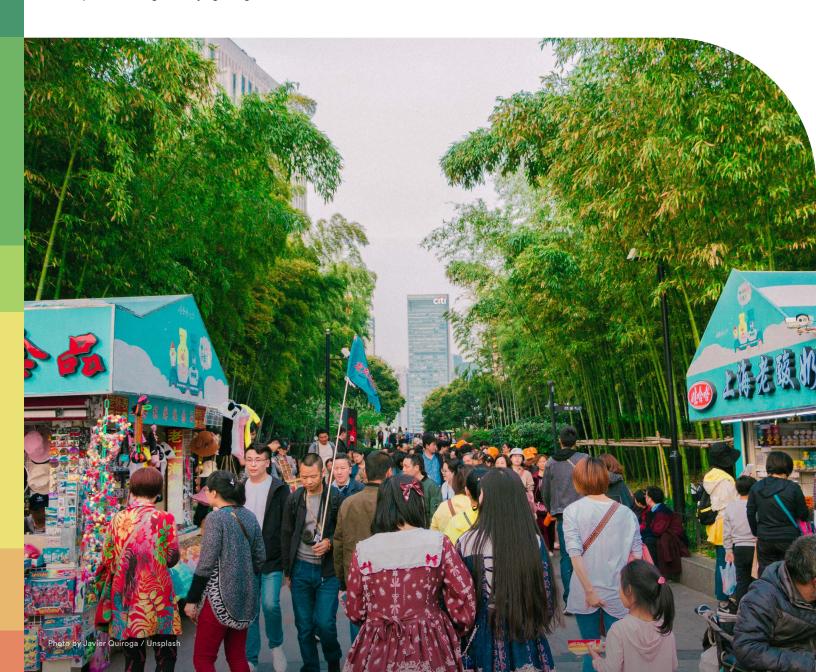




# Foundation funding for climate change mitigation: China spotlight

By Vance Wagner, Yujing Yang, Helene Desanlis, Muniba Ahmad, Surabi Menon



# **Executive summary**

As the world's largest emitter of greenhouse gases and second-largest economy, China plays a critical role in the global effort to address climate change. Responding to the climate crisis, President Xi Jinping has signaled strong support for climate action, and the Chinese government has established a series of macro-level climate targets for the medium and longterm. However, with China's energy system still largely powered by coal, China's transition to a zero-carbon economy faces a challenging road ahead.

Philanthropic investments have played — and will continue to play — a key role in supporting China's low-carbon transition. Philanthropic investments in China help identify opportunities for ambitious climate action, introduce and scale up new ideas and solutions, facilitate dialogue and coordination among diverse stakeholders, and demonstrate how addressing climate change is consistent with achieving China's long-term development goals.

This report summarizes trends in philanthropic support for climate action in China over the period 2017-2020. We provide an overview of funding trends from international donors (mainly foundations supporting climate change mitigation efforts in China), local philanthropy, and official development assistance (ODA)<sup>1</sup>. We also indicate where these various funding streams are being directed.

The results show that even though China accounts for almost 30% of global emissions of greenhouse gases, less than 6% of climate philanthropy funding from foundations is directed to support China's decarbonization. Furthermore, international foundation support for China has remained relatively flat in recent years, at an average of \$75 million per year. Chinese domestic philanthropy, for which limited data exists, is relatively small compared to international philanthropic support, while ODA support varies considerably between \$15 million to \$60 million per year. Funding in China supports a variety of mitigation efforts, including work on clean energy, sustainable finance, low-carbon cities, industry, transportation, and more.

Over the period 2017-2020, philanthropic funding was directed to a field of nearly 350 unique grantees working to support China's climate targets. Funding amounts for over half of these grantees were below \$50,000 per year. Eighty-five percent of funding was directed to organizations working in China, among which a supermajority are based in Beijing, indicating the centralized nature of China's governance systems, preference for national-level work by international funders, and a lack of grantee capacity at the sub-national level. Philanthropic funding supports a variety of different types of institutions; the largest categories of grantees receiving funding are international NGOs in China, Chinese government-affiliated research institutions, universities in China and abroad, and Chinese domestic NGOs.

Our data on funding and grantees, combined with political signals from China, international pressure for the major emitters and economies to accelerate climate action, and the urgency of the climate crisis, implies that many opportunities exist to accelerate China's low-carbon transition and achieve the country's 2030 and 2060 climate targets sooner. We highlight a few areas that would benefit from additional donor support, including:

- Developing high-level narratives;
- Diving deep into sub-national action;
- Scaling up existing sectoral work;
- Strengthening international climate diplomacy;
- Developing underfunded areas such as food and agriculture, carbon removal, and more; and
- Building the grantee field by increasing capacity and geographical representation.

We do not attempt to arrive at a specific funding need to support expanded activities in these various areas, but rather urge the donor community to join or scale current giving to match the urgency of the problem and meet the challenge of aligning the world's largest emitter with its own climate goals as well as the goals of the Paris Agreement.

