



The Global Climate Finance Architecture

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Climate Finance Fundamentals **2**

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Climate finance remains central to achieving low-carbon, climate resilient development. The global climate finance architecture is complex and always evolving. Funds flow through multilateral channels – both within and outside of the UNFCCC and Paris Agreement financial mechanisms – and increasingly through bilateral, as well as through regional and national climate change channels and funds. Monitoring the flows of climate finance is difficult, as there is no agreed definition of what constitutes climate finance or consistent accounting rules. The wide range of climate finance mechanisms continues to challenge coordination. But efforts to increase inclusiveness and complementarity as well as to simplify access continue.

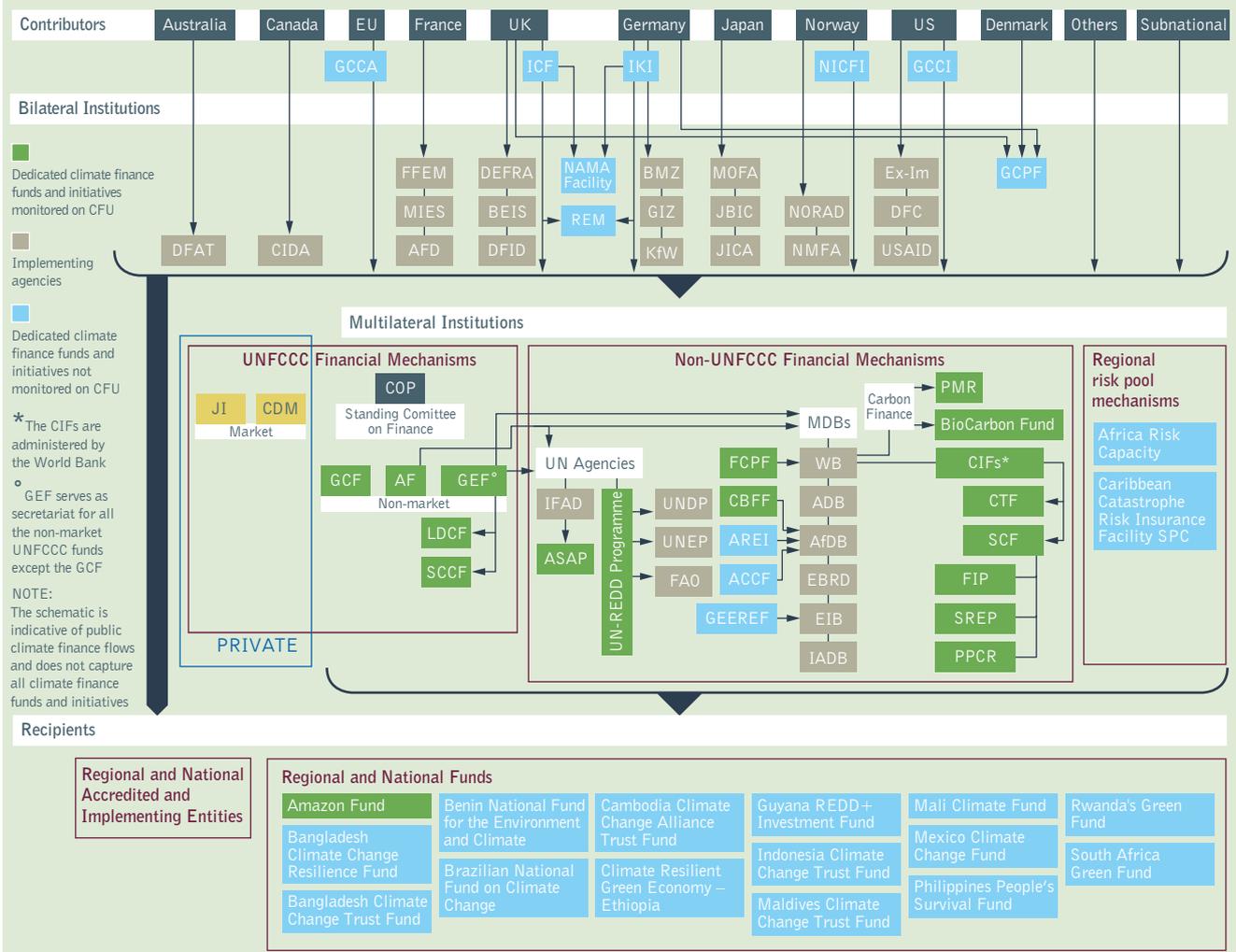
Climate finance

Climate finance refers to the financial resources mobilised to fund actions that mitigate and adapt to the impacts of climate change, including public climate finance commitments by developed countries under the UNFCCC, although a definition of the term “climate finance” is yet to be agreed internationally. In the 2009 Copenhagen Accord, and confirmed in the Cancun decision and Durban Platform, developed countries pledged to deliver finance approaching USD 30 billion between 2010 and 2012. While contributor countries at the end of the fast-start finance period self-reported that these targets were exceeded (Nakhouda et al., 2013), the 2015 Paris Agreement reiterated that developed countries should take the lead in mobilising climate finance “from a wide variety of sources, instruments and channels” in a “progression beyond previous efforts,” with the accompanying COP decision agreeing to set a new collective goal by 2025 by scaling up from a floor of USD 100 billion pledged in Copenhagen to be reached annually by 2020. Many countries have highlighted the need for scaled-up international support in implementing their National Adaptation Plans (NAPs) as well as increasing the ambition of their Nationally Determined Contributions (Hedger and Nakhouda, 2015). Ensuring that finance and investment is available to realise these goals will be the major challenge going forward (Bird, 2017). Developing countries have also made the case for finance to address climate change loss and damage already occurring in their countries as a result of climate change (Richards and Schalatek, 2017).

