

## CLIMATE FINANCE THEMATIC BRIEFING: MITIGATION FINANCE

## CLIMATE FINANCE 4 FUNDAMENTALS

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**P**rogress in making ambitious emission reductions has been slow to date. Climate finance can play a crucial role in assisting developing countries to make the just transition to more environmentally sustainable systems of energy production and use, while also addressing developmental priorities of energy security and energy poverty. Currently, the largest sources of international public finance for climate mitigation in developing countries are the World Bank-administered Clean Technology Fund (CTF), the Green Climate Fund (GCF) and the Global Environment Facility (GEF). Operational since 2015, the GCF has increasingly become a major source of mitigation finance; in 2022, alone, it approved the largest amount of mitigation finance at USD 428 million for six mitigation projects during the third year of its first replenishment period (GCF-1). Currently about 45% of the financing approved since 2003 flowing from the dedicated climate finance initiatives that Climate Funds Update (CFU) monitors is approved for mitigation activities (excluding REDD+ – reducing emissions from deforestation and forest degradation, plus the sustainable management of forests and the conservation and enhancement of forest carbon stocks). This is largely to support the development and deployment of renewable energy and energy efficiency technologies in fast growing countries. The cumulative amount of finance approved for mitigation from climate funds was USD 13.5 billion as of December 2022.

### Introduction

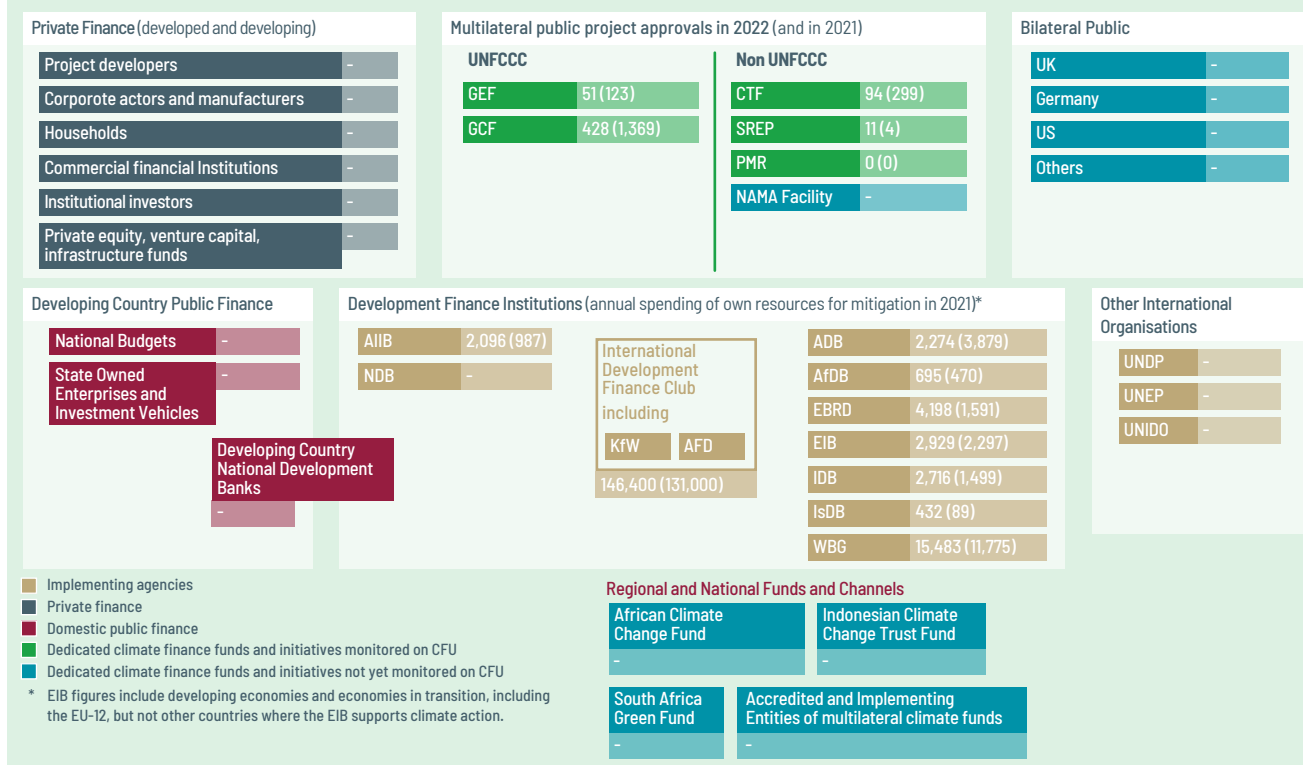
There is a global consensus, confirmed by the 5th Assessment of the Intergovernmental Panel on Climate Change (IPCC), that the temperature rise due to climate change should be restricted to 2°C if the most dangerous impacts are to be avoided (IPCC, 2014). The Paris Agreement raised the ambition to keep global warming closer to 1.5°C, thus upping the ante even further (UNFCCC, 2015). The 2018 IPCC Special Report showed that climate change impacts at 1.5°C of warming will be considerably lower than at 2°C, a target that is possible through deep transitions in energy, land, urban, infrastructure and industrial systems, with the window of opportunity to act closing fast (IPCC, 2018), while the latest IPCC reports, released under its ongoing 6th Assessment, warned that climate change is even more rapid and intensifying than earlier estimates expected (IPCC, 2021 and 2022). The bulk of the immediate burden for greenhouse gas (GHG) reductions rests on the shoulders of developed countries, but it is also essential that developing countries incorporate climate mitigation into their development plans by pursuing comprehensive low-carbon development strategies (UNFCCC, 2021 and 2022a). International climate finance can assist developing countries in implementing priority mitigation actions including renewable energy and energy efficiency programmes, support a just transition away from fossils fuels and more sustainable transport (UNFCCC, 2022b).

