

Catalyzing System Change

2018–2023 Climate Finance Strategy Evaluation



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Executive Summary

This assessment was requested by the Climate Finance Fund (CFF).¹ This assessment aims to help the CFF take stock of its funding activities as well as provide preliminary recommendations for the future direction of its climate finance portfolio. This evaluation is based on over 21 interviews with climate finance and energy experts including staff from the William and Flora Hewlett Foundation, a CFF supporter, and individuals from other foundations, asset managers, banks and other lenders, venture capitalists, corporate leaders, non-governmental organizations, and other experts. The evaluation also includes a review of present and past climate finance literature and data, government reports, and the authors' own expertise in climate finance. It is important to note that the evaluators were unable to analyze much of the funding that started in 2023 due to the timing of the evaluation; it was simply too early to evaluate results of work that began in 2023.

Since 2018, Marilyn Waite – first at the Hewlett Foundation and now at the Climate Finance Fund – has set out to mobilize private capital for climate solutions across three target regions (China, the European Union, and the United States). Roughly \$75 million has been allocated to support solutions that unleash systemic change in the financial system, as well as direct capital to financial products and investment vehicles designed to reduce carbon emissions and limit warming to well below 2°C.

A key feature of the strategy is to broaden the historical focus of climate philanthropy to reach underrepresented constituencies, such as women and racialized communities in the financial services sector. This has led to supporting organizations previously overlooked by traditional climate philanthropies, including those that focus on and are led by underrepresented groups.

Implementing the climate finance strategy was highly successful at mobilizing diverse groups across three continents, decarbonizing capital, and supporting systemic change, which will be discussed in greater detail in Section II. All of the key performance indicators (KPIs) and portfolio goals of the Climate Finance Fund were achieved. The following five outcomes are emblematic of the numerous types of activities the portfolio supported:

- Pioneering support for the Partnership for Carbon Accounting Financials (PCAF) standard, which grew from only 16 members in 2018 to 425 global financial institutions in 2023 at the time of writing with \$93 trillion in assets under management (AUM);
- 2. Providing catalytic capital to asset manager BlackRock to launch the Climate Finance

Partnership, which raised \$673 million in 2021 for climate private equity in middle income economies;

- Backing lenders and intermediaries such as Optus Bank, the Hive Fund, the Clean Energy Federal Credit Union, and Inclusiv to scale clean energy lending in diverse communities across the United States (for example, Inclusiv's field of green lenders generated in excess of \$2.4 billion worth of loan volumes for solar and energy efficiency projects predominantly in low-income and underserved communities);
- **4.** Providing early support to the Principles of Responsible Investment (PRI) in China, which led to an expansion of signatories from just a handful in 2018 to over 140 institutions at the time of writing;
- 5. Mobilizing and educating consumers, finance professionals and policymakers through various multi-year policy and thought leadership projects around climate finance regulation. Examples include submitting public comments to the U.S. Securities and Exchange Commission (SEC) and the Department of Labor (DOL), spearheading the creation of the Regenerative Crisis Response Committee (RCRC) and associated thought-leadership; and establishing the Energy Independence Council (EIC) to develop a financial plan to move Germany away from fossil gas infrastructure.
- 6. Providing early, catalytic support to the Prime Impact Fund, which grew to \$50 million and then to \$239 million in a second fund managed by the newly created Azolla Ventures; funder support was pivotal and helped influence the field of early-stage venture capital focused on scaling startups with gigaton-scale climate impact.

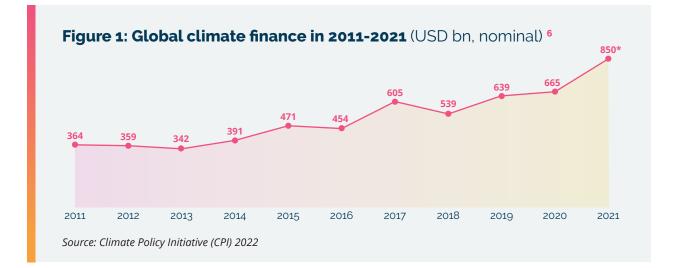
Our interviews identified seven leading factors that contributed to the portfolio's success:

- Leveraging established contacts: CFF cultivated contacts and partnerships with key actors early on (i.e., various leaders in finance and sustainable finance advocates)– therefore when systemic policy or other changes happened, these actors were able to move more quickly.
- 2. Calculated risk taking and willingness to operate in overlooked communities: The focus on activating investors, consumers, and advocates, who know and operate in diverse constituencies, led to important gains in underserved areas. Women- and people of color-led organizations shared that CFF's funding was often catalytic and helped them to quickly scale their work.
- **3. Flexible funding:** The funding provided by CFF was more flexible compared to other funding sources. Grantees reported that they were able to make mid-project adjustments and ultimately be more creative and agile with how the funds were allocated leading to increased success.

- 4. Support of targeted regional and national campaigns: CFF funded organizations that encouraged retirement funds, asset managers, and retail banking communities to act on climate. Since finance is very localized and not global, the specificity that CFF brought to the table was welcomed by financial players across the target geographies.
- 5. Global public focus on climate change: The drastic lifestyle changes brought about by the COVID-19 pandemic meant people saw clear skies in previously smoggy cities, cleaner waterways, and practically no traffic in many typically congested areas. This brought a greater awareness to humanity's relationship to pollution and our collective ability to repair the environment. An uptick in extreme natural disasters (wildfires, flooding, etc.) also brought the tangible longer-term effects of global warming into the present.