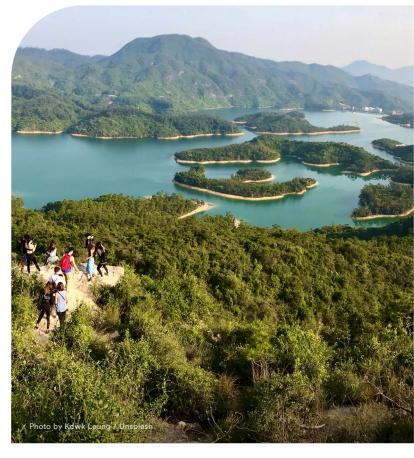
<sup>1</sup> We include a comparison to ODA funding because such funding tends to be similar in terms of strategies and principles as philanthropic funding for climate-related causes. It is also a useful comparison to understand where public and private funding are being directed to get a better estimate of total funding available for climate interventions.

# Introduction

China's extraordinary economic growth over the past few decades has been accompanied by a correspondingly rapid growth in greenhouse gas (GHG) emissions. Although China's cumulative and per capita emissions still lag behind many developed countries, China is now by far the world's largest annual emitter of greenhouse gases. In 2019, China emitted an estimated 27% of global net GHG emissions, nearly 2.5 times more than the United States (the second-largest emitter), and around four times more than either India or Europe (the third- and fourth-largest, respectively).

There can be no global solution to climate change without ambitious action by China, the world's most populous country, largest developing country, and second-largest economy. China's impacts on climate change — both positive and negative — are staggering: China consumes half the world's coal, but also has three times more installed renewable energy capacity than any other country. China has the world's largest motor vehicle market, but accounts for half of global electric car sales and 98% of global electric bus sales. At least eight of China's provinces have provincial economies larger than some G-20 nations.

China's leaders understand the imperative to address the climate crisis, and recognize the economic opportunity of transitioning to a zero-carbon society. Declaring that "green mountains are gold mountains," President Xi Jinping has established low-carbon development as a guiding principle for the country, and has announced a series of macro-level mediumand long-term climate targets — most notably that China aims to peak carbon dioxide emissions by 2030 and achieve carbon neutrality before 2060.



Over the past year, China has released a highest-level guidance document, *Guidelines for Carbon Peaking and Neutrality*,<sup>3</sup> to serve as an organizing framework for domestic climate action; pledged to stop building new coal-fired power plants overseas; and announced it will begin phasing down domestic coal use this decade. Some modeling suggests that China's current targets could be compatible with a global pathway that would limit global warming to 1.5° C. However, many questions remain: At what level will China peak, and how early? What are the roadmaps (technological, political, economic) to neutrality at national, sub-national, and sectoral levels, and how can they be accelerated? How are non-CO<sub>2</sub> gases being accounted for?

Philanthropic investments have played — and will continue to play — a key role in answering such questions and supporting China's low-carbon transition. Philanthropic investments in China help identify opportunities

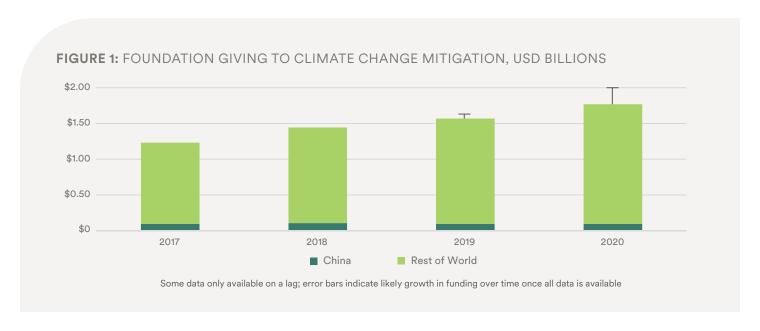
<sup>2</sup> Larsen et al. 2021: China's greenhouse gas emissions exceeded the developed world for the first time in 2019. Rhodium Group Report, May 6, 2021.

<sup>3</sup> http://www.news.cn/english/2021-10/24/c\_1310265726.htm

for ambitious climate action, introduce and scale up new ideas and solutions, facilitate dialogue and coordination among diverse stakeholders, and demonstrate how addressing climate change is consistent with achieving China's long-term development goals. For example, intensive, philanthropy-supported research and engagement over the period 2018-2020 helped establish the intellectual and political basis for China's carbon neutrality pledge in September 2020.

However, current philanthropic support for climate action, and specifically for China's decarbonization, is disproportionately small. In 2020, philanthropic giving worldwide, to all causes, totaled around \$750 billion, of which only \$6 billion-\$10 billion was dedicated to climate change mitigation.<sup>4</sup> Although the field of climate change mitigation philanthropy has been developing rapidly, climate change continues to receive less than 2% of all known foundation grantmaking globally. In comparison, official development assistance (ODA) grantmaking<sup>5</sup> with climate change mitigation as the primary focus amounted to a little more than \$4.6 billion out of a total of \$161 billion in 2019.