### Which climate funds support mitigation?

Figure 1 presents an overview of the global mitigation finance architecture, while Table 1 and Figure 2 present the main multilateral climate funds tracked by CFU that support mitigation actions in developing countries. Funds differ widely in the scale of mitigation projects and programmes they can accommodate and the number of developing countries they support. For example, the 170 approved projects under the CTF benefit a small number of emerging market economies to achieve scaled-up action. The CTF has approved USD 5.7 billion in largely programmatic, loan funding to these countries.<sup>1</sup> In contrast, the 578 individual grant-financed projects supporting mitigation under GEF-4, 5, 6 and 7, which cover most developing countries, account for less than half of this amount. The GEF's System for Transparent Allocation of Resources (STAR) allows developing countries with low per capita income to access small-scale mitigation grant finance from the GEF.

In five years, the GCF has approved USD 4.4 billion for projects that have a focus on mitigation, with over two-thirds of this amount as concessional loans. The GCF during that time has also approved 64 multi-foci projects worth USD 4.1 billion, the largest being a USD 378 million programme for Sustainable Energy Financing Facilities (SEFF) in 10 countries.

**Figure 1: Mitigation finance architecture (USD millions)**



Multilateral Funds and Initiatives		Development Finance Institutions	
CTF	Clean Technology Fund (implemented through WB, ADB, AfDB, EBRD and IDB)	ADB	Asian Development Bank
GCF	Green Climate Fund	AfDB	Agence Française de Développement (French development agency)
GEF	Global Environment Facility	AfDB	African Development Bank
PMR	Partnership for Market Readiness	AiIB	Asian Infrastructure Investment Bank
SREP	Scaling Up Renewable Energy Program in Low Income Countries (implemented through WB, ADB, AfDB, EBRD and IDB)	EBRD	European Bank for Reconstruction and Development
NAMA	Nationally Appropriate Mitigation Action Facility (UK, Germany, Denmark and the EC)	EIB	European Investment Bank
		IDB	Inter-American Development Bank
		IsDB	Islamic Development Bank
		KfW	Kreditanstalt für Wiederaufbau (German development bank)
		NDB	New Development Bank
		WBG	World Bank Group
Other International Organisations			
UNDP	United Nations Development Programme		
UNEP	United Nations Environment Programme		
UNIDO	United Nations Industrial Development Organization		

Of the smaller funds, the Scaling up Renewable Energy Program in Low Income Countries (SREP) of the Climate Investment Funds (CIFs), which focuses on increasing renewable energy generation and improving energy access in poorer developing countries, approved USD 680.6 million for 95 projects as of December 2022. The Partnership for Market Readiness (PMR), meanwhile, has 42 projects worth USD 83.4 million in middle-income countries to implement policies to promote private investment in mitigation activities through grant funding.