Climate finance flows are increasing, yet a pernicious gap remains

While this approach has been effective at catalyzing systemic change and meeting or exceeding all KPIs, the macro goal of closing the climate financing gap stubbornly remains. Since 2018, the climate financing gap (as defined by the difference between levels of investment needed per annum to reach net-zero by 2050 versus what was actually invested) loomed large at roughly 3 to 1.² Today, despite much progress, this gap remains stubbornly wide. Estimates still vary, but the greatest total climate-related financial flows in one year were \$850-940 billion (2021) according to the Climate Policy Initiative³ and \$1.31 trillion (2020) according to a BCG-Rockefeller Foundation report.⁴ Nevertheless, the range is significantly lower than the \$4.3 trillion per year of investments now needed by 2030 to avoid the worst effects of climate change.⁵ The key takeaway from this ongoing and widening financing gap is that the longer the world collectively waits to get serious about the energy transition-the more costly (per annum) and the more challenging limiting warming to well-below 2°C becomes. This fact underscores the absolute necessity that philanthropies continue to set aside dedicated funds to target the financial sector and work to accelerate the global energy, agriculture, and industry transition.



In the political sphere there has been a great deal of activity in the climate financing and climate goal setting space since 2018. Three international Conference of the Parties (COPs) have occurred. The Glasgow Climate Pact, which arose out of COP26 held in 2021, created new commitments to curb methane emissions, "phase-down" coal usage, and align the financial sector with net-zero emissions by 2050. However, it should be acknowledged that wealthy nations, which committed to mobilizing \$100 billion a year by 2020 to support climate efforts in Global Majority countries, have largely failed to fulfill these pledges. Looking ahead to the next five years and beyond, our analysis predicts that the climate finance community will largely shift towards implementing solutions—as opposed to setting targets. This presents fresh opportunities for philanthropy and provides important context as strategies pivot.

Grantees and partners also faced challenges over the past five years. Our interviews identified four overarching factors that were barriers to the organizations and portfolio's success:

- Project Staffing and Scaling: While funding was swift in moving 'out the door' to partners, some expressed challenges in finding enough staff with the financial knowhow and particular technical skills needed to implement their respective programs. For example, Inclusiv had challenges to find enough solar finance instructors with the combined knowledge of community development and finance lending for solar and clean energy systems to meet the demand for their training programs.
- 2. Work Culture Differences among Financial Players: Some organizations expressed minor challenges in fostering new partnerships with organizations that operated under different work cultures and came from different parts of the financial ecosystem. Such differences did not prevent reaching overall programmatic goals, but they did create minor frictions in how programs were implemented in communities that the grantees served. As an example, partner credit unions operated differently than clean tech startups or commercial banks. When both actors collaborated, it was clear the groups had differing understandings of how and where to roll out certain types of loan offerings. In addition, the language and terminology used around certain investment practices differed from varying partner organizations.
- 3. Balancing Swift Implementation vs. Desire to Avoid Procedural Blunders: Many organizations we spoke to expressed wrestling with the need to move quickly in implementing a program while simultaneously working to avoid mishaps or misunderstandings with other implementing partners.

4. Growing Pains: The success of some organizations in scaling-up their operations meant that some needed to build new systems of operation as they were growing (i.e., building the electric car while driving it). The rapid pace of growth for some necessitated a more nuanced approach in how they managed operations and dispensed funds to their respective partners. For example, certain investor cohorts were at varying levels of readiness with regards to their program implementation. A few organizations required more guidance and financial education hand-holding, whereas others were ready at the onset of receiving their funding.

Future Directions for the Climate Finance Portfolio

As the climate movement shifts away from largely planning and goal setting and towards more dedicated action and implementation, we recommend that funders working in climate finance philanthropy consider launching a four-pronged approach to accelerate the mobilization of capital for climate justice and equity, close the climate financing gap, and enable deeper decarbonization before 2030.

These recommendations include:

- **1. Global Majority (also known as the Global South):** In the coming years, there is a critical need for funders to channel more of their investments towards climate-friendly initiatives in the Global Majority economies. Therefore, funders should explore how to fill the capital investment gap in low- and middle-income countries.
- 2. Workforce Development: The global climate transition will not come to pass without the human capital to reimagine, develop, install and maintain new climate-friendly systems. Funders should seek out innovative workforce approaches to support climate finance and capital deployment.
- 3. **Consumer-facing Finance:** Encompassing retail banking and investing, consumer finance has been key to driving regulatory change for climate finance. There is an ever-increasing need to focus on the connections between consumers and citizens, leveraging gains in climate finance literacy to drive more capital to equitable and just climate solutions.
- 4. Innovation, Implementation, and Scaling: The Climate Finance Fund has built a reputation as an innovator and leader within the climate finance space over the past five years. As the broader climate community pivots to strategies largely focused on implementation, funders interested in transforming the climate finance space should consider continuing its innovative and inclusive approach to selecting partners and scaling solutions.

I. Introduction

This evaluation was conducted during the summer of 2023 to assess the impact of the Climate Finance Fund's climate finance strategy.⁷ The Strategy is rooted in the idea that "finance for climate is flowing at a greater pace than ever before, but it is not flowing fast enough to limit warming to well below 2°C." While progress has been made, this sadly continues to remain true.

This evaluation covers climate finance-focused grants made during the time period of 2018 to mid-2023 across China, the European Union and the United States. The author's approach was driven by five specific goals: (1) take stock of how CFF allocated funds and assess if the stated key performance indicators (KPI) from the Strategy were achieved; (2) analyze and assess the impact of CFF's leadership in the climate finance space; (3) understand what made partners successful and what challenges they faced; (4) assess the three target region's financial ecosystem decarbonization progress and climate policy trends to contextualize the Climate Finance Fund's focus and inform our future recommendations; and (5) provide formative feedback and recommendations to guide future climate finance portfolios.

