FONDATION POUR LES ÉTUDES ET RECHERCHES SUR LE DÉVELOPPEMENT INTERNATIONAL

Report
January 2026

Climate finance for adaptation

Tomáš Hos, Senior Analyst, International Forum on TOSSD

Sylviane Guillaumont Jeanneney, Special Advisor, FERDI;
Professor Emeritus, Université Clermont Auvergne

Clara Pugnet, Research Assistant, FERDI

LA FERDI EST UNE FONDATION RECONNUE D'UTILITÉ PUBLIQUE.
CETTE PUBLICATION A BÉNÉFICIÉ D'UNE AIDE DE L'ÉTAT FRANÇAIS AU TITRE
DU PLAN D'INVESTISSEMENT FRANCE 2030 PORTANT LA RÉFÉRENCE ANR-16-IDEX-0001.

Table of contents

Introduction 6
1. Climate finance for adaptation: big picture 9
1.1 Volume and key providers 9
1.2 Sectoral distribution 10
1.3 Geographic allocation 11
1.4 Vulnerability to climate change 14
2. Focus on grants 18
2.1 Volume and key providers 18
2.2 Channels of delivery 19
2.3 Sectoral distribution 20
2.4 Geographic allocation 21
2.5 Vulnerability to climate change 24
3. Focus on concessional loans 27
3.1 Volume and key providers 27
3.2 Channels of delivery 28
3.3 Sectoral distribution 29
3.4 Geographic allocation 30
3.5 Vulnerability to climate change 32
4. Focus on non-concessional loans 35
4.1 Volume and key providers 35
4.2 Channels of delivery 36
4.3 Sectoral distribution 37
4.4 Geographic allocation 38
4.5 Vulnerability to climate change 40
Conclusion 43
Appendix: methodological considerations 45
Key concepts 45
Definition of climate finance and monitoring methods 45
Bilateral climate finance 46
Analytical categories 52
Abbreviations 54

Table of figures

Figure 1. Structure of the Physical Vulnerability to Climate Change 8

Figure 2. Volume of climate adaptation finance by finance type in 2019-23, USD billion, 2023 prices 9

Figure 3. Volume of climate adaptation finance by provider and finance type, 2019-23 average, USD billion, 2023 prices 10

Figure 4. Sectoral distribution of climate adaptation finance, 2019-23 average, USD billion, 2023 prices 11

Figure 5. Regional allocation of climate adaptation finance by type of finance, 2019-23 average, USD billion, 2023 price 12

Figure 6. Per-capita regional allocation of climate adaptation finance, 2019-23 average, USD, 2023 prices 12

Figure 7. Top 15 recipients of climate adaptation finance by type of finance, 2019-23 average, USD billion, 2023 prices 13

Figure 8. Per-capita top 15 recipients of climate adaptation finance (beyond SIDS) by type of finance, 2019-23 average, USD, 2023 prices 13

Figure 9. Climate adaptation finance by income group and type of finance, 2019-23 average, USD billion, 2023 prices 14

Figure 10. Distribution of climate adaptation finance by physical vulnerability to climate change, 2019-23 average, USD billion, 2023 prices 15

Figure 11. Distribution of flows based on vulnerability to climate change and per capita income of recipient countries in dollars, 2019–2023 average, 2023 prices 15

Figure 12. Distribution of climate adaptation finance by physical vulnerability to climate change by instrument type, 2019-23 average, USD, 2023 prices 16

Figure 13. Per capita allocations of total flows based on physical vulnerability to climate change, 2019–23 average, in dollars, 2023 prices 17

Figure 14. Volume of grants for adaptation in 2019-23, USD billion, 2023 prices 18

Figure 15. Main providers of grants for adaptation, 2019-23 average, USD billion, 2023 prices 19

Figure 16. Main channels of delivery of grants for adaptation, 2019-23 average, USD billion, 2023 prices 19

Figure 17. Sectoral distribution of grants for adaptation, 2019-23 average, USD billion, 2023 prices 20

Figure 18. Regional allocation of grants for adaptation, 2019-23 average, USD billion, 2023 prices 21

Figure 19. Top 20 recipients of grants for adaptation, 2019-23 average, USD million, 2023 prices 22

Figure 20. Grants for adaptation by income group, 2019-23 average, USD billion, 2023 prices 22

Figure 21. Grants for LDCs and SIDS, 2019-23 average, USD billion, 2023 prices 23

Figure 22. Per-capita regional allocation of grants for adaptation, 2019-23 average, USD, 2023 prices ... 23

Figure 23. Per-capita top 15 recipients of climate grants for adaptation (beyond SIDS), 2019-23 average, USD, 2023 prices 24

Figure 24. Distribution of grants for adaptation by physical vulnerability to climate change, 2019-23 average, USD billion, 2023 prices 24

Figure 25. Distribution of grants for adaptation by provider type and physical vulnerability to climate change, 2019-23 average, USD, 2023 prices 25

Figure 26. Distribution of grants based on vulnerability to climate change and per capita income of recipient countries in dollars, 2019–2023 average, 2023 prices 26

Figure 27. Per capita grant allocations based on physical vulnerability to climate change, 2019–23 average, in dollars, 2023 prices 26

Figure 28. Volume of concessional loans for adaptation in 2019-23, USD billion, 2023 prices 27

Figure 29. Main providers of concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices 28

Figure 30. Main channels of delivery of concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices 29

Figure 31. Sectoral distribution of concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices 29

Figure 32. Regional allocation of concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices 30

Figure 33. Top 20 recipients of concessional loans for adaptation, 2019-23 average, USD million, 2023 prices 31

Figure 34. Concessional loans for adaptation by income group, 2019-23 average, USD billion, 2023 prices 31

Figure 35. Per-capita regional allocation of concessional loans for adaptation, 2019-23 average, USD, 2023 prices 32

Figure 36. Per-capita top 15 recipients of concessional loans for adaptation (beyond SIDS), 2019-23 average, USD, 2023 prices 32

Figure 37. Distribution of concessional loans for adaptation by physical vulnerability to climate change, 2019-23 average, USD billion, 2023 prices 33

Figure 38. Distribution of concessional loans for adaptation by provider type and physical vulnerability to climate change, 2019-23 average, USD, 2023 prices 33

Figure 39. Distribution of concessional loan based on vulnerability to climate change and per capita income of recipient countries in dollars, 2019–2023 average, 2023 prices 34

Figure 40. Per capita concessional loan allocations based on physical vulnerability to climate change, 2019–2023 average, in dollars, 2023 prices 34

Figure 41. Volume of non-concessional loans for adaptation in 2019-23, USD billion, 2023 prices 35

Figure 42. Main providers of non-concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices 36

Figure 43. Main channels of delivery of non-concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices 37

Figure 44. Sectoral distribution of non-concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices 37

Figure 45. Regional allocation of non-concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices 38

Figure 46. Top 20 recipients of non-concessional loans for adaptation, 2019-23 average, USD million, 2023 prices 39

Figure 47. Non concessional loans for adaptation by income group, 2019-23 average, USD billion, 2023 prices 39

Figure 48. Per-capita regional allocation of non-concessional loans for adaptation, 2019-23 average, USD, 2023 prices 40

Figure 49. Per-capita top 15 recipients of non-concessional loans for adaptation (beyond SIDS), 2019-23 average, USD, 2023 prices 40

