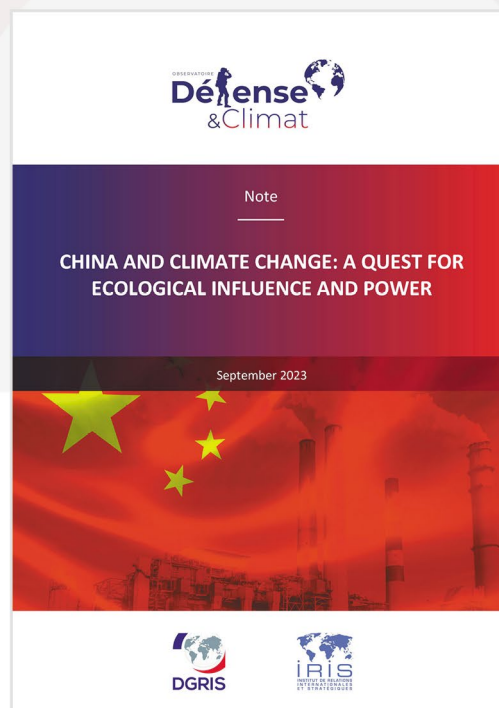


# SYNTHESIS

## CHINA AND CLIMATE CHANGE : A QUEST FOR ECOLOGICAL INFLUENCE AND POWER

September 2023





The Defence and Climate Observatory, launched in December 2016, aims to study climate-related security and defence issues.

It is coordinated by IRIS under contract to the French Ministry of Defence's Directorate General for International Relations and Strategy (DGRIS). The Observatory has a multi-disciplinary and cross-disciplinary team of researchers specialising in international relations, security, defence, migration, energy, economics, climatology and health. It is headed by two scientific coordinators: Julia Tasse and François Gemenne.

The Observatory has initiated numerous collaborations with European partners (Netherlands, Luxembourg) and international partners (Australia, United States, India), international NGOs and national and international public bodies. These initiatives have strengthened cooperation on climate issues and their security implications.

The Observatoire Défense et Climat produces reports and notes, organises restricted seminars and conferences open to the public, and hosts the podcast "On the climate front".

[www.defenseclimat.fr](http://www.defenseclimat.fr)

The Ministry of Defence regularly calls on private research institutes for outsourced studies, using a geographical or sectoral approach to complement its external expertise. These contractual relationships are part of the development of the defence foresight approach, which, as emphasised in the latest White Paper on Defence and National Security, *"must be able to draw on independent, multidisciplinary and original strategic thinking, integrating university research as well as specialised institutes"*.

Most of these studies are made public and available on the Ministry of Defence website. In the case of a study published in part, the Directorate General for International Relations and Strategy may be contacted for further information.

**DISCLAIMER: The Directorate General for International Relations and Strategy or the organisation leading the study cannot be held responsible for the statements made in the studies and observatories, nor do they reflect an official position of the Ministry of Defence.**

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This note on **China's quest for influence and ecological power in the face of climate change** is divided into three parts: the first looks at **the use of climate information for political and diplomatic purposes**; the second looks at the **economic leadership that China is seeking to develop in the context of climate change mitigation and adaptation**; and finally, the third looks at **China's use of HADR (Humanitarian Assistance and Disaster Response) operations as a tool for influence and military power**.

## 1. A quest for diplomatic influence

Over the last two decades, **China has become one of the world's major economic powers**. This rise has resulted in a sharp increase in its greenhouse gas (GHG) emissions, making it the world's largest emitter, emitting 30 % of the planet's total GHGs. Paradoxically, these two decades have also been marked by China's growing awareness of environmental issues - the 2012 Constitution of the Chinese Communist Party introduced **the concept of an "ecological civilisation"** - and by **China's rise to prominence in international discussions on the climate**: at COP15 in Copenhagen, China was still perceived as a blocking force in the agreements, but at COP21 it became a **facilitating and indispensable force in the Paris Agreement**.

**Strengthening China's discursive influence within global climate governance has become one of the main diplomatic priorities of the Chinese Communist Party (CCP)**. This influence is largely based on **the principle of common but differentiated responsibility (PCDR)**, which will permeate the speeches of the Chinese authorities as well as media productions, and will be included in the 2021 White Paper. **The PRC is at the heart of China's leadership strategy for developing countries**, a strategy based on two pillars: **highlighting the shortcomings of the West's handling of the climate problem, and making China a "responsible great power" among developing countries**. This strategy is also based on **promoting adaptation by the most vulnerable countries, an area largely neglected by the West, which tends to favour mitigation**.