A study commissioned by the French and Peruvian Governments, in their capacities as Presidents of COP 21 and 20, concluded that USD 62 billion in public and private sources were directed to developing countries from developed countries in 2014 (OECD, 2015). A more recent OECD update from 2019 puts the public and private climate finance provided and mobilized from developed countries to developing countries at USD 71 billion for 2017 (OECD, 2019). It is notable that in this wider reading of climate related funding a substantial part comes from the private sector and the additionality of public finance identified is unclear (i.e. how much of this represents effort over and above existing development finance commitments). CFF 1 presents a longer discussion of the principle of additionality. The second Biennial Assessment and Overview of Climate Finance Flows of the UNFCCC, released in November 2016, recorded USD 41 billion of public international finance flowing to developing countries in 2013-14. In 2018, the third Biennial Assessment recorded that this had reached USD 56 billion annually in the period 2015-2016 (UNFCCC, 2018). These figures remain relatively small, however, compared to global climate finance estimates, taking into account all countries and both private and public finance, of USD 579 billion a year in the 2017-2018 period (CPI, 2019).

Figure 1 presents an overview of the global architecture, focusing particularly on public climate financing mechanisms. There are a number of channels through which climate finance flows, including multilateral climate funds that are dedicated to addressing climate change. Several developed countries have also established climate finance initiatives or are channelling climate finance

Figure 1: Global climate finance architecture diagram



Implementing Agencies and Institutions	
AfDB	African Development Bank
AFD	French Development Agency
ADB	Asian Development Bank
BEIS	Department for Business, Energy & Industrial Strategy
BMZ	Federal Ministry of Economic Cooperation and Development
CIDA	Canadian International Development Agency
DEFRA	Department for Environment, Food and Rural Affairs
DFAT	Department of Foreign Affairs and Trade (Australia)
DFC	US Development Finance Corporation
DFID	Department for International Development
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
Ex-Im	Export-Import Bank of the United States
FAO	Food and Agriculture Organisation
FFEM	French Global Environment Facility
GIZ	German Technical Cooperation
IADB	Inter American Development Bank
IFAD	International Fund for Agricultural Development
JBIC	Japan Bank of International Cooperation
JICA	Japan International Cooperation Agency
KfW	German Development Bank
MIES	Inter-ministerial Taskforce on Climate Change
MOFA	Ministry of Foreign Affairs
NMFA	Norwegian Ministry of Foreign Affairs
NORAD	Norwegian Agency for Development Cooperation
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	US Agency for International Development
WB	World Bank