### Who pledges and deposits mitigation finance?

To date, pledges to the funds in Table 1 (excluding the GCF)<sup>3</sup> from the United States, United Kingdom, Japan, Germany and Canada account for 76% of the USD 14 billion committed in total (Figure 3).

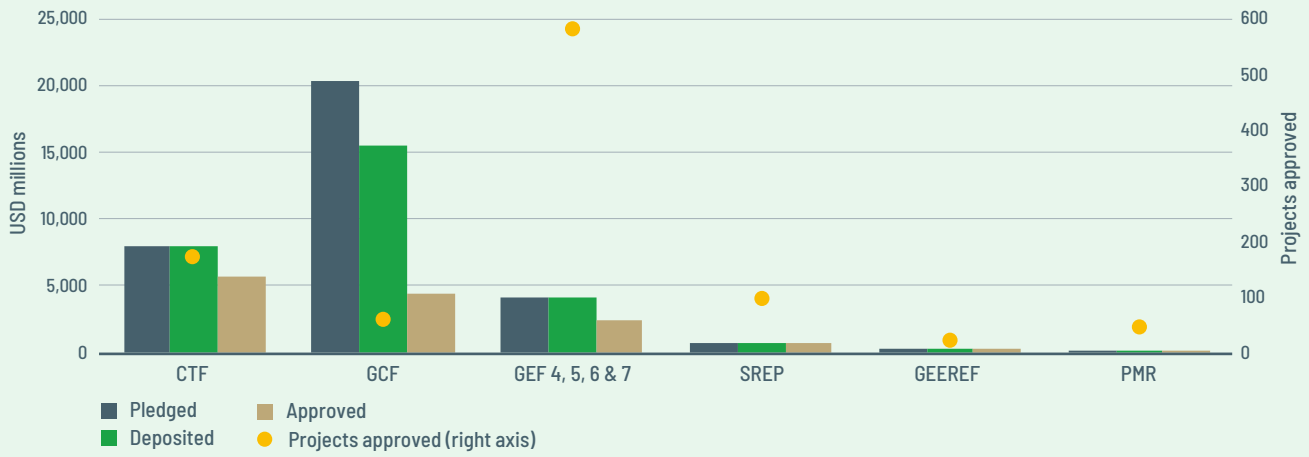
### Who receives the money and what kinds of mitigation projects are funded?

Mitigation finance has been relatively evenly distributed across the various regions (Figure 4). However, the picture is different when looking at country distribution. Ten countries have received 49% of total mitigation

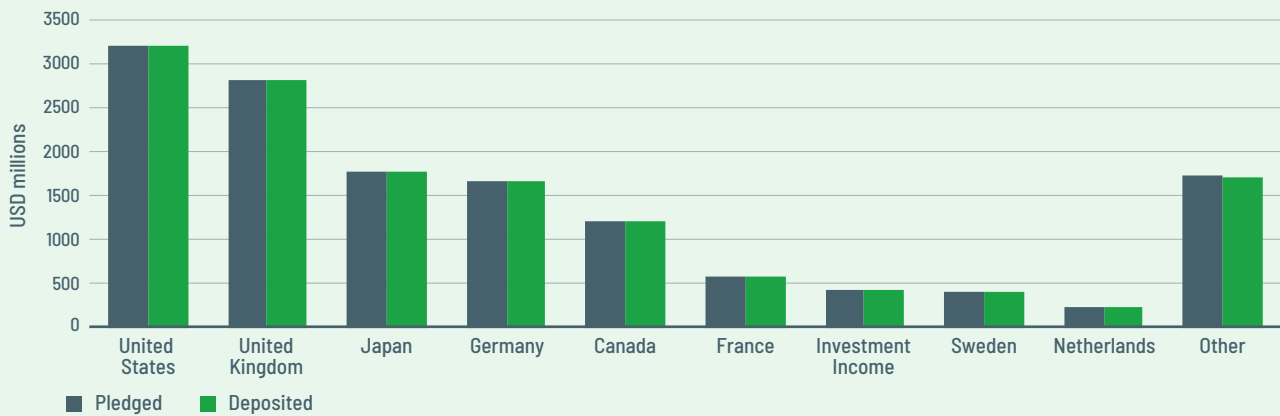
**Table 1: Main funds supporting mitigation (2003–2022, USD millions)<sup>2</sup>**

