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State and Trends in Climate Adaptation Finance 2023

CONFERENCE VERSION

About the Global Center on Adaptation

The Global Center on Adaptation (GCA) is an international organization, hosted by the Netherlands, which works as a solutions broker to accelerate action and support for adaptation solutions from the international to the local, in partnership with the public and private sector, to ensure we learn from each other and work together for a climate resilient future.

About Climate Policy Initiative

Climate Policy Initiative is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. Our vision is to build a sustainable, resilient, and inclusive global economy.

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Key Messages

- Global climate finance¹ doubled in the last two years to USD 1.3 trillion annually in 2021–2022 compared to the USD 653 billion tracked on average in 2019–2020².
- Unfortunately, global adaptation finance is diminishing in importance, from 7% in 2019–2020 to 5% of total climate finance in 2021–2022³.
- In absolute terms, annual adaptation finance flows in 2021–2022 reached USD 63 billion⁴, a modest 28% year-on-year increase compared to 2019–2021. Climate mitigation finance is growing much faster.
- Developing countries currently need about USD 212 billion per year in adaptation finance up to 2030. Only USD 56 billion were tracked for adaptation in 2021–2022. Adaptation finance flows must almost quadruple.
- Between now and 2035, developing countries will need USD 3.3 trillion. However, at current levels of financing, only USD 840 billion will flow.
- Africa is the most affected region by climate change. However, the region received only 20% of global adaptation finance flows, or USD 13 billion annually in 2021–2022⁵. For reference, about 45% of global adaptation finance flows went to the East Asia and Pacific region.
- Based on Africa's nationally determined contributions (NDCs), the region needs USD 53 billion per year⁶ between 2020 and 2035, or 2.5% of Africa's GDP. However, the NDCs may underestimate by as much as 100% the adaptation needs^{7,8}.
- At the current level of adaptation funding flows, Africa will only achieve USD 195 billion by 2035. However, the total adaptation finance needs may be as high as USD 1.6 trillion, more than 8 times larger.
- Adaptation flows to Africa are not growing fast enough, despite global commitments to increase adaptation finance. Adaptation funding to Africa only increased 14% compared to 2019–2020.
- Despite the urgency for adaptation action in Africa, adaptation finance was only 36% of total climate finance in 2021–2022. This was a decrease from 39% of total climate finance in 2019–2020. Adaptation is losing ground to mitigation financing in the continent.
- Most of the adaptation finance to Africa comes from multilateral development finance institutions (63%) and African governments (19%).
- African governments invest more resources in adaptation than flows from bilateral development finance institutions to the region (19% vs. 11%).
- From 2019–2022, the private sector has consistently financed less than 3% of adaptation activities globally and in Africa, mostly from large investors and channeled as grants, primarily to the agriculture sector.
- African governments provide almost as much adaptation finance as grants as the multilateral and bilateral financiers (USD 2.4 billion per year).
- In Africa and globally, the private sector has consistently financed less than 3% of adaptation activities from 2019–2022. A substantial portion of these funds come from philanthropies. The opportunity for commercial financiers and private enterprises to develop and finance adaptation solutions, products and services is enormous.
- Africa's climate finance flows are concentrated in too few countries. 54% of adaptation finance flows to only 10 countries. The bottom 10 recipient countries only have 1% of adaptation finance.
- Between 2019–2021, USD 94 billion was committed by international donors as emergency

response funding in developing countries⁹. This is similar to the international adaptation finance flows tracked over the same period (USD 91 billion).

- However, of the tracked USD 94 billion in emergency response funding, only 1.4% (or USD 1.3 billion) was also tagged as adaptation finance. There is insufficient consideration of climate adaptation in emergency response funding.
- In Africa, the situation is similar with international public emergency response funding (USD 26 billion) committed to the continent between 2019–2021 being similar to international public adaptation finance to the region (USD 28 billion).
- Unfortunately, there are insufficient resources for adaptation financing directed to most vulnerable African countries. These countries are instead dependent on emergency response funding to cope with hazards. South Sudan, Democratic Republic of the Congo, Ethiopia, Somalia and Sudan were the top five recipients of emergency funds. Of these, only Ethiopia was among the top five recipients of adaptation financing.
- Between 2019–2021, only 8% of international reconstruction funding was also counted as adaptation finance. There is a greater need to build back better and mainstream adaptation in post-disaster reconstruction.
- Very few public financial institutions have made public adaptation finance-specific commitments. Many of the commitments that do exist are not robust.
- Of the 60 public financial institutions reviewed, only 13 have made public adaptation-specific commitments.
- Multilateral climate funds are the clear leaders in climate adaptation commitments given their mandates. Multilateral development banks follow but still have ways to go. Five multilaterals have specific adaptation finance commitments. Six have climate finance commitments but no specific adaptation target. Of the remaining institutions assessed in the report, over 50% do not have any form of climate commitment.

Executive Summary

INTRODUCTION

Climate change impacts globally have increased the urgency for ambitious action on adaptation. This is especially the case in the world's most vulnerable regions, including Africa. This report covers global status and trends of adaptation finance and provides a deeper analysis of Africa at a regional level, given the heightened adaptation needs and opportunities on the continent. Across the globe, and especially in Africa, climate smart and resilient development pathways offer enormous investment opportunities with a triple dividend of avoided losses, positive economic gains, and enhanced social and environmental benefits.

This report assesses the state of adaptation finance globally and in Africa as follows:

- **Section 1:** Provides the latest analysis on the adaptation funding gap.
- **Section 2:** Summarizes tracked adaptation finance flows in 2021–2022.
- **Section 3:** Maps and evaluates institutional adaptation finance commitments and statements.
- **Section 4:** Assesses the type and efficacy of financial instruments deployed in practice for adaptation.
- **Section 5:** Reviews the challenges and barriers to tracking adaptation finance.
- **Section 6:** Presents—for the first time—analysis of the intersection between adaptation finance and humanitarian assistance, including emergency response funding and post-disaster reconstruction funding.

ADAPTATION FINANCE NEEDS ARE RISING, THOUGH UNCERTAINTY REMAINS REGARDING THE SIZE OF THE GAP

The global adaptation funding gap continues to widen concerningly, driven by accelerating climate impacts and relatively slower growth in adaptation finance flows. All countries face increasing pressure to invest in adaptation as they experience accelerating climate-related risks and impacts. Developing countries will especially be hard pressed to meet their anticipated investments needs, the estimation for which is between USD 130–415 billion per year by 2030, if they are to bridge the adaptation funding gap.

At the same time, much is still not known about the adaptation finance gap. Estimating adaptation finance needs requires robust data, effective modeling, and strong technical capacity. In the absence of these elements, needs assessments are likely to substantially underestimate the true cost of adaptation measures. The challenges in costing adaptation needs include uncertainty regarding future risk, disagreement on objectives, and variation in geographic and sectoral coverage of analysis. Though the precise volume of adaptation finance needs remains challenging to calculate, it is clear that current adaptation finance flows are several orders of magnitude below the lower boundary of adaptation cost estimates advanced. Immense collective ambition is required to bridge the gap.

ADAPTATION FINANCE FLOWS INCREASED IN 2021–2022 FROM PREVIOUS YEARS, BUT DECLINED AS A PROPORTION OF TOTAL CLIMATE FINANCE

While mitigation finance has accelerated dramatically in the last two years to USD 1.2 trillion annually in 2021–2022, adaptation finance saw a more modest increase. Only 5% of total climate finance (USD 63 billion) flowed specifically to adaptation finance annually in 2021–2022 (down from 7% in 2019–2020). This marks a 28% year-on-year increase in adaptation finance flows compared to 2019–2020, but the growth rate in global mitigation financing has significantly outpaced the growth rate of global adaptation finance. Estimates for the costs of adaptation in developing countries are, on average, approximately 4 times higher than the USD 56 billion of tracked adaptation finance to those countries in 2021–2022.

About 45% of global adaptation finance flows went to the East Asia and Pacific region, followed by 20% to Africa and about 10% each to Latin America and the Caribbean and South Asia. Africa received USD 13 billion on average in adaptation finance in 2021–2022, a modest 14% increase compared to 2019–2020. Adaptation finance was approximately 36% of total tracked climate finance to Africa in 2021–2022, a slight decrease in proportional terms from 39% in 2019–2020. From 2019–2022, the private sector has consistently financed less than 3% of adaptation activities globally and in Africa, mostly from large investors and channeled as grants, primarily to the agriculture sector.

INSTITUTIONAL PUBLIC COMMITMENTS TO ADAPTATION FINANCE CAN CREATE IMPORTANT MOMENTUM, BUT ARE CURRENTLY LACKING

Progress on global climate negotiations is intrinsically connected to the delivery of adaptation finance and increasingly linked to progress on loss and damage finance. Commitments made by institutions in developed countries continue to be insufficient, opaque, and lack clear delivery timelines. By developing institutional adaptation finance commitments that are ambitious, specific, credible, and measurable—public and private institutions can

increase momentum towards climate adaptation finance mobilization at scale.

An effective climate adaptation commitment is not merely a statement of intent but a clear, actionable, and transparent promise of action. It necessitates a public declaration concerning both direct investment and mobilization of climate finance and, more specifically, climate adaptation finance. For this report, the following categories are used to evaluate the robustness of a commitment: 1) quantum, 2) milestones, 3) specificity, and 4) tracking.

This report finds that very few of the public financial institutions evaluated have public institutional adaptation finance commitments. Many of the commitments that do exist are not robust, as evaluated against metrics of quantum, milestones, specificity, and tracking. In a selection (based on their adaptation impact) of 60 public financial institutions reviewed, only 13 had public adaptation-specific commitments. A handful of institutions are leaders in goal setting and commitments to adaptation finance globally, but dedicated and comprehensive institutional commitments remain lacking. Collaborations can help create momentum for commitment standards that are credible, ambitious, and holistic.

DEBT REMAINS THE PRIMARY FINANCIAL INSTRUMENT FOR ADAPTATION

To close the gap between current adaptation flows and needs of countries, a wider range of financial approaches are required than are currently being deployed at scale. Globally and in Africa, debt continues to be the most utilized instrument to deliver adaptation finance, increasing globally in 2021–2022 to 80% of total adaptation finance from 70% of flows in 2019–2020. The volume of concessional finance (including concessional debt) to adaptation also increased modestly, but its proportion relative to other financial sources diminished between the 2019–2020 and 2021–2022 periods. Given the substantial debt burdens of many countries facing severe climate risks, particularly those in regions like Africa, over-reliance on debt for climate adaptation activities introduces significant risks. To avoid increasing the debt burdens of already vulnerable countries, funders should deploy a much wider range

of financial instruments towards adaptation activities including guarantees, local currency swaps, and results-based finance.

This report assesses a range of financial instruments and evaluates the potential for debt-for-climate adaptation swaps, which have emerged as an alternative to bridge adaptation finance gaps and tackle debt distress. These swaps hold promise, but there are a range of barriers impeding their widespread adoption including: complex creditor-debtor dynamics; time-consuming structuring and negotiation needs; and questions of effectiveness in resolving debt distress, as swaps have historically covered a minimal fraction of a country's total debt. To overcome these barriers, the intervention of major financial institutions, like the World Bank and the International Monetary Fund (IMF), is essential.

ADAPTATION FINANCE TRACKING FACES PERSISTENT CHALLENGES, BUT THERE ARE EMERGING OPPORTUNITIES TO IMPROVE OUR UNDERSTANDING OF THE STATE OF PLAY

Adaptation finance tracking is significantly constrained by data gaps, methodological inconsistencies, and reporting issues at both domestic and international levels. Useful progress has been made by a handful of international development financial institutions but much more needs to be done to standardize, harmonize, and disclose granular, consistent, and comparable information on adaptation finance. The challenges are amplified for private financial institutions where there is lack of regulatory pressure, market demand, and incentives to report data on private adaptation financing.

There is real opportunity for governments and regulators to strengthen climate finance tracking systems, for development financial institutions to provide transparent leadership, and for civil society organizations to coordinate and develop simplified adaptation finance tracking methodologies for the private sector to adopt in an easy, effective, and efficient manner. If all stakeholders take ambitious collective action to improve the enabling environment

for tracking—collective understanding of current flows and needs could be substantially enhanced.

ADAPTATION IS INTERTWINED WITH HUMANITARIAN AID, AND COORDINATED ACTION ON BOTH WILL BE MOST EFFECTIVE

As incidences of climate-related disasters escalate globally, it is important to increase coordination and collaboration between actors working on humanitarian aid and climate change adaptation.

This will help maximize possible synergies, minimize duplicate action, and deploy limited financing as efficiently and effectively as possible. Section 6 provides a first-time analysis of the overlap between international humanitarian funding (emergency response funding and post-disaster reconstruction funding) and tracked international adaptation finance. It indicates that just over 1% of international emergency response funding, and 8% of international post-disaster reconstruction funding, is also tagged as adaptation finance.

An overlap between the two separate funding buckets may indicate that humanitarian aid is being delivered with climate resilience objectives in mind, and that funders are consciously working to build back better. However, as the frequency and severity of climate-related disasters increases in the coming years, it will be essential to ensure accurate tracking and accounting of each funding category to avoid double-counting or simply re-labelling funds at the expense of additional funding. A deep dive into the funding flows for Africa indicates that the most fragile African countries currently struggle to access international adaptation finance and are instead dependent on emergency response funding to cope with climate impacts and hazards.

The analysis emphasizes the opportunities for actors to spearhead ex-ante, proactive adaptation action to avoid or minimize spending on humanitarian aid later. Where adaptation efforts fall short—and climate risks cannot, or will not, be avoided—it is important to learn from the experience of humanitarian actors in deploying rapid-response funding to address the unavoidable losses and damages associated with climate change.

1 Context Setting – Assessing the Adaptation Funding Gap

Key Messages

- All countries already face significant pressure to invest in adaptation as they experience accelerating climate-related risks and impacts.
- Developing countries, especially in Africa, will be hard pressed to meet their anticipated investment needs, the range of estimation for which is between USD 130–415 billion per year by 2030, if they are to bridge the adaptation funding gap.
- The global adaptation funding gap continues to widen concerningly, driven by accelerating climate impacts and relatively slower growth in adaptation finance flows.
- Per analysis to date, Africa alone urgently requires more than USD 50 billion annually, approximately 2.5% of its GDP, for adaptation finance to meet its NDC commitments by 2035. However, this amount is likely to be an underestimate of the actual needs, as only 28 African countries provided cost estimates for adaptation in their NDCs.

1.1. GLOBAL ADAPTATION COSTS

The 2023 Global Landscape of Climate Finance indicates that developing countries will need USD 212 billion per year in adaptation finance up to 2030, and USD 239 billion per year between 2031 and 2050.¹⁰ The UNEP Adaptation Gap Report 2023, which informs CPI's analysis, estimates a similar range: that adaptation costs for developing countries in this decade are likely to be between USD 130–415 billion annually, and projected to rise significantly by 2050.^{11,12} Recent analysis by the IPCC suggests similar ranges for adaptation costs: USD 127 billion and USD 295 billion per year for developing countries by 2030 and 2050, respectively. Likewise, analysis from the LSE Grantham Institute indicates an adaptation investment requirement for emerging markets and developing economies (excluding China) of USD 180 billion by 2025 and USD 325 billion by 2030.¹³ Though the precise values vary, the key emerging theme is that by 2030, in developing countries alone, adaptation finance needs will be in

the hundreds of billions of US dollars annually, and will increase in the years that follow.

The estimated volume of finance required in Nationally Determined Contributions (NDCs) for adaptation between 2021–2030 is nearly USD 1.1 trillion per year globally, though the quality of adaptation component analysis in NDCs is highly variable. As of October 2022, 144 out of 160 countries that submitted new or updated NDCs have mentioned adaptation components.¹⁴ However, only 62 countries have outlined their adaptation finance needs, suggesting that global adaptation finance needs are underestimated.¹⁵

Countries face differential costs of adaptation relative to income levels. The UNEP Adaptation Gap Report 2023 highlights that annual per capita adaptation needs are high in upper-middle- and high-income countries (averaging USD 81), while lower-middle- and low-income countries see per capita annual needs of USD 51 and USD 22, respectively. However, as a percentage of Gross Domestic Product

(GDP), adaptation finance needs in low-income countries is the highest of any income group—at 3.1% of GDP¹⁶—a significant factor when considering where, how much, and which types of adaptation finance to deploy, discussed further in Section 4.

1.2. REGIONAL AND SECTORAL ADAPTATION NEEDS

Our analysis estimates Africa’s adaptation finance needs to be roughly USD 579 billion by 2030, extrapolated to USD 845 billion by 2035, the highest of any global region. Adaptation needs make up about 24% of the total climate finance needs identified in African NDCs. These adaptation needs translate into USD 52.7 billion per year between 2020–2035, or 2.5% of Africa’s GDP, though they are likely undercounted given limitations in methodology and a lack of clarity from certain countries.¹⁷

Unpacking global sectoral and sub-regional adaptation finance needs remains challenging. For example, in Africa, more than 70% of the total needs reported in African NDCs (USD 408 billion)

are not allocated to any adaptation sector. Countries that provided sector-specific data mainly reported adaptation needs for agriculture (25%), water (17%), infrastructure and building (12%), disaster prevention and preparedness (10%), and health (8%). Data availability on adaptation finance needs varies significantly across African regions. Central Africa and Western Africa reported the most complete information on adaptation needs. Southern Africa and Eastern Africa have high adaptation needs but current data does not specify where this finance is needed.

The UNEP Adaptation Gap Report 2023 finds that global adaptation costs are concentrated on a few key sectors linked to water, agriculture, and ecosystems. As per the literature review, captured in the Report, the highest sectoral adaptation costs for developing countries include riverine flood protection, coastal protection, and infrastructure resilience. Further details are available in Table 1 below that captures a summary of the UNEP Adaptation Gap Report 2023 analysis.

Table 1. Sectoral Adaptation Costs – Per UNEP Adaptation Gap Report 2023

Sector and Cost Type	Estimated Adaptation Costs for Developing Countries
Infrastructure: Resilience building in energy and transport sectors	USD 56 billion/year, with costs increasing significantly towards 2050
Coastal zones: Coastal protection and beach nourishment	USD 56 billion/year 2020–2030
River floods: Riverine flood protection	USD 54 billion/year 2010–2050
Early warning and social protection: Universal early warning systems	USD 16 billion/year
Agriculture: Addressing climate impact on chronic hunger	USD 16 billion/year 2015–2050
Health: Controlling climate-related disease and heat-related mortality	USD 11 billion/year
Fisheries and oceans: Addressing changes in fish catch potential	USD 5 billion/year in the 2020s, rising towards 2050s

1.3. GAPS IN KNOWLEDGE

Estimating adaptation finance needs necessitates robust data, modeling, and technical capacity. In the absence of these resources, needs assessments are likely to underestimate the true cost of adaptation measures substantially. For example, analysis from CPI and GCA predict that African countries' estimated adaptation finance needs—calculated based on NDC submissions—are likely to be less than half the required amount, given that only 28 African countries provided cost estimates for adaptation in their NDCs.¹⁸ When compared with financial estimates from other national frameworks, Ethiopia's NDC cost estimate variance was particularly pronounced: using the NDC's proposed figure of USD 40.5 billion as the baseline and comparing it against the National Adaptation Plan (NAP) estimation of USD 90 billion, this report found that the NDC underestimated the needs by 122%.^{19, 20}

The UNEP Adaptation Gap Report likewise highlights the challenges in costing adaptation needs across a number of dimensions including:

- **Disagreement on objectives:** Adaptation lacks a 'north star', a parallel to net zero around which all

actors are aligning efforts. Because there is no single quantitative goal for adaptation, assessed costs of adaptation vary as they are calculated against varied baselines.