## 2. A quest for economic leadership

Climate change represents an opportunity for China to **develop its economic power by investing in the various stages of the renewable energy technology value chain**. To support this ambition, Beijing is seeking to promote these transition policies internationally and to set itself up as an example, in particular through large-scale international projects that provide it with platforms from which to exert its influence. In this context, **adaptation, the central pillar of China's informational battle against the West, is also at the heart of a number of initiatives**. China is offering to help build infrastructures that are adapted to and resilient in the face of climate change.

**In its quest for power, China is also developing low-carbon resources, on which other powers are increasingly dependent**. It has positioned itself as a **leader in the markets for critical metals, rare earths and green energies, which are essential to the energy transition**. By 2022, the country was the world's leading refiner of metals, and by 2023 it would have the largest reserves of rare earths. A

key player in the "green" energy market, China also dominates exports of solar panels, wind turbines and lithium battery components. **This dependence on China is made all the stronger by the fact that it controls critical infrastructure around the world, which can potentially be used to boost its own economy or put pressure on other countries.**

### 3. A quest for military power

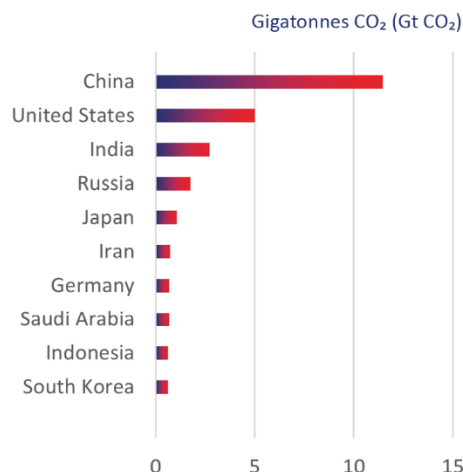
Since 2000, China has been **one of the top five suppliers of foreign humanitarian aid among non-OECD countries**. From this point of view, **the growing climate vulnerability of a number of countries, particularly island developing countries, represents a major opportunity for China to expand its soft power through humanitarian aid**. China's proactive approach to humanitarian aid is particularly well received in the Indo-Pacific and in developing countries. China is capitalising on the resentment that some of these countries feel towards the United States and Europe, which are seen as devoting too many resources to the war in Ukraine to the detriment of their development needs.

While HADR missions are a means of broadening and strengthening China's diplomatic relations, they are also **a means of extending its military power**. **Climate disasters can therefore provide China with an opportunity to deploy its armed forces on foreign territories, put its operational skills to the test, develop new capabilities in cooperation with other armies, conduct intelligence operations or even establish a physical presence on foreign territories**. **The rise of China as a HADR power is also an opportunity to occupy claimed territories, such as Taiwan**. The intensification of weather and climate hazards in the territory could eventually justify China's intervention and enable it to reassert its claim to sovereignty.

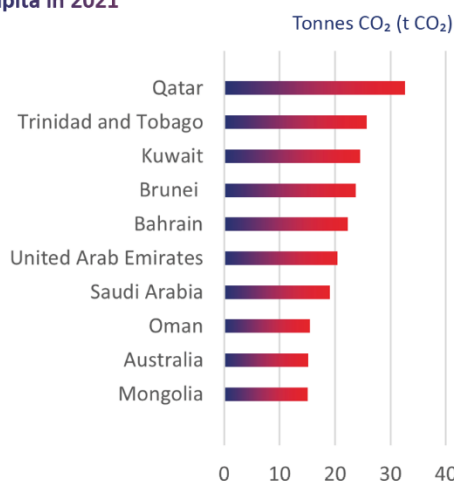
**More generally, China's involvement in HADR missions is conditioned by its political and geostrategic interests**, as it finds it difficult to dissociate humanitarian issues from geostrategic dynamics of influence and power. **The prioritisation of these interests in the context of disaster relief can affect the effectiveness of HADR operations, the quality of the relief provided and even hinder aid to populations in favour of interests of influence and/or power**. In this context, climate change could lead to China increasingly exploiting the increasingly recurrent context of environmental emergencies.

States' responsibility regarding climate change is a significant pillar in strategies of influence on the international stage. This responsibility is primarily measured by national greenhouse gas (GHG) emissions: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and tropospheric ozone (O<sub>3</sub>). Due to data availability and timeliness, only CO<sub>2</sub> emissions are considered in the following infographics. Although CO<sub>2</sub> is the primary greenhouse gas, considering other GHGs, especially methane, can significantly alter the numerical understanding of the climate responsibility of states, such as increasing the responsibility of countries like India or Brazil.