Figure 50. Distribution of non-concessional loans for adaptation by physical vulnerability to climate change, 2019-23 average, USD billion, 2023 prices 41

Figure 51. Distribution of non-concessional loans for adaptation by provider type and physical vulnerability to climate change, 2019-23 average, USD, 2023 prices 41

Figure 52. Distribution of non-concessional loan based on vulnerability to climate change and per capita income of recipient countries in dollars, 2019–2023 average, 2023 prices 42

Figure 53. Per capita non-concessional loan allocations based on physical vulnerability to climate change, 2019–2023 average, in dollars, 2023 prices 42

Table of appendices

Table 1: Simplified table of coefficients to calculate climate finance 47
Table 2: Discount rates and thresholds used in CRS and TOSSD 51

Figure A1. Calculating climate finance from climate-related development finance 46
Figure A2. Climate adaptation financing reported as ODA flows according to IMF concessionality 51

Introduction[1]

In climate finance, it is generally accepted to distinguish between the mitigation of global warming and the adaptation thereto. Only mitigation is considered part of the preservation of a global public good (maintaining temperatures at a level favorable to human life); adaptation, by contrast, is the correction of negative externalities caused by rising temperatures—in other words, by the insufficiency of mitigation policies.

Because these two objectives stem from different concerns, developed and developing countries do not attach the same importance to each of them. By financing the reduction of CO_2 emissions, developed countries contribute to their own future well-being, regardless of where the investments are made, whereas adaptation measures benefit the countries in which they are implemented. That is why, from the fifteenth session of the Conference of the Parties (COP15) in 2009, countries of the Global South called for 50% of international climate funds to be allocated to adaptation.

The considerable inequality in the creation of the carbon stock, as well as in current emissions, has led to recognition of the responsibility of industrialized countries for the negative externalities of climate change. If industrialized countries (and now also emerging economies) would contribute to financing adaptation in poorer countries—particularly those most vulnerable to climate-related risks—it will represent the affirmation of a fundamental principle of international justice.

The difficulty in determining what the "just" amount of financing should be lies in the challenge of evaluating the damage suffered by each country. It is very difficult—if not impossible—to objectively assess losses and damages while separating what is due to climate change from what stems from the natural climate, as was the case before climate change. Nevertheless, it is useful to try to answer a few seemingly simple questions:

- What has been the amount of international climate finance allocated to climate change adaptation in recent years?
- Do resourced for adaptation go to the countries that need it most, and those that are poor and vulnerable to the impacts of climate change? Are the instruments used—grants, concessional and non-concessional loans—compatible with the intended objectives?

The fact that this analysis has not yet been conducted—at least to our knowledge—is due to the dispersed nature of the necessary statistics, which are spread across two institutions: on one hand, the OECD ("Climate-related development finance, recipient perspective" data, for the years 2019–2023), and on the other, the "Total Official Support for Sustainable Development" (TOSSD), and these data are not harmonized. The Center for Global Development (CGDEV), in its article "Does World Bank Climate Adaptation Finance Go to the Most Vulnerable Countries?" by Nancy Lee, Samuel Matthews, and James Reid (*Policy paper*, 355, April 2025), indirectly

[1] This text benefited from the assistance of Léa Roques, FERDI Publications Officer, for the layout.

highlights the difficulty of accessing such data, as the authors focus solely on World Bank adaptation projects, for which they created their own database.

We therefore built a database covering adaptation finance flows from both international institutions and bilateral providers.[2] Its main characteristics are as follows: the data are based on providers' own reporting and, as needed, adjusted to capture the share of financing that can be considered as directed specifically towards adaptation (with coefficients ranging from 0 to 100%). The data concern commitments: while disbursements would provide a more accurate estimate of actual flows received by countries, commitment data are more complete, as some international organisations only report commitments. Finally, the data allow us to distinguish between three types of flows: grants, concessional loans, and non-concessional loans. The definition of concessionality applied to flows from all donors—both bilateral and multilateral—is that used by the IMF, which is traditionally applied by international institutions and allows for a more conservative estimation of which loans are subsidized which are likely not.

In the remainder of this report, we first analyze all adaptation flows and then separately grants, concessional and non-concessional loans. For each type of instrument, we analyze several characteristics: 1) the relative importance of the different providers. 2) The channels of delivery, through which resource flows are channeled, relating to the entities responsible for implementing the activity supported by the provider. An important distinction is made between governments and other recipients, such as non-governmental organizations (NGOs), multilateral organizations, or private sector institutions, as this reflects the relative weight of these flows in public policy. 3) The sectoral distribution (social, economic, production, or multi-sector). 4) The geographical allocation according to continents and to per capita income level of countries. 5) The weight of vulnerability to climate change in the allocation of funds between countries.

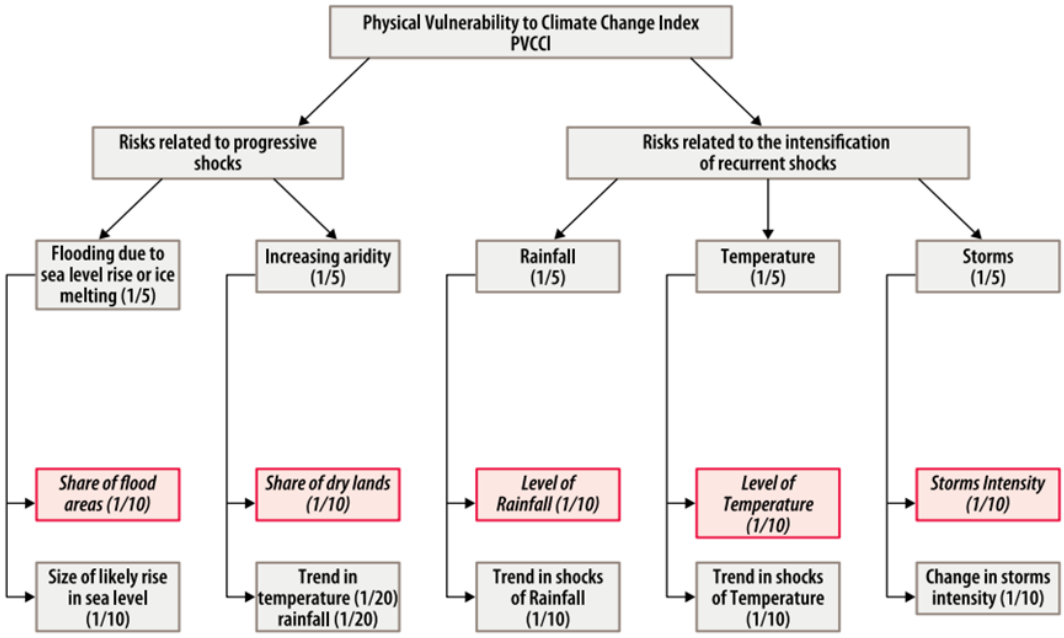
This vulnerability is measured by the Ferdi Physical Vulnerability to Climate Change (PVCCI) indicator. This indicator has two characteristics that make it particularly suitable for our study: it is universal (calculated for all countries worldwide) and based on the physical characteristics of countries; it is independent of current national policies that could potentially alter its adverse consequences in one way or another. It is a dynamic indicator, forward-looking although based on past data, constructed on the basis of a distinction between two types of risks due to climate change:

- Risks related to gradual shocks, such as rising sea levels (flood risk), rising temperatures, or decreased rainfall (desertification risk);
- Risks related to the intensification of recurring shocks, whether rainfall shocks, temperature shocks, or cyclones. For each of these shock types, the physical vulnerability index to climate change is based on a distinction between the magnitude of the shocks and the exposure or sensitivity to them.[3]

[2] This database received funding from the French Development Agency.

