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FOLLOW THE MONEY CHINESE CLIMATE-RELATED FINANCE TO THE GLOBAL SOUTH

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China could play a much bigger role in financing efforts to tackle global climate change. Chinese investment in climate-related projects in developing countries is significant. However, it remains limited and falls short of the amount pledged by Beijing. COP28 provides an opportunity for China to renew its climate commitment to the Global South.

- > Through its “South–South” mechanism, Beijing has built the diplomatic and institutional frameworks to provide climate-related finance to the Global South, but it has not yet lived up to its potential. China has delivered 10% of the \$3.1 billion pledged for a dedicated fund to finance climate cooperation with the Global South in the seven years since the launch.
- > China spent over \$1 billion a year on average on climate-related projects in the Global South between 2013 and 2017, that is less than 2% of the hundreds of billions of dollars spent on infrastructure projects through the Belt and Road Initiative and other official programmes.
- > Bilateral and regional partnerships and international initiatives have been the main mechanisms of Beijing’s climate diplomacy vis-à-vis the Global South. China has delivered these programmes in the form of in-kind donations, grants, loans or export credits.
- > Making climate finance available, accessible, and affordable is a key goal of this year’s UN climate talks in Dubai. China could support the goal by laying out a clear roadmap to deliver the pledged ‘South-South’ climate fund, supporting reforms in multilateral development banks to scale up climate finance, and working with like-minded partners to explore new and innovative sources of financing.



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Introduction

Climate cooperation with the Global South is a critical part of China's foreign policy, as Beijing seeks to showcase its image as a responsible major power and increase its influence on the world stage. China's position as the largest economy in the developing world and an influential geopolitical actor made it the de facto leader of the developing country bloc in international climate negotiations. Developed nations' failure thus far to live up to their promises on climate finance to the developing world only served to solidify China's position.

At the COP27 climate conference in 2022, countries struck a historic deal to address climate impacts, by agreeing on funding arrangements for "loss and damage", including a dedicated fund. While the design of the UN climate treaty does not oblige China to contribute to this fund or other international climate finance mechanisms, there are growing expectations for China to support developing countries financially as it grows richer, even if not through the newly established fund.¹

This paper aims to provide an overview of China's climate engagement and finance to countries in the Global South. It takes stock of the different channels through which China conducts its climate diplomacy with developing countries and the scale of Chinese climate-related finance abroad. The analysis finds that while China's climate-related finance to the Global South is significant, it remains limited compared to the overall scale of China's overseas investment.

China's climate engagement with the Global South

China has been engaging countries in the Global South on climate change using bilateral channels and regional and international platforms. There have been attempts to "green" its flagship overseas investment programme – the Belt and Road Initiative (BRI) – over the years, and some BRI investment is climate-related, if not intentionally. In addition to providing financial and technical support to developing countries to address climate change, these initiatives were also intended to "increase China's influence and voice on the world stage",²

¹ Gu Baihe et al, January 2023, **COP27:成果、挑战与展望** (COP27: progress, challenges, and outlook), *Climate Change Research*, 19(1)

² State Council of the People's Republic of China, October 2021, **Working Guidance For Carbon Dioxide Peaking And Carbon Neutrality In Full And Faithful Implementation Of The New Development Philosophy**, p 5



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“showcase China’s image as a responsible major power”³ and “build solidarity among developing countries”.⁴ Business interests play an important role in China’s overseas finance.⁵

Bilateral initiatives

- > China has been building bilateral climate partnerships with developing countries under the “South–South Climate Cooperation” banner.
- > China has signed 45 related agreements with 38 countries on climate mitigation and adaptation projects since 2011,⁶ usually through small-scale infrastructure projects (e.g. small solar farms), donations (e.g. energy efficiency lighting, electric buses), and training programmes (e.g. low-carbon cities, carbon trading).
- > Most of these activities are one-offs without ex-post evaluation or considerations of the projects’ contributions to the recipient countries’ climate goals.⁵ Strengthening long-term planning and evaluation as well as transparency around these initiatives could significantly increase the impact of China’s South–South climate engagement.