In recent years, total foundation funding to climate mitigation has increased steadily, rising from less than \$900 million in 2015 to at least \$1.9 billion in 2020.6 However, although China accounts for almost 30% of global emissions of greenhouse gases, over the period 2017-2020, less than 6% of known foundation funding for climate mitigation was directed to China. Furthermore, international support for China has remained relatively flat since 2018, at an average of \$75 million per year between 2017 and 2020, as shown in Figure 1 below.



As philanthropies consider how and where to scale up future climate investments, this report provides baseline data on the landscape of current donors and grantees supporting climate change mitigation in China and helps to inform discussions on future investment priorities and field-building to support decarbonizing the world's largest emitter.

<sup>4</sup> For more, see ClimateWorks' report on Funding trends: climate change mitigation philanthropy.

<sup>5</sup> Official Development Assistance grantmaking with climate change mitigation as the primary focus of grants. For closest comparison with foundation grantmaking, numbers do not include loans, equity, or other forms of development assistance. Source: OECD DAC External Development Finance Statistics

While ClimateWorks has launched efforts to track climate giving by individual donors, our most in-depth and longstanding research has focused on foundation grantmaking for climate change mitigation, to support strategic collaboration among climate funders. ClimateWorks database includes data for more than 70 major climate foundations and information on a time lag for several hundred more smaller foundations. Analysis ends in 2020, the last year for which complete and comprehensive data is available.

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In this section, we present more details on the different sources of funding in China over the four-year time period from 2017 to 2020.

Over this period, total international philanthropic funding to support climate change mitigation in China remained relatively flat at around \$75 million per year.

In parallel, ODA grantmaking varied considerably over the same period, ranging from \$10 million-\$60 million per year.

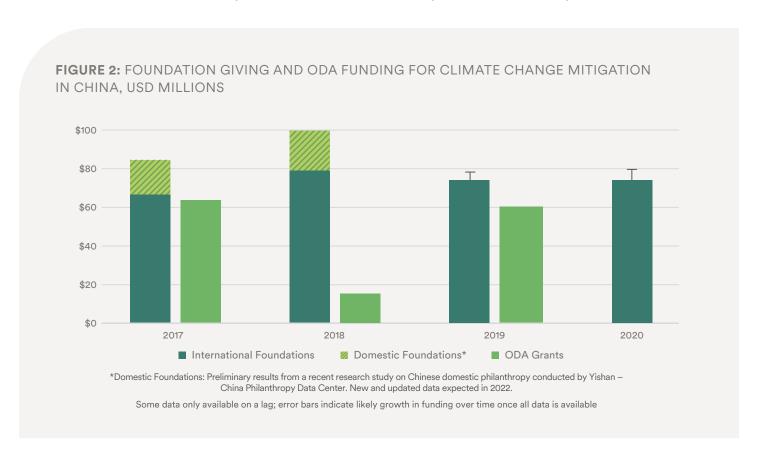
ClimateWorks Foundation has been partnering with Yishan – China Philanthropy Data Center to incorporate data on Chinese domestic philanthropy. Preliminary results show that the annual average amount of domestic philanthropic funding between 2017 and 2018 was around \$20 million per year. More details on funding levels for 2019-2020 will be forthcoming in a separate report.

A recent study conducted by the Global Family Business Research Center at Tsinghua University predicts an increase in large donations<sup>7</sup> that could help expand the amount of domestic philanthropic resources available to support China's decarbonization targets. However, the nature of grantmaking by Chinese domestic philanthropies differs considerably from that of international philanthropies, and domestic philanthropy in China for climate-related causes is still an emerging practice. Most of the domestic climate funding is being directed to land use as well as for core support and capacity-building — a focus quite different than that of the international funding community that directs funding to more sector-based objectives. Expansion of both domestic and international philanthropy as well as ODA grantmaking can support the development and implementation of a strong climate policy agenda as well as leveraging of other funds to help finance the costs of the low-carbon transition in ways that are consistent with achieving development goals.



 $<sup>7 \</sup>qquad \underline{ https://www.insidephilanthropy.com/home/2021/6/9/rising-tide-tracking-the-emerging-philanthropy-of-chinas-ultra-wealthy-independent of the properties of the properti$ 

Figure 2 below shows funding to China through these three different sources: international foundations, domestic foundations, and ODA. The results of our research on domestic climate philanthropy in China are still preliminary, and data for 2019 and 2020 is not yet available. ODA data for the year 2020 is also not yet available.



# International philanthropy

As shown in Figure 2, funding from international foundations to climate change mitigation in China increased by 20% between 2017 and 2018, and has remained flat since then. The annual average amount of international philanthropic funding over these four years was a little over \$75 million.