[3] Since the sources of vulnerability are heterogeneous and each country's vulnerability is specific, the indices corresponding to the various shock types are aggregated using a root mean square (RMS) method, which gives the most weight to the components reflecting the greatest vulnerability.

Figure 1. Structure of the Physical Vulnerability to Climate Change



Note: The boxes corresponding to the two last rows of the graph respectively refer to exposure components (grayed-out, in italics) and to size of the shocks components.
Source: Feindouno S., Guillaumont P. Simonet C. (2020) "The Physical Vulnerability to Climate Change Index: An Index to Be Used for International Policy", *Ecological Economics*, vol. 176, October 2020.

Countries are separated into more vulnerable categories (those with an index equal or above the median) and less vulnerable categories (those with an index below the median). Within each of these two groups of countries, three intensity levels are distinguished to isolate extreme cases and countries whose vulnerability is close to the median of all countries.

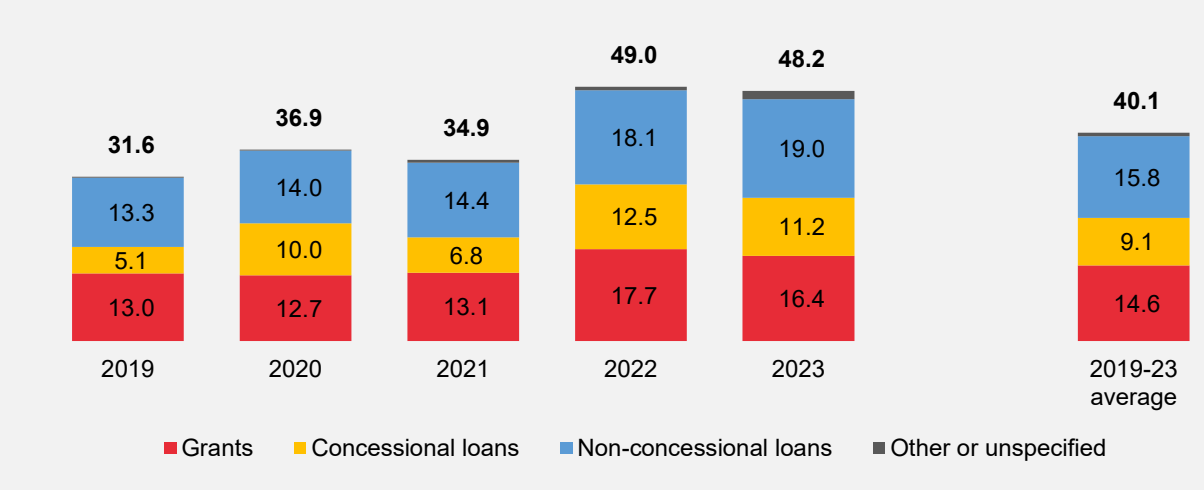
The main conclusion of the analysis is that climate finance commitments for adaptation are insufficiently directed towards the poorest and most vulnerable countries, due to the excessive share of loans (particularly non-concessional loans) at the expense of grants or aid in general. It raises the question of the particular responsibility of multilateral donors in this situation.

1. Climate finance for adaptation: big picture

1.1 Volume and key providers

During 2019-23, development finance providers committed USD 40.1 billion per year in climate finance to support developing countries' adaptation to climate change. This financing first showed a relatively stable trend in 2019-21, when it averaged at approximately USD 34.5 billion, to then grow to USD 49 billion in 2022 (+42%). In 2023, climate adaptation finance slightly decreased by -2%, reaching USD 48.2 (see Figure 2). On the entire period grants constituted over a third of the total (36%) and loans represented 62%. Most of these loans were non-concessional (39%) while concessional represented nearly a quarter of adaptation finance (23%). Equities and mezzanine finance and loans with unspecified concessionality together accounted for the remaining 2% during the five-year period.

Figure 2. Volume of climate adaptation finance by finance type in 2019-23, USD billion, 2023 prices

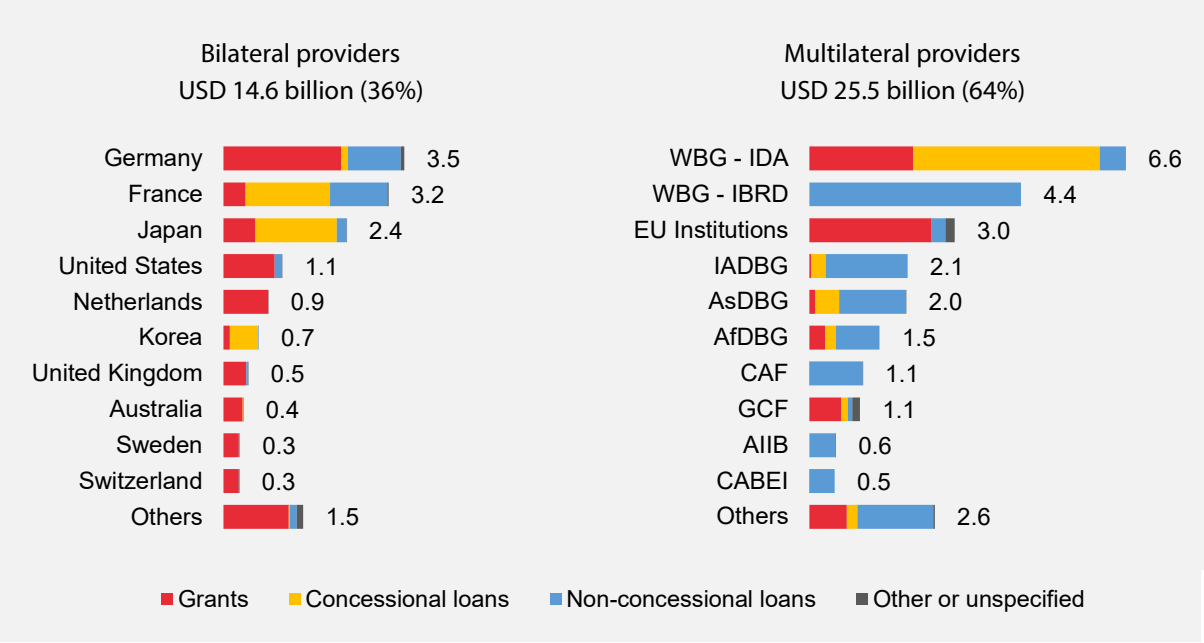


Source: TOSSD and CRS CRDF.

As shown in Figure 3, multilateral institutions provided almost two-thirds (64%) of climate adaptation finance in 2019-23. The World Bank Group alone accounted for 28% of the total, followed by European Union (EU) Institutions (8%), Inter-American Development Bank Group (IADBG; 5%), Asian Development Bank Group (AsDBG; 5%) and African Development Bank Group (4%). All multilateral development banks combined extended 51% of climate adaptation finance. Bilateral providers extended a bit over a third (36%) of the five-year total, mostly driven by Germany (9%), France (8%), Japan (6%) and United States (3%). European Commission (EC), Green Climate Fund (GCF), Global Environment Facility (GEF) and Resilience and Sustainability Trust (RST) of the International Monetary Fund (IMF) were the main non-MDB multilateral organizations supporting climate change adaptation of partner countries. While bilateral providers played a strong role in providing grants, multilateral institutions were the foremost

lenders (74%) for adaptation. In addition, Team Europe[4] allocated USD 12 billion of climate adaptation finance per year, accounting for 30% of the five-year average.

