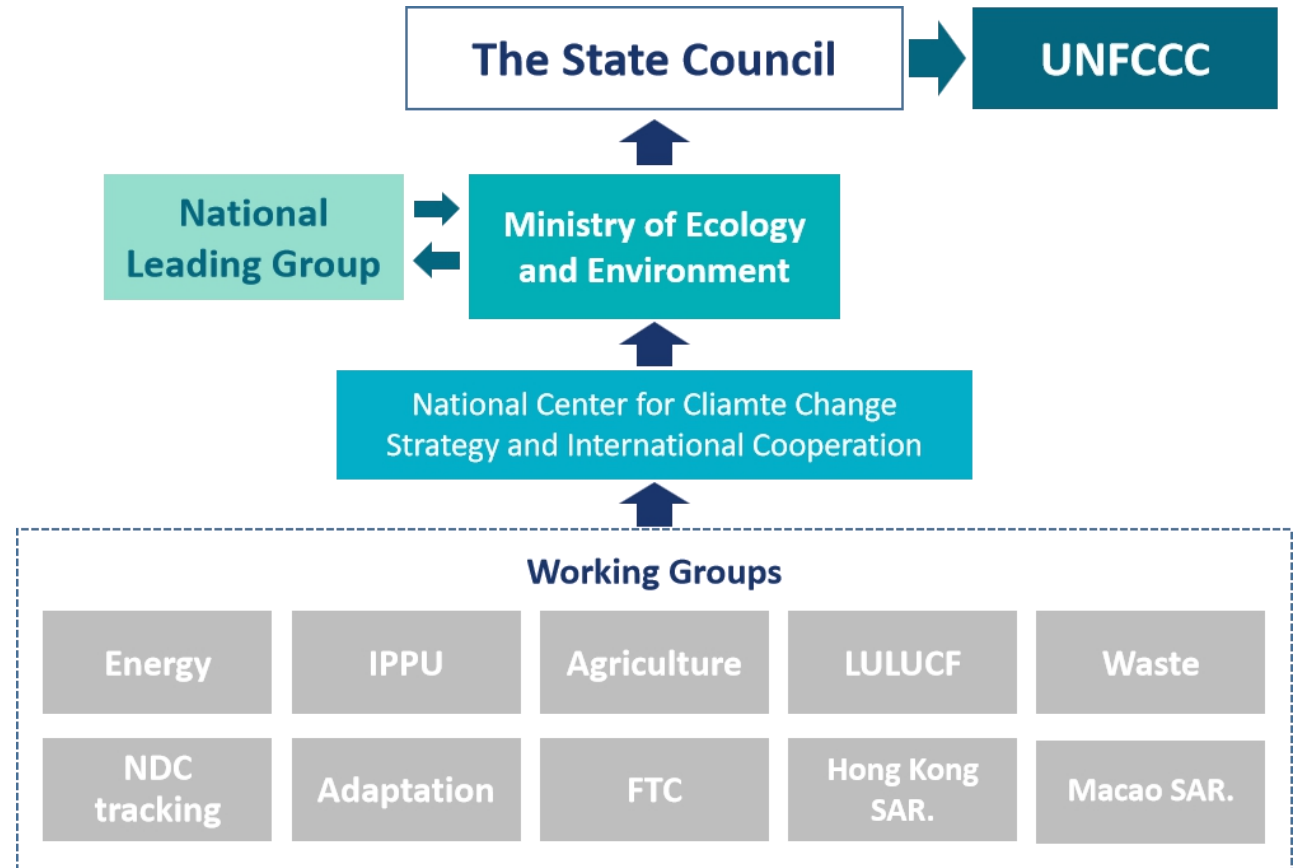


Institutional Arrangements

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.