To reach these goals, this evaluation is based on over 21 interviews with climate finance and energy experts including Hewlett Foundation staff, other foundations, asset managers, banks and other lenders, venture capitalists, corporate leaders, non-governmental organizations, and other experts; the evaluation also includes a review of present and past climate finance literature and data, government reports, and the author's own expertise in climate finance.

The authors would like to thank Jonathan Pershing, from the Hewlett Foundation, and Marilyn Waite from the Climate Finance Fund for their generous time and extensive insights.

Limitations of this Assessment

It is important to note that there are three important caveats about this evaluation. The main limitations are related to (1) the evaluation's timing and scope, (2) data available, and (3) causal attribution. First, our analysis is a qualitative assessment of progress made over approximately the past five years and is not a complete empirical evaluation, which would have required more time and resources. Furthermore, some partners are still in the midst of delivering their work and do not have the benefit of hindsight to evaluate and report their full impact. Second, our conversations with grantees, partners, and other actors in the climate finance ecosystem were highly specific to where they work and what kinds of projects they focus on. Therefore, insights were broadly aggregated and come from a relatively small sample size. Third, given the complex nature of financial markets and policymaking it is challenging to conclusively attribute a specific systemic outcome to CFF, one of its grantees, a partner, or another actor.

A further important point to note—while some of the workstreams described in this evaluation reflect the passage of legislation, the Climate Finance Fund does not lobby nor direct its funds for prohibited lobbying activities, as defined by United States federal tax laws.

A. Significant Climate Finance Fund Outcomes

The crux of this evaluation focuses on the extent to which CFF has contributed to mobilizing diverse groups across three continents, decarbonizing capital, and unleashing systemic change. Answers to these questions help us to understand whether the CFF theory of change has worked as envisioned and how systems change has progressed in the ecosystem. This section draws on data collected from all sources to present findings around key accomplishments and encountered challenges below, before turning to a larger discussion around systemic shifts in the financial ecosystem and climate finance policy.

Over the past five years, Marilyn Waite has worked with hundreds of partners and grantees. The fund's central accomplishments broadly fall into the following categories: the mobilization of private capital to climate-friendly projects, products, and services both directly and indirectly; spurring a sustainable banking transformation by supporting and promoting the adoption of the PCAF standard and similar policies; driving the overall awareness of climate-friendly banking and retirement savings to the general public and policymakers; bringing diverse groups/voices into the pool of partners and increasing climate finance investments/programs in overlooked communities; championing valuable thought leadership in all three regions; catalyzing the development of the climate fintech ecosystem in China; and collaborating with other funders in innovative ways (i.e. partnering with large tech firms to support the Greenhouse Gas Protocol update and partnering with the Grantham Foundation to support an innovative climate finance vehicle).

B. Key Performance Indicators (KPIs)

CFF successfully met each KPI outlined in the Strategy. The following table provides the reference language for each KPI and an example of the project(s) or organization(s) that fulfilled each metric. Please note that the following chart is not exhaustive, in some areas CFF exceeded the initial goal.

1. Markers of success that measure the direct impact of strategy actions:

a. Within 18 months, increase bank capital flow towards carbon accounting by at least \$100 billion.

This goal was swiftly achieved within the first year of implementation. By early 2020, financial institutions, which are signatory parties to the Partnership for Carbon Accounting Financials (PCAF), had fully disclosed (as compared to 'committed') far more than the \$100 billion that was aimed for in the target.

PCAF signatories include commercial banks, retail banks, asset owners and managers, and insurance companies (with total AUM \$93 trillion) that have been actively collaborating to develop GHG accounting in their organizations. Some examples of early signatories to PCAF include Rabobank, BancoSol, NMB Bank, Amalgamated Bank, and Clearwater Credit Union. Large signatories (by AUM) include Blackrock, HSBC Holdings PLC, Bank of America, and BNP Paribas.

b. Within 3 years, spur at least \$100 million in retail lending for climatefriendly activities in the U.S. via credit unions.

This indicator was met through various grants. The most notable of which were grants to the Clean Energy Credit Union and Inclusiv. Inclusiv is a non-profit organization that specializes in supporting credit unions serving underserved markets. They launched the **Center for Resiliency and Clean Energy** in October of 2019. Inclusiv's community development credit unions (CDCUs) network includes around 367 green lenders from 193 community financial institutions. A sample of just 73 of those 367 lenders generated \$2.4 billion in loan volume for solar and energy efficiency. The lending was made in predominantly low- and middle-income communities of color.

Grants to the **Clean Energy Credit Union**, a unique, innovative, federally chartered credit union that focuses only on clean energy finance, enabled a rapid scale-up of their clean energy lending, which recently surpassed 11,000 clean energy loans totaling \$200 million. The Foundation's grants are credited for spurring half of the credit union's clean energy lending (i.e. \$100 million).

c. Within 3 years, make \$500 million of private capital available for climatefriendly activities as a result of our direct de-risking of fund structures.

The Foundation partnered with the Grantham Foundation, the governments of France and Germany, and BlackRock to raise an initial **\$500 million** for a private equity fund. The Climate Finance Partnership (CFP) invests in climate change-linked infrastructure upgrades in emerging markets, a quarter of which are made in Africa. The CFP fund includes investments in renewable energy, energy efficiency, energy storage solutions, and ultra-low and electric transport.

d. Within 3 years, hold at least three convenings dedicated to climate-friendly retail banking solutions.