Figure 3. Volume of climate adaptation finance by provider and finance type, 2019-23 average, USD billion, 2023 prices



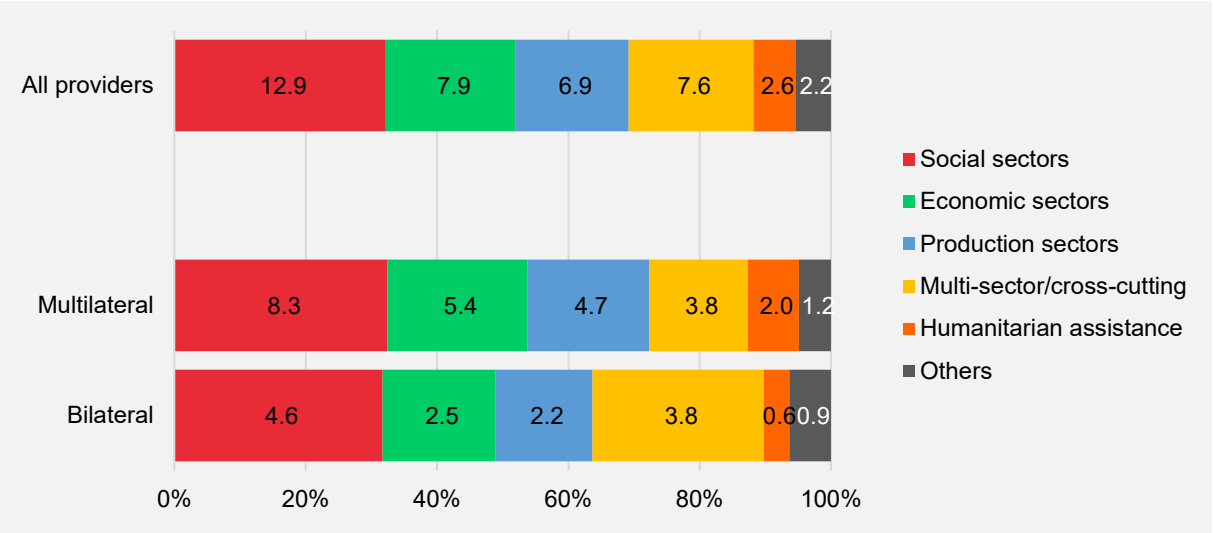
Source: TOSSD and CRS CRDF.

1.2 Sectoral distribution

During 2019-23, nearly a third (32%) of climate adaptation finance was allocated to social sectors, notably water and sanitation (see Figure 4). Around USD 7.9 billion (20%) was provided in support of economic sectors, notably transport, energy and financial services. Climate adaptation finance to agriculture, forestry and other production sectors amounted to USD 6.9 billion per year (17%). Most of the remainder was targeted towards activities and themes that straddle over multiple sectors or that are of a cross-cutting nature, in particular general environmental protection, biodiversity, urban management and disaster risk reduction. Humanitarian assistance accounted for 6% of the five-year total. While the shares of adaptation finance to social sectors were comparable among bilateral and multilateral providers, multilateral adaptation finance was relatively more focused on economic and production sectors while bilateral financing on multi-sectoral or cross-cutting activities.

[4] Team Europe consists of the European Union, EU Member States—including their implementing agencies and public development banks—as well as the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD).

Figure 4. Sectoral distribution of climate adaptation finance, 2019-23 average, USD billion, 2023 prices



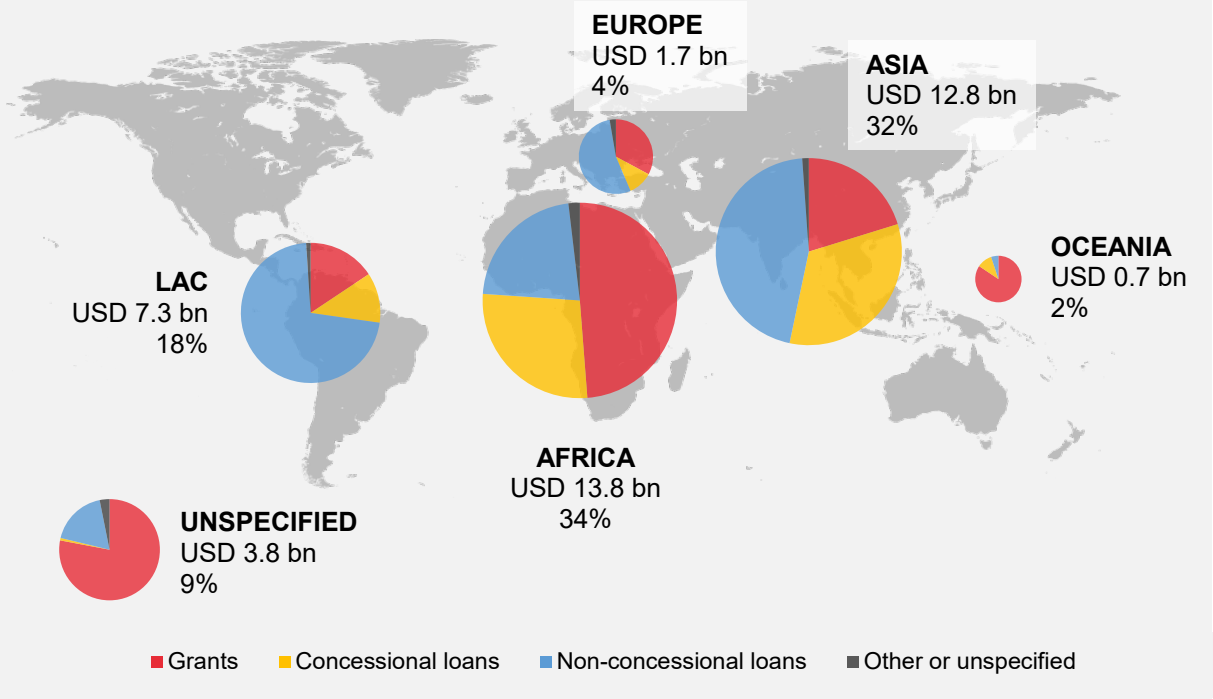
Source: TOSSD and CRS CRDF.

1.3 Geographic allocation

Africa and Asia each received around a third of climate adaptation finance in 2019-23 (see Figure 5). Latin American and the Caribbean followed with USD 7.3 billion (18%). Although similar in terms of volume, the composition of adaptation finance to African and Asian recipients differed significantly. While a half of adaptation finance for Africa took the form of grants, loans accounted for 79% adaptation finance for Asia. Moreover, lending to Asian recipients was predominantly non-concessional. This trend was even stronger in Latin America and the Caribbean, where non-concessional loans represented 72% of the regional total. Oceania received the smallest volume of adaptation finance (USD 0.7 billion), mostly through grants (84%). In addition, USD 3.8 billion (9%) was unallocated by region, mostly representing contributions to multi-regional programmes, research, or activities subject to confidentiality. A majority of such financing are grants.