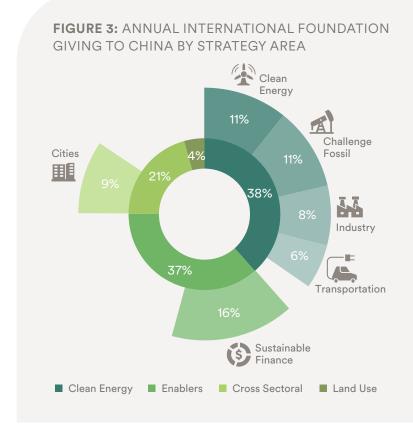
As depicted in Figure 3, grants from international foundations in China support a variety of strategies. Based on the annual average of international foundation funding between 2017 and 2020, the power sector, including power sector reform and work on coal, received around 40% of the total funding to China, followed closely by funding for "enabling environment," which includes categories such as governance, finance, and core support to organizations working across multiple sectors.

The three other categories that received the most funding in China over the past few years were the sustainable finance sector, followed by clean electricity, and work to challenge fossil fuel, all amounting to more than 10% of funding, respectively. The three areas receiving the least amount of funding were the buildings sector, carbon dioxide removal, and strategies focused on forests. These accounted for less than 1% of total funding to China.

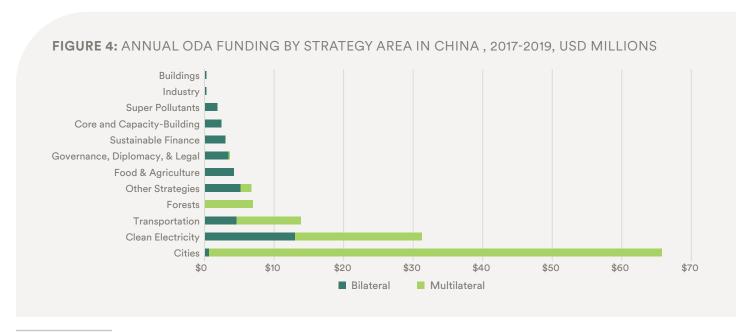
The inner circle in the graphic to the right depicts the share of international philanthropic foundation funding to China between the four strategy groups tracked by ClimateWorks Foundation, namely clean energy, enabling environments (Enablers), cross sectoral strategies, and land use. The outer circle shows the strategies within those group receiving the largest amount of funding on average over the period.

# Official development assistance grantmaking

As mentioned above, ODA grantmaking<sup>8</sup> to China varied considerably between 2017 and 2019 (2020 data is not yet available). It is useful to compare ODA funding with philanthropic funding to assess the full range of funding available for similar causes and explore where there may be gaps. While ODA funding to China in 2017 and 2019 reached more than \$60 million per year, 2018 saw a drop in funding from \$60 million to \$15 million, due to a steep decrease in multilateral funding. During the same period, bilateral funding more than doubled, led by increased funding from Germany, Norway, and Switzerland.



As shown in Figure 4, Funding to decarbonize cities through the development of city-based leadership on climate, clean urban mobility, green urban planning, and other related city-based strategies represented almost half of the total funding to China from ODA, almost entirely from multilateral sources. Funding to clean electricity strategies accounted for 20% of the total funding, while support to transportation strategies represented 10% of the overall funding to China through ODA between 2017 and 2019.



<sup>8</sup> Official Development Assistance grantmaking with climate change mitigation as the primary focus of grants. For closest comparison with foundation grantmaking, numbers do not include loans, equity, or other forms of development assistance. Source: OECD DAC External Development Finance Statistics

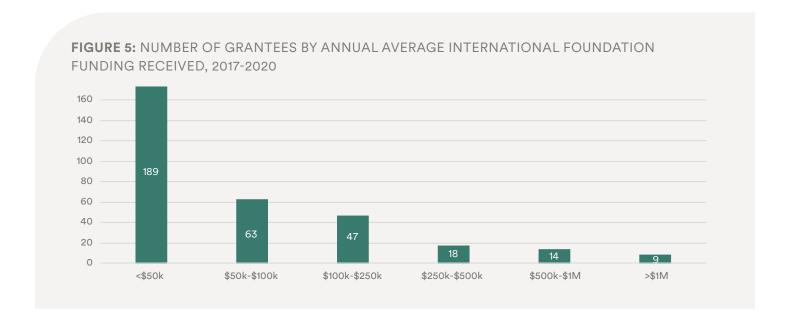
# Grantee landscape

This section of the report presents the landscape of grantees funded by international philanthropic sources, including endowed foundations and regrantors, in support of China's decarbonization. Our analysis starts in 2017, the year China's "Foreign NGO Law," which governs the operation of international NGOs (INGOs), took effect. Among other provisions, the law requires INGOs operating in China to register with the Chinese government and forbids unregistered international philanthropies from directly funding Chinese domestic institutions. Our analysis ends in 2020, the last year for which complete and comprehensive data is available. This analysis covers all grantees working to support China's decarbonization, including those operating within China as well as those based outside of China. This analysis is based on a combined database from ClimateWorks Foundation and Energy Foundation China. Due to data limitations, this section of the report does not cover grantees funded by Chinese domestic philanthropy.

Over the period 2017-2020, international philanthropic sources funded nearly 350 unique grantees working to support China's decarbonization.<sup>10</sup> We analyze funding flows to these organizations across several metrics, including size, type, and location.