Numerous convenings were supported directly and indirectly, including:

- The California Global Action Climate Summit Global Climate Summit Breakfast: "Behind the Curtain on Banks & Climate Change" Hosted by Amalgamated Bank on Wednesday, September 12, 2018 - San Francisco
- 2. Bank for Good Campaign & multiple events across 2019 Hosted by Drive Agency/Purpose/ideas42/Presente
- **3.** Where Do We Go from Here? Economic Justice and Credit Unions Hosted by Inclusiv on May 1-3, 2023 - Memphis, TN
- 4. "Financial Inclusion and The State of The Minority Banking Sector" a webinar Co-hosted by Johns Hopkins University's 21st Century Cities Initiative and the National Bankers Association on August 2, 2023

e. Within 3 years, hold at least one convening dedicated to climate-friendly passive asset management solutions.

CFF supported Adasina Social Capital, who initiated multiple convenings with social justice partners to learn how best to invest in climate-friendly public equities with a racial, gender, and economic justice lens. Out of these convenings, Adasina determined that the food and agriculture sector was the most important. Adasina and the ETC Group created an exclusion and engagement list for investors that compiles the most egregious companies in the food system (including: commercial seeds, agrochemicals/pesticides, synthetic fertilizers, gene editing companies in food, agricultural commodity traders, meat/protein, and livestock breeding/genetics). This open resource is freely available to the public on the BRIDGE platform.

Numerous other convenings were supported directly and indirectly, including:

- Business for Climate Finance Retirement Plan Report Launch Hosted by Impact Experience, CFA Institute, and Mercer during Climate Week NYC on September 20, 2023 - New York, NY
- 2. A New Frontier for Sustainable Finance: Greening Financial Supply Chains Hosted by GreenFin on June 26, 2023 - Boston, MA

f. Within 3 years, dedicate at least 25% of our total U.S. funding to people of color-led or owned organizations working on climate-friendly financing solutions. In 2018, the boards and senior staff of organizations grants were comprised of 13% and 17% people of color, respectively.

CFF supported numerous grantees that were led or owned by people of color. Some examples are: VC Include, Hive Fund, and the Greenlining Institute.*

*Note the authors independently verified this information.

g. Within 3 years dedicate at least 40% of total funding in China, EU, and U.S. to women led or owned organizations working on climate-friendly financing solutions.

CFF supported numerous grantees that were led or owned by women. Some examples are: Climate Policy Initiative, Prime Coalition, Inclusiv, and the Clean Energy Credit Union*

*Note the authors independently verified this information.

h. Within 3 years, increase the number of partners and funders working on retail banking solutions by at least 50% (baseline of six partners and three funders in 2018).

This goal was achieved with significant success. For example, early grants and partnership with Inclusiv were then supplemented by **other major funders**, including the Bank of America Charitable Foundation, the Kresge Foundation, the Annie E. Casey Foundation, PNC Bank, BlackRock, the U.S. Treasury CDFI Fund, the Target Foundation, Deutsche Bank and many others. Partners with Inclusiv were also significantly expanded. Notable examples include the CDFI Coalition, Visa, Freddie Mac, among many other state credit unions.

In addition to CFF's early grants to PCAF, various other funders and partners joined. This included Bloomberg Philanthropies, the Ikea Foundation, and anonymous foundations.

BankForGood is a coalition of organizations joining forces to create a financial system that makes it easier for people to align their values with their financial decisions. BankForGood **expanded their partnerships** with the Hive Fund, Green America, the Sunrise Project, as well as other organizations.

In addition to support for the Clean Energy Credit Union, additional funders have included the L.P. Brown Foundation, Innovo Foundation, Energy Foundation, New Resource Bank (later acquired by Amalgamated Bank), E4TheFuture, and Natural Investments LLC.

2. Markers of success that measure the indirect impact of strategy actions:

a. Within 18 months, there will be significant increase (at least 100 financial institutions) in disclosure of financed emissions and disclosure of climate-friendly investments.

With its grants made to the **PCAF**, CFF significantly increased the number of financial institutions in disclosure of financed emissions and climate-friendly investments.

In 2018 there was a baseline of just 16 financial institutions who had signed on to disclose their financed emissions via PCAF's standards. By the end of 2021, there were 172 financial institution signatories and at the time of writing, in August 2023, PCAF members totaled 425 financial institutions globally, from smaller lenders such as Clearwater Credit Union to BlackRock, the largest asset manager in the world.

b. Within 3 years, at least one new sustainable retail banking product and/or service aimed at financing climate-friendly activities will be available in two of our three focus regions.

There were two platforms launched in the United States and in China that achieved this goal. AskSustainable's U.S. Hub was launched in 2022. This freely available platform provides the general public with a database of hundreds of climate-friendly banking and investment products available in the U.S. from checking and savings accounts to ETFs, mutual funds, and money market accounts. A similar (unlaunched) database is being prepared for the European market. In China, CFF supported the Governance Solutions Group to launch the Climate Friendly Investment Product platform in 2022. This platform provides a searchable database of China's climate-friendly investment and banking products available to the general public.

Multiple retail banking products and services created by Inclusiv's network of credit unions also fulfilled this goal. For example, with Inclusiv and the University of New Hampshire's Solar Lending Training Program, several graduates have gone on to implement or scale-up solar lending programs within their respective organizations. One such graduate is the Vermont Federal Credit Union, which now provides additional financial solutions for homeowners to pay for the installation of solar panels. c. Within 3 years, at least one new passive asset management product and/or service aimed at financing climate-friendly activities will be available in two of our three focus regions.

Several projects fulfilled this indicator. With respect to China, CFF provided support for the creation of the CSI Jinsinan Climate Friendly Index. The Index selects all listed companies in the Shanghai and Shenzhen Stock Exchanges, capturing low-carbon investment opportunities across industries and facilitating the implementation of climate solutions.