Regional initiatives

- > **Africa:** A Declaration on China–Africa Cooperation on Combating Climate Change was published at the 2021 Forum on China–Africa Cooperation. The declaration proposed a high-level forum on climate change and a three-year action plan. It also reaffirmed China’s solidarity with African countries on climate finance commitments, promised increased investment in low-carbon projects, and pledged cooperation on adaptation.⁷
- > **Pacific Islands:** In 2022, China set up the China–Pacific Island Countries Climate Action Cooperation Center,⁸ which aims to carry out demonstration

³ Gao Xiang (Energy Research Institute at National Development and Reform Commission), 2016, [中国应对气候变化南南合作进展与展望](#) (Progress and Perspectives on Climate Change South-South Cooperation of China), *Journal of Shanghai Jiaotong University (Philosophy and Social Sciences)*

⁴ Zhang Zhiqiang et al, March 2022, [积极参与和引领应对气候变化南南合作：现状、问题与对策](#) (Actively Participate and Lead the South-South Cooperation on Climate Change: Situation, Problem and Countermeasures), *Journal of Environmental Economics*, 2022(1)

⁵ Chris Humphrey and Yunnan Chen, ODI, September 2021, [China in the multilateral development banks](#)

⁶ Global Times, Nov 2022, [China’s Envoy urges developed countries to ‘make pie bigger’ on climate finance](#)

⁷ Ministry of Foreign Affairs of the People’s Republic of China, December 2021, [Declaration on China-Africa Cooperation on Combating Climate Change](#)

⁸ Ministry of Foreign Affairs of the People’s Republic of China, May 2022, [Fact Sheet: Cooperation Between China and Pacific Island Countries](#)



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projects and share China’s experience on green and low-carbon development and adaptation.⁹ China has provided training sessions on tackling climate change for green and low-carbon development and in-kind donation of green energy technology to Pacific Islands countries.

- > **Latin America:** China and the Community of Latin American and Caribbean States (CELAC) also highlighted the need for cooperation to respond to climate change, on energy transition and low-carbon industries. In 2021, China promised financial support to the small island states in the region but did not specify the amount or concrete projects.¹⁰
- > Information on financial commitments and project delivery on these regional initiatives is sparse and vague. Publicly available data on cooperation agreements usually lacks concrete numbers on financial commitments or details around individual projects and timelines.

International initiatives

- > China has attempted to “green” the BRI. President Xi first raised the idea of a “green silk road” in 2016.¹¹ Chinese institutions have since worked with international partners to launch guidance to limit energy-intensive projects within the BRI¹² and voluntary green principles to guide financial institutions investing in BRI countries.¹³ In 2021, President Xi also pledged to “step up support for developing countries in green and low-carbon energy”.¹⁴
- > The recently launched Global Development Initiative (GDI), in contrast to the BRI, has an emphasis on delivering UN’s Sustainable Development Goals over “hard infrastructure” such as roads and railways. China has sought to position the GDI within existing multilateral institutions. Last September, it convened a meeting of the “Group of Friends of the GDI” on the side-lines of the UN annual assembly. The meeting was attended by 60 countries and the heads of international organisations such as United Nations Development

⁹ Ministry of Foreign Affairs of the People’s Republic of China, April 2022, **Vice Foreign Minister Xie Feng Attends the Unveiling Ceremony of China-Pacific Island Countries Climate Action Cooperation Center**

¹⁰ China-CELAC Forum, Dec 2021, **China-CELAC Joint Action Plan for Cooperation in Key Areas (2022-2024)**

¹¹ Ministry of Foreign Affairs of the People’s Republic of China, June 2016, 习近平：携手打造绿色、健康、智力、和平的丝绸之路 (Xi Jinping: Join Hands to Build a Green, Healthy, Intellectual, and Peaceful Silk Road)

¹² Green Finance and Development Center, April 2019, **Belt and Road Initiative International Green Development Coalition (BRIGC)**

¹³ UK-China Green Finance Centre, 2019, **Green Belt and Road**

¹⁴ Xinhua, September 2022, **Full text of Xi’s statement at the General Debate of the 76th Session of the United Nations General Assembly**



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Programme, Food and Agriculture Organisation, and International Maritime Organisation.¹⁵

- > The GDI will receive financial backing through the \$4 billion Global Development and South–South Cooperation Fund (previously South–South Cooperation Assistance Fund).¹⁶ While there is no information on climate-related finance under this fund, Beijing has put forward a Global Clean Energy Cooperation Partnership, as part of the GDI, to expand investment in clean energy.¹⁷