# By size

Figure 5 shows the distribution of grantees by annual average funding received from international philanthropic sources over the period 2017-2020. The data shows that many grantees receive only a small amount of funding each year; over half of the grantees received total average funding of less than \$50,000 per year, while less than 3% received over \$1,000,000 per year.



<sup>9</sup> The Law on the Administration of Activities of Overseas Nongovernmental Organizations

<sup>10</sup> Note: in this section of the report, unless otherwise noted, organizations principally engaged in regranting, such as Energy Foundation China and ClimateWorks Foundation, are considered to be donors, not grantees.

# By location

Figure 6 shows the distribution of international philanthropic funding to grantees by location. 84% of funding flowed to organizations in China (either directly or via regrantors), with slightly more going to Chinese domestic institutions (46%) than international institutions operating in China (38%). 16% of funding flowed to organizations outside of China.

Of the funding flowing to China, Figure 7 shows distribution by grantee registration location. The vast majority (89%) of international philanthropic funding to China went to organizations registered in Beijing. (Note: many Beijing-based organizations, including both international and Chinese organizations, implement projects throughout China. Our database does not yet include project-level location data — an important caveat and an area for further future analysis.) The fact that so much funding flows to Beijing-registered organizations is likely due to several factors. First, the strongly centralized nature of China's governance system has led to a historical focus of international funders on national-level action. Second, many international organizations' China offices, as well as many leading Chinese research institutions, are based in Beijing. Third, the field of potential grantees outside of Beijing is comparatively immature.







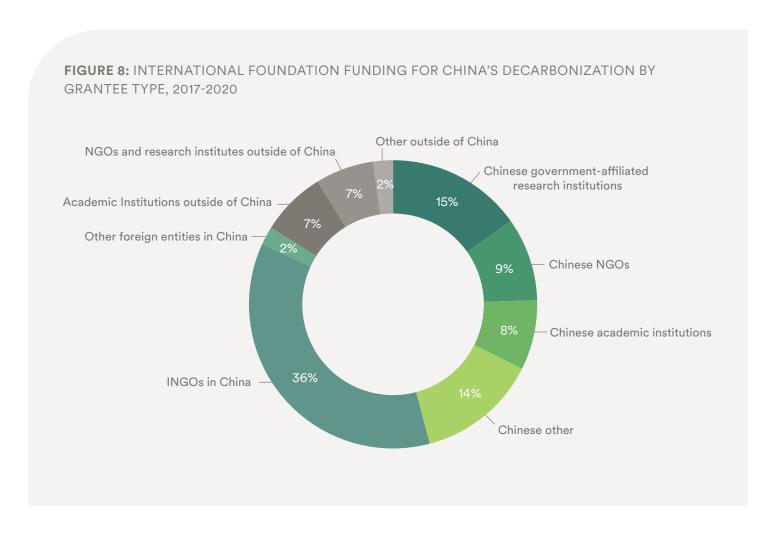
FIGURE 7: GEOGRAPHIC
DISTRIBUTION OF CHINABASED GRANTEES RECEIVING
INTERNATIONAL FOUNDATION
FUNDING FOR CHINA'S
DECARBONIZATION, 2017-2020



# By type

Figure 8 shows international philanthropic funding to grantees by grantee type. The single category of grantees receiving the most funding (36%) is INGOs operating in China (including INGOs registered in China as well as those operating with temporary activity permits). This is likely due to a preference among institutional foundations for funding INGOs, combined with the fact that China's Foreign NGO Law prohibits unregistered international philanthropies from directly funding Chinese domestic institutions. However, it is important to note that some INGOs also regrant to Chinese domestic institutions, which is not yet reflected in our database.

In terms of funding, the second-largest category of grantees is Chinese government-affiliated research institutions (15%), which are engaged in policy research, advising, development, and implementation. Other significant categories of recipients include Chinese NGOs (9%), Chinese academic institutions (8%), and international academic institutions (7%).



# Implications and future needs

As highlighted in the introduction of this report, philanthropic climate funding to China is severely and disproportionately small compared to the magnitude of China's emissions and the climate actions desired by the international community. Here, we identify some key opportunities for scaled-up philanthropic investment in China across six themes.

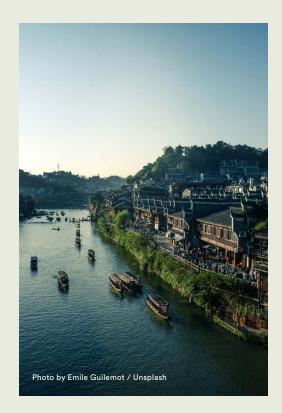
Please note that the purpose of this report is not to present a detailed analysis of funding gaps in China, or to suggest a diversion of funding from one cause to another. We recognize that funding decisions are not solely related to size of emissions; funding may also be prioritized to where there are immediate political or economic opportunities, a network of grantees working on particular topics, local champions, and other factors.