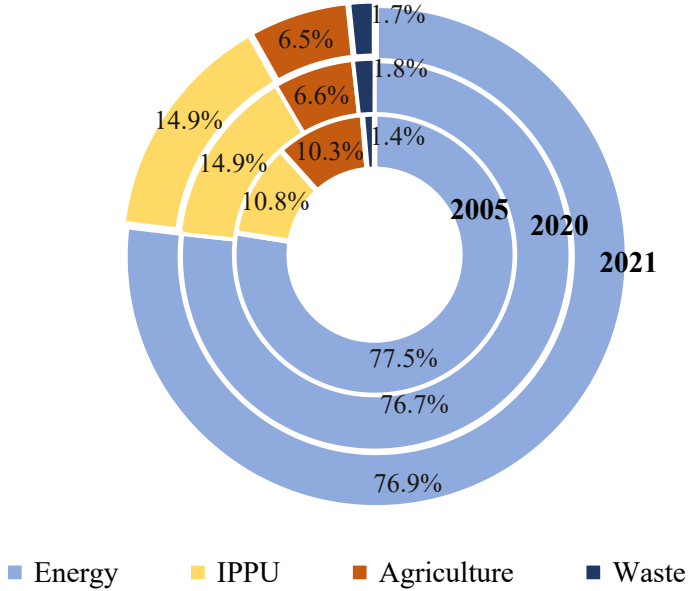
GHG Emissions and Removals



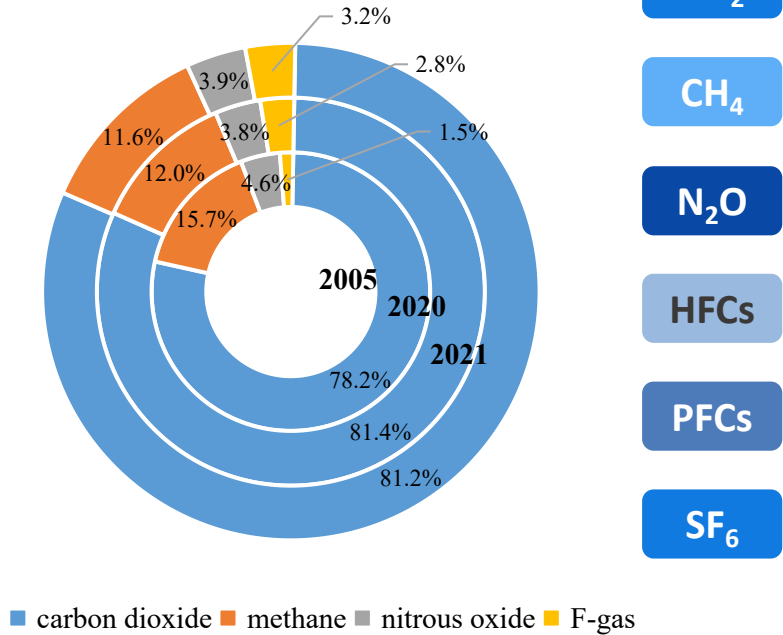
China's GHG Emissions and Removals by Category (Mt)

In 2021, China's total greenhouse gas emissions, including LULUCF, amounted to about **12.999 billion tonnes of CO₂ equivalent**, which was 4.3% higher than in 2020.

Energy and IPPU are the largest emitting sectors in China, and CO₂ is the most dominant GHG.



China's GHG Emissions by Category (without LULUCF)



China's GHG Emissions by Gas

- CO₂
- CH₄
- N₂O
- HFCs
- PFCs
- SF₆

NDC Progress Tracking

In October 2021, China updated its Nationally Determined Contribution and further enhanced its climate commitments.

Aim to have CO₂ emissions peak before 2030

CO₂ emission from Energy & IPPU sectors



11.62 billion tonnes by 2021

By 2030, To Lower CO₂ emissions per unit of GDP by over 65% from the 2005 levels

Energy related CO₂ emissions



Declined by 50.9% by 2021

Increase the share of non-fossil fuels in primary energy consumption to around 25%

Share of non-fossil fuels in total primary energy consumption



**17.9% by 2023
(21.7% by 2025)**

Increase the forest stock volume by 6 billion cubic meters from 2005 levels

Forest stock volume (statistical results)



6.493 billion cubic meters by 2021



Bring the total installed capacity of wind and solar power to over 1.2 billion kilowatts by 2030

total installed capacity of wind and solar power



**1.05 billion kW by 2023
(1.84 billion kW by 2025)**



Mitigation Policies and Measures

To achieve its climate objectives, China has continued to advance mitigation actions across key sectors.



Energy

Accelerating Non-fossil Energy Development and Clean Coal Utilization

- By 2022, installed non-fossil power generation capacity had reached 1.27 billion kilowatts, accounting for nearly half of China's total installed power capacity;
- Renewable energy became the main source of newly installed power capacity;
- Standard coal consumption for thermal power supply declined from 304.9 g/kWh in 2020 to 300.8 g/kWh in 2022;
- By 2025, Nearly **40 per cent** of total electricity consumption came from green electricity, and all newly added electricity demand was met by renewable energy.