Multilateral Funds and Initiatives	
AF	Adaptation Fund (GEF acts as secretariat and WB as trustee)
ACCF	Africa Climate Change Fund
AREI	African Renewable Energy Initiative
ASAP	Adaptation for Smallholder Agriculture Programme
CBBF	Congo Basin Forest Fund (hosted by AfDB)
CDM	Clean Development Mechanism (implemented under the Kyoto Protocol)
CIF	Climate Investment Funds (implemented through WB, ADB, AfDB, EBRD, and IADB)
CTF	Clean Technology Fund (implemented through WB, ADB, AfDB, EBRD, and IADB)
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program (implemented through WB, ADB, AfDB, EBRD, and IADB)
GCCA	Global Climate Change Alliance
GCF	Green Climate Fund
GEF	Global Environment Facility
GEEREF	Global Energy Efficiency and Renewable Energy Fund (hosted by EIB)
JI	Joint Implementation (implemented under the Kyoto Protocol)
LDCF	Least Developed Countries Fund (hosted by the GEF)
PMR	Partnership for Market Readiness
PPCR	Pilot Program on Climate Resilience (implemented through World Bank, ADB, AfDB, EBRD, and IADB)
SCCF	Special Climate Change Fund (hosted by the GEF)
SCF	Strategic Climate Fund (implemented through WB, ADB, AfDB, EBRD, and IADB)
SREP	Scaling Up Renewable Energy Program (implemented through WB, ADB, AfDB, EBRD, and IADB)
UN-REDD Programme	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation Programme

Bilateral Funds and Initiatives	
GCCI	Global Climate Change Initiative (US)
GCCP	Global Climate Partnership Fund (Germany, UK and Denmark)
ICF	International Climate Fund (UK)
IKI	International Climate Initiative (Germany)
NAMA facility	Nationally Appropriate Mitigation Action facility (UK, Germany, Denmark and the EC)
NICFI	International Climate Forest Initiative (Norway)
REM	REDD+ Early Movers (Germany and UK)

through their bilateral development assistance institutions. Many developing countries have also set up regional and national funds and channels to receive climate finance. By December 2019, two global climate funds (the GCF and AF) had received USD 67.2 million in pledges from three subnational governments (Brussels, Wallonia and Flanders) and the cities of Quebec and Paris. The types of climate finance available vary from grants and concessional loans, to guarantees and private equity. The architecture has differing structures of governance, modalities and objectives. While the transparency of climate finance programmed through multilateral initiatives is increasing, detailed information on bilateral initiatives, regional and national funds are often less readily available.

A multitude of funding channels increases the options and therefore possibilities for recipient countries to access climate finance, and theoretically also the possibilities to provide funding complementarity, but can also make the process more complicated. It becomes increasingly difficult to monitor, report, and verify (MRV) climate finance, coordinate a response, as well as to account for its effective and equitable use. There is opportunity, however, to draw lessons from the diversity about how best to structure climate finance to maximise impacts, and environmental, gender equality and social co-benefits. The HBS Climate Funds Update website seeks to track this intricate architecture (<http://www.climatefundsupdate.org>). Climate Funds Update tracks operating entities of the UNFCCC, large multilateral climate funds that feature prominently in reporting to the UNFCCC and funds that have had a significant demonstration role. It does not track all climate funds or all channels of climate finance, due to limits to available information as well as resource limitations.