China’s climate-related finance to the Global South

The South–South Climate Cooperation Fund

The Chinese government has set up a 20 billion yuan (\$3.1 billion) China South–South Climate Cooperation Fund dedicated to financing climate cooperation with the Global South. There was no timeline attached to the pledge. It was made public in a US–China joint declaration ahead of the Paris climate summit in 2015.¹⁸ At the time, the fund was the largest single pledge on climate made by any country to the developing world.¹⁹

By the end of 2022, the fund has delivered 2 billion yuan (\$286 million) worth of projects,²⁰ or 10% of the pledged amount (in yuan) in the seven years since the fund’s inception (Figure 1), according to Chinese official data. Analysts^{21,22} have pointed to several reasons for the fund’s sluggish pace of disbursement, including the complexity of coordinating across ministries in the project delivery

¹⁵ Ministry of Foreign Affairs of the People’s Republic of China, September 2022, **Press Statement of the Ministerial Meeting of the Group of Friends of the Global Development Initiative**

¹⁶ Business Standard, June 2022, **Xi Jinping announces additional \$1 billion for Global Development Fund**

¹⁷ Ministry of Foreign Affairs of the People’s Republic of China, September 2022, **Concept Note on the Global Clean Energy Cooperation Partnership**

¹⁸ The White House, September 2015, **US-China Joint Presidential Statement on Climate Change**

¹⁹ Moritz Weigel and Alexander Demissie, December 2020, **Achieving the SDGs in Africa Through South-South Cooperation on Climate Change with China**

²⁰ State Council Information Office of the People’s Republic of China, November 2022, **Envoy: China supports developing countries’ demand on climate finance**; amount in US dollar converted using exchange rate at time of the announcement.

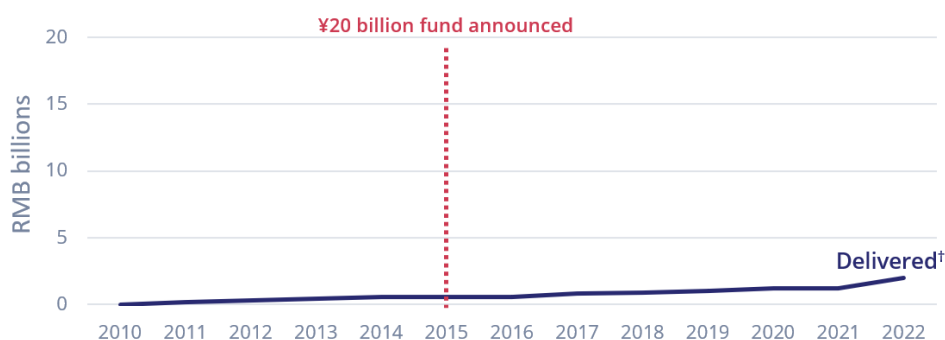
²¹ Zhang Zhiqiang et al, March 2022, **积极参与和引领应对气候变化南南合作：现状、问题与对策** (Actively Participate and Lead the South-South Cooperation on Climate Change: Situation, Problem and Countermeasures), *Journal of Environmental Economics*, 2022(1)

²² Xi Wang and Mo Feifei (Foreign Environmental Cooperation Center, Ministry of Ecology and Environment), 2020, **“十四五” 应对气候变化南南合作形势分析与对策建议** (State of play of South-South cooperation on climate change and policy recommendation in the 14th Five-year plan), *Environmental Protection 2020*(16)



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Chinese financing on South-South climate cooperation Pledged vs. Delivered



† Cumulative amount

Source: Publicly disclosed data from the Ministry of Ecology and Environment and National Development and Reform Commission, E3G Analysis



Figure 1: As of 2022 China had only delivered 10% of the 20 billion yuan it had pledged to finance climate cooperation in the Global South.

and the consolidation of international development responsibilities to the recently established China International Development Cooperation Agency.

Chinese overseas investment

In addition to the South–South Climate Cooperation Fund, a host of government ministries and state-owned financial institutions are investing in climate-related activities in the developing world. These investments do not necessarily fall under the “South–South” climate cooperation banner. These projects are driven by a combination of the following factors: priorities of the implementing government agencies; expanding export opportunities, including for green technologies;²³ and securing the supply of strategic resources.²⁴ Nevertheless, the sum of these investments provides a fuller picture of China’s climate diplomacy towards the Global South.