In the United States, Adasina Social Capital also received funding to **provide data toward passive investment funds** that embrace more climate solutions, especially those involving climate-friendly agriculture. More specifically, the project filled gaps in data about the global seed, agrochemical and synthetic fertilizer markets, making that information public, while creating a sustainable agriculture investment screen that addresses climate change and racial justice. The Adasina Social Justice All Cap Global (JSTC) ETF was also established to allow investors to align their portfolios with social justice, including climate action.

d. Within 5 years, at least five economies (national and sub-national) will adopt climate-friendly finance policies that directly or indirectly mobilize capital for GHG mitigation.

This goal was achieved in over five economies. Specific examples include (but not limited to):

- New York City was among the first cities in the United States to commit to net-zero GHG emissions in their public pension funds by 2040. Three NYC retirement systems (NYCERS, TRS, and BERS) adopted a commitment in 2021 to achieve a net-zero GHG portfolio by 2040.
- 2. The State of California recently passed climate finance disclosure legislation. The Climate Corporate Data Accountability Act, SB 253, requires large public and private companies doing business in California to disclose their scope 1, 2, and 3 emissions, beginning in 2026. The Climate-Related Financial Risk Act, SB 261, requires certain entities doing business in California to prepare and submit reports that cover climate-related financial risks consistent with recommendations from the Task Force on Climate-Related Financial Disclosure (TCFD) framework. This by default also includes PCAF compliance.

- **3.** The European Banking Authority (EBA) recommends PCAF for calculating financed emissions (Scope 3, Category 15 of the GHG Protocol).
- 4. Announced in 2022, banking and insurance entities in China are required by the China Banking and Insurance Regulator (CBIRC) to "establish strategies, processes and capacity to support the transition to a sustainable future." CBIRC also directs these entities to "reduce the carbon intensity of their asset portfolios in a gradual and orderly manner, and eventually achieve carbon neutrality of asset portfolios."
- 5. In November 2022, the U.S. Department of Labor released a final rule under the Employee Retirement Income Security Act (ERISA) that empowers plan fiduciaries to consider climate change and other ESG factors when they make investment decisions and exercise shareholder rights.
- 6. The U.S. also has several pivotal climate finance-related rules still in process, including: the Security and Exchange Commission's (SEC) mandatory disclosures rule; the Consumer Financial Protection Bureau's (CFPB) implementation of section 1033 whereby the bureau proposes to strengthen consumer data rights, aiming to fuel greater competition in the financial products market; and the Department of Defense (DOD), General Service Administration (GSA) and National Aeronautics Space Administration's (NASA) joint proposal to amend federal procurement rules (under FAR) to compel certain federal contractors to disclose their GHG emissions and climate-related financial risk and set science-based targets to reduce their emissions.

e. Within 5 years, 25% more capital will be deployed annually (or about \$100 billion more compared to a baseline of \$500 billion in 2017) to GHG mitigation.

Capital flows increased by at least 25% within three years. Based on CPI analysis, preliminary estimates suggest 2021 climate finance flows amount to \$850 – \$940 billion, **representing a 28% – 42%** increase from 2019-2020 averages, reaching an all-time high. Note that capital flow calculations vary, based on how climate finance is defined. For example, Boston Consulting Group reported even higher climate finance flows of \$1.3 trillion for 2020 in their report **released in November 2022**.

C. How the Financial Ecosystem Changed & Spotlight on the Sustainable Banking Transformation

Overall progress in the key countries and regions where CFF focused its philanthropic contributions has been, on the whole, positive. Some of the changes discussed below came about from external market or political forces, while others have a more direct link to the partners, projects, solutions and organizations CFF supported. As noted in this report's introduction, given the complex nature of financial markets and policymaking it is challenging to conclusively attribute a specific systemic outcome to CFF, one of its grantees, a partner, or another actor. That being said, this section outlines key systemic developments across all three regions that are relevant to the Fund's theory of change and partner activities.

At present, we have seen incremental systemic shifts take place across all active regions amongst financiers. For example, the availability of sustainable investment funds and financial products are on the rise to meet consumer demand; rules mandating disclosure of carbon emissions in financial portfolios are being actively promulgated in all Strategy regions; and ensuring that climate finance is just, from the Justice40 framework of the U.S. to the Shared Prosperity framework of China, is underway—to name a few key developments.

On the retail banking side, there has been progress in consumer awareness as well as continued evidence of unmet demand for green banking products. A recent Mambu global survey indicated that 67% of consumers want their bank to be more sustainable.[®] However, as earlier Hewlett Foundation funded work by ideas42 uncovered, there are clear behavioral barriers preventing consumers from acting on these stated preferences, and in the U.S., opening a new account and closing an old one is rarely easy.[®] Uncovering these foundational roadblocks then informed other workstreams funded by the portfolio, such as regulatory work to inform the CFPB's bank account portability policy. The retail banking community, made up of bankers, financial advisors, researchers, and advocates, was able to play a pivotal role in driving many of the financial regulatory action for climate. Because this community was already organized around climate and equity, they were able to successfully advocate that climate financial regulations support the everyday person and their future. CFF portfolio's foresight into the value of having an informed populace, which could refute claims that climate financial regulation would be burdensome for the average saver and small business, was thus uniquely helpful.

CFF's funding also seeks to play the long game through backing consumer-focused platforms, such as AskSustainable and the Climate Friendly Investment Product platform in China, which provide the public with a searchable database of climate-friendly financial products and services. In addition, CFF has recently begun to fund the pilot of retail investment circles, bringing the Activate Your Money curriculum to consumers. These investment circles are linked to policy circles and thus able to leverage the voice of newly informed consumers for more climate-aligned lending and investment policies. Much of this work's impacts are geared toward the long-term and are still playing out. This suggests a need to continue to support and amplify awareness of these projects in the coming years to fully realize their potential to move the market.