- **Uncertainty regarding future risks and impacts:** There is a dual uncertainty regarding future climate risks given the range of potential scenarios for future emissions trajectories and variation in predictive climate modeling of impacts. Limitations in understanding of future conditions make it very challenging to know how much adaptation is 'enough'.
- **Variation in geographic and sectoral coverage:** Global adaptation cost assessments cover variable geographies and sectors which makes comparability challenging.

Though the precise volume of adaptation finance needs remains challenging to calculate, assessments from UNEP, the IPCC, LSE Grantham Institute, and others make very clear that the scale of need is enormous. As captured in Section 2, current adaptation finance flows are several orders of magnitude below the lower boundary of adaptation cost estimates, thus immense collective ambition is required to bridge the gap.

2 Current Trends in Tracked Adaptation Finance Flows

Key Messages

- Climate finance globally crossed the mark of USD 1 trillion in annual commitments for the first time in 2021–2022 and both mitigation and adaptation finance commitments grew from prior periods.
- Adaptation finance grew by 28% year-on-year, reaching USD 63 billion in 2021–2022 compared to USD 49 billion in 2019–2020. Nevertheless, the global adaptation funding gap is widening. Estimates for the costs of adaptation in developing countries are, on average, approximately 4 times higher than the USD 56 billion of tracked adaptation finance flows to those countries in 2021–2022.
- Africa received USD 13 billion in adaptation finance in 2021–2022 (20% of global adaptation finance), a modest 14% increase from tracked finance flows in 2019–2020. Flows tracked in 2021–2022 represent just 15–30% of assessed adaptation needs on the continent annually.
- In 2021–2022, 48% (or USD 6.2 billion) of tracked adaptation finance commitments in Africa went towards cross-sectoral activities. Agriculture, forestry, and other land use saw the second highest commitments, accounting for roughly 26% or USD 3.4 billion in 2021–2022, followed by water and wastewater (USD 2 billion, 15%), and transport (USD 900 million, 7%).

2.1. GLOBAL TRENDS IN TRACKED ADAPTATION FINANCE

Climate finance crossed the mark of USD 1 trillion in annual commitments for the first time in 2021–2022. According to the 2023 Global Landscape of Climate Finance, an annual average of USD 1.3 trillion in climate finance was committed in those years globally by public, private, international, and domestic financial actors.²¹ This reflects a nearly twofold increase compared to the USD 653 billion tracked on average in 2019–2020. This growth is largely the result of accelerated investment in clean energy in a handful of countries: China, the U.S., Japan, and India, which collectively received 90% of the increased funds.²²

While mitigation finance has accelerated dramatically in the last two years, adaptation finance saw a more modest increase. Out of the USD 1.3 trillion tracked

in annual climate finance in 2021–2022, only USD 63 billion²³ (5%) was earmarked specifically for adaptation finance (down from 7% in 2019–2020). This marks a 28% year-on-year increase in adaptation finance flows compared to 2019–2020, but the growth rate in global mitigation financing has significantly outpaced the growth rate of global adaptation finance in the last two years. These efforts to reduce GHG emissions should be lauded. However, global mean temperature rise is expected to reach 1.5 degrees Celsius in the near term,²⁴ which will result in cascading impacts affecting vulnerable communities and ecosystems across the globe. This demands a far more robust focus and rapid acceleration of adaptation finance efforts.

The global adaptation funding gap is widening. Analysis indicates that developing countries will need USD 212 billion per year in adaptation finance

up to 2030, and USD 239 billion per year between 2031 and 2050²⁵ (see Figure 1). Estimates for the costs of adaptation in developing countries are, therefore, approximately 4 times higher than the USD 56 billion tracked adaptation finance flows to those countries in 2021–2022. The gap between adaptation finance flows and needs is widening due to increasing costs of adaptation and relatively slow growth in adaptation flows globally.

Global tracked adaptation finance flows are concentrated in the East Asia and Pacific region. About 45% of global adaptation finance flows went to the East Asia and Pacific region, followed by 20% to Africa. Latin America and the Caribbean and South Asia received roughly 10% each (USD 6 billion) (see Figure 2). Almost 85% of adaptation finance in the East Asia and Pacific region was raised and spent domestically, primarily in China. There are several data and methodological challenges in adequately tracking domestic climate expenditure—faced in both developing and developed countries—which are likely to undercount the contributions made by national governments to domestic activities.

Figure 1. Estimated Adaptation Finance Flows and Needs in Developing Countries, 2021–2035

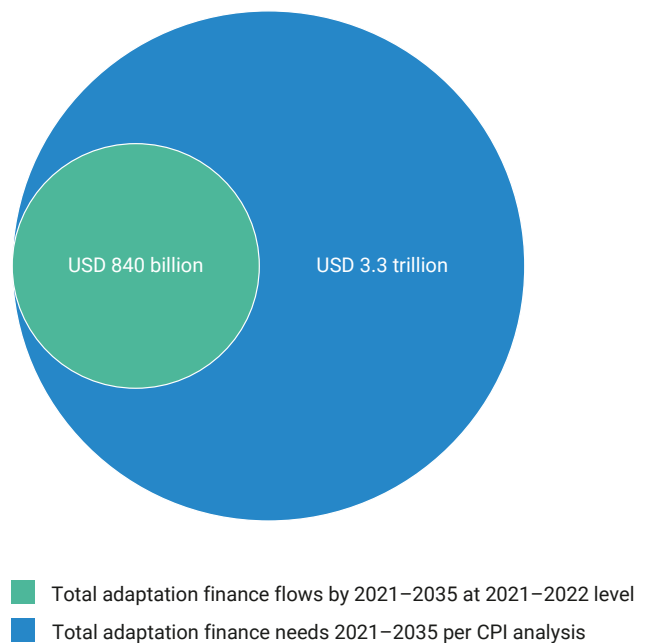
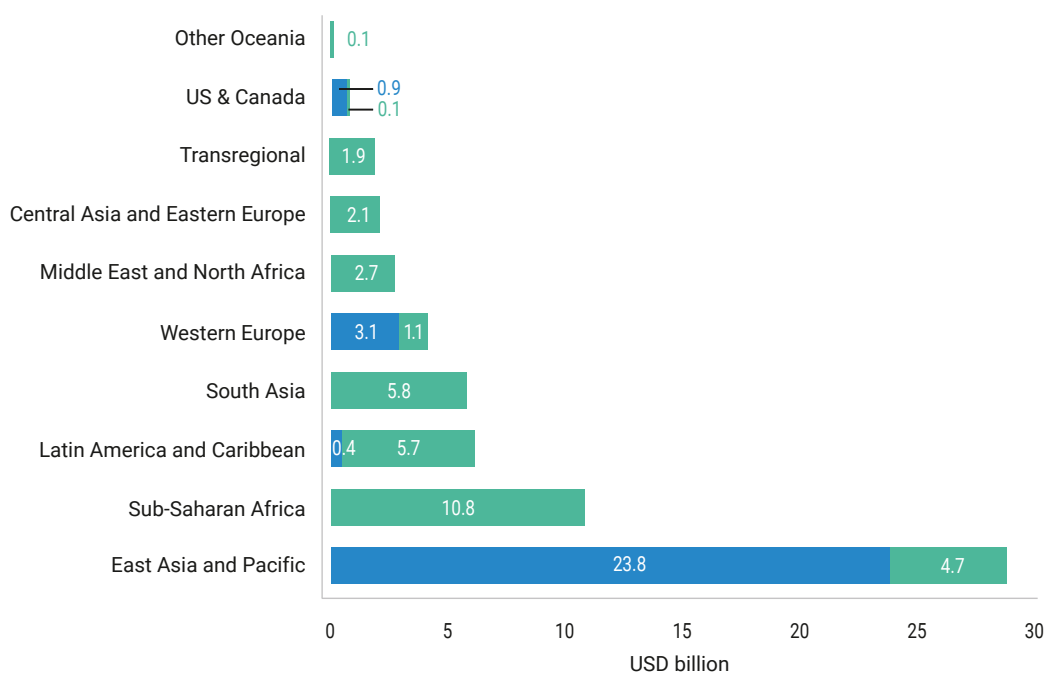


Figure 2. Global Adaptation Finance by Region and Sources (2021–2022, USD billion)



Box 1: Assessing the Universe of Tracked Adaptation Finance Flows

CPI's Global Landscape of Climate Finance (the Landscape) is the most comprehensive overview of global climate-related primary investment. The Landscape tracks climate finance flows by domestic, international, public, and private financial actors. Such data is aggregated annually from more than 20 data sources including primary sources, open access and subscription databases, and research organizations. However, despite its coverage, tracking adaptation finance faces substantial challenges in obtaining high-quality data, which hinders CPI's ability to comprehensively record global adaptation finance flows.

As shown in the Figure 3, data from international public financial sources such as multilateral development banks, climate funds, as well as bilateral and regional development financial institutions is relatively well documented. The Landscape relies on the following sources to retrieve this data:

- The members of the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC)—data is publicly available through the Creditor Reporting System (CRS) database.
- The group of multilateral development banks (MDB) and members of the International Development Finance Club (IDFC) reporting on climate finance.
- The group of Multilateral Climate Funds, as reported through Climate Funds Update.

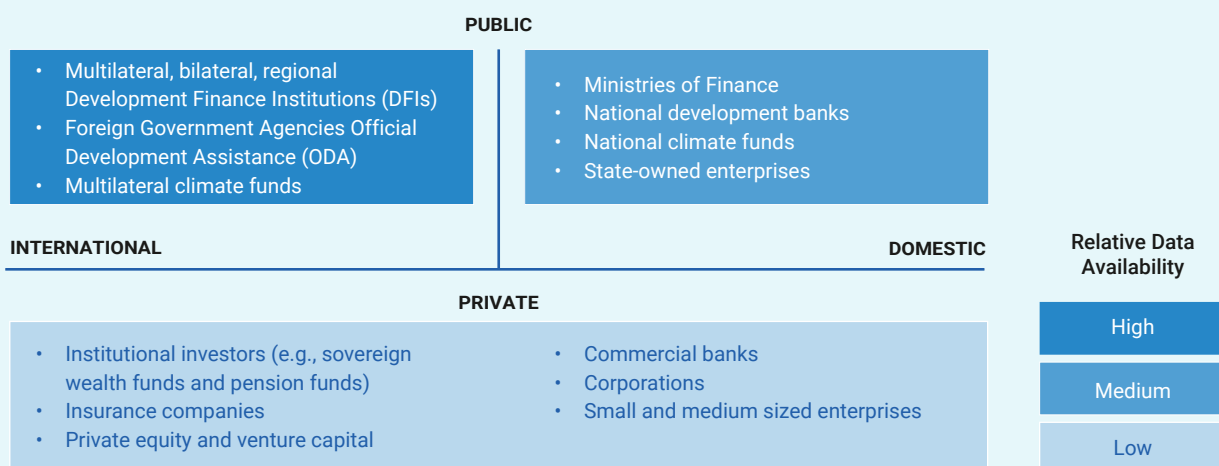
The data collection from national public sources, such as national development banks—for example, China Development Bank, French Development Agency etc., which raise and spend the climate funding

domestically—is also made available, in limited granularity, to the IDFC.

Reporting in the form of domestic budgetary expenditures and annual reports (for both OECD and non-OECD countries) on adaptation finance flows and projects from national ministries, national climate funds, and state-owned enterprises (including banks) remains severely fragmented or missing. This means that the information is challenging to aggregate in a comprehensive, comparable, and consistent manner. In particular, there is a lack of clear commitments and contributions by developed country providers of adaptation finance. This fragmentation makes quantitative assessment of progress against the Glasgow Climate Pact—which “urges developed country Parties to at least double their collective provision of climate finance for adaptation to developing country Parties from 2019 levels by 2025”—extremely challenging. Limitations in tracking progress against global adaptation finance commitments substantially limit the credibility of those commitments. CPI urges that transparent reporting be quickly improved, with a strengthened role for the OECD on collating and publishing this information as a priority.

The issues are even more pronounced for private adaptation finance actors, which is likely to result in significant undercounting of private flows, which presently represent less than 2% of tracked adaptation finance being contributed from private actors. Several categories of private adaptation financing such as internal funding of resilient supply chains, corporate social responsibility, SME financing, insurance, etc., are hard to report, track, and aggregate. See Section 5 for more detailed analysis.

Figure 3. Overview of Financial Actors and Adaptation Finance Data Availability

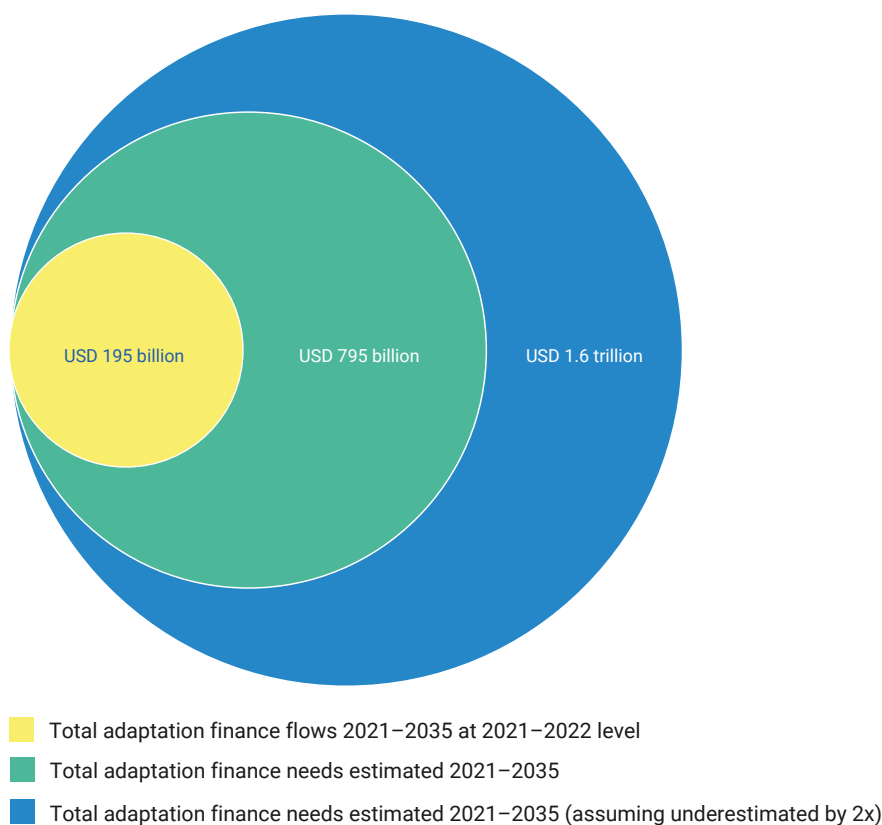


2.2. REGIONAL SNAPSHOT: AFRICA

Africa received USD 13 billion on average in adaptation finance in 2021–2022, a modest 14% increase compared to 2019–2020²⁶. Adaptation finance was approximately 36% of total tracked climate finance to Africa in 2021–2022, a slight decrease in proportional terms from 39% in 2019–2020. The share of adaptation finance continues to be more in Africa than any other region. In contrast, 13% and 12% of total climate finance to South Asia and Latin America and the Caribbean, respectively, was directed to adaptation activities in 2021–2022. Globally, less than 5% of tracked climate finance was dedicated specifically to adaptation projects.

The adaptation finance gap is very stark in Africa, as assessed against Nationally Determined Contributions and UNEP estimates. African NDCs indicate that the continent needs USD 53 billion per year for adaptation or 2.5% of Africa’s GDP, though CPI analysis suggests this may actually be an underestimation by as much as 100%.^{27, 28} At the lower-end USD 53 billion estimate, current flows are less than 25% of the necessary volume of adaptation finance to Africa, while at the upper-end USD 106 billion estimate, flows are currently less than 15%.

Figure 4. Estimated Adaptation Finance Flows and Needs in Africa, 2021–2035



The private sector can play a significant role in bridging the adaptation funding gap in Africa. The private sector contributes 12% of total climate finance going to Africa, which trails behind other regions like South Asia (55%) and East Asia and Pacific (52%), where commercial markets are more robust.²⁹ The share of private financing for mitigation in South Asia increased from 48% in 2019–2020 to 65% in 2021–2022. In contrast, private mitigation finance share in Sub-Saharan Africa decreased from 30% to 19% in the same period.

The need for private participation is evident for adaptation efforts in Africa, where the private sector continues to contribute a very minor portion of total finance to adaptation (less than 3%). About 90% of this finance comes from large institutions and is channeled as grants, primarily to the agriculture sector. Enhanced multi-stakeholder collaboration is essential to improve tracking and transparency in private adaptation finance.