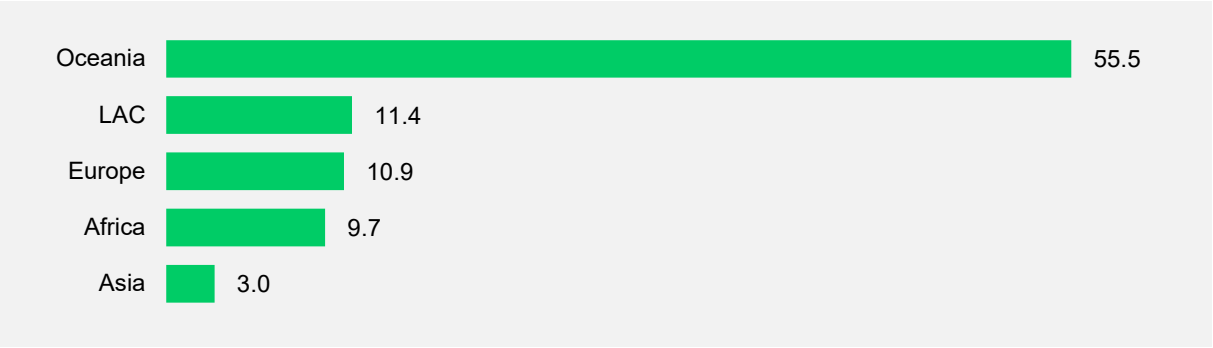
The picture is very different from a per-capita perspective (see Figure 6). Oceania was by far the main recipient with USD 55.5 allocated per capita for climate change adaption. Latin America and the Caribbean, European developing countries and Africa followed with per capita receipts around USD 10. Per-capita receipts by Asian developing countries amounted to mere USD 3. Had India and China not been included in this calculation, Asia's per-capita receipts would still be the lowest.

Figure 5. Regional allocation of climate adaptation finance by type of finance, 2019-23 average, USD billion, 2023 price



Source: TOSSD and CRS CRDF.
Note: LAC stands for Latin America and the Caribbean.

Figure 6. Per-capita regional allocation of climate adaptation finance, 2019-23 average, USD, 2023 prices



Source: TOSSD and CRS CRDF.
Note: LAC stands for Latin America and the Caribbean. Amounts presented in this chart are calculated as a quotient of total adaptation finance allocated to individual regions (country-specific and regionally allocated) and population eligible countries belonging to the regions.

At the level of individual recipients, Asian countries were the foremost recipients of adaptation finance in 2019-23 (see Figure 7). India was allocated USD 2.1 billion, followed by Bangladesh, Indonesia, Philippines and Pakistan, each of which received more than USD 1 billion per year. Other top 15 recipients were composed of countries in Africa (5×), the LAC region (3×), Europe (1×) and Asia (1×). In addition, only three of the top 15 recipients were LDCs, one of

which was a low-income country (Ethiopia). Non-concessional finance played an important role among these top 15 recipients: only six of them were predominantly allocated grants or concessional loans.

Figure 7. Top 15 recipients of climate adaptation finance by type of finance, 2019-23 average, USD billion, 2023 prices

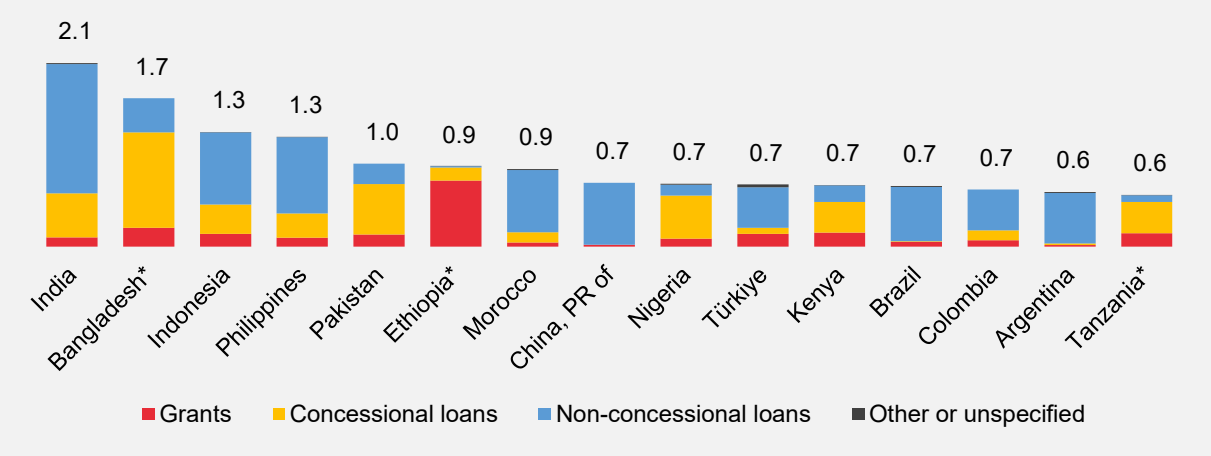
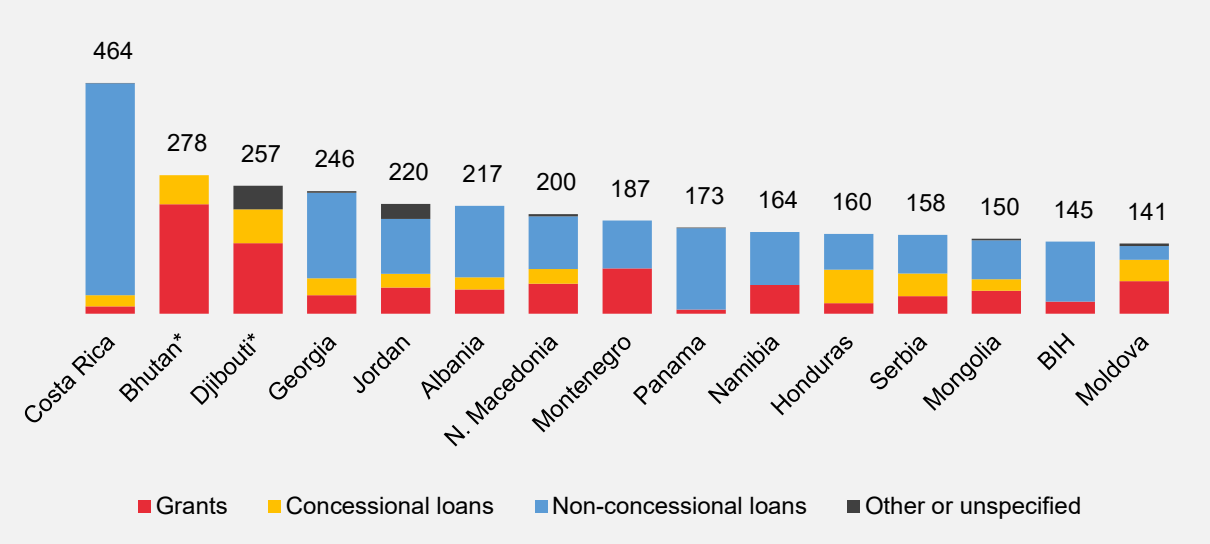


Figure 8. Per-capita top 15 recipients of climate adaptation finance (beyond SIDS) by type of finance, 2019-23 average, USD, 2023 prices