Fund	Pledged	Deposited	Approved	Projects approved
Clean Technology Fund (CTF)	7,901.6	7,901.6	5,752.8	170
Green Climate Fund (GCF-IRM, GCF-1)	20,323.1	15,475.1 <sup>3</sup>	4,359.7	55
Global Environment Facility (GEF-4, 5, 6, 7)	4,080.9	4,068.7	2,419.0	578
Scaling Up Renewable Energy Program in Low Income Countries (SREP)	779.3	779.3	680.6	95
Global Energy Efficiency and Renewable Energy Fund (GEEREF)	281.5	275.5	223.6	19
Partnership for Market Readiness (PMR)	131.5	129.8	82.4	42

**Figure 2: Main funds supporting mitigation (2003-2022)<sup>2</sup>**



**Figure 3: Pledges and deposits to mitigation funds<sup>4</sup> (2003-2022)**



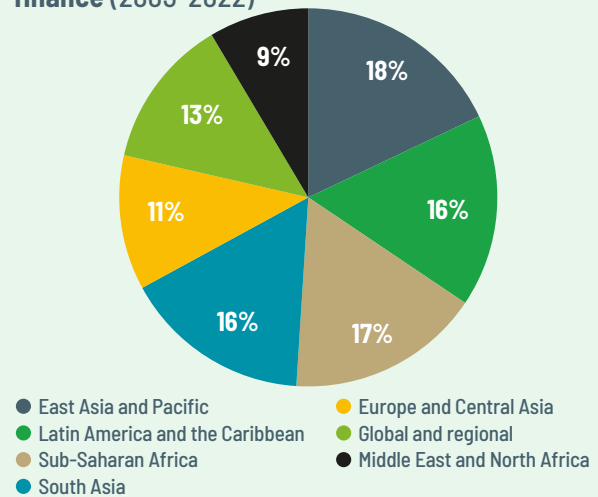
funding. Rapidly developing countries with substantial mitigation need and potential such as India (USD 1.55 billion), Indonesia (USD 744 million), South Africa (USD 619 million), Turkey (USD 498 million) and Mexico (USD 444 million) are the top recipients of approved mitigation finance. There may be tensions between realising large-scale GHG mitigation opportunities in fewer countries and investing in smaller-scale solutions from which all developing countries can benefit. Many GEF- and SREP-supported projects have sought to improve energy access for the poor by supporting rural electrification using renewable energy technologies.

With GEF-6 in 2014, the GEF began shifting its programming strategy away from project-level investments in specific technologies towards a holistic programmatic approach to cut across different impact areas (GEF, 2014). GEF-7 (2018-2021) and GEF-8 (2022-2026) have continued to pursue integrated programming, where climate impact has been delivered from programming in other focal areas and plans to expand its non-grant instrument approach further will continue. For this reason, and in light of the operationalisation of the GCF, the climate change focal area was reduced in GEF-7 and GEF-8 (GEF, 2018 and 2022).

For 2022, the prominence of the GCF as a major funding source for global mitigation action continued. The GCF approved USD 428 million for six mitigation projects

including one project with USD 200 million in equity. In India, this project will improve the country's electric mobility system by providing financing solutions to electric vehicle owners and operators. GCF's second largest project in 2022 aims to increase Indonesia's capacity to innovate financing mechanisms for industrial energy efficiency by providing USD 100 million in guarantees and USD 5 million in grants for a total of USD 105 million in support.