Figure 5. Tracked Climate Finance by Region and Source (2021–2022)

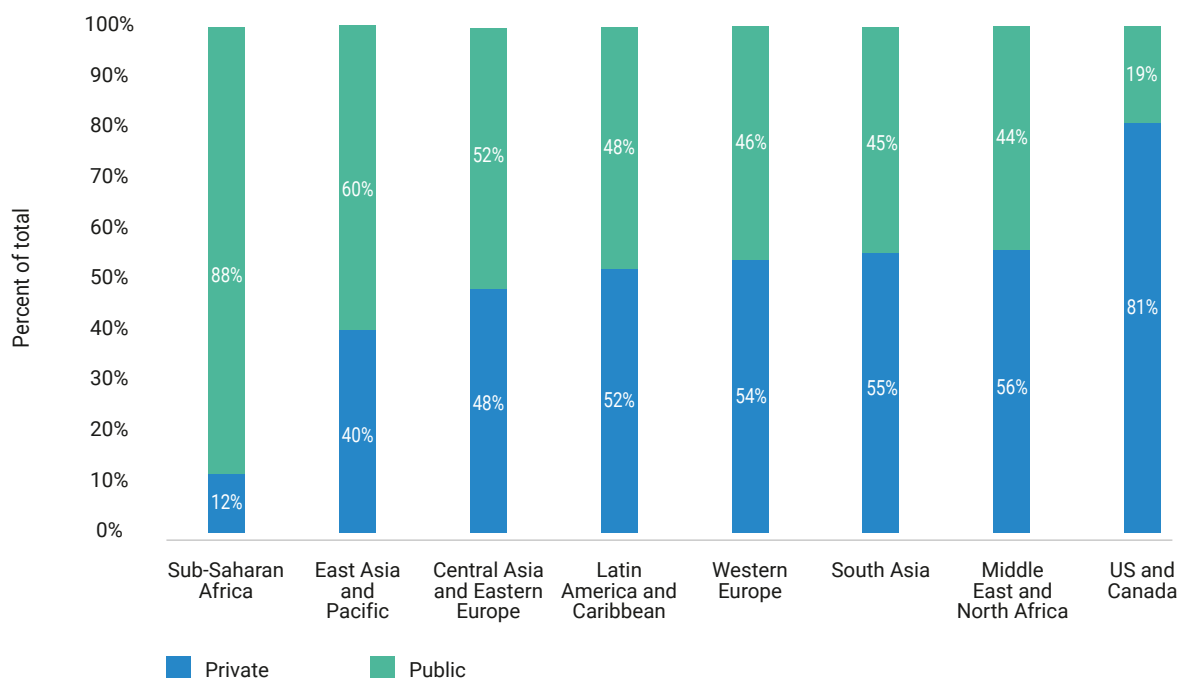
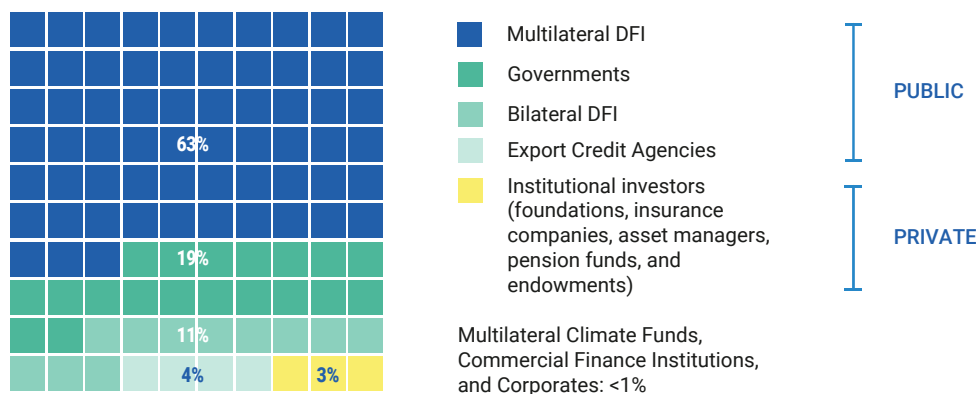


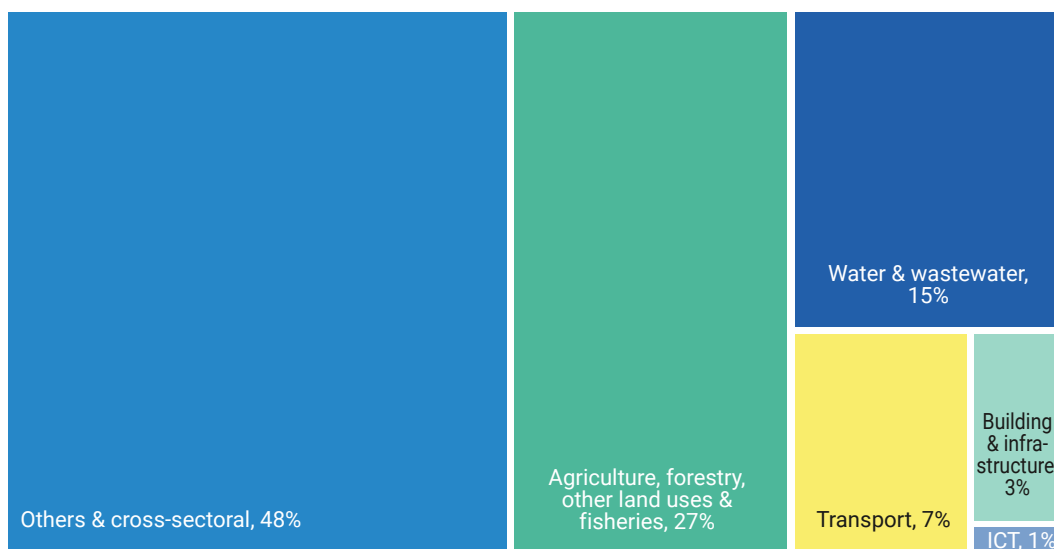
Figure 6. Adaptation Finance Flows in Africa, by Actors (2021–2022, USD billion)



Africa’s adaptation projects deliver multiple benefits across sectors, aligning with its developmental priorities. In 2021–2022, 48% (or USD 6.2 billion) of tracked adaptation finance commitments in Africa went toward the category of cross-sectoral activities (see Figure 7). This included support for national-level policy and capacity building, disaster management activities, urban issues, biodiversity, and social security. This may be a result of the cross-sectoral nature of adaptation finance projects and the need to bring a variety of technical experts and stakeholders to deliver projects with maximum adaptation benefits.³⁰ Agriculture, forestry, and other land use (AFOLU) saw the second highest category of commitments, accounting for roughly 26% or USD 3.4 billion in 2021–2022,³¹ followed by water and wastewater (USD 2 billion, 15%), transport (USD 900 million, 7%) and the buildings and infrastructure sector and information technology sector, which received 3% collectively (USD 350 million).³²

Funding for adaptation of the AFOLU sector in Africa must increase substantially to ensure food security. The AFOLU sector has the highest adaptation finance needs in Africa and requires at least USD 49 billion between 2021–2030, with the majority of need coming from Central and West Africa.³³ Our analysis suggests that these estimates could be underestimated by a factor of two compared to the actual needs of the continent.³⁴ AFOLU stands as the second-largest source of GHG emissions on the African continent, while simultaneously being one of the sectors most susceptible to climate change impacts. Resilient agricultural systems play a vital role in ensuring food security for all African citizens and demand a need for higher climate financing.

Figure 7. Adaptation Finance Flows in Africa, by Sector (2021–2022)



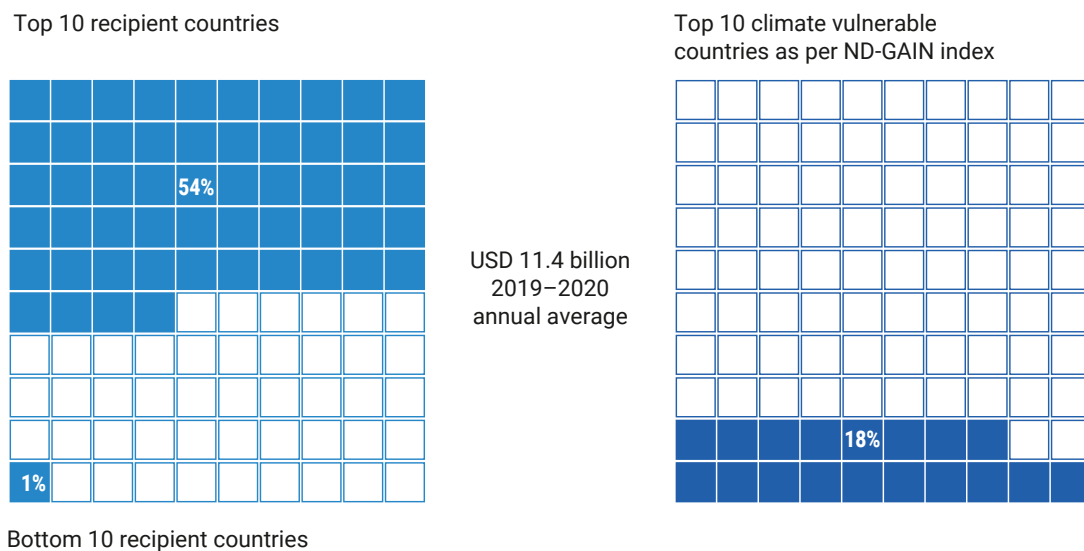
Of the total USD 3.4 billion to AFOLU, the agriculture sub-sector saw the largest share of AFOLU adaptation finance (40% or USD 1.4 billion), followed by policy, national budget support, and capacity building activities relevant to AFOLU (14%, USD 500 million) and forestry (8% or USD 270 million). More than 37% of the adaptation finance for AFOLU in Africa, USD 1.3 billion, could not be allocated to a specific sub-sector due to limited granular information underscoring the need for better tracking practices (see Chapter 5 for challenges in tracking adaptation finance).

Africa’s climate finance flows are concentrated in too few countries. Within Africa, data indicates that ten nations³⁵ received over half of the continent’s climate finance in 2019–2020.³⁶ Various factors, including perceived and real risks, likely influence this allocation, as investors often exhibit caution when considering broader distribution to the most

vulnerable regions. Moreover, in the same period, 20 countries identified as being in fragile and conflict-affected situations (FCS) received a combined 35% of the continent’s adaptation finance.^{37, 38}

Recent GCA analysis suggests that only seven countries in Africa today have all the key strategic and planning elements for adaptation action in place: clear institutional mandates, priority sectors identified, adaptation costs estimated, and specific adaptation goals stated. These countries are ready to absorb financing and implement adaptation programs at scale. Strengthening strategic planning, adaptation priority programs, and institutions is a critical task for most African countries.³⁹

Figure 8. Adaptation Finance Flows in Africa (2019–2020), by Recipient Countries



3 Assessment of Public and Private Finance Institution Adaptation Commitments

Key Messages

- Progress on global climate negotiations is intrinsically linked to the delivery of adaptation finance and increasing loss and damage finance. Commitments made by institutions in developed countries continue to be insufficient, unclear, and lack well-defined delivery timelines.
- By developing adaptation finance commitments that are ambitious, specific, credible, and measurable—public and private institutions can increase momentum towards climate adaptation finance mobilization at scale.
- Public financial institutions have a critical role to play in helping to bridge adaptation funding gaps through deploying their own capital and via mobilization of the private sector and other funders (including philanthropies).
- Significant limitations currently persist in definition, comparability, and ambition of institutional (both public and private) commitments focused on adaptation finance.

3.1. INTRODUCTION AND CONTEXT

In 2015, the Paris Agreement established, for the first time, a process to agree on a global goal on adaptation and in 2021, at COP26, the Glasgow Climate Pact urged country Parties to double adaptation finance flows from 2019 levels by 2025 to roughly USD 40 billion. COP28 will focus on the Global Goal on Adaptation (GGA) and the establishment of a New Collective Quantified Goal (NCQG), both of which highlight the urgency for higher ambition on climate finance, especially for adaptation. These COP-initiated processes are instrumental to channeling more finance to adaptation activities globally.

In connection with the global processes, since the Paris Agreement, many public and private financial institutions have released statements concerning their goals and commitments related to climate change finance and portfolio emissions.⁴⁰ To date, the majority of commitments have centered on mitigation objectives, while adaptation commitments are much less common.⁴¹ While these statements

vary drastically in their content and context, collectively they signal an impetus for financial institutions to play a more active role in defining and mobilizing finance to climate mitigation and adaptation activities.

This section sets out to evaluate specific institutional climate adaptation finance commitments in order to advance recommendations to increase the ambition and integrity of commitments from all financial institutions. The recommendations are informed by the range of potential benefits that ensue from setting a high-quality institutional commitment (for public and private institutions alike) including:

1. **Catalyzing structured organization-wide analysis of adaptation finance.** Although there are various ways to organize the creation of a commitment, they all require boards, leadership, and staff (who may not usually think about adaptation) to consider adaptation finance in their daily operations.

2. **Influencing key decision-makers to consider adaptation when making investment decisions.** High quality commitments require mainstreaming throughout the institution to ensure proper alignment through all operations. Those involved in commitment-making will be able to view current and future investments through an adaptation lens, integrating an adaptation-sensitive approach into organization-wide investment decisions and portfolio construction.
3. **In theory, publishing a commitment sets the foundation for an institution to be held accountable for its stated actions.** For this to hold true, it requires the commitment to be clear; to detail quantitative figures, and to be consistently reported upon.

This section defines an institutional climate adaptation commitment as a publicly available declaration of an entity's intent and strategy to invest in, and mobilize financing for, climate adaptation activities.

This research also captures climate adaptation statements, which are higher level and less advanced than commitments. Crucially, statements fall short of describing a clearly articulated strategy to achieve climate goals—rather, they publicize a more basic recognition of the necessity of climate action at the institutional level when it comes to adaptation. Though there is no universal consensus on the necessary components of a high-quality climate adaptation commitment, this paper advances the theory that a high-quality commitment will have explicit and comprehensive content across four categories: quantum, milestones, specificity, and tracking—each defined further below.

The dataset includes commitments from public financial institutions (FIs) that are members of the following groups: the International Finance Development Club (IDFC), multilateral development banks (MDBs), African national development banks (NDBs) and sub-regional development banks (SRDBs),⁴² and Middle Eastern or North African NDBs and regional development banks.⁴³ While this dataset is not globally comprehensive, it aims to capture a set of public financial institutions that are critical to mobilizing of adaptation finance for the key high climate risk regions of Sub-Saharan Africa, the Middle East, and North Africa. The focus on these regions is determined by their high vulnerability to climate change impacts and significant need for adaptation finance. This focus

also aligns with major climate dialogues, such as the Africa Climate Summit and COP28. Furthermore, the selection of these public financial institutions is based on the availability of funding and the availability of public information.

To form a dataset of climate commitments and statements, it was necessary to collect qualitative and quantitative data from various sources, such as institutions' websites, annual reports, sustainability reports, and news articles. For each commitment and statement, the dataset contains funding amounts, geographic origin, and relevant start and end dates, where available.⁴⁴ Notably, the dataset includes declarations that do not relate to climate adaptation—primarily for the purpose of understanding how declarations are distributed across adaptation, mitigation, and general climate finance.

3.2. EVALUATION APPROACH

An effective climate adaptation commitment is not merely a statement of intent but a clear, actionable, and transparent promise of action. It necessitates a public declaration concerning both direct investment and mobilization of climate finance and, more specifically, climate adaptation finance. For this report, the following categories are used to evaluate the robustness of a commitment: 1) quantum, 2) milestones, 3) specificity, and 4) tracking.

A commitment scoring high on all four categories would include: one or a set of quantitative adaptation finance goals accounting for at least 50% of total climate finance pledged; distinct dates for deadlines and a time-bound approach to realizing objectives; and a detailed approach for reporting against, and monitoring progress on, the commitments to ensure accountability and transparency in realizing the adaptation finance objectives. Further details on each of the criteria used to evaluate commitments on a low to high quality scale are presented in Table 2.

It is important to note that this evaluation is not meant to assess how likely an institution is to follow through with its commitment or how serious an institution is about adaptation interventions. Rather, this report aims to use tailored metrics to assess how complete a commitment is in relation to four primary characteristics. By doing so, it illuminates new pathways for future research on structuring and implementing high-quality adaptation finance commitments.

Table 2. Proposed Evaluation Metrics and Indicators for Institutional Commitments

Indicator	Quantum ⁴⁵	Milestones	Specificity	Tracking
Low	Does not indicate a numerical value for adaptation finance over any period.	Does not include any specific dates to which commitments are attached.	Does not offer any details on sectoral ⁴⁶ or geographic targets of commitment or on implementation planning.	No articulated strategy for reporting against, or tracking progress on, commitment.
Medium	Indicates at least one numerical value for adaptation finance but below a balance of mitigation and adaptation finance.	Includes at least one date to which adaptation finance commitments are attached, with the target date being no later than the end of 2025.	Includes at least some mention of sectoral or geographic targets of commitment and/or on implementation planning (e.g., identified partners, activities, etc.).	Limited detail provided on strategy for reporting against, or tracking progress on, commitment.
High	Indicates at least one numerical value for adaptation finance and that value constitutes at least 50% of total climate finance committed.	Includes one near-term target (within 5 years) or two long-term targets (5 years or more) with specific dates to which adaptation finance commitments are attached.	Includes details on both sectoral and geographic targets of commitment and on implementation planning (e.g., identified partners, activities, etc.).	Highly detailed approach outlined for reporting against, and tracking progress on, commitment.

When interpreting the analysis of commitments, it is crucial to contextualize the challenges and opportunities faced by institutions, particularly those in developing economies. Many financial institutions, especially in developing countries, grapple with a set of challenges, such as the necessity for improved data sharing and sectoral benchmarking, which limit the mobilization of capital.⁴⁷ Simultaneously, the complexity of establishing concrete climate adaptation interventions, and thereby a cohesive consensus on precise needs, complicates the formulating and evaluation of robust, quantifiable pledges.

3.3. CURRENT STATUS OF PUBLIC INSTITUTIONAL COMMITMENTS

Very few public financial institutions have made public adaptation finance-specific commitments, and many of the commitments that do exist are not robust, as evaluated against the criteria advanced above. Of the 60 public financial institutions reviewed, only 13 have made public adaptation-specific commitments.⁴⁸ Of these, multilateral climate funds are the clear leaders, unsurprisingly given the inherently climate-relevant nature of the funds'

mandates (which often explicitly cover adaptation). MDBs follow—five have advanced adaptation finance specific commitments, while an additional two have climate finance commitments that mention adaptation finance but do not call it out separately, and four have broader climate finance commitments that do not mention adaptation. Of the remaining institutions assessed in the report, over 50% do not have any form of climate commitment.

A detailed list of these institutions is provided in Annex 2. Further analysis of institutional commitments to adaptation finance and climate finance more broadly by institution type is available in Table 3.

Even many institutions with adaptation commitments have significant room for improvement in the quality of those commitments. In analysis of the 13 institutions with commitments identified that include adaptation-specific mentions, we found significant limitations across the four categories of analysis proposed: quantum, key milestone, level of specificity, and robustness of tracking measures. Figure 9 summarizes the evaluated quality of commitments against those categories.

Table 3. Evaluation of Institutional Commitments by Institution Type⁴⁹

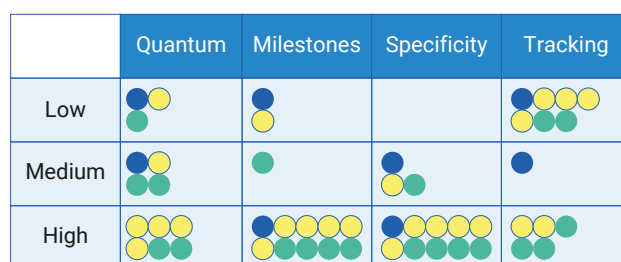
Institution Type	Number of Institutions Evaluated	Institutions Evaluated by Most Ambitious Commitment:			
		Adaptation Finance Specific	Climate Finance (w/ non-specific adaptation mention)	General Green/Climate Finance Commitment	No Climate-Related Commitment
IDFC Member ⁵⁰	19	2	4	3	10
Multilateral Development Bank	11	5	2	3	1
Sub-Saharan African NDB/SRDB	15	0	1	1	13
Multilateral Climate Fund	6	6	0	0	0
MENA NDB/SRDB	9	0	0	1	8
Total	60	13	7	8	32

- Quantum:** Of the 13 institutions with adaptation finance commitments, six have high quality commitments as assessed against quantum—meaning that the commitment has at least one numerical value for adaptation finance and that value constitutes at least 50% of total climate finance. There is nevertheless a widespread lack of comprehensive description of quantum across commitments: most commitments that detail quantum do not discriminate between mitigation and adaptation, meaning that the portion of adaptation finance is not quantifiable. Some institutions opt to describe commitments through percentages of projects, which limits aggregability and comparability of adaptation finance commitments across institutions.
- Milestones:** Eleven of the institutions evaluated have included at least one temporal milestone within their commitment. The inclusion of milestones is promising, though many commitments still lack an articulated strategy for progress in adaptation finance commitments over time. The relative strength of quantum and milestones criteria may reflect the public relations character that some climate commitments have taken on since the Paris Agreement; the international community has continuously emphasized volume and timelines of climate financing.
- Specificity:** Institutional commitments evaluated for specificity rank extremely high when compared to other categories. No institution with an adaptation commitment scores low, while just

three score medium. The majority provide content of varying levels of granularity, from discrete project-level investments to priority sectors for adaptation interventions.