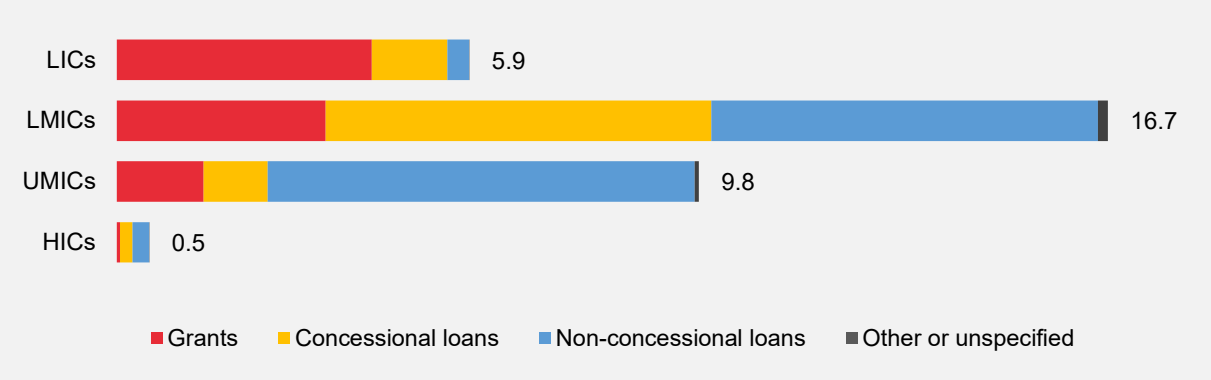


Source: TOSSD and CRS CRDF.
Note: BIH stands for Bosnia and Herzegovina. This per-capita calculation only includes financing allocated to individual countries or territories. Recipients with an asterisk (*) are classified as Least Developed Countries (LDCs).

On a per-capita basis, the most significant recipients were SIDS or other countries with population well below 10 million: 28 of top 30 recipients were SIDS. Tuvalu, Nauru, Marshall Islands and Niue were the main per-capita recipients, all of which were allocated more than USD 2 thousand per capita. Tuvalu's per-capita receipted reached even USD 14.2 thousand and Nauru's USD 5.2 thousand. Beyond SIDS, however, Costa Rica, Bhutan and Djibouti received the

highest volumes of adaptation finance per capita (see Figure 8). Ten of these top 15 recipients were mostly allocated non-concessional loans. Grants and concessional loans played the most significant role in the case of Bhutan and Djibouti, both of which are LDCs.

Figure 9. Climate adaptation finance by income group and type of finance, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.
Note: LICs stand for low-income countries, LMICs for lower-middle income countries, UMICs for middle-income countries and HICs for high- income countries.

Overall, middle-income countries (MICs) were allocated 80% of country-allocable climate adaptation finance in 2019-23, averaging at USD 26.5 billion per year (see Figure 9). Lower middle-income countries (LMICs) were targeted 51% (USD 16.7 billion per year), while upper middle-income countries 30% (UMICs; USD 9.8 billion). Low-income countries (LICs) received USD 5.9 billion, accounting for 18%. The share of grants decreased with income levels: it was clearly the highest for LICs (72%) and the lowest for UMICs (15%) and HICs (11%).5 On the contrary, non-concessional loans clearly played the most significant role in UMICs where they accounted for 73% of the group total. In volume terms, however, UMICs and LMICs received a comparable amount of non-concessional climate adaptation finance (USD 6.5 billion). Concessional loans were by far the most significant in LMICs (39%).

In addition, LDCs were allocated USD 11 billion per year during the five-year period, accounting for a third of the country-allocable climate adaptation finance. Grants represented a half (52%) of this financing with the remainder composed of concessional (35%) and non-concessional loans (13%). Beyond the three LDCs listed in Figure 7 (Bangladesh, Ethiopia and Tanzania), other LDCs that received more than USD 400 million per year included Mozambique, Democratic Republic of the Congo (DRC), Niger and Cambodia.

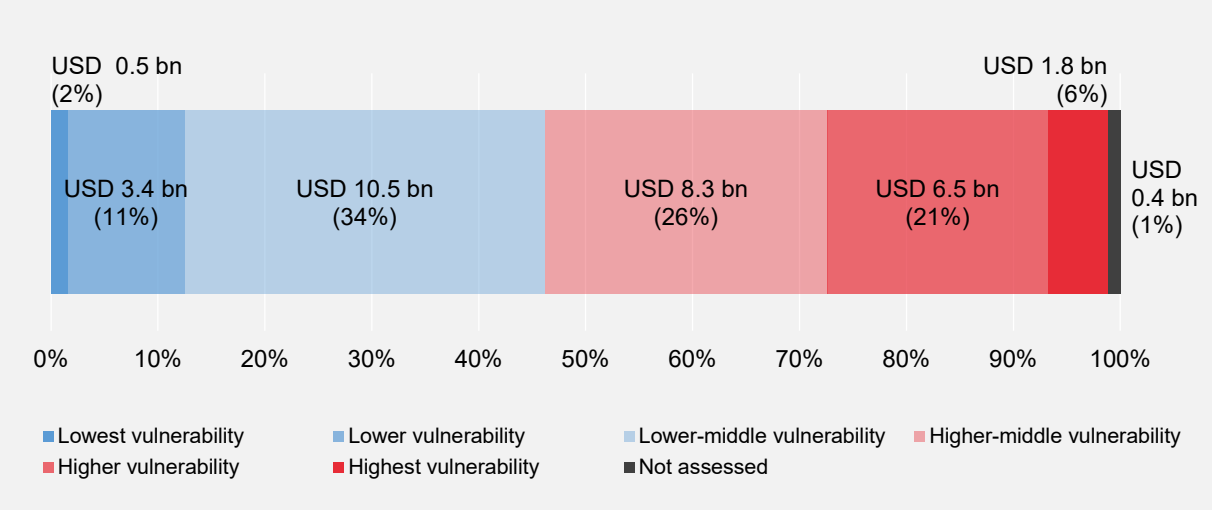
1.4 Vulnerability to climate change

In 2019-23, over a half (53%; USD 16.5 billion per year) of climate adaptation finance was allocated to countries assessed as more vulnerable to the effects of climate change (see

[5] In line with TOSSD eligibility rules, the following high-income recipients are included in this analysis (see also the methodological annex): Antigua and Barbuda, Chile, Cook Islands, Guyana, Nauru, Palau, Panama, Saint Helena, Saint Kitts and Nevis, Seychelles and Uruguay.

Figure 10). Countries and territories with the highest vulnerability received 6% of this financing (USD 1.8 billion), over a half of which went to Chad, Mali, Niger and Somalia. Least vulnerable countries were allocated 2% of adaptation grants and recipients with lower vulnerability 11%.

Figure 10. Distribution of climate adaptation finance by physical vulnerability to climate change, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.
Note: Non-assessed recipients include Cook Islands, Dominica, Guyana, Kosovo, Montserrat, Nauru, Niue, North Macedonia, Panama, Saint Helena, Tokelau, Wallis and Futuna, and West Bank and Gaza Strip. Countries with low vulnerability are assigned PVCCI scores around 40, lower vulnerability 45, lower-middle vulnerability 50, higher-middle vulnerability 55, higher vulnerability 60 and extreme vulnerability 65. Median score is 52.9.

From a per-capita point of view, recipients with the highest vulnerability were allocated the largest amounts of climate adaptation finance. SIDS included, these countries and territories were allocated USD 227 per capita per year, followed by other vulnerable recipients (USD 76 for higher-middle vulnerability and USD 41 for higher vulnerability). SIDS excluded; however, the per-capita receipts were similar across all vulnerability categories, mostly between USD 10 and USD 16 (see Figure 11).