**Figure 4: Regional distribution of mitigation finance (2003-2022)**



## References and further reading

Climate Funds Update: [www.climatefundsupdate.org](http://www.climatefundsupdate.org)

CTF (2023) CTF semi-annual report. Washington, DC: Clean Technology Fund, CTF/TFC.29/3, January 2023. [https://www.cif.org/sites/cif\\_enc/files/meeting-documents/ctf\\_tfc\\_29\\_03\\_sar.pdf](https://www.cif.org/sites/cif_enc/files/meeting-documents/ctf_tfc_29_03_sar.pdf)

GEF (2014) GEF-6 programming directions. Washington, DC: Global Environment Facility. <https://www.thegef.org/documents/gef-6-programming-directions>

GEF (2018) GEF-7 replenishment. Resource allocation scenarios and global environmental benefits targets. Washington, DC: GEF. [https://www.thegef.org/sites/default/files/council-meeting-documents/GEF-7%20Resource%20Allocation%20and%20Targets%20-%20GEF\\_R.7\\_22.pdf](https://www.thegef.org/sites/default/files/council-meeting-documents/GEF-7%20Resource%20Allocation%20and%20Targets%20-%20GEF_R.7_22.pdf)

GEF (2022) GEF-8 Programming Scenarios and Global Environmental Benefits Targets. Washington, DC: GEF. [https://www.thegef.org/sites/default/files/documents/2022-03/GEF\\_R.08\\_30\\_Programming\\_scenarios\\_GEB\\_targets.pdf](https://www.thegef.org/sites/default/files/documents/2022-03/GEF_R.08_30_Programming_scenarios_GEB_targets.pdf)

IPCC (2014) Climate change 2014: synthesis report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva: Intergovernmental Panel on Climate Change. <https://www.ipcc.ch/report/ar5/syr/>

IPCC (2018) Summary for policymakers. In: V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.) Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Geneva: World Meteorological Organization. <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

IPCC (2021) Summary for Policymakers. In: Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.) Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva: World Meteorological Organization. [https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_SPM\\_final.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf)

IPCC (2022) Summary for Policymakers. In: H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösschke, V. Möller, A. Okem, B. Rama (eds.) Climate Change 2022: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press. [https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC\\_AR6\\_WGII\\_SummaryForPolicymakers.pdf](https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf)

OECD (2021) Forward-looking Scenarios of Climate Finance Provided and Mobilised by Developed Countries in 2021-2025: Technical Note, Climate Finance and the USD 100 Billion Goal, OECD Publishing, Paris. <https://doi.org/10.1787/a53aac3b-en>

UNFCCC (2015) Paris Agreement. FCCC/CP/2015/10/Add.1. Bonn: United Nations Framework Convention on Climate Change. [http://unfccc.int/paris\\_agreement/items/9485.php](http://unfccc.int/paris_agreement/items/9485.php)

UNFCCC (2021) First report on the determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement. Bonn: UNFCCC Standing Committee on Finance. <https://unfccc.int/topics/climate-finance/workstreams/needs-report>

UNFCCC (2022a) Nationally determined contributions under the Paris Agreement. Revised synthesis report by the secretariat. FCCC/PA/CMA/2022/4. Bonn: UNFCCC. [https://unfccc.int/sites/default/files/resource/cma2022\\_04.pdf](https://unfccc.int/sites/default/files/resource/cma2022_04.pdf)

UNFCCC (2022b) Fifth Biennial assessment and overview of climate finance flows – 2022. Bonn: UNFCCC Standing Committee on Finance. <https://unfccc.int/topics/climate-finance/resources/biennial-assessment-and-overview-of-climate-finance-flows>

## Endnotes

1. A new USD 2.2 billion investment programme for Accelerating Coal Transition (ACT) was endorsed by the CTF Trust Fund Committee in October 2021. The new ACT with South Africa, India, Indonesia and the Philippines selected to be the first beneficiaries, is supported by financial pledges from the United States, United Kingdom, Germany, Canada, and Denmark. As of December 2022, the CTF has not yet approved projects within this investment programme.
2. Multi-foci funds, the GEF and GCF full-pledge and deposit amounts are included, while approvals and projects represent dedicated mitigation projects.
3. This amount reflects countries' deposits using the official GCF initial resource mobilisation exchange rate set in November 2014 for GCF-IRM contributions and the official exchange rate set for the first replenishment in October 2019 for GCF-1 contributions, not actual amounts received taking into account exchange rate fluctuations.
4. It is not possible to determine the share of pledges arising from particular countries for the GCF and so these are excluded from the Figure (see CFF11 for more pledge information).

The Climate Finance Fundamentals are based on Climate Funds Update data and up to 2021 also available in French and Spanish at [www.climatefundsupdate.org](http://www.climatefundsupdate.org)

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