- Tracking:** Few institutions indicate a strategy for tracking the components of their commitment over time. Just one-third of the group articulate a specific tracking approach. Seven institutions do not address details of tracking in their commitments. In stark contrast to other categories, the group scores notably low on average in tracking. Generally, MDBs involved in the 2022 Joint Report on Multilateral Development Banks' Climate Finance fare better on tracking, with four out of five in the dataset scoring high.

Figure 9. Institutional Adaptation Finance Commitments Evaluated Against Criteria



IDFC Member
 Multilateral Climate Fund
 Multilateral Development Bank

3.4. EVALUATING ADAPTATION FINANCE COMMITMENTS OF AFRICAN FIS

SRDBs have a substantial opportunity to play a leading role in advancing climate adaptation across Africa, but their effectiveness may be limited without clear and ambitious adaptation commitments. SRDBs have a mandate to contribute to regional integration and regional infrastructure development projects, financial stability, and relationships with stakeholders. They collectively have at least USD 6.2 billion assets under management.⁵¹ To date, however, none of the four African SRDBs have made public adaptation-specific commitments. Below captures the climate finance commitments of these institutions to date:

- **ECOWAS:** In 2021, the Economic Community of West African States (ECOWAS) led the development of a regional climate strategy to support member states in implementing their respective NDCs and NAPs. Notably, the financial institution established by ECOWAS—ECOWAS Bank for Investment and Development (EBID)—deferred to member states’ commitments, rather than declaring its own.
- **East African Development Bank (EADB):** In 2018, EADB committed to carbon neutrality using a two-pronged approach: reduction of electricity consumption or renewable energy alternatives and purchase of Carbon Emission Reductions (CERs) to offset emissions.
- **West African Development Bank (BOAD):** BOAD lacks adaptation commitments, although it was listed as a financier of specific actions under the regional climate strategy.
- **Eastern and Southern African Trade Development Bank (TDB):** TDB and the French Development Agency (AFD) signed a USD 150 million credit line to support the development of green infrastructure in member states, further encouraging alignment with NDCs.

Public financial institutions in Africa and the Middle East have extremely limited adaptation finance commitments. While some of these institutions are beginning to incorporate climate change into their strategic planning efforts, there are significant strides to be made in formulating their own commitments as potential regional leaders on climate adaptation. This analysis finds no

adaptation finance-specific commitments across the 24 public financial institutions in Sub-Saharan Africa and MENA.

This section is largely focused on public financial institution commitments to climate adaptation because these institutions to date have been more likely to make public commitments given their mandates and regulatory conditions. Private institutions, however, also have a critical role to play in adaptation finance flows and are increasingly announcing climate commitments to align with the goals of the Paris Agreement, which advances an aim to make finance flows consistent with a low-emissions and climate-resilient pathway.

In practice, commitments made to date by the private sector have been almost entirely focused on the low emissions component of the Paris Agreement while commitments towards alignment of private finance flows with a climate-resilient pathway have been limited. Corporations, institutional investors, and commercial banks each must play a role in financing adaptation activities and aligning their commitments with a climate-resilient future, and all three have significant room for growth in articulating commitments to this end.

- **Corporations:** Though two-thirds of Fortune Global 500 companies have a climate commitment, very few of these commitments speak materially to climate adaptation and resilience.⁵²
- **Institutional investors:** There is growing coordination among institutional investors on climate adaptation, as evidenced by a recent publication by the Institutional Investors Group on Climate Change of a discussion paper to support the development of a Climate Resilience Investment Framework.⁵³ There is still significant work to be done to advance adaptation specific institutional commitments. For example, the Paris Aligned Asset Owners have published an institutional statement related to Paris alignment, but none of the 10 commitment elements cover the climate-resilient pathway element of the Paris Agreement.⁵⁴
- **Commercial banks:** Commercial banks are increasingly making climate commitments—as of 2022, 128 had made a commitment to net zero. As with institutional investors, commercial banks’ climate commitments to date are almost entirely focused on the mitigation side

of the Paris Agreement, with little attention to climate-resilient pathways.

- **Central banks and financial regulators:** Central banks and financial regulators are also playing an increasingly important role in the incorporation of climate resilience in strategic planning efforts. They are progressively integrating climate-related risks into their supervisory frameworks, recognizing that climate change affects the financial system through physical risk to assets and transition risks during the shift to a lower-carbon economy.⁵⁵ This shift has been influenced by the potential disruption of central banks' primary mandates, such as price and financial stability, and banking supervision. In line with its mandate, the IMF is also increasingly incorporating climate change risk into its macro-financial policy advice and stress testing frameworks.⁵⁶ The IMF recently joined the Network of Central Banks and Supervisors for Greening the Financial System (NGFS)⁵⁷ and is developing a framework for assessing climate-related risks.

3.5. LESSONS LEARNED AND RECOMMENDATIONS

A handful of institutions are leaders in goal setting and commitments to adaptation finance globally, notably MDBs, multilateral climate funds (MCFs), and individual bilateral development finance institutions (DFIs), as evidenced by the Joint Framework—but dedicated and comprehensive institutional commitments remain lacking. By defining and disclosing adaptation commitments, more public financial institutions can signal intent to respond to growing calls for action in this space. While a useful first step, simply setting an adaptation finance goal is insufficient; the commitment must have a high

quantum of finance, be specific and contain delineated timelines for action, and must advance a strategy for evaluation of progress over time.

National, regional, and sub-regional institutions lag behind multilateral institutions in quality and number of adaptation finance commitments. Regrettably, there is limited evidence of interaction between these institutions and MDBs on adaptation finance commitments or tracking. The lack of guidance from, and alignment between, MDBs can act as a considerable barrier for smaller public FIs to progress on adaptation finance. If MCFs and MDBs are excluded, the data starkly reveals that adaptation finance is not a focus of institutions making climate commitments. Furthermore, the remaining institutions that have adaptation finance commitments, consisting of Sub-Saharan African SRDBs and IDFC members, have significantly lower quality commitments.

Collaborations can help create quality commitments that are more ambitious and holistic.

The commitment evaluation finds the AfDB to have the most comprehensive commitment in the dataset, aiming to mobilize USD 25 billion by 2025 to scale climate adaptation across Africa. In collaboration with the GCA, the AfDB developed the Africa Adaptation Acceleration Program (AAAP),⁵⁸ a program that supports improvements in climate resilience across four pillars. This program enables AfDB to invest in adaptation through its execution of the commitment as its primary goal and support from technical expertise through GCA. In this regard, the AAAP acts as a catalyst for the AfDB to make more ambitious, comprehensive, and expert-guided climate adaptation commitments.

4 Analysis of Instruments Deployed for Adaptation Finance

Key Messages

- Globally, debt continues to be the most utilized instrument to deliver adaptation finance, increasing in 2021–2022 to 80% of total adaptation finance from 70% of flows in 2019–2020. The remaining share consists predominantly of grants with a minor proportion of equity investment.
- To close the gap between current adaptation flows and the needs of countries, a wider range of financial approaches are required. Given the substantial debt burdens of many countries, especially those facing severe climate risks, financial instruments beyond traditional debt approaches should be deployed, including debt-for-climate swaps, results-based finance, local currency swaps, and guarantees.
- To scale private adaptation funding effectively, innovative approaches and partnerships are essential in addressing and overcoming investment barriers. Based on currently available data, private actors, including corporations and philanthropies, have committed limited volumes of finance to date to adaptation. Overcoming barriers to private adaptation finance can be accelerated by increased collaboration with public actors and the greater use of blended finance to mitigate risks and incentivize greater investment.

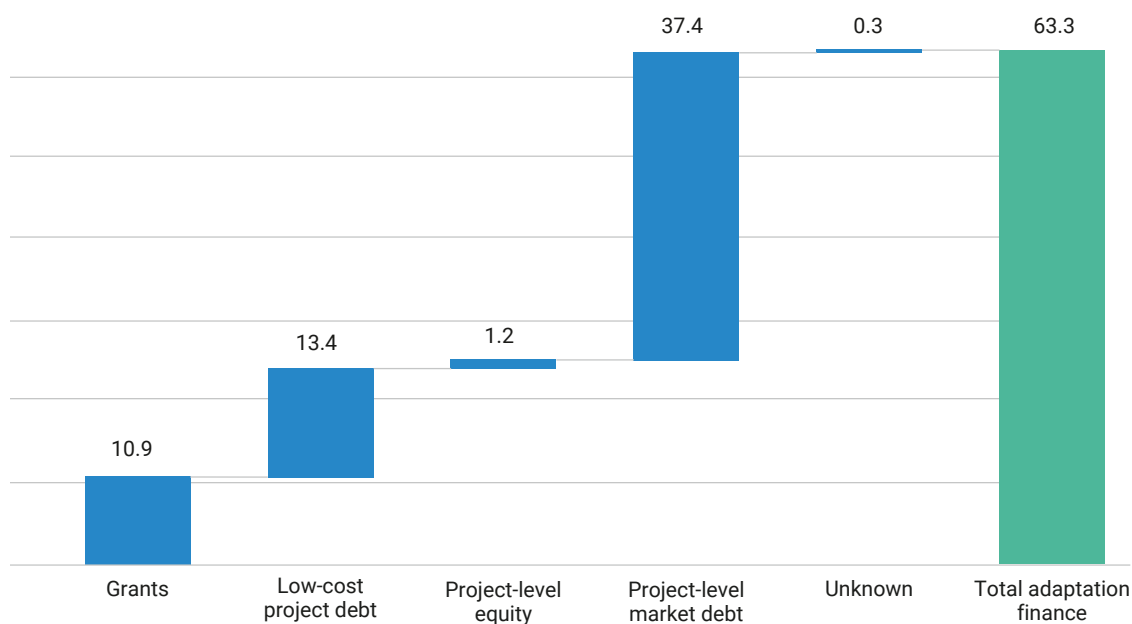
4.1. INTRODUCTION

Market-based debt is currently the most common instrument used to mobilize adaptation finance globally. The latest data from CPI indicate that in 2021–2022, project-level market rate debt⁵⁹ constituted USD 37.5 billion (or 59%) of average annual adaptation flows. This represents an increase from 2019–2020 when project-level market rate debt accounted for USD 24.2 billion (or 46%). Notably, equity investments represent a small fraction of the global landscape of adaptation finance. In the context of adaptation finance, traditional instruments such as debt are set to remain pivotal for future delivery. Nonetheless, diversifying the utilization of financial tools and addressing challenges like

debt stress, through the Common Framework⁶⁰ and debt negotiations, are imperative. Refer to Annex 1 for an existing IMF strategy to address financing challenges faced by countries with high climate risk and debt burdens.

The volume of concessional finance flowing to adaptation increased modestly, but its proportion relative to other financial sources diminished between 2019–2020 and 2021–2022. In 2019–2020, grants accounted for about 19% of total utilization, and low-cost debt was at 24%; these figures dropped to 17% and 21% in 2021–2022, respectively. Non-market rate instruments are essential for enabling investments in countries where high risks prevent market rate capital investments. Concessional capital is also critical for leveraging private sector investments.

Figure 10. Average Annual Adaptation Finance Flows by Instrument (USD billion, 2021–2022)



4.2. PUBLIC SECTOR ADAPTATION INSTRUMENTS LANDSCAPE

Market-based debt also emerged as the predominant instrument for adaptation finance from public institutions in 2021–2022. According to CPI’s recent analysis, market-level debt accounted for USD 36.8 billion (or 60%) of the total public finance channeled for adaptation. This was followed by concessional (low-cost) project debt, which contributed USD 13.4 billion (or 22%), and grants which contributed USD 10.5 billion (or 17%).⁶¹ Other instruments, such as project-level equity and unspecified instruments, accounted for USD 0.9 billion (or 1%).⁶²

Increased debt utilization was largely driven by national DFIs and multilateral DFIs. National DFIs increased debt utilization compared to 2019–2020 by 58%, and multilateral DFIs by 51%. The utilization of much-needed concessional instruments by the public sector remained virtually the same between periods.

Governments remained the primary providers of grants, with their utilization seeing only a marginal increase between 2019–2020 and 2021–2022. Although national DFIs increased the overall amount of finance delivered using low-cost project debt, the volume provided by multilateral and bilateral DFIs decreased.

In the African context, concessional instruments dominated the deployment of public adaptation finance. Concessional instruments were used to deploy 77% of the adaptation finance in Africa, with grants dominating the flows with approximately USD 5.3 billion (or 43% of all flows), and low-cost project debt following with USD 4.2 billion (or 34%).⁶³ Project-level market rate debt amounted to USD 2.8 billion (23% of the flows). Multilateral DFIs emerged as the main source of adaptation finance in the African context. Governments followed, providing adaptation finance mostly with grants.

Figure 11. Average Annual Public Adaptation Finance Flows by Instrument (USD billion, 2021–2022)^{64,65}

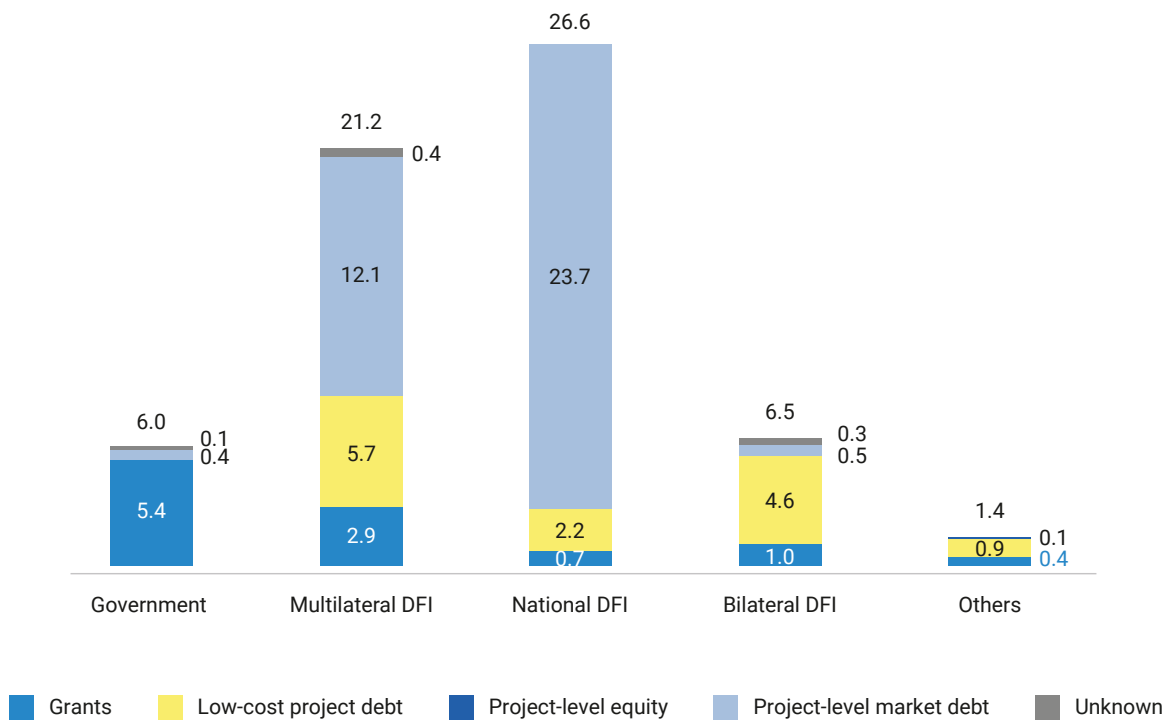
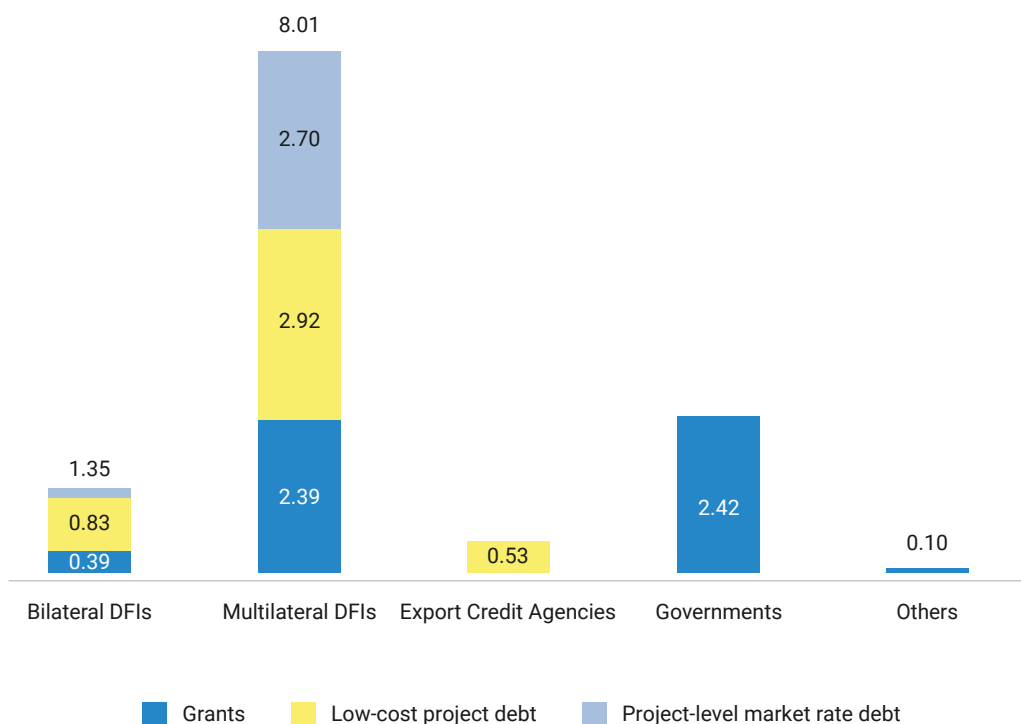


Figure 12. Average Annual Public Adaptation Finance Flows by Instrument in Africa (USD billion, 2021–2022)⁶⁶



Adaptation finance for developing countries should be delivered through a diverse array of innovative instruments to prevent exacerbating their debt burdens. Increased demand for public health initiatives and stimulus spending, coupled with a dramatic reduction in tax revenues during the COVID-19 pandemic, placed immense financial pressure on low- and middle-income countries, resulting in rising debt-to-GDP ratios.^{67,68} Recent reporting by the IMF identified that by the end of 2022, global public debt reached 92% of GDP—and that 60% of low-income countries and 25% of emerging economies are either in or at risk of debt distress.⁶⁹

Data from the Notre Dame Global Adaptation Initiative (ND-GAIN) Index and the IMF's World Economic Outlook reveals that almost all low-income countries facing high sovereign debt levels are highly vulnerable to climate change.⁷⁰ As a

result of the fiscal burden, these nations prioritize debt repayment over much-needed adaptation investments. Furthermore, climate vulnerability itself has compounding financial repercussions: one study found that climate vulnerability raised the average borrowing cost by 1.2%.⁷¹

To reduce the gap between existing adaptation finance and global adaptation finance needs, various financial instruments beyond traditional debt approaches are needed to unlock and scale investments. Though traditional instruments are needed to spur and bridge the gap of public adaptation investments, instruments beyond market-based debt are required to balance and scale the finance flows without further aggravating debt burden, especially on already vulnerable and severely indebted countries. Table 4 provides a compilation of various financial instruments available for adaptation.