Figure 11. Distribution of flows based on vulnerability to climate change and per capita income of recipient countries in dollars, 2019–2023 average, 2023 prices

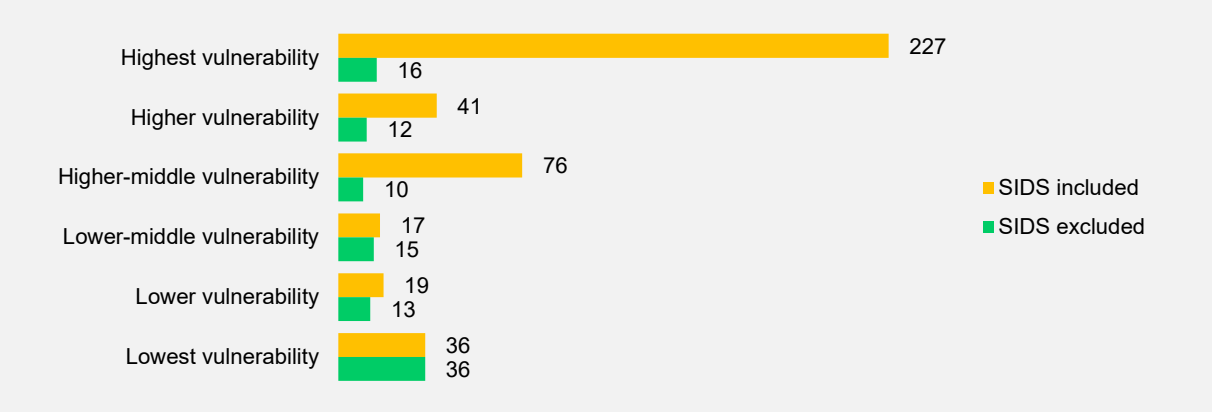
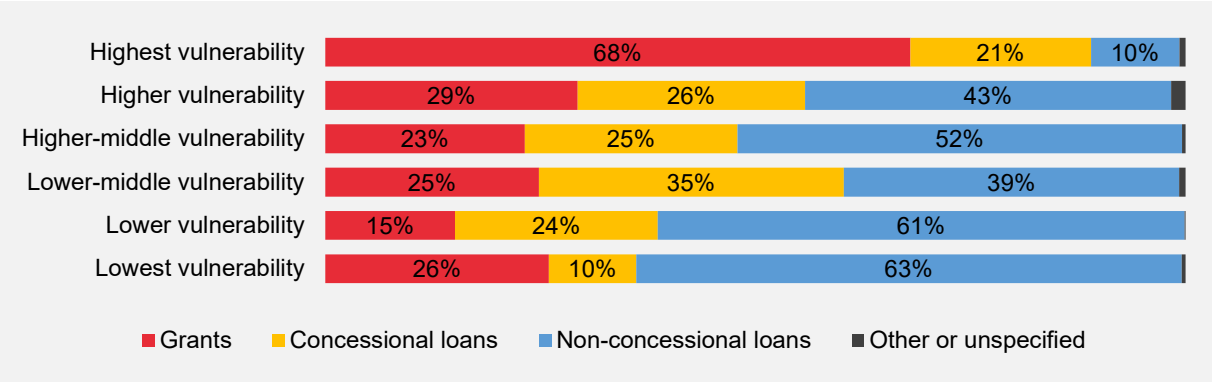


Figure 12. Distribution of climate adaptation finance by physical vulnerability to climate change by instrument type, 2019-23 average, USD, 2023 prices

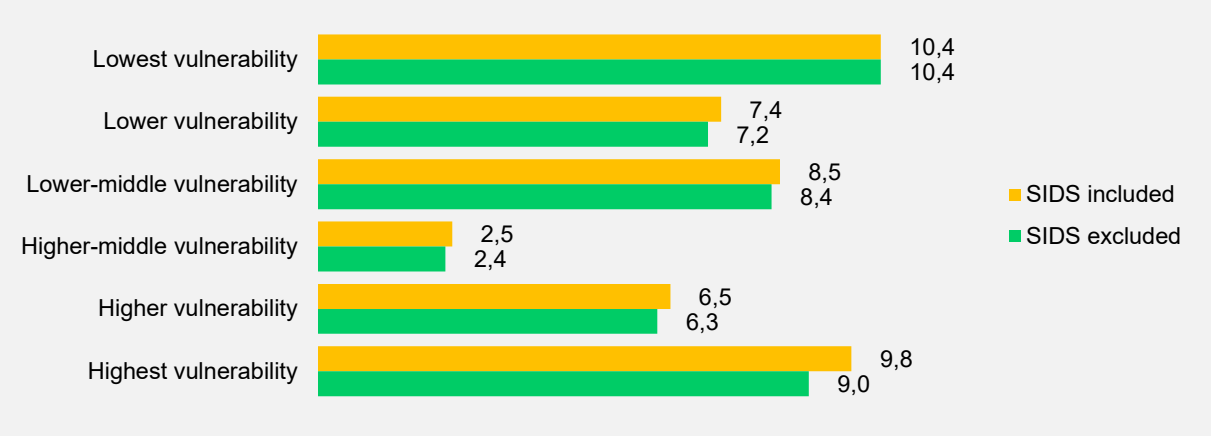


Source: TOSSD and CRS CRDF.
Note: See note above

In general, the share of grants in climate adaptation finance increased with the recipients' vulnerability levels (see Figure 12). Grants represented more than two-thirds of financing made available for the most vulnerable countries while it was only 15% for countries with lower vulnerability levels. Non-concessional loans, in contrast, were the most significant in the case of the least vulnerable countries (63% for recipients with the lowest vulnerability and 61% lower vulnerability) whereas they only represented 1% of climate adaptation finance in support of recipients with the highest vulnerability.

Finally, when we look at annual allocations relative to population in different countries based on their physical vulnerability to climate change, we see a different pattern depending on the financial instrument, but one that is relatively similar to that of global flows (see Figure 13). The majority of per capita allocations are therefore concentrated in countries with the lowest vulnerability, including or excluding SIDS ($10.4/capita). However, the second most funded category of countries remains those with the highest vulnerability, although it is noteworthy that there is a difference of £0.8 per capita between including SIDS and not including them. Nevertheless, countries with vulnerabilities above the median (from higher-middle vulnerability to highest vulnerability) are significantly less well funded than those with vulnerabilities below the median (there is a funding difference of £7.5 per capita when including SIDS and £8.3 per capita when excluding SIDS from the calculation).

Figure 13. Per capita allocations of total flows based on physical vulnerability to climate change, 2019–23 average, in dollars, 2023 prices



Source: TOSSD and CRS CRDF.
Note: See note above.