There has been remarkable progress on aligning the financial system with climate goals in the past five years. To that end, a number of climate finance-focused rules have been adopted or proposed in all regions. For instance, The European Banking Authority (EBA) formally recommended PCAF for reporting on financed emissions and required all banks under its authority to report portfolio greenhouse gas emissions. The European Sustainability Reporting Standard (ESRS) lists the PCAF methodology for financed emissions in the disclosure standard for the whole value chain (Scope 3).¹⁰ New climate reporting standards and disclosure rules were announced in 2022 by the China Securities Regulatory Commission (CSRC), as well as requirements for banking and insurance entities in China being required to reduce the carbon intensity of their asset portfolios by the China Banking and Insurance Regulatory Commission (CBIRC).¹¹ Also in 2022, the U.S. Department of Labor (DOL) released a final rule under ERISA that empowers plan fiduciaries to consider climate change and other ESG factors when they make investment decisions and exercise shareholder rights.¹² Finally, there are numerous important climate finance rules in process in the United States—including the SEC's mandatory climate disclosure rule; the CFPB's implementation of section 1033 whereby the bureau creates bank account portability (and thus makes account switching easier); and efforts to amend the Federal Acquisition Regulation (FAR) procurement rules to require certain federal contractors to disclose their GHG emissions and climaterelated financial risk.13

While these systemic shifts represent meaningful progress, there has also been an enduring 'anti-ESG' campaign (particularly in the United States) that had been especially vocal in 2022. Evidence gathered from a Freedom of Information Act (FOIA) request revealed that this campaign has been primarily funded by the fossil fuel industry, including the Texas Oil and Gas Association, Permian Basin Petroleum Association, North Dakota Petroleum Council, Lignite Energy Council, Ohio Coal Association, and the Ohio Oil and Gas Association.¹⁴ Over the last five years, the Strategy has sought to address many of the larger, institutional and systemic barriers that limit investment opportunities in climate-friendly projects. One of those barriers has been around the lack of transparent and comprehensive data around climate investments. To address this gap in data, the Foundation provided support to PCAF. CFF's subsequent funding helped to expand PCAF's geographic footprint, as well as to provide financing for new methodologies around financial asset classes. CFF's grants to PCAF have also helped investors identify new opportunities to reduce GHG emissions. Over the last several years, PCAF has moved toward becoming a self-sustaining initiative. In 2023, PCAF filed to become a non-profit entity and has begun developing professional training programs on GHG accounting. Additionally, the Partnership has continued to grow, reaching 425 financial institutions at the time of writing. These institutions represent more than \$93 trillion in total assets (as of August 2023). More than 130 signatories have similarly published their emissions disclosures as a result of PCAF's partnerships with signatory institutions.⁴⁵

Funding for the Clean Energy Credit Union catalyzed additional investments in equitable clean energy lending programs. Specifically, CFF's investment was leveraged by ten: \$1 million to the Clean Energy CU translated into \$100 million in deployed clean energy loans. Additionally, a grant to the Community Builders of Color Coalition, led by the African American Alliance of CDFI CEOs, helped launch the Justice Climate Fund.

CFF also played a leading role within the climate financial regulatory space. Specifically, convenings over the past five years have helped promote the integration of climate solutions within U.S. financial regulatory frameworks. This has resulted in an influential agenda to leverage financial regulatory mandates for climate solutions. As a convenor, the Climate Finance Fund brought various organizations, such as think tanks, financial institutions, and policy experts, together to identify what was politically feasible and legally possible with regards to integrating climate risks, opportunities, and impacts into market rules. A particularly impactful meeting took place in early 2020 to gather experts in Washington, D.C. and probe various regulatory systems that could incorporate climate-friendly policies.

Expert testimony by Marilyn Waite (at the time, employed by Hewlett Foundation's Environment program) to the U.S. Senate Committee on Banking, Housing, and Urban Affairs also helped to advocate for climate considerations in the U.S. financial system. Ultimately, CFF's efforts helped push the policy discussion forward around climate-proofing the country's balance sheets. With the Fund's additional efforts, DEI considerations were raised as part of a broader discussion in addressing systemic issues within market regulations and climate investments.

D. Contributions to Diversity, Equity, and Inclusion

A commitment to embedding *diversity, equity,* and *inclusion* (DEI) considerations into the portfolio's workstreams has had a demonstrated and deep impact in the field. From convening diverse voices across the climate finance and equity ecosystems, to working to improve workforce diversity in financial institutions, and to funding organizations that deploy capital for climate-friendly activities in overlooked geographies and communities, CFF has been effective at supporting projects and partners that seek to level the playing field from numerous angles.

The lack of representation and access to capital by certain demographics such as women and people of color, particularly with respect to climate investments, is but a microcosm of much larger, systemic issues within society. The financial sector has wide control over capital and assets and therefore a large responsibility in driving the current status quo of inequity. By extension, the sector holds outsized influence and power in global markets and the business environment. In Europe, less than 0.5% of venture capital funding goes to Black-led startups.⁴⁶ In 2018, the Strategy cited a 2017 U.S. Government Accountability Office (GAO) study that found that racialized communities held just 12% of senior roles, while women held 29% of senior positions. Since then, the GAO has found that between 2018 and 2020, representation for both racialized people and women remained relatively flat or had marginally increased. This sobering statistic highlights the reality of the existing challenges in addressing the lack of diversity in the financial sector and illustrates the crucial need to continue embedding DEI into climate finance work.