Box 2: Deep Dive – Evaluating Debt-for-Adaptation-Swaps ^{72,73, 74}

Debt-for-adaptation swaps have emerged as an alternative to bridge adaptation finance gaps and tackle debt distress, yet they face several barriers impeding their widespread adoption. Creditor-debtor dynamics introduce complexities, as some creditors hesitate to adjust or cancel debts, and debtors may resist due to perceptions of sovereignty infringement or fears of adverse economic and social implications. Moreover, establishing these swaps demands intricate, prolonged negotiations among diverse stakeholders, sometimes taking years to finalize—and they are susceptible to evolving external dynamics. Lastly, the effectiveness of these swaps is often questioned; will they only cover a minimal

fraction of a country's total debt, possibly failing to provide meaningful debt relief or adequate funding for environmental programs?

To overcome the barriers of debt-for-adaptation swaps, the intervention of major financial institutions, like the World Bank and the IMF, is essential. These entities could reform debt relief programs, such as the World Bank's Debt Service Suspension Initiative and the IMF's Catastrophe Containment and Relief Trust, to promote these swaps. Additionally, they should collaborate with lenders to standardize swap practices and strategically design programs that target the most suitable loans and countries.

Table 4. Financial Instruments Available for Adaptation Finance^{75, 76, 77}

Category	Description	Typical Use Case	Example
Debt-for-Climate Swaps	Debt swap in which the debtor nation, instead of continuing to make external debt payments in a foreign currency, makes payments in local currency to finance domestic climate projects.	Countries with high climate vulnerability, and significant but manageable debt levels, ⁷⁸ and no imminent liquidity crisis. Institutional capacity is required to execute.	Belize and The Nature Conservancy (TNC) debt-for-nature swap (2021). The Nature Conservancy (TNC) and the Belize Government finalized a USD 364 million marine conservation debt conversion, reducing Belize's debt by 12% of GDP. ⁷⁹
Financing Facilities	Debt or equity funding for a pool of projects, companies, or individuals at various levels of concessionality including subordinated debt and equity, private equity funds, and other debt facilities.	Wide ranging: Can support investment which requires aggregation and coordination.	Catalyst Climate Resilience Fund (2015–present). The Catalyst Climate Resilience Fund (CCRF) is the leading impact fund and accelerator supporting pre-seed tech startups that are building a climate resilient future in Africa. ⁸⁰
Grants	Non-repayable or no interest rate reimbursable funding. Can include development grants, Technical Assistance funding, and Project Preparation Facility.	For projects that serve a critical development objective, but where the commercial potential is low, or funding is needed to make the effort 'investment ready'.	West Africa Coastal Areas Resilience Investment Project (WACA) (2018–2023). The WACA program is aimed at strengthening the resilience of targeted communities and areas in coastal Western Africa through bilateral support with traditional development partners for concessional and grant financing. ⁸¹
Guarantees	A financial safeguard where a third-party guarantor commits to repaying part or all of a loan to the lender if the borrower defaults.	When a project requires a credibility boost to secure loans acting as a de-risking mechanism provided by a third party.	USDA Water and Waste Disposal Loan Guarantees: (2020–present). The USDA Water and Waste Disposal Loan program guarantees 80% of loans for rural water and waste projects, spurring private investment in essential public utility infrastructure.
Insurance	The most common form of risk transfer. Can include catastrophe bonds, parametric insurance, index insurance.	Cases with high climate risk. Most effective when climate data is robust, regulatory conditions are workable, and there is trust in insurance payouts.	Quintana Roo Reef Protection Parametric Insurance: (2018–present). Swiss Re and The Nature Conservancy collaborated to deploy the first insurance that funds reef restoration immediately after hurricanes, based on wind speed. ⁸²
Liquidity Instruments	Grant or debt facilities that are designed to provide immediate access to capital. Most frequently shock-responsive cash transfers, liquidity support, and domestic budget reallocations.	In response to insufficient financial and technical capacity in the face of emergency situations.	IMF Catastrophe Containment and Relief Trust (CCRT) (2015–present). The CCRT offers debt relief grants to the poorest countries affected by major natural or public health disasters. ⁸³
Local Currency Swaps	Long-term finance options in local currency through fixed and inflation-linked swaps designed to mitigate the dual risks of currency and interest rate fluctuations for climate investments.	Commonly deployed to support investments in emerging markets, to hedge against currency and interest rate volatility.	Long-term FX Risk Management (TCX) (2013–present). TCX specializes in mitigating currency and interest risks for energy investments in developing nations, enabling long-term, local currency financing. It has supported the de-risking of more than USD 8 billion in loans since its inception.
Project Finance	Direct debt or equity investments into a single/set of project(s) across commercial or concessional finance including first-loss debt, off-taker guarantees, direct infrastructure investments, and Public–Private Partnerships financing.	Direct development and investment in an infrastructure project or for financing based on a government contract.	Patong Desalination Investment (2020–present). The project's primary objective is producing safe drinking water in regions with seasonal water scarcity using seawater desalination. Funded by Climate Investor Two (CI2). ⁸⁴
Results-Based Finance	Debt or grant capital for a project or portfolio of projects that is contingent on the achievement of certain outcomes. Can include impact notes, climate bonds, and conservation trusts.	Blended finance approach: Involving favorable repayment terms or bonuses for achieving policy outcomes. Can support insufficiently bankable projects.	European Bank for Reconstruction and Development Climate Resilience Bond (2019). EBRD launched the first ever dedicated climate resilience bond, raising USD 700 million with the issuance. ⁸⁵

4.3. PRIVATE SECTOR ADAPTATION INSTRUMENTS LANDSCAPE

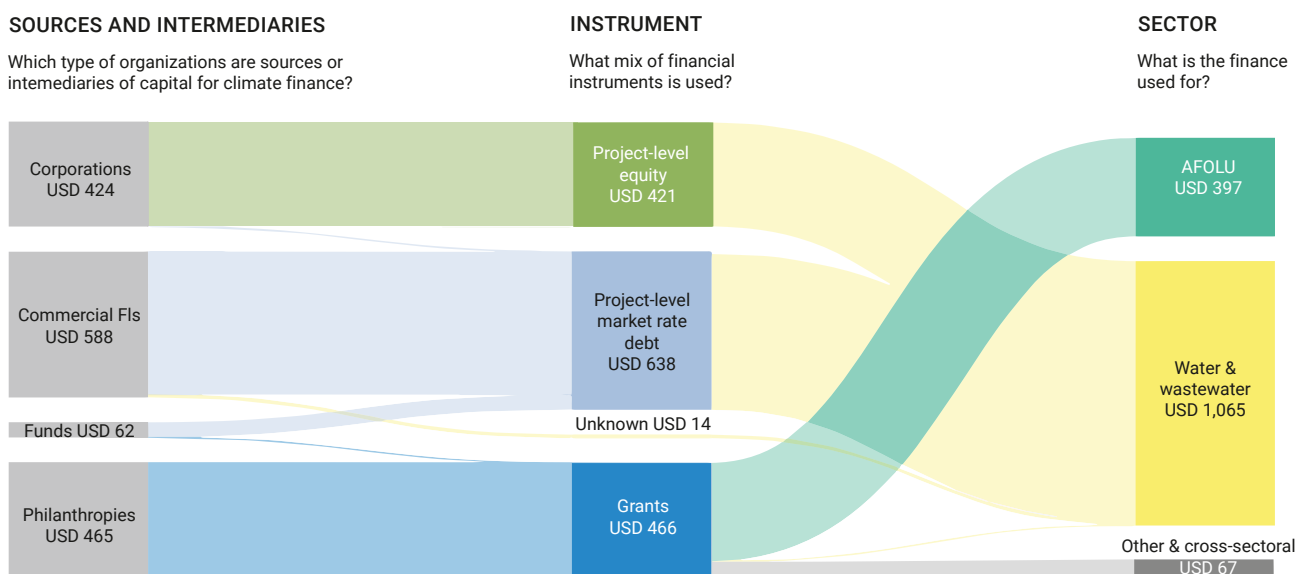
The tracked flows of private sector institutions lag considerably in total volume of adaptation investments. Within these flows, project-level debt has emerged as the primary instrument deployed by the private sector towards adaptation. Market-level debt financing accounted for USD 638 million (or 41% of the total private finance for adaptation). This was followed by grants, which contributed USD 466 million (or 30%), and project-level equity with USD 421 million (or 27%). Unknown instruments accounted for the remaining USD 13 million (2%). Tracked project-level equity and market rate debt from the private sector flowed almost entirely to water and wastewater projects while grants from the private sector (largely from philanthropies) flowed almost entirely to AFOLU and other & cross-sectoral activities (see Figure 13).

Tracking the flows and instruments used by private entities to mobilize adaptation funding is challenging. A lack of common definitions and established tracking mechanisms leads to limited

or incomplete information regarding the funders, administrators, and recipients of adaptation financing. Thus, reporting conducted by private actors rarely identifies investments as 'adaptation', and rather focus on outcomes, or categorizes these investments under other terms like 'resilience' or 'risk management'.^{87,88} Limited tracking also hinders the identification of instrument use.

Private sector actors encounter several barriers that inhibit them from engaging with adaptation investment opportunities. Adaptation investments are often considered as high-risk due to their perceived and, at times, actual low returns—as well as the challenges associated with monetizing their benefits.⁸⁹ Additionally, the inherent long-term nature of many adaptation projects often conflicts with the private sector's short-to-mid-term business horizons. This discrepancy makes it difficult for them to justify the up-front costs, particularly when future paybacks remain uncertain.⁹⁰ Moreover, the lack of information regarding climate risks makes it challenging to price the risks accurately and identify where investments are most required. This is compounded by the lack of

Figure 13. Overview of Tracked Private Adaptation Finance Flows (USD million, 2021–2022)⁸⁶



clarity regarding the full environmental and social benefits of these investments.

The increasing recognition of climate change as a key risk management issue is driving several corporates to enhance the resilience of their supply chains and operations. Financing instruments, such as green bonds and sustainability-linked loans, are now being explored as mechanisms to address these challenges.⁹¹ More specifically, resilience bonds, a subset of green bonds, are emerging as an innovative financial instrument to unlock private finance for resilience projects.⁹² Public actors can play a crucial role to leverage private investments by issuing these resilience bonds; these bonds can pay for adaptation projects, with repayments funded by user fees from the benefiting private sector entities—successfully leveraging private investment in adaptation and resilience.⁹³

Enhancing blended finance solutions poses an opportunity to leverage the private sector's adaptation investments.⁹⁴ Combining concessional public funds with private capital can prove instrumental in catalyzing private investments for climate and green growth projects, especially in emerging markets. By mitigating both real and

perceived risks, the blended approach can enable greater private capital involvement, particularly in crucial sectors like infrastructure.⁹⁵

Blended finance usually employs various instruments, such as bonds and notes (which can take the form of privately placed securities or public issuances), facilities like private equity funds and funds-of-funds structured with concessional capital in the stack, as well as specific projects. Furthermore, companies with 'blended' financial structures, as direct recipients, are another significant instrument, leveraging the benefits of this dual concessional market level approach.⁹⁶

Adaptation blended finance lags in the blended finance market, securing only USD 7.5 billion in total over the past decade. In contrast, mitigation has dominated the space, attracting an approximate USD 64.2 billion since 2013.⁹⁷ Hybrid transactions—those which address both mitigation and adaptation activities—are emerging as an opportunity area for private actors to invest in, and have impact on, adaptation goals. These types of transactions accounted for USD 18.5 billion in the last decade.⁹⁸ The agricultural sector received the majority of the hybrid transaction deals (27%).

5 Challenges and Recommendations

Key Messages

- Adaptation finance tracking is significantly constrained by data gaps, methodological inconsistencies, and reporting issues at both domestic and international levels.
- Useful progress has been made by a handful of international development financial institutions but much more needs to be done to standardize, harmonize, and disclose granular, consistent, and comparable information on adaptation finance.
- The challenges are amplified for private financial institutions where there is lack of regulatory pressure, market demand, and incentives to report data on private adaptation financing.
- There is real opportunity for governments and regulators to strengthen climate finance tracking systems, for development financial institutions to provide transparent leadership, and for civil society organizations to coordinate and develop simplified adaptation finance tracking methodologies for the private sector to adopt in an easy, effective, and efficient manner.

5.1. INTRODUCTION

Improved higher quality adaptation finance tracking is key to measuring progress. Tracking helps in identifying gaps and barriers in financing adaptation and resilience solutions globally and in Africa—effectively scaling up financing flows. This enables better insight into the relative effectiveness of different solutions and their associated financing. It plays a crucial role in measuring progress, and ensuring the scaling is at the required pace and meets the identified needs.

Comprehensive adaptation finance tracking should cover all actors across the financial value chain and at different levels. Climate finance refers to local, national, or international financing—drawn from public, private, and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address the impacts of climate change.⁹⁹ A robust and comprehensive adaptation finance tracking exercise must collect adaptation finance data from a range of financial actors across public, private, domestic, and

international levels which vary significantly in their size, operations, and geographical contexts. Table 5 lists the major challenges related to data, reporting, and methodologies in tracking adaptation finance.

Despite these challenges, adaptation financing from international public financial institutions is relatively well documented. As discussed in Section 2, the MDBs and the group of DFIs that are the members of the IDFC, have committed to the MDB-IDFC Common Principles for Tracking Adaptation Finance which outline a rigorous three-step process to identify adaptation projects and track adaptation finance. The adaptation finance contributions from these financial institutions are relatively well documented and publicly available through the OECD-CRS database and annual reports such as the Joint Report on Multilateral Development Banks' Climate Finance. While this is progress, many of these institutions still experience challenges in tracking adaptation finance as captured in Table 5. The continuation of their joint efforts to collaborate and work through the challenges is crucial for helping catalyze wider progress.

Table 5. Challenges in Tracking Adaptation Finance Flows

Methodological Challenges	
Definitional	There is currently no common definition of adaptation finance that can be easily adopted by all stakeholders. There is a wide spectrum of potential solutions that could be used across sectors to ensure that communities, systems, and infrastructure are adapted to climate change. This constrains comparability and transparency.
Variation in disclosure requirements and incentives	Particularly in the private sector, disclosure of resilient investments is limited. ¹⁰⁰ A lack of standards and reporting requirements limit private sector actors' incentives to report adaptation finance and many institutions simply do not have the tools to identify investment as adaptation or resilience. At present, private sector finance to adaptation is very difficult to compare to public finance in light of the inconsistent definitions and methodologies. Gaps in tracking private sector adaptation finance create significant uncertainty regarding current overall progress towards financing adaptation.
Lack of domestic budget tagging	The lack of comprehensive climate tracking of domestic budget expenditures leads to significant data gaps in tracking domestic public climate finance.
Mix of incremental and total tracking	The MDB and IDFC recommend the use of incremental or proportional cost of adaptation to report adaptation finance—capturing a share of finance dedicated to adaptation activities. ¹⁰¹ However, in practice, only the MDBs are following the incremental/proportional approach while other DFIs, climate funds, and governments largely report the total cost of the projects and all institutions report the full amount for mitigation finance, which yields comparability challenges between adaptation and mitigation finance. ¹⁰²
Different capacities to deploy use of methodologies	Adaptation finance tracking methodologies used by MDBs and large DFIs which are members of the International Development Finance Club (IDFC) are often quite robust and resource intensive. Smaller DFIs, as well as other public and private financial institutions and governments, might not have the required technical, institutional, and financial capacity to implement these methodologies (and may not receive transparent information about the approaches of larger institutions). This leads to varied levels of practical implementation, incomparability in reporting, and difficulty in aggregating data from different institutions.
Context dependency	Climate adaptation is highly context specific. Whether an investment has adaptation and resilience outcomes depends on specific regional or local vulnerabilities. It can thus be difficult to define and tag the expected outcomes of a financial flow.
Lack of impact metrics	As the amount of adaptation finance grows, it is important that tracking of adaptation finance goes beyond measuring financing volume to capturing impact, results, benefits, and outcomes. Climate adaptation does not have a central impact metric equivalent to the tons of CO ₂ emissions that is commonly used for mitigation. This often leads to multiple impact metrics being used by different actors to evaluate the project performance—making it harder to identify, aggregate, and compare financing flows and associated impact.
Limited understanding of adaptation end goals	There is a lack of collective understanding of what needs to be done to scale up adaptation financing and what are the intended objectives of combined adaptation efforts.
Institutional Challenges	
Confidentiality issues	Several DFIs and private financial institutions have strict client confidentiality, commercial sensitivity, and data protection concerns. This may make them reluctant (and legally constrained) to publicly disclose granular information about adaptation projects, such as intended objectives, achieved outcomes, and associated adaptation finance flows.
Fragmented data and processes	As many adaptation projects are cross-sectoral, there are several operational teams (besides dedicated strategy, policy, finance, monitoring and evaluation, research and communications teams) that are involved in the data collection and reporting process. Despite progress in engagement and collaboration, different teams often use disparate data collection methods and tools, leading to fragmentation of data. This can make it difficult to have a unified view of the information across different platforms and processes.
Limited agility and delay in responses	Integrating data from different sources and teams can be a complex task. This may cause organizations to either respond slowly or provide limited data in the given timeframe without high granularity and consistency. Complex data collection processes also hinder the organization's ability to implement new methodologies rapidly and track adaptation finance flows efficiently.