Newly demand: **516.1** billion kWh
Newly generation: **519.3** billion kWh



Industry

Developing Green and Low-carbon Industries and Upgrading Traditional Industries

- In 2022, production and sales of **new energy vehicles** increased by **96.9%** and **93.4%** respectively;
- The world's largest photovoltaic (PV) module producer;
- **National Industry-Finance Cooperation Platform**: facilitating **RMB 67.9 billion** in green financing for enterprises.
- In 2021 and 2022, the energy consumption per unit of added value of industrial enterprises above designated size **decreased** by **5.6%** and **1.4%** respectively.



Mitigation Policies and Measures



Transport

Prioritizing Public Transport and Green Aviation

- Actively encourage public transport: share of new energy buses of all buses reached **77.2%**; and that for new energy taxis reached **22.0%**;
- Application of aircraft auxiliary power unit (APU): saved around **240,000 tonnes** of aviation fuel annually and **reduced CO₂ emissions by about 760,000 tonnes**.
- 2020—2022, Temporary air routes: shortened flight distances by 50.33 million km, saving **272,000 tonnes** of fuel and **reducing CO₂ emissions by 857,000 tonnes**.
- Phased out more than 1.1 million diesel trucks below China III emission standards by the end of 2021.



eco carbon sinks

Enhancing Ecosystem Carbon Sinks

- Between 2020 and 2022, China completed **14.2 million hectares** of afforestation and greening, improved **9.11 million hectares** of grasslands, and restored **5.38 million hectares** of desertified and rocky desertification land.
- 19 ecological protection and restoration related projects were included in the first and second batches of central government support under the 14th Five-Year Plan, with **RMB 2 billion** allocated to each project and a total of **RMB 29.4 billion** already disbursed.

Mitigation Policies and Measures



Non-CO₂ Greenhouse Gas Emission Control

- **Methane Emission Control Action Plan:** released in November 2023. it has set the methane control targets for the 14th and 15th Five-Year Plan periods and includes key tasks such as strengthening methane MRV systems, controlling methane emissions in energy, agriculture, waste and wastewater sectors, promoting technology innovation, and enhancing international cooperation.
- **Action Plan for Nitrous Oxide Emission Control:** released in September 2025. focuses on emission reduction, supporting policies, technology innovation, MRV system development, and international cooperation, aiming to improve emission management and reduce nitrous oxide emissions in industries such as adipic acid, nitric acid and caprolactam production.



National Carbon Market

- China's national carbon market system consists of the **National Carbon Emissions Trading Market (national ETS)** and the **National Voluntary Emission Reduction Trading Market (CCER market)**.
- **National ETS:** officially started in 2021. By 2025, coverage expanded from **Power** to include **Steel, Cement and Aluminum smelting industries**;
- By 31 December 2025, cumulative trading volume reached 865 million tonnes, with a total transaction value of RMB 57.663 billion;
- **CCER market:** officially launched in 2024. By the end of 2025, cumulative CCER trading exceeded 9 million tonnes, with transactions surpassing RMB 600 million.



Covers over **60%** of China's CO₂ emissions; Gas types include **CO₂**, **CF₄** and **C₂F₆**.

Climate Change impact and Adaptation

In 2022, seventeen government departments jointly issued the National Climate Change Adaptation Strategy 2035.

Climate change monitoring, early warning and risk management

Improving the comprehensive meteorological observation network, strengthening climate change risk assessment, and enhancing comprehensive disaster prevention, mitigation and post-disaster reconstruction actions;

Adaptive capacity of economic and social systems

Agriculture and food security, health and public health, infrastructure and major projects, cities and human settlements, and climate-sensitive secondary and tertiary industries;