²³ State Council of the People’s Republic of China, October 2021, **Working guidance for carbon peaking and carbon neutrality in full and faithful implementation of the new development philosophy**

²⁴ Ministry of Foreign Affairs of the People’s Republic of China, October 2022, **Report to the 20th National Congress of the Communist Party of China**

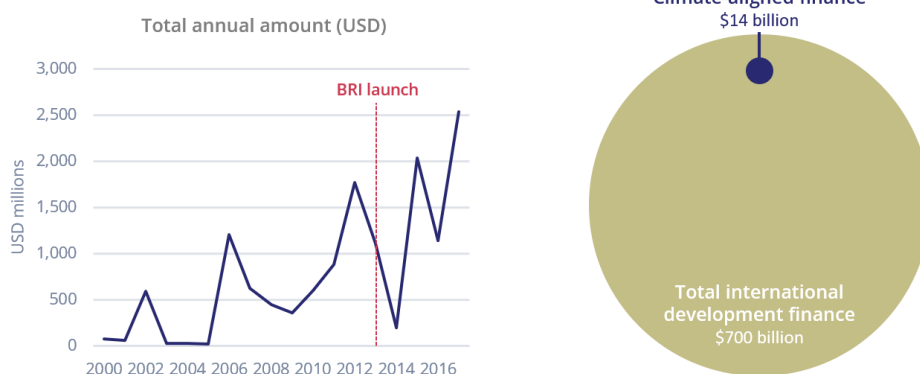


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Our analysis shows that Chinese investment in climate-related projects²⁵ in the developing world is significant, but remains limited to the tens of billions of dollars spent annually in financing developing countries through the BRI and other official programmes. The analysis covers overseas development finance data from 2000 to 2017.^{26,27}

- > The amount of climate-related spending is small relative to the total amount of international development finance from China to the developing world. Climate-related projects in the Global South represents 2% of Chinese international development finance annually going to climate-related projects between 2000-2017 (Figure 2). Between 2013 (the year the BRI was launched) and 2017, China spent \$1.4 billion a year on average on climate-related projects in the Global South.

International climate-aligned finance from China to developing countries, 2000-2017



Source: AidData (2021), WRI (2022), E3G Analysis; 'Developing countries' include 141 countries eligible for official development assistance from OECD Development Assistance Committee.



Figure 2: Chinese climate-related projects in the Global South have been on the rise since the launch of BRI (left). Climate-related finance represents 2% of Chinese international development finance (right).

²⁵ While it was not possible to independently verify the alignment of every project included in this analysis with internationally agreed principles on climate finance, we have strived to only scope in projects that would make a meaningful contribution to climate mitigation and adaptation objectives. The analysis cross referenced the project information in the dataset with principles and definitions from relevant standards from the **OECD, Green Climate Fund, International Development Finance Club** and **Climate Policy Initiative**, to identify projects that are “climate-related”. See the Appendix for details on the research methodology.

²⁶ AidData, September 2021, **AidData’s Global Chinese Development Finance Dataset, Version 2.0**

²⁷ World Resources Institute, February 2022, **China Overseas Finance Inventory Database by the World Resources Institute (WRI)**