Box 3: Lessons Learned from the Implementation of the MDB–IDFC Common Principles for Tracking Adaptation Finance

MDBs and members of the IDFC adopted the Common Principles for Tracking Adaptation Finance in 2015. Since then, these Principles have been the guiding methodology for developing adaptation-relevant projects and reporting adaptation finance. In 2023 alone, MDBs and the IDFC members financed USD 25 billion and USD 31.6 billion worth of adaptation projects respectively.^{103,104} These institutions vary significantly in their organization size, mandates, and geographical presence. Therefore, implementation of the Common Principles for the past eight years in mainstreaming adaptation in the investment decisions and operations of these institutions has generated several lessons, some of them are listed as follows:

1. Mainstreaming adaptation-development nexus:

Adaptation is no longer considered a mere supplement to development investments; instead, it is seen as a necessity to steer development toward resilience. Consequently, support for adaptation has broadened its scope beyond conventional infrastructure sectors to encompass various areas, including education, health, social protection,

financial services, and research and innovation for adaptive solutions.¹⁰⁵

2. Distinguishing adaptation from non-adaptation activities:

The MDB adaptation finance tracking methodology requires project activities that contribute to adaptation to be disaggregated from activities that do not. In turn, the entire cost of adaptation-relevant projects does not automatically get counted as adaptation finance. However, a range of methods and approaches are undertaken to reflect the variety of mandates, business models, vulnerability context, data and resource availability. They must be applied consistently within the organization and adhere to the principle of conservativeness.¹⁰⁶

3. Improving management practices in adaptation projects:

Integrating adaptation management practices in the design and delivery of effective adaptation projects is of significant importance. These may include, among others, the introduction of better management practices for climate resilience, improved use of climate information, and policy or regulatory reforms that incentivize more climate-resilient practices and behaviors.¹⁰⁷

Domestic public climate finance data availability in Africa is increasing but still remains fragmented for adaptation. Many African nations have been actively working to enhance budget planning processes, integrating climate finance into their existing development strategies. Since 2012, 14 African countries, have engaged in Climate Public Expenditures and Institutional Review (CPEIRs) to analyze international support, and domestic climate-related expenditures.¹⁰⁸ Despite these efforts, implementing climate budget tagging systems (CBT) or similar exercises has proved challenging and resource intensive. Currently, countries like Ethiopia, Eswatini, Mauritius, Namibia, Nigeria, South Africa, and Uganda are in various stages of developing or piloting similar climate coding systems within their Public Financial Management (PFM) frameworks. Publicly available information for such analysis lacks detailed breakdowns of climate finance by use as mitigation and adaptation, by sectors, or project. They often have a time lag in reporting and are not conducted in a periodic manner.^{109,110}

High-quality tracking of private investments in adaptation remains elusive globally. Private financial institutions face limited market demand and regulatory pressure for disclosing adaptation-related information, which poses additional challenges to tracking private adaptation finance. Private actors have limited incentives to provide granular, accurate, and comprehensive information due to confidentiality and competition concerns. For example, the Common Principles for tracking adaptation finance, adopted by the MDBs, account for incremental costs of specific adaptation-related activities in a project which is often a complex and resource-intensive methodology. In contrast, accounting for full cost data is more practical and accessible for the private sector.¹¹¹ Private sector actors often do not define activities as adaptation finance if they are a function of business continuity or supply chain optimization.¹¹²

Addressing these challenges will require multi-stakeholder collaboration to track, report, and monitor adaptation finance data in a way that is comprehensive, consistent, and comparable.

5.2. ADAPTATION FINANCE TRACKING RECOMMENDATIONS

A. Governments and regulators:

i. Agree upon a 'North Star' goal for adaptation

Climate adaptation does not have a comparative impact metric, equivalent to the tons of CO₂ emissions that is commonly used for mitigation. This often leads to multiple impact metrics being used by different actors to evaluate the project performance, making it harder to identify and aggregate financing flows. Stakeholders must collaboratively devise an accessible framework encompassing adaptation and resilience actions, technologies, policies, and financing. This framework will help in identifying a north star goal for adaptation finance that is the equivalent of the net zero goal for mitigation finance. Such a goal will clarify any ambiguity in intended objectives for adaptation finance and engage a broader audience from the public and private sectors, spurring investment, innovation, and targeted interventions where they are most essential.¹¹³ The Glasgow-Sharm el-Sheikh (GlaSS) Work Program on the Global Goal on Adaptation (GGA) was established at COP26 in 2021. However, the progress on defining and operationalizing GGA has remained elusive.

In November 2022, at COP27, the Sharm-el-Sheikh Adaptation Agenda provided a valuable list of 30 aspirational, global adaptation outcomes by 2030. The list aimed to inform adaptation plans and strategies by defining simple, specific, measurable impact indicators which can be delivered by implementing specific high-impact adaptation solutions. This can serve as a step towards further synthesis and consolidation to a single or limited set of clear outcomes agreed by the Parties. Governments should also further regionalize, localize, and refine these adaptation outcomes to provide clarity on what adaptation outcomes should be tracked and prioritized.

ii. Link national determined contributions and investment roadmaps with climate finance tracking systems

Across all geographies, converting NDCs and NAPs into adaptation investment plans with viable project pipelines is a crucial step. Many wealthier countries are already investing, in light of predicted

climate impacts—often unlocking private resources to invest alongside public investment. This type of approach needs to be accelerated into emerging and developing economies. Led by governments, systems to track and evaluate progress must be established, updated, and strengthened.

At the regional level, Africa has made good progress in developing national strategies for adaptation embedded in the NDCs and NAPs. All African countries have submitted their NDCs, and close to one-third have finished their NAPs.¹¹⁴ The next step now is to delineate priorities for adaptation investments, funding requirements, and strategies through dedicated adaptation investment roadmaps. These roadmaps can identify specific projects and programs to be funded by international and private financiers. These investment roadmaps must be linked to domestic climate finance tracking systems, including climate budget tagging to create a comprehensive system for domestic adaptation finance tracking.

Some countries have already started work in this direction, which needs to be further strengthened.

For example, the NAP for Ethiopia identified 18 major adaptation options that will be implemented at all levels in the country and across different development sectors. These options reflect Ethiopia's strategic developmental priorities and optimize several factors such as cost-effectiveness, existing capacity, sensitivity to vulnerable groups, and potential to build adaptive capacity. However, the NAP mentions the need for capacity building to measure the financing and impact of these options in a consistent, coherent manner, so translating the options into an investment plan is not complete.

iii. Advance regulatory alignment with recommendations of the TCFD

The recommendations of the Task Force on Climate Related Financial Disclosures (TCFD) have been transformative in advancing momentum towards standard, credible, and decision-useful voluntary disclosures on climate risks at the portfolio level. In 2021, the United Kingdom was the first G7 country to mandate that all listed companies and large asset owners align reporting with the recommendations of the TCFD. Globally, governments must further advance disclosure regulation informed by the TCFD and must ensure that disclosure standards

increasingly integrate physical climate risk considerations.

B. Development financial institutions:

i Provide transparent leadership

MDBs, multilateral climate funds, and bilateral DFIs that are relatively advanced in their tracking of adaptation finance can and should offer ambitious and transparent leadership on adaptation finance tracking which includes:

- Setting public, measurable, and ambitious climate adaptation finance goals.
- Openly sharing information about the criteria and methodology used to identify and quantify adaptation finance and the data, models, and scenarios that are relevant in the context of tracking adaptation action.

C. Private financial institutions:

i Invest in reporting and disclosure practices for adaptation

Private FIs should support enhanced disclosure and reporting of critical information related to physical climate risks and opportunities. Public disclosure of adaptation finance data promotes transparency within the financial industry and ensures that climate-related financial information is accessible, comparable, and reliable, reducing information asymmetry and enabling investors to make more informed decisions.

According to the 2023 status report on the implementation of the TCFD, acute physical risk was the most frequently identified risk type by investors driving decreased revenues from decreased production capacity, decreased asset value or useful life, and increased capital expenditure.¹¹⁵ However, less than 20% of the banks that conducted a form of physical risk scenario analysis had assessed the impact of scenarios on their business.¹¹⁶ There are significant data gaps in assessments which require detailed information on the location of company assets, their nature (type, vulnerability, adaptations), the use of localized or regional climate models, and challenges with acute event attribution to climate change which are not provided by investee companies. Investing in filling these data gaps is critical to improve the uptake and reporting of physical risk management practices via TCFD.

Private FIs should make appropriate climate commitments and join one of the coalitions representing their investor category. Specific institutions and coalitions are paying increased attention to the challenges and implications of adaptation. Entities should participate proactively, forming internal teams to develop their own responses. The United Nations Environment Programme Finance Initiative (UNEP-FI) and Principles of Responsible Banking (PRB) both have existing initiatives on integrating and progressing adaptation and resilience financing—these must go further, quicker.

ii Raise awareness and build capacity within finance and operations teams

There is a need to raise awareness within private sector institutions on the benefits of reporting adaptation finance externally, during engagements with investee companies. Sector-level experts should be trained on climate adaptation concepts and terminology so that they can be comfortable reporting and tracking activities that build resilience. When sector specialists within financial institutions have a better understanding of climate vulnerability, resilience building, and climate adaptation finance, it will improve documentation efforts.

D. Civil society and international organizations:

i Develop, harmonize, and simplify adaptation finance methodologies

Currently there are different adaptation finance methodologies being adopted by the public and private sectors. The recommendations of the TCFD have had a positive impact on the physical climate risk disclosure ecosystem. Many other reporting frameworks and bodies such as the International Financial Reporting Standards (IFRS), CDP (formerly Carbon Disclosure Project), GRESB (Global Real Estate Sustainability Benchmark), IOSCO (International Organization of Securities Commissions), and UN Principles for Responsible Investment (PRI), are increasingly aligning with the TCFD recommendations and are including physical climate risk related indicators.¹¹⁷ Further progress to develop, harmonize, and simplify adaptation-relevant reporting standards will be critical to increasing efficiency across disclosure.

Box 4: Emerging Solutions to Respond to Adaptation Finance Tracking Challenges

Per analysis in this report and in prior work¹¹⁸ advanced by GCA and CPI on adaptation finance, it is clear that **high-quality adaptation finance tracking** is critical to identify trends and gaps, monitor commitments, support stakeholders in their reporting, and ensure that adaptation finance scales at the required pace to meet growing needs.

As noted throughout Section 5, we have found that while headway has been made by a handful of public financial institutions to resolve data gaps, methodological inconsistencies, and reporting issues, much more must be done to standardize, harmonize, and disclose granular, consistent, and comparable information on adaptation finance.

GCA and CPI are developing a cohesive work program of activities for an **adaptation finance tracking platform** with the following key aims:

1. Increasing clarity on, and integrity of, adaptation finance commitments and implementation.
2. Progressing on challenges identified in work to date, notably variation in disclosure requirements and incentives, lack of coherent and usable adaptation impact metrics, and limited understanding of adaptation end goals.
3. Increasing country-level action and capacity in adaptation finance tracking. The adaptation finance tracking platform's work program will progressively include:
 - **Development of an online platform for adaptation finance tracking**, initially populated with information from existing analyses to create a central repository of information.

- **Research and convenings focused on international public financial institutions** in order to capture and further disseminate current approaches to setting adaptation finance targets and tracking flows and to advance recommendations towards the creation of consistency among MDBs, bilateral DFIs, and regional DFIs.
- **Activities focused on improving tracking of public domestic climate adaptation finance** through the development jointly with stakeholders of each category of methodologies to track and report climate adaptation finance. The key categories of stakeholders will include (i) bilateral agencies and DFIs; (ii) regional DFIs; (iii) NDBs; (iv) Ministries of Finance; and (v) other financial institutions. This pillar of work will also include capacity-building activities to support the improved accounting of adaptation investment flows that are already happening and the decision-making processes to expand and accurately reflect new adaptation financing. This will involve engagement at the regional and country level.
- **Development of a suite of additional knowledge products on adaptation finance tracking**, including landscape(s) of regional and national adaptation finance, a landscape of adaptation finance addressing specific sectors or groups of countries (e.g., water-stressed countries, FCV countries, SIDS), and landscape reports by financial institution categories.

6 Intersection of Adaptation Finance and Humanitarian Assistance

Key Messages

- As climate-related disasters increase, the need for emergency response funding is growing. The importance of accurately tracking and accounting for both adaptation finance and humanitarian assistance funding to avoid double counting or re-labelling of funds will be paramount.
- The most fragile African countries struggle to access adaptation finance and are instead dependent on emergency response funding to cope with hazards. Re-evaluating eligibility requirements for accessing international adaptation funding could help to unlock much-needed finance for these highly vulnerable states.
- Only one-in-ten post-disaster reconstruction projects are reported as being designed and delivered with adaptation and resilience objectives in mind. However, a commitment to build back better should be mainstreamed across all reconstruction projects, ensuring resilience is embedded and maladaptation is avoided.
- Stakeholders in the emerging Loss & Damage finance agenda can learn from experience in the humanitarian sector for deploying rapid response funding following the onset of a climate-related disaster.

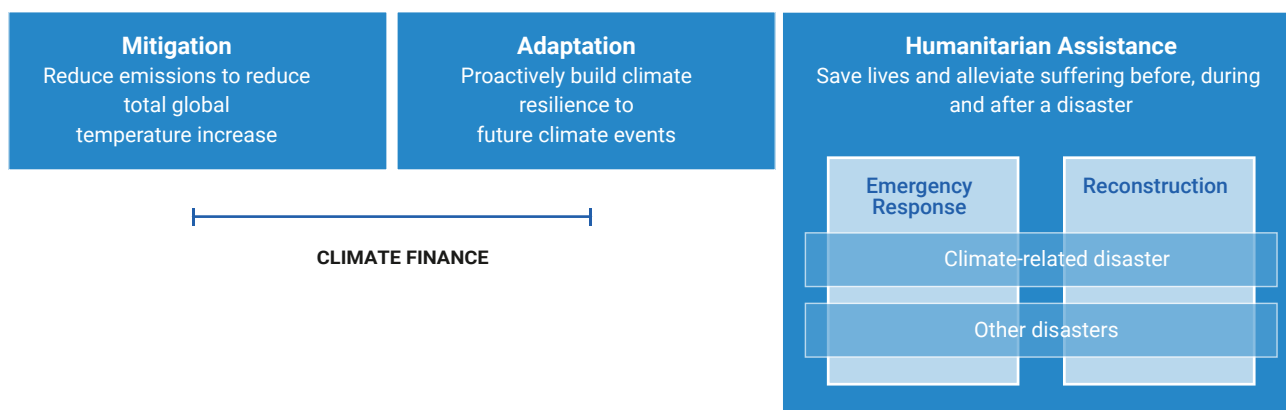
6.1. INTRODUCTION

Humanitarian assistance is intended to save lives and alleviate suffering, both during and after a disaster.¹¹⁹ It is generally provided on a needs basis, giving priority to the most urgent cases, irrespective of cause.¹²⁰ The severity and frequency of climate-related humanitarian crises have increased in recent years,¹²¹ with those in need of humanitarian assistance often facing multiple, cascading risks in relation to conflict, food security, health and climate change, among others.¹²² Establishing climate attribution is certainly complex, however, there is a consensus that climate change is driving new, and compounding existing, crises. It is putting the humanitarian system—as well as limited finance—under further strain.¹²³ Indeed, with insufficient

mitigation, and inadequate adaptation, the losses and damages associated with climate change—and the concurrent humanitarian need—will continue to spiral.

As is the case with international adaptation finance (Section 2), though international¹²⁴ humanitarian assistance funding has been growing in recent years, it continues to fall far short of estimated needs and funding appeals.¹²⁵ This section compares international public humanitarian assistance funding (defined here as ‘emergency response funding’¹²⁶ and ‘reconstruction funding,’¹²⁷ as reported by donors to OECD CRS) with international public adaptation finance committed between 2019–2021.¹²⁸ A deep dive on emergency response funding specifically committed to African countries, as compared to their adaptation finance, is also provided.

Figure 14. Depiction of Different Funding Categories



The aim of this new analysis is to:

1. Better understand the nature and magnitude of each funding category depicted in Figure 14.
2. Explore the implications of the overlaps between these funding buckets.
3. Provide key messages for actors working in the humanitarian sector and on climate change adaptation.

This first-time analysis provides an exploratory assessment of the intersection between adaptation finance and humanitarian assistance funding, and is limited to international public funding flows in the period 2019–2021 for comparative purposes. A wider universe of humanitarian assistance funding—beyond that reported to the OECD CRS—could also overlap with adaptation finance.¹²⁹ Given the escalation of climate-related disasters, both now and anticipated, there is a need to rapidly increase coordination and collaboration between actors working on these topics to maximize possible synergies, minimize duplicate action, and deploy limited resources as efficiently and effectively as possible.

6.2. ADAPTATION FINANCE AND EMERGENCY RESPONSE FUNDING

The total volume of international emergency response funding is on par with the magnitude of international adaptation finance flows. Between

2019–2021, USD 94 billion was committed by international donors as emergency response funding in developing countries prior to, or during, crises relating to food insecurity, health, conflict, and adverse weather events, among others. This funding bucket is of the same magnitude as the international adaptation finance flows tracked over the same period (USD 91 billion).

Of the tracked USD 94 billion in emergency response funding, 1.4% (or USD 1.3 billion) was also tagged as adaptation finance. This funding overlap includes projects that increase capacity to prepare for, respond to, and recover from climate-related disasters—that is, ex-ante anticipatory action (see Box 5)—as well as ex-post response projects with resilience objectives built into project design and delivery. In addition to this explicit tagging, which indicates the overlap between emergency response and adaptation, various emergency flows that were not explicitly tagged as adaptation nevertheless responded to drought, flooding, and food insecurity (for a total of USD 8.5 billion). Increased frequency and severity of all three event types is highly correlated with climate change, thus we consider these flows to be potentially climate-related.¹³⁰ The wider bucket of non-climate-related funding largely responds to conflict- and health-related emergencies.