Provincial-level climate change adaptation actions

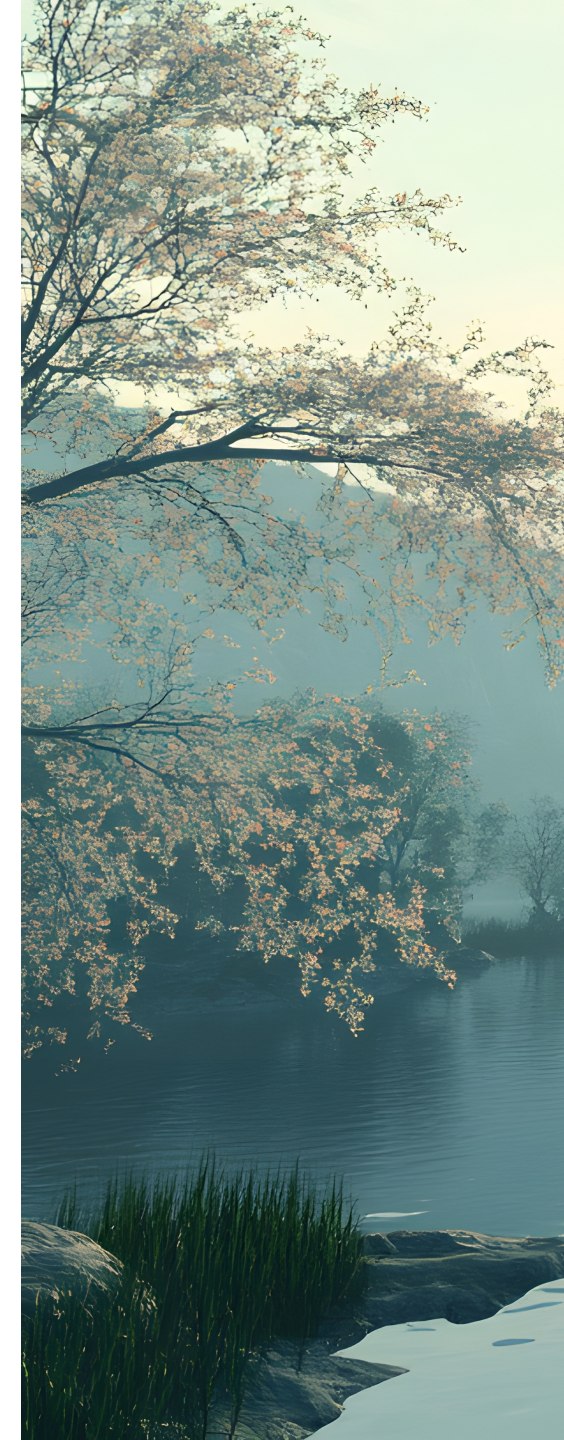
By 2025, 30 provinces (autonomous regions and municipalities directly under the Central Government) and the Xinjiang Production and Construction Corps had issued and implemented provincial climate change adaptation action plans.

Adaptive capacity of natural ecosystems

Water resources and river basins/aquatic ecosystems, terrestrial ecosystems, and marine and coastal zones;

Building a regional pattern for climate change adaptation

Developing climate-adaptive territorial space, strengthening climate change risk assessment and decision-making capacity in key regions, accelerating climate change work on plateau areas, and strengthening the adaptation capacity of key river basins;



Financial, Technical and Capacity-building

China has made every effort, consistent with its national circumstances and development stage, to address climate change.

Public Finance

- Between 2020 and 2022, nationwide general public budget expenditure related to climate change amounted to **approximately 3 trillion yuan**, representing **3.9% of total public expenditure** over the same period (**700 yuan per capita per year**).
- Covered areas include: energy conservation and efficiency improvement, renewable energy, circular economy, natural ecosystem protection, forest resource cultivation, grassland management, natural disaster prevention, disaster relief and post-disaster recovery and reconstruction, meteorological information transmission and management, and meteorological observation.



Achieving long-term climate goals requires substantial financial, technological, and capacity-building support.

Financial support needed and received

- National estimates indicate that China's climate-related financial needs will remain at a very high level in the coming decades. Total financial needs is estimated at **approximately 25.2 trillion yuan** during the period **from 2024 to 2030**, and around **243 trillion yuan** during the period **from 2031 to 2060**.
- Between **2020 and 2022**, China **received approximately 2.62 billion US dollars** in international climate support through multilateral climate funds, multilateral development institutions, and bilateral cooperation channels.

An aerial photograph of a lush green mountain valley. The foreground and middle ground are dominated by terraced rice fields, which are filled with water and reflect the golden light of the rising sun. The fields are arranged in a winding pattern that follows the contours of the hills. In the background, a range of misty, blue-toned mountains stretches across the horizon. The sky is filled with soft, wispy clouds, and the sun is visible in the upper left corner, creating a bright glow and a lens flare effect. The overall atmosphere is serene and peaceful.

Thank You