From the discussions we had with grantees and partners alike, the racial justice movement catalyzed greater interest in embedding DEI considerations within their respective organizations and wider grantmaking processes. To this end, CFF supported organizational effectiveness DEI (OE-DEI) funding to grantees wishing to advance DEI considerations within their own organizations. One such grantee was the Prime Coalition, a nonprofit organization that channels catalytic capital to companies, projects, and funds that have significant potential to mitigate GHG emissions.⁴⁷ Of the funding Prime received, some was used for OE-DEI support. After a third party operations review, staff training, and time—Prime shared that the work was transformational and now DEI considerations permeate all aspects of their operations. For example: the organization launched a diversity, equity, inclusion, belonging (DEIB) staff working group that meets monthly; sets diversity targets in the context of all their investment pipelines; researches charitable co-benefits and co-risks of unintended social consequences through investment management—amongst a dozen other processes and program priorities where DEI has been embedded.

The Strategy also aimed to address systemic inequities by creating direct impacts in the communities that the grant recipients served (i.e., through job creation and community workforce empowerment). One such partner was the Hive Fund, a specialized intermediary that raises funds and makes grants to groups that are building power to accelerate an equitable transition to cleaner, renewable energy.¹⁸ In the words of the Hive Fund's codirector, CFF's grants have been "formative" in directly benefiting communities of color in the U.S. South, where pollution levels and clean energy opportunities are high but funding levels are low. The Hive Fund has also provided funds to national organizations, such as the African American Alliance of CDFI CEOs, an alliance that empowers Black CDFI CEO members to lead and grow their institutional operations, teams, and social impact.¹⁹ This elevated interest and action among Black CDFI CEO members in climate-related investments, which have been historically overlooked by larger, 'green' lenders.

Another way the portfolio integrated DEI considerations into its climate finance work was a focus on national-level regulations and policies. The partnership with the Center for American Progress (CAP) and similar think tanks are examples of how CFF was effective at leveraging change in this way. In our conversations, the Foundation's support of CAP was cited as foundational in the policy discourse around 'just and equitable transitions' toward renewable energy and the net-zero economy. Several of the individuals that we interviewed cited the Climate Finance Fund's strength as a trailblazer in the philanthropic and climate investment community around issues addressing the systemic effects of environmental racism. At the time of the Strategy's launch, few people in government and the philanthropic sector were truly discussing these issues within the context of climate-related investments.

A. Gaps Remain

Global climate finance continues to lag far behind what is needed to reach the targets of the Paris Agreement. It is broadly estimated that between four and six trillion dollars of investments into renewable energy systems will be needed every year until 2030 in order to reach net-zero emissions by 2050.²⁰ As of 2021, total global climate finance was estimated to be around 31-32% of the annual investments needed to reach the Agreement's 1.5°C target.²¹ Numerous systemic barriers remain in addressing the climate investment gap and managing global cooperation around climate action.²² These barriers represent opportunities for the philanthropic community to effect change.

In addition to systemic barriers, there are several broader economic developments and geopolitical shocks that have emerged in the past 18 months, which have the potential to compound the roadblocks mentioned above and further delay reallocating capital towards climate-friendly technologies. For example, growing geopolitical tensions; market volatility in fossil fuel energy and commodity prices; and rising interest rates—are all drivers affecting financier behavior and strategies. Many countries are still investing in fossil fuels in order to meet growing energy demands and several major GHG-emitting countries are expected to invest greatly in coal-power generation over the next decade.²³ The next subsection will outline some of the commonly cited potential threats identified in our interviews.

B. Market Threats

The following is a short-list of key market threats that have the potential to affect the success of the next five-year climate finance strategy. As the Foundation thinks about developing its approach and focal points, we believe it should take into account the following:

High Interest Rate Environment:

With recent inflationary pressures and monetary policy adjustments, there are growing risks associated with higher interest rates and overall cutbacks to lending and investment around climate action.

Debt Crisis:

Many countries will face growing debt payment pressures as they struggle to balance loan repayments with necessary investments in climate infrastructure and services.

Anti-ESG in the United States:

A vocal anti-ESG opposition has emerged in the U.S. in recent years, largely funded by the fossil fuel industry. The orchestrated backlash to ESG-related investments may threaten gains in addressing wider systemic barriers in the financial system and climate action.

Politicization of Climate Change and Investment Needs:

Climate change has often been used as a partisan political wedge issue, particularly in the United States. Future risks may arise in mobilizing necessary investments for a net-zero transition, as politicians delay or undermine renewable energy production.

Post-COVID Economic Growth in China:

Chinese government officials are looking to balance pressures in stimulating economic growth with moving forward on climate goal initiatives. There is a fear that climate concerns will take a backseat to economic growth.

Right-wing, Nationalist Surges in Europe:

In tandem with climate policy backsliding in some European countries, a right-wing surge in many locales across the continent threatens future cooperation and financing related to climate action. Policy coordination across the EU and additional financing for renewable energy production may be at risk.

Rising Geopolitical Tensions:

As multiple wars upend global energy and commodity prices, there are concerns about how rising geopolitical tensions may slow global climate cooperation. Growing trade concerns, protectionism, and energy security considerations could serve as roadblocks for further cooperation.

C. Recommendations

Reflecting upon the insights gleaned from our interviews and research, there are several broad recommendations that emerged from the portfolio's performance over the past five years.

First, philanthropies should embed justice, equity, diversity, and inclusion (JEDI) considerations in climate finance activities and tether them to the local context of where a program or project is located. While the focus on net-zero targets and investments in 100% renewable energy systems are necessary, those ambitions alone cannot deliver the climate transformation that is needed. Additional attention and investments could be made with smaller and less-well known grantees, where funding for DEI considerations may prove to be more transformative.

Second, if there are future constraints from competing strategic priorities and limited pools of funding, CFF should consider narrowing its focus to one pool of capital and operate in one to two geographies (e.g., East Africa or China). This more targeted approach will ensure that philanthropic dollars will not be spread so thin, and that available resources can be used to more effectively create change.