Box 5: Anticipatory Action in Somalia

Anticipatory action—a topic that has long commanded the attention of actors in the humanitarian sector—refers to activities taken in the expectation of a crisis, whether by aid actors, government officials, service providers, or affected populations themselves.¹³¹ Anticipatory action is supported by pre-agreed finance, which is triggered (and therefore disbursed) subject to crossing some pre-defined threshold, often in relation to weather forecasts or risk analyses.¹³²

In recent years, Somalia has been suffering from a prolonged humanitarian crisis, enduring recurrent climate shocks—including drought, flooding and tropical storms—compounded by conflict and food insecurity.¹³³ Since 2020, the World Food Programme (WFP) has piloted anticipatory action in the country, supported by the Central Emergency Response Fund (CERF). CERF has established itself as one of the fastest, most predictable, and most flexible ways of delivering humanitarian assistance—filling temporal funding gaps which bilateral donors often struggle to address.¹³⁴ Following previous, and responding to further anticipated, rainy seasons in Somalia, the WFP leveraged an existing national safety net platform to deliver early cash transfers to vulnerable populations, thereby mitigating the adverse impact of predicted failed rains. This monetary assistance

was complemented by early warning messaging and investments in community-level infrastructure and soil and water conservation.¹³⁵ The WFP's work in Somalia has demonstrated the effectiveness of implementing anticipatory action through safety nets, as well as illustrating the importance of disseminating early warning systems throughout affected communities.¹³⁶

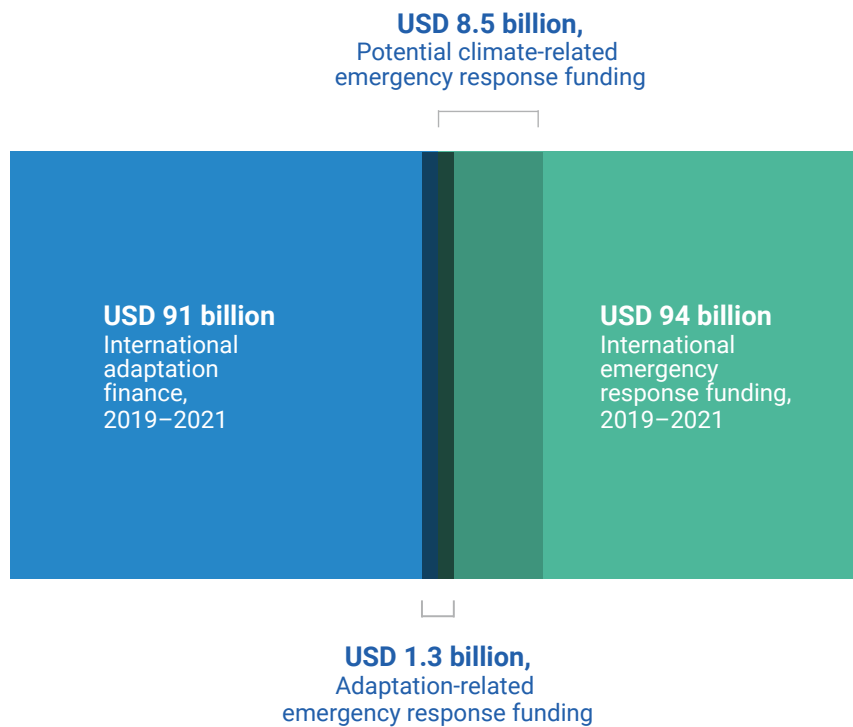
Indeed, more broadly, a study on anticipatory action in the agricultural context emphasized the importance of providing vulnerable populations with information on: weather and climate; how the crisis is expected to evolve; as well as agricultural practices and livestock health.¹³⁷ All these actions and activities overlap with the purview of adaptation actors, therefore, anticipatory action is, or could be, a focal point for overlap between the climate adaptation and humanitarian sector, ensuring the preparedness of communities to withstand, and recover from, the adverse impacts of climate change. Anticipatory action yielding heightened preparedness is a relatively low-cost but effective measure, with one study estimating that every USD 1 invested in early response and building resilience (in the context of drought) can save approximately USD 3 in humanitarian aid.¹³⁸

As climate-related disasters increase, the need for emergency response funding will grow, as will the importance of accurately tracking and accounting for each funding category to avoid double-counting or re-labelling of funds. As shown in Figure 15, USD 1.3 billion or 1.4% of total international adaptation finance committed between 2019–2021 was also counted as international emergency response funding. This represents the explicit tracked overlap, as reported by donors, however, the extent of the overlap could be larger in reality. The overlap between international adaptation finance and emergency response funding is promising if it indicates humanitarian aid is also being made climate-resilient,¹³⁹ but as the frequency and severity of climate-related disasters escalate, donors will

need to ensure that they are both increasing the pool of each respective funding category and improving coordination between, or shared objectives for, each pool. Greater scrutiny will help prevent double-counting or re-labelling of funds, at the expense of additional finance.¹⁴⁰ Ultimately, placing the emphasis on anticipatory adaptation action to avoid or minimize prospective losses and damages now, could help to save billions in humanitarian aid later.¹⁴¹

Between 2019–2021, USD 708 million or 3% of international emergency response funding to Africa was also tagged as adaptation finance. It is now well-established that climate change poses a grave threat to the African continent, with fragile and conflict-affected states particularly at risk.¹⁴²

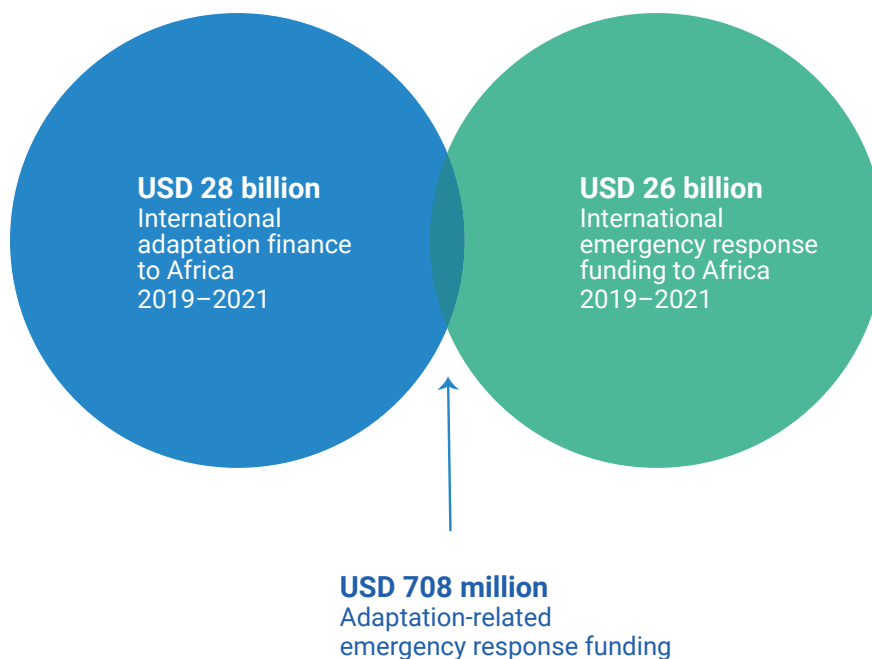
Figure 15. Interlinkages between Tracked Funding Buckets, 2019–2021



This is because climate shocks worsen existing fragilities.¹⁴³ As such, the argument for ensuring climate finance is additional to emergency response funding—as opposed to re-labelling or redirecting funds—takes on even greater importance in this

regional context. Overall, international public adaptation finance to Africa (USD 28 billion) was of a similar magnitude to international public emergency response funding (USD 26 billion) committed to the continent between 2019–2021 (see Figure 16).

Figure 16. Interlinkages between Tracked Funding Buckets, 2019–2021

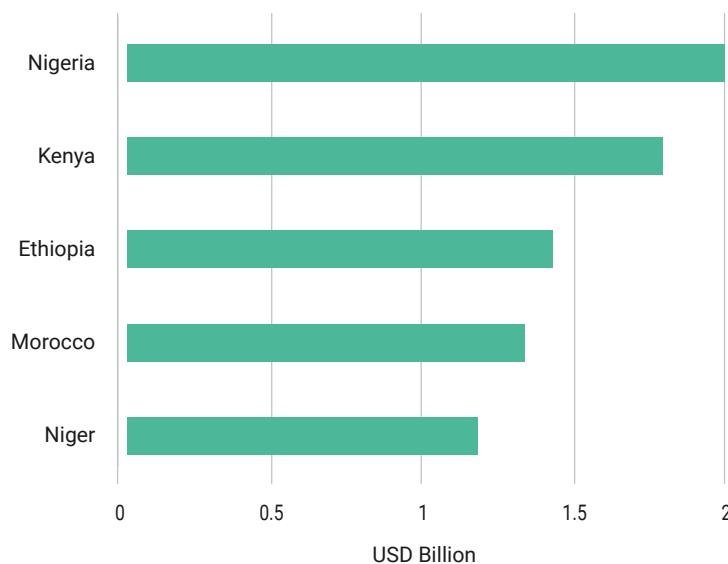


The most fragile African countries struggle to access adaptation finance and are instead dependent on emergency response funding to cope with hazards. The top 5 African recipients of international emergency response funding between 2019–2021 were all ranked as some of the most fragile states globally, either on ‘high’ or ‘very high’ alert.¹⁴⁴ However, only Ethiopia surfaced among the top 5 African recipients of international adaptation finance in the same period (see Figure 17). This reflects the challenges that highly fragile and conflict-affected states face in trying to access climate finance.

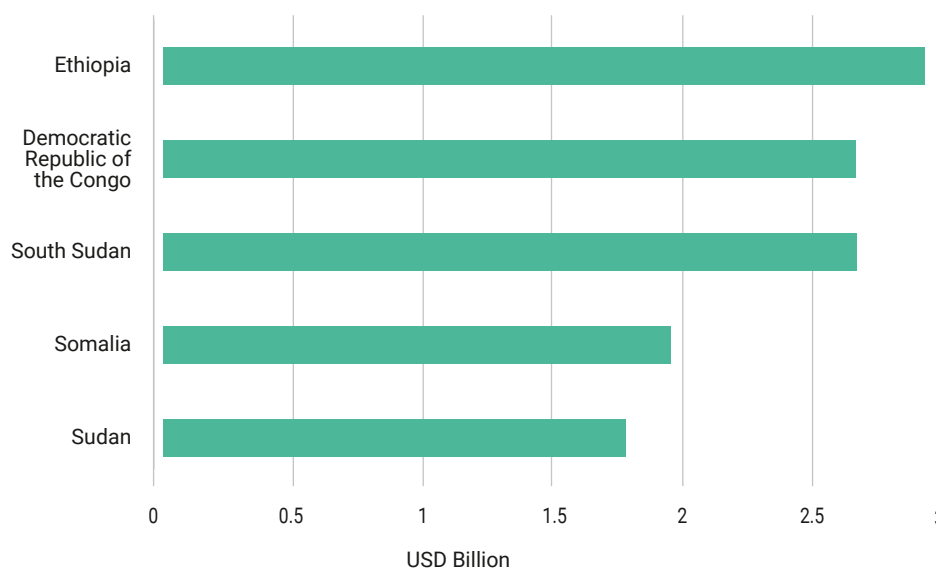
Accessing international adaptation finance is dependent upon achieving certain enabling conditions domestically—rather than distributing funding purely based on vulnerability considerations¹⁴⁵—a requirement often at odds with the realities of fragile, conflict-affected states. Re-evaluating eligibility requirements for accessing international funding could, then, help to unlock adaptation finance for these highly vulnerable states, otherwise constricted to, or dependent on, emergency response funding flows.

Figure 17. Interlinkages between Tracked Funding Buckets, 2019–2021

Top 5 African Recipients of Adaptation Finance



Top 5 African Recipients of Emergency Response Funding



6.3. ADAPTATION FINANCE AND POST-DISASTER RECONSTRUCTION FUNDING

Between 2019–2021, USD 271 million or 8% of international reconstruction funding was also counted as adaptation finance. The bucket of international post-disaster reconstruction funding (USD 3.4 billion) is much smaller than that of emergency response funding, however, its overlap with adaptation finance is proportionally larger (8%) (see Figure 18). This is positive in that it suggests almost one-in-ten post-disaster reconstruction projects are being designed and delivered with adaptation and resilience objectives in mind. However, arguably that overlap should—and could—be much larger, if resilience was to be mainstreamed into all post-disaster reconstruction, ensuring that recipients build back better with the next emergency in mind (Figure 18).

Those advancing the emerging Loss & Damage (L&D) finance agenda can learn from experience in the humanitarian sector for deploying rapid

response funding following the onset of a climate-related disaster. Where adaptation is inadequate, or anticipatory action falls short, L&D finance will be needed to facilitate vital reconstruction and rehabilitation in the wake of a climate-related disaster. Indeed, the post-disaster period is critical to ensure that already vulnerable communities receive the support they need to recover and rebuild, and to avoid falling into cycles of crises, thus the speed with which L&D funding can be deployed will be critical.¹⁴⁶ Humanitarian aid models can, then, provide learnings on the potential for rapid disbursement, for example, through the use of pooled funds or forecast-based funding (see Box 6).¹⁴⁷

Figure 19 summarizes the tracked funding flows in this chapter, illustrating the difference in magnitude between international adaptation finance and emergency response funding, on the one hand, and post-disaster reconstruction funding on the other. The analysis is specific to international public funding and should not, therefore, be considered an exhaustive picture of all humanitarian assistance funding committed in the period 2019–2021.

Figure 18. Summary of Tracked Funding Flows (USD billion), 2019–2021

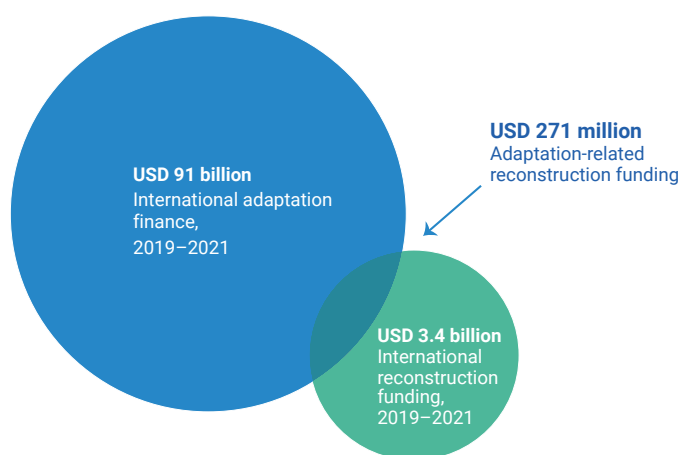
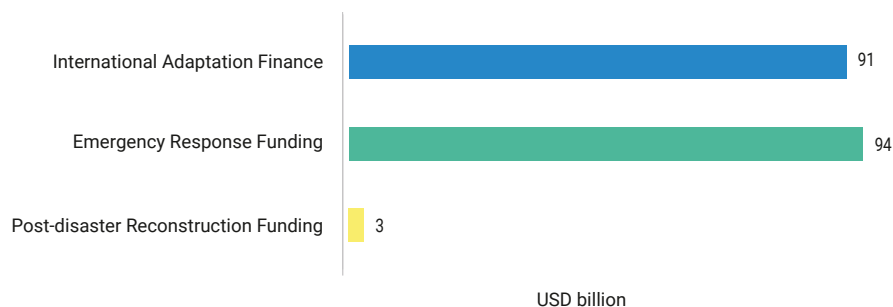


Figure 19. Summary of Tracked Funding Flows (USD billion), 2019–2021



Box 6: Financial Mechanisms for Rapid Disbursement

Given the time-sensitive nature of emergency response and reconstruction, the humanitarian sector has established various financial mechanisms that could offer essential guidance and learnings for actors working on the emerging loss and damage agenda. Some particularly relevant examples include:

Country-Based Pooled Funds (CBPFs): These funds are managed by the Office for the United Nations Coordination of Humanitarian Affairs (OCHA) taking contributions from public donors, as well as some private sector actors, and collecting them into a single fund to later support high-priority projects as set out in Humanitarian Response Plans.¹⁴⁸ CBPFs are leading sources of funding to promote early response ahead of predictable hazards (i.e. anticipatory action) with early contributions and multi-year funding agreements enabling the deployment of assistance to those most in need, leveraging existing local networks and local actors. With allocation decisions taking place close to the affected population, these funds facilitate an agile response in rapidly changing contexts.¹⁴⁹

Forecast-based Financing (FbF): This funding mechanism enables early access to humanitarian funding based on in-depth forecast information and risk analysis, a key feature of which involves agreeing on financial allocations in advance of a shock or crisis, together with the specific threshold that needs

to be breached for then releasing those financial resources.¹⁵⁰ For example, based on a forecast of a major cyclone in Bangladesh in 2023, the Red Cross was able to disburse affected populations with cash grants prior to the storm hitting, providing them also with infrastructure to protect their belongings and in which to store clean water for later use.¹⁵¹

Humanitarian Insurance: While this funding mechanism is still novel within the humanitarian sector, actors are increasingly exploring the design, purchase, and implementation of insurance-like instruments for risk transfer.¹⁵² Using such mechanisms to pre-arrange funds ahead of crises is, in fact, a novel way of working for many in the humanitarian sector, however, analyses demonstrate the justification for applying an insurance model to humanitarian aid; often, it is more cost-efficient to purchase insurance to cover large unpredictable costs, that do not occur often, than to hold funds back in reserve for such an occasion, thereby forgoing the use of these substantial reserve funds.¹⁵³

All of these funding mechanisms are predicated on pre-arranging finance prior to the onset of a crisis, thereby creating the conditions to plan for, and design, better humanitarian outcomes. Actors working on Loss & Damage can, therefore, learn from these established funding mechanisms with a view towards replicating them in a climate finance context.

Annex 1: Building Resilience to External Shocks and Ensuring Sustainable Growth: IMF's Resilience and Sustainability Trust

Given the increasing impact of climate change on macroeconomic stability, the IMF is expected to play a critical role in innovating new financing mechanisms to enhance climate resilience while addressing other long-term development issues. For instance, the Bridgetown Initiative, led by the Prime Minister of Barbados and representing a significant effort in reshaping global development finance, identifies the IMF as having a central role due to its existing financing facilities and its efforts to facilitate the rechanneling of Special Drawing Rights (SDRs) to nations in need, such as the Resilience and Sustainability Trust (RST).¹⁵⁴

The relatively recent RST introduced by IMF in 2022, aims to enhance economic resilience and foster long-term sustainable growth, especially for low- and vulnerable middle-income countries facing challenges such as inflation, high debt burdens, geopolitical threats, along with climate change and pandemic preparedness.¹⁵⁵ This trust represents a strategic shift from the IMF's traditional tools like the General Resources Account (GRA) and the Poverty

Reduction and Growth Trust (PRGT), focusing instead on longer-term financing.

The RST offers longer-term financing designed to support economic resilience and promote sustainable growth, extending beyond traditional Overseas Development Assistance (ODA) eligibility.¹⁵⁶ It is available for 143 eligible countries, including all low-income countries (LICs), vulnerable small states, and lower middle-income countries (LMICs). The financing terms include a 20-year maturity and a 10½-year grace period.¹⁵⁷ Notably, the RST allows for the channeling of funds from wealthier IMF members to countries with greater needs.

As of September 15, several countries, including Australia, Canada, China, France, Italy, Japan, Korea, Lithuania, Luxembourg, Netherlands, Oman, Spain, the United Kingdom, Estonia, and Germany, have recycled part of their Special Drawing Rights (SDRs) to the RST, and five countries have been approved for RST assistance: Bangladesh, Barbados, Costa Rica, Jamaica, and Rwanda.¹⁵⁸

Annex 2: Assessment of Finance Institution Adaptation Commitments – Methodology

The dataset includes commitments from 60 public financial institutions that are members of the following groups: the International Finance Development Club (IDFC), multilateral development

banks (MDBs), African national development banks (NDBs) and sub-regional development banks (SRDBs), and Middle Eastern or North African NDBs and regional development banks.