Based on the current state of the Chinese funding and grantee ecosystem, this section recommends areas that are underserved and could represent "no regrets" opportunities to pursue. These are not ranked by priority or urgency but are rather intended to be areas within climate change mitigation efforts that would benefit from additional philanthropic support.

# 1. Develop high-level narratives

President Xi's announcements that China will peak carbon emissions by 2030 and achieve carbon neutrality by 2060 offer high-level political momentum for climate action. Philanthropy can leverage this momentum by developing and telling a consistent narrative that pursuing low carbon development toward early peaking and early neutrality is not only technically feasible, but that doing so produces vibrant, prosperous, innovative economies and healthy cities. Such high-level narratives — targeting central and local government officials as well as non-state actors and international stakeholders — should focus on actions, not just on the targets themselves.

- Partnering with economists and development experts in addition to climate and energy experts and key provincial leaders;
- Identifying and accelerating local champions who can exemplify a "new growth story" for China;
- Deconstructing the national-level early peaking and early neutrality vision into concrete sectoral and provincial action plans;
- Scaling up strategic communications and narrative building.



# 2. Dive deep into sub-national action

Although China has a strong, top-down, centrally-managed governance system, most implementation (as well as experimentation) occurs at the provincial and municipal levels. Furthermore, China's regions and provinces vary dramatically in terms of their energy and emissions profiles, socio-economic factors, local political willingness to act, and others. Philanthropy should scale up support to a subset of "typical" Chinese provinces and cities (e.g., less developed provinces with strong existing fossil fuel dependency, rural provinces with strong renewable energy development potential, more developed provinces with high energy demand), with a goal to create a series of low-carbon transition success stories and grantees that can continue deepening efforts to be replicated throughout the country. Province-by-province action is also one key to phasing out coal in China, since the distribution of coal production and consumption is quite uneven across the country.



### **KEYS TO SUCCESS**

- Identifying sub-national champions and building high-level trust;
- Leveraging existing provincial goals, targets, and plans;
- Focusing on economic and development opportunities, including just transition at the sub-national level, in addition to emissions reductions potential.

# 3. Scale up existing sectoral work

Achieving carbon neutrality will require fundamental changes across all major energy-producing and -consuming sectors of society. Over the past two decades, philanthropic investments have built a strong foundation of capacity and expertise in key sectors and themes, including industry, transport, buildings, power, cities, and others. All of these areas have mature strategies and grantees that are ready to scale up with new funding. Additionally, all provinces and sectors are developing and implementing ambitious peaking and carbon neutrality plans and strategies.



- Leveraging current political pressure on sectors to develop peaking and neutrality action plans;
- Balancing near-term, incremental action with a long-term vision;
- Reducing the carbon intensity of key industry sectors and large emitters;
- Demonstrating successful zero-carbon pilot projects that can be scaled up nationwide;
- Expanding focus from carbon dioxide alone to all greenhouse gases, especially methane;
- Innovating and deploying new technologies where needed, such as in industry and long-distance transport.

# 4. Strengthen international climate diplomacy with China

The global nature of the climate crisis requires a coordinated global response. Philanthropy can play a critical role in developing ideas and supporting dialogues and concrete cooperation to strengthen China's international engagement in multilateral forums such as the United Nations Framework Convention on Climate Change and Paris Agreement, G-20, Clean Energy Ministerial, and Mission Innovation, as well as through China's bilateral, plurilateral, and regional cooperation. For example, the November 2021 "U.S.-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s" provides new impetus for expanding climate engagement between the world's two largest emitters, including explicit references to including both government and non-government experts in a new bilateral working group. In parallel, philanthropy can expand support for reducing the climate impacts of China's overseas investments, including by supporting action within China and in



recipient countries, and by supporting dialogues between China and other developing countries.

- Leveraging government-to-government engagement, e.g. U.S.-China climate dialogue, to expand bilateral cooperative initiatives;
- Connecting China's domestic ambition with global efforts to achieve the goal of limiting global warming to 1.5° C;
- Contextualizing climate diplomacy in broader international relations issues such as trade;
- Pushing for sustainable supply chains of Chinese companies;
- Successfully implementing China's overseas coal pledge to avoid "leakage" of China's high-carbon industries into countries receiving support from China's Belt and Road Initiative.

<sup>11</sup> https://www.state.gov/u-s-china-joint-glasgow-declaration-on-enhancing-climate-action-in-the-2020s/

# 5. Develop underfunded areas such as food and agriculture, links to biodiversity, carbon removal, and more

Even after over 20 years of philanthropic investing in climate change mitigation in China, there remain many underfunded priorities that need more attention if we are going to succeed at achieving carbon neutrality. These include issues around land use, agriculture, and food; links between climate change and other environmental issues such as biodiversity and oceans; scaling up both natural and technical carbon capture and/or removal solutions; and links between climate change and rural development and poverty alleviation.