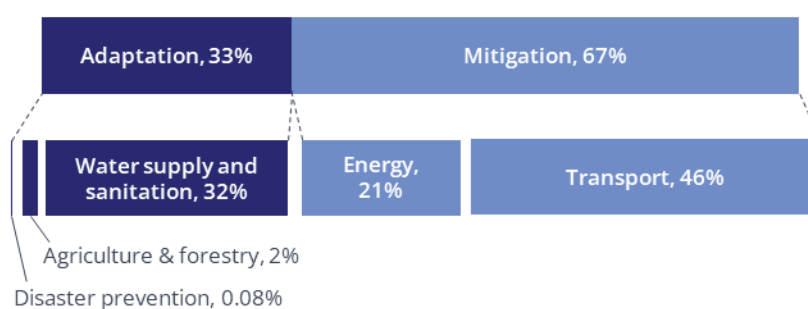


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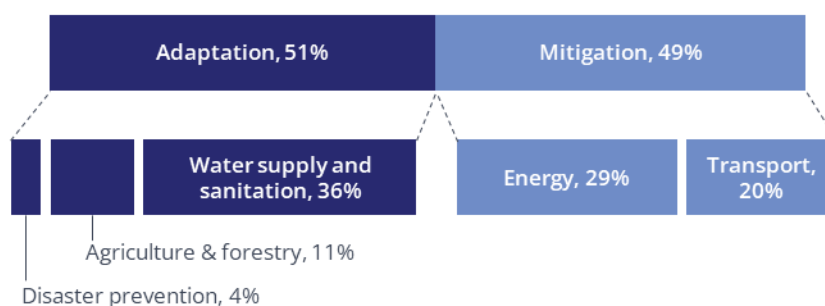
- > Granular project-level data beyond 2017 is not yet available for the purpose of this analysis. However, it is unlikely that the amount of climate-related finance has increased since 2017. The total amount of BRI investment began to shrink from 2018 and there was no significant increase in the level of solar and wind energy investment to BRI countries during the same period.²⁸
- > About two-thirds of climate-related financing goes to mitigation, including in the energy (e.g. solar and wind farms) and transport sectors (e.g. urban metro systems). There is more of a balance between mitigation and adaptation in terms of the number of projects. Climate adaption projects, such as for disaster prevention, are usually smaller in scale and require less capital investment than mitigation projects (Figure 3).

Total Chinese climate-aligned finance, 2000–2017, by type and sector

% of total commitment in USD



% of project count



Source: E3G analysis of AidData, 2021; WRI, 2022



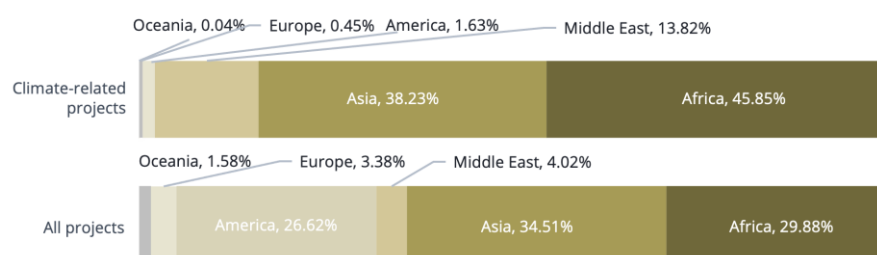
Figure 3: The majority of financing is mitigation-related, but there is a balance between mitigation and adaptation in terms of the number of projects.

²⁸ Christoph Nedopil, January 2023, **China Belt and Road Initiative (BRI) Investment Report 2022**



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Chinese overseas finance (% of total commitment in USD), 2000-2017, by geography



Source: AidData (2021), WRI (2022), E3G Analysis



Figure 4: Most of the climate-related finance was delivered to Africa and Asia.

- > Most of the climate-related finance from China was delivered to countries in Africa (46%) and Asia (38%). The proportion of climate-related finance to Latin America (1.6%) is much lower than China's allocation of overall development finance to the region (24%) (Figure 4).
- > 1.1% or \$155 million of all Chinese climate-related finance to developing countries went to Small Island Developing States (SIDS), countries that are the most vulnerable to climate impacts and that account for less than 1% of the world's population.
- > In contrast, China provided 3.8%, or \$26 billion, of its overall development finance commitments to SIDS over the same period. Papua New Guinea, Cuba, Marshall Islands, Jamaica received over 70% of that financing.
- > An overwhelming majority of the climate-related spending (73%) is provided in the form of loans or export credit by China's state-owned banks: the China Development Bank and the Export-Import Bank of China. Another 10% of the financing comes from state-owned commercial banks including the Bank of China and the Industrial and Commercial Bank of China. The remaining amounts are financing from the government (e.g. Ministry of Commerce) or from unspecified sources.



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Conclusion

Climate finance will become an increasingly important means to support development in the Global South. Trillions of dollars per year will be needed in the coming decades to finance developing countries to transition to low-carbon energy and industrial systems and to adapt to worsening climate impacts, which for many climate-vulnerable countries are existential threats. Without filling the gap on climate finance, neither China nor any other major powers will be able to win a battle of narrative, influence, or diplomacy in the developing world.

Through its “South–South” mechanism, Beijing has built the diplomatic and institutional frameworks to provide climate-related finance to the Global South, but it has not yet lived up to its potential. The Chinese government should step up its financing to developing countries to support their climate transitions and to build more resilience to deal with climate impacts.