Institution Type	Institution
African NDB	<ul style="list-style-type: none"> ▪ Caisse des Dépôts et Consignations Benin ▪ Caisse des Dépôts et Consignations Cameroon ▪ Caisse des Dépôts et Consignations Gabon ▪ Development Bank of Angola ▪ Development Bank of Ethiopia ▪ Development Bank of Namibia ▪ Development Bank of Nigeria ▪ National Development Bank of Zambia ▪ National Investment Bank (Cote d'Ivoire) ▪ TIB Development Bank ▪ Uganda Development Bank
African SRDB	<ul style="list-style-type: none"> ▪ East African Development Bank ▪ ECOWAS Bank for Investment and Development (EBID) ▪ Trade and Development Bank (TDB) ▪ West African Development Bank (BOAD)
IDFC member	<ul style="list-style-type: none"> ▪ Africa Finance Corporation (AFC) ▪ Agence Française de Développement (AFD) ▪ Banco Industrial y de Comercio Exterior (BICE) ▪ Bancoldex ▪ Black Sea Trade and Development Bank (BSTDB) ▪ Brazilian Development Bank (BNDES) ▪ Cassa Depositi e Prestiti (CDP) ▪ Central American Bank for Economic Integration (CABEI) ▪ China Development Bank ▪ Corporacion Financiera de Desarrollo S.A. (COFIDE) ▪ Croatian Bank for Reconstruction and Development (HBOR). ▪ Development Bank of Latin America and the Caribbean (CAF) ▪ Development Bank of Southern Africa (DBSA) ▪ Industrial Development Bank of Turkey (TSKB) ▪ Korea Development Bank ▪ Kreditanstalt für Wiederaufbau (KfW) ▪ Nacional Financiera ▪ PT Sarana Multi Infrastruktur (PT SMI) ▪ Small Industries Development Bank of India (SIDBI)

Institution Type	Institution
MENA NDBs and RDBs	<ul style="list-style-type: none"> ▪ Bank of Industry & Mine ▪ Caisse de Dépôt et de Gestion (CDG) ▪ Caisse des Dépôts et Consignations Tunisia ▪ Emirates Development Bank ▪ National Development Fund of Saudi Arabia ▪ National Investment Bank of Egypt ▪ National Investment Fund (Algeria) ▪ Qatar Development Bank ▪ Arab Fund for Economic and Social Development
Multilateral Climate Fund	<ul style="list-style-type: none"> ▪ Adaptation Fund ▪ Global Climate Change Alliance ▪ Global Environment Facility ▪ Green Climate Fund ▪ Least Developed Countries Fund ▪ Pilot Program for Climate Resilience
Multilateral Development Bank	<ul style="list-style-type: none"> ▪ African Development Bank ▪ Asian Development Bank ▪ Asian Infrastructure Investment Bank ▪ European Bank for Reconstruction and Development ▪ European Investment Bank ▪ Inter-American Development Bank ▪ Islamic Corporation for the Development of Private Sector ▪ Islamic Development Bank ▪ Japan International Cooperation Agency (JICA) ▪ New Development Bank ▪ World Bank Group

Endnotes

- 1 By public, private, international, and domestic financial actors.
- 2 This growth is largely the result of accelerated investment in clean energy in a handful of countries: China, USA, Japan and India, which collectively received 90% of the increased funds.
- 3 In absolute terms, there was a modest increase in global adaptation finance of 28% year-on-year between 2019–2020 and 2021–2022.
- 4 89%, or USD 56 billion, of which was for adaptation in developing countries specifically (emerging markets and developing economies (EMDEs), including China, and least developed countries (LDCs)).
- 5 About 45% of global adaptation finance flows went to the East Asia and Pacific region, followed by 20% to Africa and about 10% each to Latin America and the Caribbean and South Asia.
- 6 The UNEP Adaptation Gap Report 2023 suggests a similar volume of adaptation finance need in Africa – at USD 46 billion annually from 2021–2030. See: UN Environment Programme. (2023). Adaptation Gap Report 2023. <https://www.unep.org/resources/adaptation-gap-report-2023>
- 7 There are two reasons for the underestimation: 1) only half of African NDCs calculate adaptation costs; 2) the damages from climate change are occurring faster and stronger than estimated and projected by science at the time of preparing the NDCs.
- 8 The UNEP Adaptation Gap Report 2023 suggests a similar volume of adaptation finance need in Sub-Saharan Africa – at USD 46 billion annually from 2021–2030.
- 9 compares international public humanitarian assistance funding (defined here as 'emergency response funding' and 'reconstruction funding,' as reported by donors to OECD CRS
- 10 CPI. (2023). Global Landscape of Climate Finance 2023. <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/11/Global-Landscape-of-Climate-Finance-2023.pdf>. The USD 212 billion estimate is CPI's analysis based on a combined assessment of available needs information from across sources notably: UNEP (2021) & World Bank and GFDRR (2021).
- 11 UN Environment Programme. (2023). Adaptation Gap Report 2023. <https://www.unep.org/resources/adaptation-gap-report-2023>
- 12 Though this report aims to present a global picture of adaptation finance, there is a strong focus throughout on developing countries given the: 1) relatively higher GDP burden associated with adaptation in these countries and 2) trajectory of increasing climate vulnerability concentrated in these countries (linked to poverty).
- 13 LSE Grantham Research Institute on Climate Change and the Environment. (2022). Financing a big investment push in emerging markets and developing countries for sustainable, resilient and inclusive recovery and growth. <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/05/Financing-the-big-investment-push-in-emerging-markets-and-developing-economies-for-sustainable-resilient-and-inclusive-recovery-and-growth-1.pdf>
- 14 Notably, adaptation components do not necessarily reveal country financing needs.
- 15 WRI. (2023). The State of Nationally Determined Contributions: 2022. <https://files.wri.org/d8/s3fs-public/2022-10/state-of-ndcs-2022.pdf?VersionId=1KmRfYb85rXRRK2rYivyzSDuUhdR60>
- 16 Compared to 2.5% in lower-middle income countries and 1.4% in upper-middle and high-income countries.
- 17 Climate Policy Initiative. (2022b). The State of Climate Finance in Africa: Climate Finance Needs of African Countries. <https://www.climatepolicyinitiative.org/wp-content/uploads/2022/06/Climate-Finance-Needs-of-African-Countries-1.pdf>
- 18 African Development Bank. (2019). Analysis of Adaptation Component of Africa's Nationally Determined Contributions (NDCs). https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Analysis_of_Adaptation_Components_in_African_NDCs_2019.pdf
- 19 UNFCCC Standing Committee on Finance. (2021). First report on the determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement. https://unfccc.int/sites/default/files/resource/54307_1%20-%20UNFCCC%20BA%202020%20-%20Report%20-%20V4.pdf
- 20 Climate Policy Initiative. (2022c). Landscape of Climate Finance in Ethiopia. <https://www.climatepolicyinitiative.org/publication/landscape-of-climate-finance-in-ethiopia/>
- 21 Climate Policy Initiative. (2023). Global Landscape of Climate Finance 2023. <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/11/Global-Landscape-of-Climate-Finance-2023.pdf>
- 22 Roughly 15% (USD 177 billion) of the total climate finance flows in 2021–2022 (USD 1.3 trillion) tracked in the Global Landscape of Climate Finance 2023 can be attributed to new data additions compared to the 2019–2020 analysis, which mainly contributed to the domestic climate financing flows in the US and Western Europe, especially in the buildings and infrastructure sector.
- 23 89%, or USD 56 billion, of which was for adaptation in developing countries specifically (EMDEs, including China, and LDCs).
- 24 Analysis by World Meteorological Organization (WMO) suggests that there is a 66% likelihood that the annual average near-surface global temperature between 2023 and 2027 will be more than 1.5°C above pre-industrial levels for at least one year. <https://public.wmo.int/en/media/press-release/global-temperatures-set-reach-new-records-next-five-years#:~:text=There%20is%20a%2066%25%20likelihood,be%20the%20warmest%20on%20record>
- 25 The UNEP Adaptation Gap Report 2023 estimates a comparable range at USD 130–415 billion annually in adaptation costs for developing countries in this decade.
- 26 Agricultural insurance and listed equities are not captured in the Global Landscape of Climate Finance which adheres to the principle of conservativeness and only tracks 'project-level' primary transactions in real economic sectors climate projects. Nonetheless, these instruments play an important role in managing climate risks and supporting small and medium-sized enterprises that deploy adaptation technologies.
- 27 There are two reasons for the underestimation: 1) only half of African NDCs calculate adaptation costs; 2) the damages from climate change are occurring faster and stronger than estimated and projected by science at the time of preparing the NDCs.
- 28 The UNEP Adaptation Gap Report 2023 suggests a similar volume of adaptation finance need in Sub-Saharan Africa – at USD 46 billion annually from 2021–2030.
- 29 Climate Policy Initiative. (2023). Global Landscape of Climate Finance 2023. <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/11/Global-Landscape-of-Climate-Finance-2023.pdf>
- 30 Cross-sectoral solutions break down silos and align with several sustainable development goals (SDGs) and development impacts. Africa hosts some of the world's fastest-growing economies, and its real GDP growth is projected to surpass the global average in 2023–2024. Considering this, it is imperative that adaptation projects in Africa align with development priorities and deliver multiple benefits across sectors.
- 31 Given the AFOLU sector's implications for food security, gender, biodiversity, and water security, it is possible that some portion of the finance flowing to the AFOLU sector is captured in the cross-sectoral sub-category.
- 32 Climate Policy Initiative. (2023). Global Landscape of Climate Finance 2023. <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/11/Global-Landscape-of-Climate-Finance-2023.pdf>
- 33 CPI. (2022a). The State of Climate Finance in Africa: Climate Finance Needs of African Countries. Available at: <https://www.climatepolicyinitiative.org/wp-content/uploads/2022/06/Climate-Finance-Needs-of-African-Countries-1.pdf>
- 34 See Section 1 for analysis on underestimation of adaptation finance needs in Africa.
- 35 Egypt, Morocco, Kenya, Nigeria, Ethiopia, South Africa, Mozambique, Cote d'Ivoire, Tunisia, and Ghana.
- 36 CPI. (2022b). Landscape of Climate Finance in Africa: Interactive Data Tools. Available at: <https://www.climatepolicyinitiative.org/dataviz/landscape-of-climate-finance-in-africa-interactive-data-tools/>
- 37 World Bank. (2023). FY23 List of Fragile and Conflict-affected Situations. Available at: <https://thedocs.worldbank.org/en/doc/a91e714e0a53291b569c4a41981aa2c5-0090082023/original/FCSList-FY06toFY23.pdf>
- 38 CPI. (2022b). Landscape of Climate Finance in Africa: Interactive Data Tools. Available at: <https://www.climatepolicyinitiative.org/dataviz/landscape-of-climate-finance-in-africa-interactive-data-tools/>
- 39 GCA. (2023). Strategy and Planning to Redouble Adaptation in Africa. Available at: https://gca.org/wp-content/uploads/2023/09/Strategy-and-Planning-to-Redouble-Adaptation-in-Africa_Web.pdf?_gl=1*19g9iy*_ga*Nzc2Njc2MDU2LjE2OTcwMzQ5Mjk*_up*MQ
- 40 Climate Policy Initiative. (Forthcoming). Public Financial Institutions' Climate Commitments.
- 41 Climate Policy Initiative. (2021). Net Zero Finance Tracker. <https://netzerofinancetracker.climatepolicyinitiative.org/>
- 42 The four African SRDBs analyzed in this research are: the East African Development Bank, Eastern and Southern African Trade and Development Bank (TDB), Economic Community of West African States Bank of Investment and Development (ECOWAS), and the West African Development Bank.
- 43 The regional focus of the research on African and Middle Eastern financial institutions is informed by the location of recent and upcoming COP meetings, and by the underlying climate risk present in those locations. Further research would be merited on the commitments of public financial institutions in other regions.
- 44 Commitments and statements are divided into three categories based on their relevance to adaptation finance: solely adaptation (the declaration concerns adaptation only), includes adaptation (the declaration concerns adaptation and mitigation or other climate-related concepts), and green finance (the declaration does not explicitly mention adaptation, but is rather concerned with broader finance related to climate change).
- 45 The metric of 50% of climate finance earmarked for adaptation is ambitious, but aims to mirror calls for a balance of mitigation and adaptation financing to achieve effective adaptation interventions globally. Under current accounting procedures, this will be a difficult target for institutions to achieve, because most institutions track proportional or incremental adaptation finance (i.e., just the portion of a project specific to adaptation outcomes) while tracking total cost of mitigation projects.
- 46 Sectors to be detailed include agriculture, water, transport, energy, urban infrastructure, land use and forestry, and others.
- 47 Climate Policy Initiative. (2022). What Makes a Transition Plan Credible? Considerations for financial institutions. <https://www.climatepolicyinitiative.org/wp-content/uploads/2022/03/Credible-Transition-Plans.pdf>
- 48 'Adaptation commitments' here is used to describe both commitments concerning solely adaptation and commitments including adaptation but having a broader scope.

- 49 Where an institution fits into two categories (e.g., it is both an IDFC member and a sub-regional development bank), it is captured in the analysis in the regional category to avoid double-counting.
- 50 One IDFC member, the China Development Bank (CDB), was excluded from this analysis due to analytical capacity constraints around language.
- 51 Global Center on Adaptation. (2022). State and Trends in Adaptation Report 2021. https://gca.org/wp-content/uploads/2022/07/03_WTW_14855_GCA_2021_Sect1_FINANCE_v10.pdf
- 52 Climate Impact Partners. Markers of Real Climate Action in the Fortune Global 500. <https://www.climateimpact.com/news-insights/fortune-global-500-climate-commitments/#:~:text=Two%20thirds%20of%20Fortune%20Global,around%20two%20thirds%20of%20companies>
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- 54 Paris Aligned Asset Owners. (2023). Commitment. <https://www.parisalignedassetowners.org/commitment/>
- 55 IMF. (2019). Climate Change and Financial Risk. <https://www.imf.org/en/Publications/fandd/issues/2019/12/climate-change-central-banks-and-financial-risk-grippa>
- 56 Idem.
- 57 The NGFS was established in 2017 with eight members and has since expanded significantly. It now comprises 95 members and 15 observers, including all major central banks. The primary objective of the NGFS is to integrate climate-related risks into financial supervision and stability monitoring, reflecting the growing recognition of the impact of climate change on the global financial system.
- 58 Global Center on Adaptation. (2023). Africa Adaptation Acceleration Program. <https://gca.org/programs/aaap/>
- 59 Market-rate debt refers to loans provided at market conditions.
- 60 The Common Framework is intended to deal with insolvency and protracted liquidity problems, along with the implementation of an IMF-supported reform program.
- 61 Climate Policy Initiative. (2023). Global Landscape of Climate Finance 2023. <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/>
- 62 Ibid.
- 63 Climate Policy Initiative. (2023). Global Landscape of Climate Finance 2023. <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/>
- 64 Ibid.
- 65 Tracked flows provided by governments includes both OECD and non-OECD members.
- 66 Ibid.
- 67 International Monetary Fund. (2020). Fiscal Policies to Address the Covid-19 Pandemic. <https://www.imf.org/-/media/Files/Publications/fiscal-monitor/2020/October/English/ch1.ashx>
- 68 Monasterolo et al. (2023). Scaling up climate adaptation finance during periods of growing public debt, inflation and natural disasters. ECMI. Policy Brief no 35. https://www.ecmi.eu/sites/default/files/scaling_up_climate_adaptation_finance_formatted.pdf
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- 73 Camps, B. & Plant, M. (2022). Debt-for-Climate Swaps Won't Solve the Climate or Debt Crises, but Can They Help? Center For Global Development. <https://www.cgdev.org/blog/debt-climate-swaps-wont-solve-climate-or-debt-crises-can-they-help#:~:text=Debt-for-climate%20swaps%20are,climate-friendly%20policies%20or%20projects>
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- 75 Climate Policy Initiative. (2022a). Africa Adaptation Financial Instruments. <https://www.climatepolicyinitiative.org/gca-africa-adaptation-finance/instruments/>
- 76 Global Center on Adaptation. (2022a). Financial Innovation for Climate Adaptation in Africa. <https://gca.org/wp-content/uploads/2021/10/GCA-CPI-Financial-Innovation-for-Climate-Adaptation-in-Africa.pdf>
- 77 Climate Policy Initiative. (2021). Debt for Climate Swaps. <https://www.climatepolicyinitiative.org/publication/debt-for-climate-swaps/>
- 78 Over USD 3 billion or 5% of GDP.
- 79 International Monetary Fund. (2022). Belize: Swapping Debt for Nature. <https://www.imf.org/en/News/Articles/2022/05/03/CF-Belize-swapping-debt-for-nature>
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- 81 World Bank. (nd.) West Africa Coastal Areas Management Program. <https://www.wacaprogram.org>
- 82 Green Finance Institute. (2021). Quintana Roo Reef Protection (Parametric Insurance). <https://www.greenfinanceinstitute.com/gfihive/case-studies/quintana-roo-reef-protection-parametric-insurance/>
- 83 International Monetary Fund. (nd). Catastrophe Containment and Relief Trust. <https://www.imf.org/en/About/Factsheets/Sheets/2023/Catastrophe-containment-relief-trust-CCRT>
- 84 Climate Fund Managers. (nd). Patong - Desalination. <https://climatefundmanagers.com/portfolio/patong-desalination/>
- 85 European Bank for Reconstruction and Development. (2019). Climate Resilience Bonds/Green Bond Programme information. <https://www.ebrd.com/documents/treasury/framework-for-climate-resilient-bonds.pdf>
- 86 Ibid.
- 87 World Bank. (2021). Enabling Private Investment in Climate Adaptation & Resilience. <https://openknowledge.worldbank.org/server/api/core/bitstreams/127de8c7-d367-59ac-9e54-27ee52c744aa/content>
- 88 Adaptation involves making adjustments in human systems to mitigate the impacts of climate change, while resilience refers to the capacity to absorb shocks and maintain function. Both concepts are intertwined, with adaptation actions often enhancing system resilience.
- 89 Climate Policy Initiative. (2021d). Landscape of Climate Finance in Africa. <https://www.climatepolicyinitiative.org/publication/landscape-of-climate-finance-in-africa/>
- 90 Africa Development Bank. (2023). Africa Economic Outlook: Mobilizing Private Sector Financing for Climate and Green Growth in Africa. <https://www.afdb.org/en/knowledge/publications/african-economic-outlook#:~:text=Despite%20the%20confluence%20of%20multiple,mixed%20and%20considerable%20challenges%20remain>
- 91 Ibid.
- 92 Global Center on Adaptation. (2020). What are resilience bonds and how can they protect us against climate crises? <https://gca.org/what-are-resilience-bonds-and-how-can-they-protect-us-against-climate-crises/>
- 93 Climate Bonds Initiative. (2023). Designing a Climate Resilience Classification Framework. https://www.climatebonds.net/files/reports/resiliencewhitepaper_climatebondsinitiative_undrr.pdf
- 94 The Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT) is one pioneering example of a blended finance initiative. CRAFT's approach involved investing in companies dedicated to climate resilience solutions and offering grants to provide them with crucial technical support. For every dollar allocated with concessional support, CRAFT aims to leverage at least three times that amount in commercial funding. Other blended finance instruments used for adaptation and resilience investments include Climate Investor Two (CI2), Ejido Verde SAPI de CV, and the InsuResilience Fund.
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