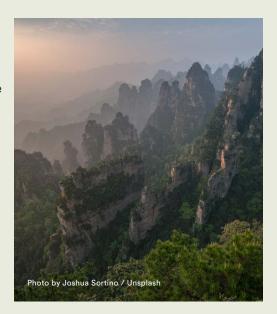
## **KEYS TO SUCCESS**

- Leveraging China's current high-level focus on nature-based climate solutions to help strengthen standards and accounting for land-based carbon removal solutions;
- Strengthening international cooperation on carbon removal through natural as well as technical measures;
- Expanding direct consumer engagement on topics such as consumption and health benefits of plant-based diets;
- Connecting rural energy transition with poverty alleviation.

# 6. Build the field

As noted in the section on grantees in China, based on our data collection and analysis, the current landscape of grantees supporting China's decarbonization consists of nearly 350 unique institutions. However, with around half of these receiving less than \$50,000 per year, and most of them based in Beijing, it's clear that philanthropies will need to focus on organizational development and field-building in order to dramatically scale up investing in China.

- Investing patiently in institution-building;
- Capacity-building outside of Beijing;
- Funding multi-year core support for predictability and growth;
- Supporting new (or new to climate mitigation) organizations.



# Conclusions

Achieving the global 1.5° C goal will require accelerated climate action in all major emitters and economies — especially China. In recent years, philanthropic investments to support China's low carbon transition have been disproportionately small compared to the magnitude of China's emissions and therefore the potential to reduce those emissions. The field in China is robust and growing. There are many intervention areas for philanthropies to scale up in China to create an enabling policy and finance environment for ambitious climate action. Expanded engagement can help speed up and scale action to achieve China's peaking and neutrality goals as early as possible.

This report is just an initial snapshot of the landscape of philanthropic funding for climate action in China. The authors look forward to further opportunities for deeper analysis and trend tracking over time. We also eagerly anticipate related research results coming out that will dive deeper into where resources would be most useful to support China's zero carbon transition<sup>12</sup>.

Finally, we encourage philanthropies interested in China to get in touch. There are around two dozen international foundations — including Energy Foundation China and ClimateWorks Foundation —actively funding projects supporting China's decarbonization. Plus, dedicated networks such as the Climate Leadership Initiative<sup>13</sup> exist to advise and guide philanthropists exploring work in this space. Together, we can support accelerated climate action in China and around the world to avoid the worst impacts of the climate crisis and achieve a 1.5° C future.

<u>Contact us</u> to learn more about key trends in climate change mitigation funding or to start building your own funding strategy.



<sup>12</sup> A forthcoming report by H Zhang and S Tierney will examine gaps and opportunities for philanthropies to support China's zero carbon transition.

<sup>13</sup> https://climatelead.org/

# Annex 1: Methodology and notes

In order to help the philanthropic community effectively combat the climate crisis, ClimateWorks Global Intelligence tracks worldwide philanthropic giving for climate change mitigation, allowing funders to understand funding flows, gaps, and opportunities.

This tracking includes funding from foundations with major climate programs, publicly available data on official development assistance flows, and more recent tracking of donations from individuals to climate-relevant causes.

# **Data for Donor and Grantee Landscape**

Data on foundation giving for climate change mitigation is based on a combination of proprietary data collected by ClimateWorks in real time from approximately 70 major climate foundations, supplemented with data from dozens of other institutions on a time lag, due to the time between funding commitments and the data becoming publicly available. In addition to direct partnerships, we also use publicly available data from foundation websites and tax disclosure forms, and data collected by partners such as the OECD's Philanthropy Center, the European Foundation Centre, and Candid. The research on domestic foundation funding in China is conducted by Yishan – China Philanthropy Data Center.

Significant measures are taken to avoid double-counting in these figures. Data is based on annual payments wherever known; when grant duration unavailable, the duration is assumed to be one year and full commitment amount is shown in the first year.

Data on grantee landscape comes from ClimateWorks database, cross-referenced and expanded with Energy Foundation China's own database of grantees, categorized by location and type.

Data included in this brief was last updated in December 2021.