Multilateral channels for climate finance

Multilateral climate finance initiatives often break from contributor country-dominated governance structures, typical in development finance institutions. This gives developing country governments greater voice and representation in decision-making. Steps to increase inclusion and accountability in multilateral climate fund governance have been taken, including by creating a role for non-governmental stakeholders as observers to fund meetings, with varying degrees of active participation opportunities.

Established in 1991, the **Global Environment Facility (GEF)** is an operating entity of the financial mechanism of the UNFCCC, serving in the same function for the Paris Agreement, with a long track record in environmental funding. It also serves as financial mechanism for several other conventions, including on biodiversity and desertification. Resources are allocated targeting multiple focal areas, including climate change, according to the impact of dollars spent on environmental outcomes, but ensuring all developing countries have a share of the funding. For the 6th replenishment of the GEF (2014-2018), 30 donor countries pledged USD 4.43 billion over all focal areas, of which USD 1.26 billion supported the climate change focal area. GEF 6 shifted the focus of its programming to targeting multiple focal areas including climate change, in thematic areas such as sustainable cities and land use and forests. For the 7th replenishment period

(2019-2022), close to 30 countries pledged USD 4.1 billion for all five focal areas, with an increase in funding for biodiversity and land degradation, but a reduction in funding for climate change to USD 654 million, reflecting the growing role of the GCF. As of December 2019, through the fourth, fifth, sixth and seventh Trust Fund, GEF had approved over 750 projects in the focal area of climate change amounting to USD 2.8 billion.

The GEF also administers the **Least Developed Countries Fund (LDCF)** and the **Special Climate Change Fund (SCCF)** under the guidance of the UNFCCC Conference of Parties (COP). These funds support national adaptation plan development and implementation, although largely through smaller scale projects (with a country ceiling for funding of USD 20 million). As of December 2019, the LDCF has made cash transfers to projects of USD 534 million and the SCCF has made cash transfers of USD 181 million, both since their inception in 2001 in close to 100 countries.

Formally linked to the UNFCCC, the **Adaptation Fund (AF)** is financed through a 2% levy on the sale of emission credits from the Clean Development Mechanism of the Kyoto Protocol. Now mandated to serve the Paris Agreement, a similar automated funding source from a new carbon market mechanism to be developed under the Paris Agreement is under consideration. However, in times of low carbon prices, the AF is increasingly reliant on developed country grant contributions to stay afloat. Operational since 2009, total financial inputs amount to USD 957 million, with total cash transfers to projects of USD 362 million. The AF pioneered direct access to climate finance for developing countries through accredited National Implementing Entities that are able to meet agreed fiduciary as well as environmental, social and gender standards, as opposed to working solely through UN agencies or Multilateral Development Banks (MDBs) as multilateral implementing agencies.

The **Green Climate Fund (GCF)** of the UNFCCC was agreed at the Durban COP and became fully operational with its first projects approved at the end of 2015. Like the GEF, it serves as an operating entity of the financial mechanism of both the UNFCCC and the Paris Agreement and receives guidance by the COP. It is expected to become the primary channel through which international public climate finance will flow over time and is intended to fund the paradigm shift toward climate-resilient and low-carbon development in developing countries with a country-driven approach, and a commitment to a 50:50 balanced allocation of finance to adaptation and mitigation. The initial resource mobilisation process for the GCF raised USD 10.3 billion. However, the failure by the United States to fulfil USD 2 billion of its USD 3 billion contribution agreement, in addition to exchange rate fluctuations, means that only USD 7.1 billion were ultimately available (CFF 11 discusses the GCF and its first formal replenishment process in more detail). By December 2019, the GCF's first formal replenishment (GCF-1) had resulted in pledges from 29 countries of funds amounting to USD 9.8 billion (see briefing CFF 11 for a full list of pledges).