**a) The 10 largest carbon dioxide emitters in 2021**

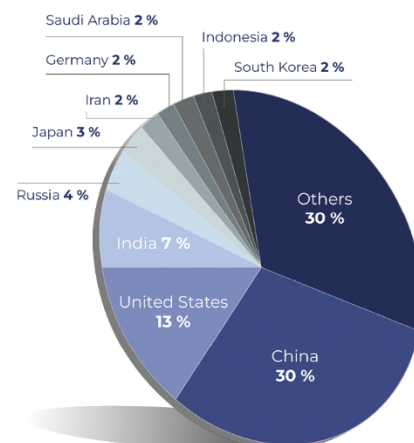


**b) The 10 largest carbon dioxide emitters per capita in 2021**

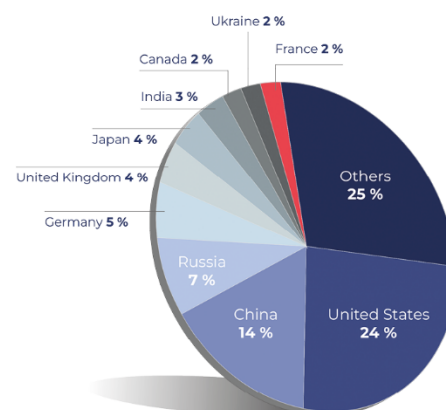


These figures consider carbon dioxide emissions from the use of coal, oil, and gas (combustion and industrial processes), gas flaring, and cement production. Emissions related to land use and forest management are not included. These are territorial emissions and not associated with imports. Based on total carbon dioxide emissions in 2021 (a), China emerges as the world's top emitter, far ahead of the United States, India, Russia, and Japan. Based on per capita carbon dioxide emissions, neither the United States (15.09 t CO<sub>2</sub>) nor China (8.12 t CO<sub>2</sub>) are among the top ten emitters in 2021. The United States ranks 11th, and China ranks 27th, after Canada (13th), Russia (17th), Japan (24th), Belgium (25th), and Germany (26th). France is 60th with 4.53 t CO<sub>2</sub>. The distribution of carbon dioxide emissions, in other words, the climate responsibility of states, can still lead to different interpretations depending on whether one looks at emissions for the year 2021 or cumulative or historical emissions. These reveal the United States as the top historical emitter, just ahead of China and Russia. Moreover, several European countries are at the top of the list: Germany, the United Kingdom, France, and Ukraine.

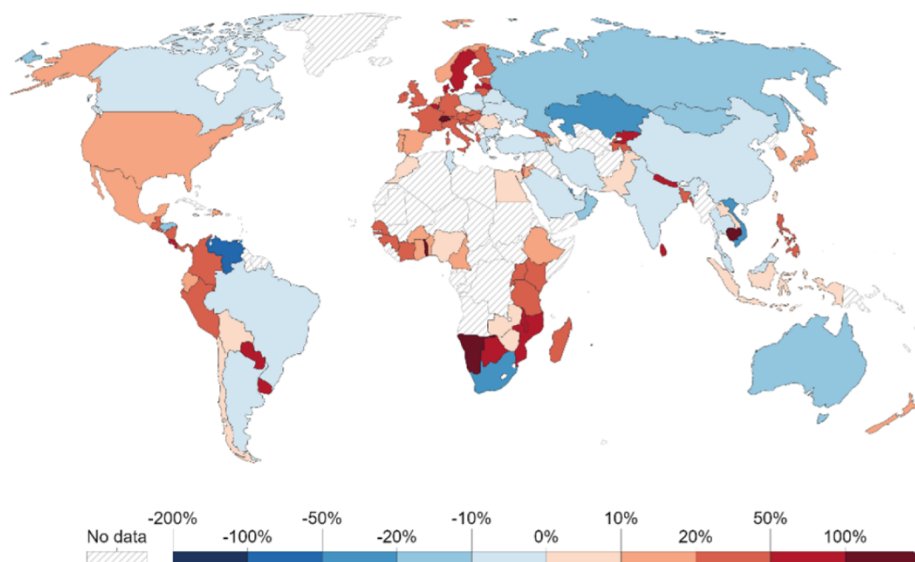
**c) Global distribution of carbon dioxide emissions in 2021**



**d) Distribution of historically cumulative carbon dioxide emissions**



**e) Trade-related carbon dioxide emissions map**



The countries marked in red on this map (e) are net importers of emissions: they import more CO<sub>2</sub> through commercial trade than they export. The countries marked in blue are net exporters of emissions, meaning they export more CO<sub>2</sub> through commercial trade than they import. On this map, the United States has a value of 10.21 %, which means their net CO<sub>2</sub> import is 10.21 % of their national emissions. Thus, emissions related to consumption in the United States are 10.21 % higher than emissions based on their production. In contrast, China is assigned a value of -8.42 %, meaning that emissions related to its consumption are 8.42 % lower than emissions based on its production. This map highlights an east-west contrast: most Western European countries, the Americas, and many African countries are net importers of emissions, while most Eastern European and Asian countries are net exporters.





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