Third, the philanthropic community should consider prioritizing stronger coordination with a wider set of diverse partners, including corporate foundations, to accelerate climate finance strategies. This is a tactic that has already been in play at CFF, yet our research revealed a strong interest in expanding coalition building and coordination from the ecosystem. We frequently heard that there is a need for greater coherence toward solving problems and setting goals within the climate finance community—and that funders could be a driving force for this. Expanding the number of initiatives where funders pool their resources to attack a specific problem was another commonly offered suggestion.

In terms of shaping future grantmaking for climate finance, we share four tactical focus areas to consider. These include:

1. Global Majority Focus

In the coming years, there is a critical need for funders to channel more of their investments towards climate-friendly initiatives for the Global Majority. Therefore, funders should explore how it and others in philanthropy might fill more of the capital investment gap in low- and middle-income countries. Influential regional players, such as Vietnam in the Asia-Pacific and Jamaica in the Caribbean have the potential to lead on implementing equitable net-zero solutions and building resiliency in their respective regions. If funders have a limited budget to dedicate to climate finance, then we suggest focusing on a specific region within the Global South. Potential workstreams where the Foundation could leverage its convening power, financial resources, and the learnings and success of the past five years include, but are not limited to:

- Catalyzing South-South cooperation via convenings for specific financial actors/ institutions/capital pools within the Global Majority;
- Facilitating engagement and deal flow among climate finance actors in China, ASEAN, the African Union, and CELAC;
- Focusing on regulatory action and climate finance standards uptake for the Global Majority;
- Driving funding in often overlooked regions that struggle to attract foreign investments in renewable energy projects and green infrastructure with solutions such as derisking investment opportunities;
- Directly funding (or derisking) investments in shovel-ready climate-friendly projects or workstreams that can be easily scaled-up.

Multilateral development banks (MDBs) and development financial institutions (DFIs) will continue to play a role in climate financing in the Global South. As such, the Climate Finance Fund and other aligned funders would naturally engage more with these actors around climate. However, it should also be noted that this space is already particularly saturated with philanthropic resources and attention. Therefore, it is suggested that the CFF and aligned funders leverage the international finance stakeholder networks to drive country-specific and cross-border innovative finance for GHG mitigation.

2. Workforce Development

The global energy transition will not come to pass without the human capital to reimagine, develop, install and maintain new climate-friendly systems. CFF and aligned funders should seek out innovative approaches to workforce development and capacity building to support climate finance and capital deployment. This could take many forms, such as the training and development of professionals in the financial sector. This could also be a place to emphasize justice, equity, diversity, and inclusion, by ensuring that the climate finance workforce represents the populations in target regions.

3. Consumer Finance

The fact that the climate finance portfolio made early investments in mobilizing consumers and small businesses towards climate-friendly investing and banking paid off for helping to convince regulators that the market had spoken—knowing the climate risks, opportunities, and impacts of a bank or investment product were demanded. Having evidence that small, local retail banks were already measuring and reporting their financed emissions illustrated that requiring such public disclosure would not be burdensome. Pointing to the plethora of climate-aligned retail investing assets under management also supported systemic change. This work has received a minuscule portion of current climate finance philanthropic investments and could have an even greater impact if more funds pursued retail climate finance strategies. There is an additional need to focus on the connections between consumers and citizens, leveraging gains in climate finance literacy to drive more capital to equitable and just climate solutions.

4. Innovation, Implementation, and Scaling

CFF has built a reputation as innovators and leaders within the climate finance space over the past five years. As the broader community pivots to strategies largely focused on implementation, the Foundation should consider continuing its innovative approach to selecting partners and scaling solutions. Too often, grantees and partners lament the fact that philanthropists do not listen to enough dissenting voices on strategy and get trapped in the echo chamber of climate philanthropy conventional wisdom. CFF was praised for taking a more inclusive approach and seeking to identify and listen to voices outside of typical "core" partners. Continuing to vanguard an inclusive and diverse roster of partners in overlooked geographies and communities will help ensure that climate solutions are a better fit for the local community in the long run.

CFF also proved itself adept at scaling certain transformational market solutions (such as PCAF, such as existing community-focused banks, credit unions, and investors) and crowding in additional capital from other funders. The Foundation should consider continuing to commit to this approach.

Conclusion

The next few years offer a make-or-break moment for the international community to act on climate change. With the targets under the Paris Agreement and Agenda 2030 set, funders and governments alike are pivoting towards strategies to overcome the implementation challenges of financing and fill the climate finance gap. The 2018-2023 period was marked by success in achieving and, in some cases, exceeding all of the goals set out in the Strategy. Yet, the macro goal of closing the global climate financing gap to limit warming to well below 2°C remains elusive.

Looking ahead, protecting hard fought climate finance regulations, as well as continuing to experiment with projects that target market transformation and a greater equitable decarbonization should underpin the climate finance strategic approach.

About the Authors

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Jennifer M. Silvi is an experienced leader and advocate for the global transition to a cleanenergy economy. She currently leads Silvi Consulting LLC, an independent strategy and advisory services firm. With a career spanning 17+ years, she has developed broad expertise with sustainable investing/ESG frameworks, SDGs, geopolitics, carbon finance, renewable energy, GHG accounting, compliance and regulations.

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Endnotes

- **1**. The Climate Finance Fund is hosted by the European Climate Foundation.
- 2. In 2019 numerous studies identified an annual need of \$1.6 to \$3.8 trillion worth of investments to reach net-zero by 2050, while actual annual investments totaled only \$600 billion.
- **3.** "Global Landscape of Climate Finance: A Decade of Data." n.d. CPI. https://www.climatepolicyinitiative. org/publication/global-landscape-of-climate-finance-a-decade-of-data/
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