Developing countries can access the GCF both through MDBs, international commercial banks and UN agencies, as well as directly through accredited National, Regional and Sub-National Implementing Entities. By December 2019, the implementing partner network of the GCF has grown to 95 Accredited Entities and the GCF had approved a total of 124 projects with USD 5.6 billion in GCF funding commitments for approved projects.

At COP 16, the **Standing Committee on Finance** was established under the UNFCCC to assist the COP in meeting the objectives of the Financial Mechanism of the Convention. The Standing Committee on Finance¹ has been tasked with, among other things, preparing a biennial assessment of climate finance flows, the fourth of which will be published in 2020 and will detail flows from 2017-2018.

A substantial volume of climate finance has been channelled through institutions that are not directly under the guidance of the UNFCCC COP.

The **Climate Investment Funds (CIFs)** established in 2008 are administered by the World Bank, but operate in partnership with regional development banks including the African Development Bank (AfDB), the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD) and the Inter-American Development Bank (IDB). The CIFs finance programmatic interventions in selected developing countries, with the objective of improving understanding of how public finance is best deployed at scale to assist transformation of development trajectories. The CIFs have a total pledge of USD 8 billion. They include a **Clean Technology Fund** with USD 5.4 billion in contributions and USD 1.65 billion in cash transfers to projects to-date, and a **Strategic Climate Fund (SCF)**, with USD 2.61 billion in contributions and USD 818 million in cash transfers to projects as of December 2019. The SCF is composed of the **Pilot Program for Climate Resilience (PPCR)**, the **Forest Investment Program (FIP)**, and the **Scaling-Up Renewable Energy Program for Low Income Countries (SREP)**. While the CIFs had a sunset clause that would come into effect when a global architecture was in place, commonly understood to be the operationalisation of the Green Climate Fund (GCF), in 2019 this clause was once again revisited and this time indefinitely postponed, opening the door to a possible recapitalisation of the CIFs.

Multilateral Development Banks (MDBs) play a prominent role in delivering multilateral climate finance, with climate finance commitments of USD 43.1 billion made in 2018 alone (EBRD et al., 2019). Many have incorporated climate change considerations into their core lending and operations, and most MDBs now also administer climate finance initiatives with a regional or thematic scope. The World Bank's carbon finance unit has established the **Forest Carbon Partnership Facility (FCPF)** to explore how carbon market revenues could be harnessed to reduce emissions from deforestation and forest degradation, forest conservation, sustainable forest management and the enhancement of forest carbon stocks (REDD+). It also manages the **Partnership for Market Readiness**, aimed at helping developing countries establish market based mechanisms to respond to climate

change and the **BioCarbon Fund**, which is a public-private partnership that mobilises finance for sequestration or conservation of carbon in the land use sector. The European Investment Bank administers the EU **Global Energy Efficiency and Renewable Energy Fund (GEEREF)**. The African Development Bank also finances enhanced climate finance readiness in African countries through the German funded **Africa Climate Change Fund (ACCF)**, whose first projects were approved in 2015. The African Development Bank is also the Trustee for the **Africa Renewable Energy Initiative (AREI)** and will house the AREI Trust Fund with expected USD 10 billion in resources.

Both MDBs and UN Agencies act as implementing entities for the GEF, SCCF, LDCF, AF and the GCF. Like MDBs, UN agencies commonly take on the role of administrator and/or intermediary of climate finance. The **UN-REDD Programme**, made operational in 2008, brings together UNDP, UNEP and the FAO to support REDD+ activities, with the governance structure giving representatives of civil society and Indigenous People's organisations a formal voice. The International Fund for Agriculture and Development (IFAD) administers the **Adaptation for Smallholder Agriculture Programme (ASAP)** that supports smallholder farmers in scaling up climate change adaptation in rural development programmes.