Making climate finance available, accessible, and affordable, particularly to the Global South, is a key goal of this year’s UN climate talks in Dubai. China could support the goal by laying out a clear roadmap to deliver the pledged \$3.1 billion fund for climate cooperation with the Global South, supporting reforms in multilateral development banks to scale up climate finance, and working with like-minded partners to explore new and innovative sources of financing. This would not only put China in a proactive position in responding to mounting pressure to contribute to international climate finance through the UN frameworks, but also put pressure on traditional donors in the developed world to fulfil their climate finance pledges. This could drive a race to the top in mobilising the trillions needed in transitioning to green and resilient economies worldwide.



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About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

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Appendix

Data source

The Global Chinese Development Finance Dataset by AidData and the China Overseas Finance Inventory Database by the World Resources Institute (WRI) were used in this analysis. The WRI dataset was used to complement the AidData dataset on projects in the power generation sector, as we were not able to identify the type of generation technology in the project descriptions in the AidData dataset and hence unable to separate the “climate-related” renewable energy projects from the fossil-based generation projects.

The AidData dataset covers 13,427 projects worth \$843 billion across 165 countries from 2000 to 2017. Projects with financial or in-kind support from government institutions in China are included, e.g. central, regional or local government agencies, state-owned enterprises, state-owned policy banks, state-owned commercial banks, state-owned funds, non-profit government organisations. The COFI dataset covers 443 unique financial transactions amounting to \$106 billion from 2000 to 2020 (only data from 2000 to 2017 were used in this analysis) in the power sector, including equity and debt investments financed by Chinese policy and commercial bank loans.

Definitions

Developing countries and Global South countries

141 countries eligible for official development assistance from OECD Development Assistance Committee are included in this analysis.

Climate-related finance

The project descriptions provided by the AidData and COFI datasets have been used in assessing the projects’ alignment to climate mitigation and adaptation outcomes. The classification process was done with reference to the principles and definitions in four standards: Appraisal Guidance from the Green Climate Fund,²⁹ OECD DAC Rio Markers for Climate,³⁰ Common Principles for Climate Mitigation Finance Tracking from the International Development Finance Club,³¹ and Methodology of the Global Landscape of Climate Finance from the Climate

²⁹ Green Climate Fund, July 2022, [Appraisal Guidance](#)

³⁰ OECD, [OECD DAC Rio Markers for Climate Handbook](#)

³¹ World Bank Group, October 2021, [Common Principles for Climate Mitigation Finance Tracking](#)



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Policy Initiative.³² Only projects in the following sectors were eligible for inclusion in the analysis:

Sector	Considerations for “climate-related” eligibility
Agriculture & Forestry	<p>Agriculture: projects that increase energy efficiency of crop production, e.g. irrigation, pumping, harvesting, crop cooling, storage; enhance carbon stock; include more efficient use of nitrogen fertiliser; promote climate-resilient farming methods, diversified agricultural production or heat- or drought-resistant crops.</p> <p>Forestry: projects that enhance sinks and reservoirs of GHGs through sustainable forest management, afforestation and reforestation; adopt harvesting techniques that reduce soil erosion.</p>
Disaster prevention	Projects that support the development of emergency prevention and preparedness measures to cope with potential climatic disasters such as floods or landslides; support the preparation of event scenarios, rescue plans, early warning systems; promote awareness.
Energy	Power generation projects: wind energy (onshore and offshore), photovoltaic and concentrated solar power (CSP), geothermal, biomass and biogas, ocean tide power. All hydro-electric projects are excluded.
Transport	Projects that support modal switching to non-motorised transportation or urban public transport (buses and metros) only. Inter-city or long-distance railway projects are excluded as we were unable to ascertain, based on available data, the type of train used (diesel or electric), the power mix of the grid that supplies electricity to the railway and the modal shift impact of long-distance railway projects.
Water supply and sanitation	Projects that strengthen integrated water resources management, e.g. preserve existing water resources, develop new water supply sources. Only projects in countries exposed to medium and high levels of drought risks, as defined by World Resources Institute Aqueduct Global Maps 3.0, ³³ are included.

Limitations

This analysis did not include any financing that China has provided for the developing world that is channelled through multilateral development banks. While it was not possible to independently verify the alignment of every project included in this analysis with internationally agreed principles on climate finance, we have strived to only include projects that would make a meaningful contribution to climate mitigation and adaptation objectives.

³² Climate Policy Initiative, December 2021, [Global Landscape of Climate Finance 2021 Methodology](#)

³³ WRI, August 2019, [Aqueduct Global Maps 3.0 Data](#)