# **SECTOR DEFINITIONS**

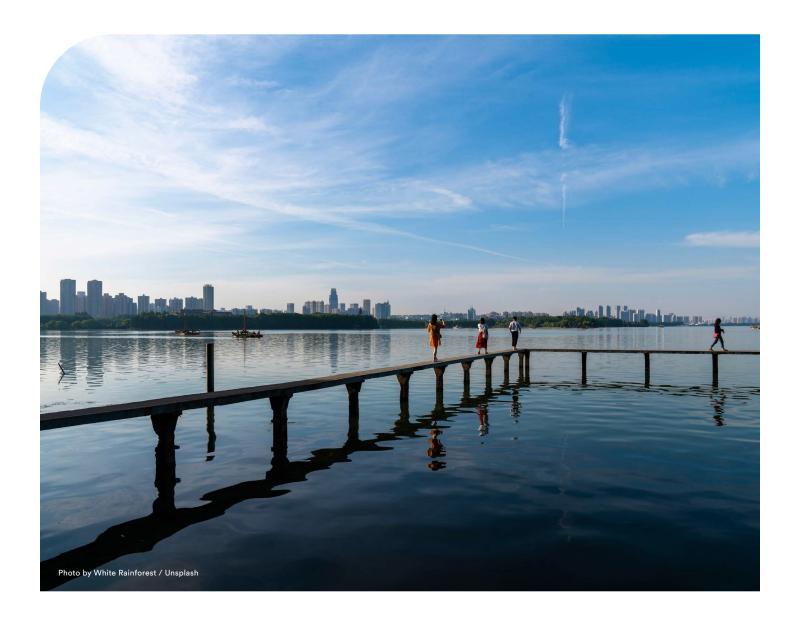
		Sector Description
<b>*</b>	Buildings	This sector includes work to decarbonize the buildings sector, including electrification, efficiency, and reduction of embodied emissions.
s)	Carbon Dioxide Removal (CDR)	In addition to slashing greenhouse gas emissions, carbon dioxide (CO2) needs to be removed from the atmosphere in order to meet the goals of the Paris Agreement. Work under this sector encompasses the variety of strategies targeting the removal of CO2 from the air, including land-based CDR, on-farm CDR, combined CDR, technological CDR, ocean-based CDR, as well as comprehensive strategies and other carbon removal strategies and innovations.
A	Challenge Fossil	This sector includes work to target upstream supply of oil, gas, and coal, as well as efforts to fight the use of coal-fired power. Efforts to reduce the use of fossil fuels in specific sectors, such as industry or transport, are included under those sectors.
	Cities	This sector includes work to decarbonize cities, including through the development of city-based leadership on climate clean urban mobility, green urban planning, and related city-based strategies.
10	Clean Electricity	This sector includes work pushing forward on clean electricity, including the development and deployment of renewable energy, utility model reform, grid efficiency, energy access, and integration of renewables onto the grid.
 !!	Cooling	This sector includes support to increase energy efficient and climate-friendly cooling.
<b>\$</b>	Core and Capacity-Building	This sector includes core support that is not otherwise related to a specific sector. Core support to an organization, such as a clean transport nonprofit, would be shown as accruing to the relevant sector, in this example, transport. Core support to an organization working across a range of climate-relevant topics and sectors is shown in this core sector.
	Food & Agriculture	This sector includes work to decarbonize the food system and agricultural sector, including increasing efficiency in the system, supporting alternative production models, shifting consumption patterns, supporting deforestation-free commodities, and accelerating support for a just rural transition.
(A)	Forests	This sector includes work to prevent deforestation and protect climate-relevant non-agricultural landscapes.  Afforestation or reforestation efforts, which ClimateWorks considers land-based carbon removal, can be found under the Carbon Dioxide Removal sector. Work on agricultural landscapes and work on forest-related commodities can be found under the Food & Agriculture sector.
	Governance, Diplomacy, & Legal	This sector includes work on general governance and policy (for example, broad efforts to support development and implementation of a country's Nationally Determined Contribution to the Paris Agreement); diplomacy (for instance, wo with Track II dialogues or with the U.N.); and litigation-based climate initiatives.
1.4	Industry	This sector includes work to decarbonize the material economy (including mining, manufacturing, construction, and waste processing) through electrification where possible, promotion of the circular economy and material efficiency, deployment of industry-specific carbon capture and storage, and broad efforts to innovate industrial business models and the policy environment.
	Public Engagement	This sector includes work on public will-building, mobilization, and engagement. Specifically, it includes work on strategic communications, grassroots mobilization, work to mobilize non-traditional allies, business engagement, and other public engagement efforts.
<u>\$</u>	Super Pollutants	This sector targets super pollutants including methane, hydrofluorocarbons (F-gases), black carbon, and ground-level ozone. The scope includes methane leakage and venting from oil and gas operations, speeding up implementations of the Kigali Amendment on F-gases, and cutting particulate emissions from off-road diesels, brick kilns, and other source
\$	Sustainable Finance	This sector contains work to align finance with international climate goals and accelerate the inevitable low-carbon transition. It spans influencing activities in the capital markets, including climate disclosure and analysis, investment alignment, and corporate and policy engagement; the governance of the financial system, including supervision, regulation, legislation, and monetary policy; fiscal policy, including development of public financial institutions, subsidie procurement, and emissions pricing; development of markets for low-carbon investments, including mission investment and program-related investment; and macroeconomic and trade-related strategies.
- E	Transportation	This sector contains work to decarbonize the transportation sector, including through vehicle electrification (light duty and freight), vehicle efficiency, aviation, maritime shipping, and promotion of other zero-emission modes of transport. Urban mobility, including micro-mobility, can be found under the Cities sector.
Ľ	Other Climate Change Mitigation Strategies	This sector contains additional strategies that, while important, cut across multiple other sectors or do not receive significant enough funding at this point to be broken out into their own sectors. Strategies in this sector include: air quality; equity & justice strategies; general climate research; health-based strategies; innovation; just transition; new economy; and sustainable behavior & lifestyles.

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