Bilateral channels for climate finance

A significant share of public climate finance is spent bilaterally, administered largely through existing development agencies although a number of countries have also set up special bilateral climate funds. There is limited transparency and consistency in reporting of some bilateral finance for climate change, however, with countries self-classifying and self-reporting climate-relevant financial flows without a common reporting format or independent verification. The 2018 Biennial Assessment and Overview of Climate Finance Flows reported that USD 31.7 billion annually in 2015-2016 was provided by developed to developing countries bilaterally, in addition to that spent through climate funds and development finance institutions (UNFCCC, 2018). An annual average of USD 30.3 billion in climate related ODA was reported to the OECD DAC in the same year.

Germany's **International Climate Initiative** has provided over USD 4 billion for more than 700 mitigation, adaptation, and REDD+ projects since its establishment in 2008. The initiative is innovatively funded partly through sale of national tradable emission certificates, providing finance that is largely additional to existing development finance commitments (BMU, 2019).

The UK government has committed USD 5.8 billion to its **International Climate Fund** from 2016 through to 2021. In 2019, it announced a doubling of its investments to help developing countries to combat climate change in the period 2021-2026. The UK channels a substantial share through dedicated multilateral funds, including the CIFs and the GCF. Together with Germany, Denmark and the EC, the UK also contributes to the **NAMA Facility** that supports nationally appropriate mitigation actions (NAMAs) in developing countries and emerging economies that want to implement ambitious mitigation measures.

Germany, the UK and Denmark also support the **Global Climate Partnership Fund (GCPF)**, managed by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and KfW, that focuses on renewable energy and energy efficiency through public-private partnership. Germany and the UK also support the **REDD+ Early Movers Programme (REM)**.

Norway's **International Forest Climate Initiative** has pledged USD 350 million each year since 2008 through bilateral partnerships, multilateral channels and Civil Society. Sizeable pledges have been made for REDD+ activities in Brazil, Indonesia, Tanzania, and Guyana.

Regional and national channels and climate change funds

Several developing countries have established regional and national channels and funds with a variety of forms and functions, resourced through international finance and/or domestic budget allocations and the domestic private sector. The **Indonesian Climate Change Trust Fund** was one of the first of these institutions to be established. Brazil's **Amazon Fund**, administered by the Brazilian National Development Bank (BNDES), is the largest national climate fund, with a commitment of more than USD 1.5 billion from Norway and Germany. However, the operation of the fund and delivery of the commitments has been called into question since Bolsonaro came into power in Brazil. There are also national climate change funds in Bangladesh, Benin, Cambodia, Ethiopia, Guyana, the Maldives, Mali, Mexico, the Philippines, Rwanda, and South Africa. Additional countries have proposed national climate funds in their climate change strategies and action plans. In many cases UNDP acted as the initial administrator of national funds, increasing donor trust that good fiduciary standards will be met, but many countries are now passing these tasks on to national institutions. Data on capitalisation of national climate change funds, however, is not consistently available.

National climate change funds attracted early interest, largely because they were established with independent governance structures that met high levels of transparency and inclusiveness and could channel finance quickly to projects suited to national circumstances that were aligned with national priorities. Working through coordinated national systems could also improve transaction efficiency. In practice, however, the impact of national trust funds on strengthening national ownership and coordination remains to be seen, and the sums of finance that these funds have raised are often modest. At the same time, many developing countries are beginning to incorporate climate risk into their national fiscal frameworks, and monitoring climate related expenditure.

The **Caribbean Catastrophic Risk Insurance Facility (CCRIF)** was established in 2007 through support of the World Bank and other development partners, but is now also funded by developing countries premiums. A 16 member-country risk pool, it offers parametric insurance. Similarly, the **African Risk Capacity (ARC)** offers index insurance against drought as a specialised agency of the African Union.

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End Notes

1. Note the committee is an oversight mechanism rather than a fund.

The Climate Finance Fundamentals are based on Climate Funds Update data and available in English, French and Spanish at www.climatefundsupdate.org

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