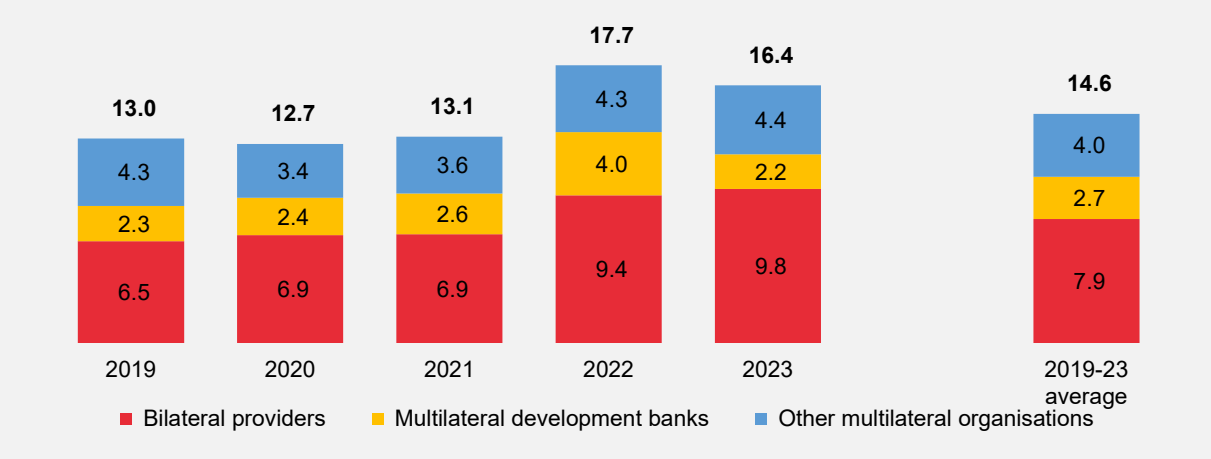
2. Focus on grants

With no expectation of financial returns to the providers, grants extended to an important role in the case of recipients that cannot afford debt financing or in sectors that do not generate investment profits. In this analysis, grants include cash donations and providers' direct expenditure.

2.1 Volume and key providers

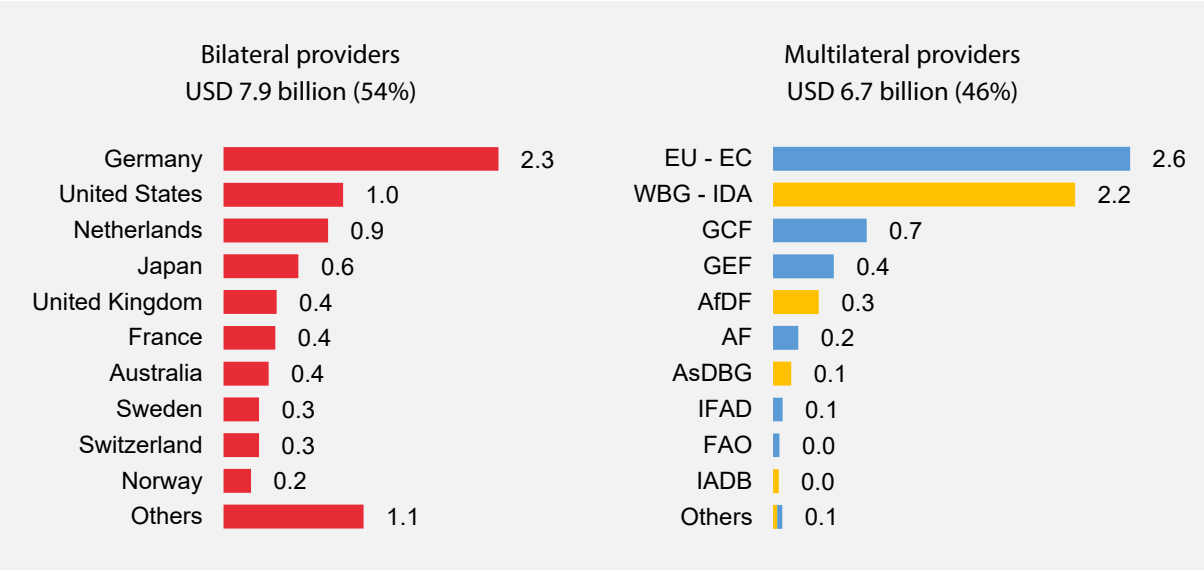
During 2019-23, providers of development finance committed USD 14.6 billion per year on average in climate finance grants for adaptation (see Figure 14). The annual volumes first stagnated around USD 13 billion during the first three years to then grow by more than a third (+35%) to USD 17.7 billion in 2022. This growth was not sustained in 2023 when grant financing dropped back to USD 16.4 billion (-7%).

Figure 14. Volume of grants for adaptation in 2019-23, USD billion, 2023 prices



Over a half (54%) of adaptation grants in 2019-23 were provided by 45 bilateral providers, representing USD 7.9 billion per year on average. Germany provided by far the largest amount (USD 2.3 billion), followed by the United States and the Netherlands. The remaining 46% was provided by multilateral organizations, most notably the European Commission, and the International Development Association (IDA) of the World Bank Group (WBG). These two multilateral organizations together accounted for nearly three-quarters of all adaptation grants provided by multilateral institutions during the five-year period. Multilateral environmental funds, notably the Green Climate Fund (GCF), Global Environment Facility (GEF), Adaptation Fund (AF) and Climate Investment Funds (CIFs) combined provided 19% of climate adaptation grants in 2019-23. In addition, Team Europe provided USD 7.1 billion of climate adaptation grants per year, accounting for 49% of the five-year average (see Figure 15).

Figure 15. Main providers of grants for adaptation, 2019-23 average, USD billion, 2023 prices

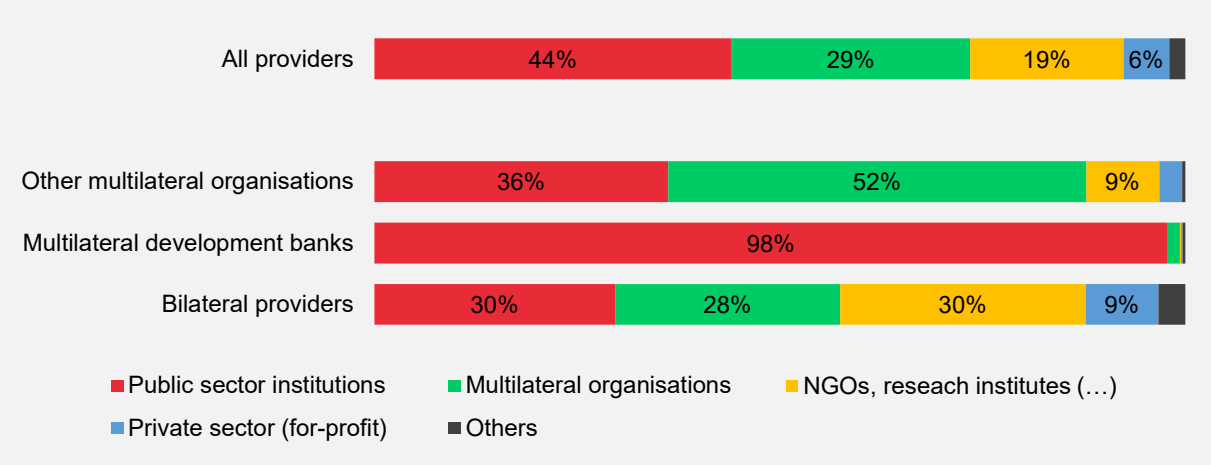


Source: TOSSD and CRS CRDF.

2.2 Channels of delivery

Climate adaptation grants were delivered to developing countries through a wide range of channels (see Figure 16). Nearly a half (44%) of adaptation grants were extended to the governments of recipient countries. Almost a third (29%) of adaptation grants was channelled through non-core resources of multilateral organisations, such as trust funds, special-purpose programmes or projects implemented by such institutions. A fifth (19%) was channelled through non-governmental organisations (NGOs), networks, research institutes, think-tanks and similar types of institutions.

Figure 16. Main channels of delivery of grants for adaptation, 2019-23 average, USD billion, 2023 prices



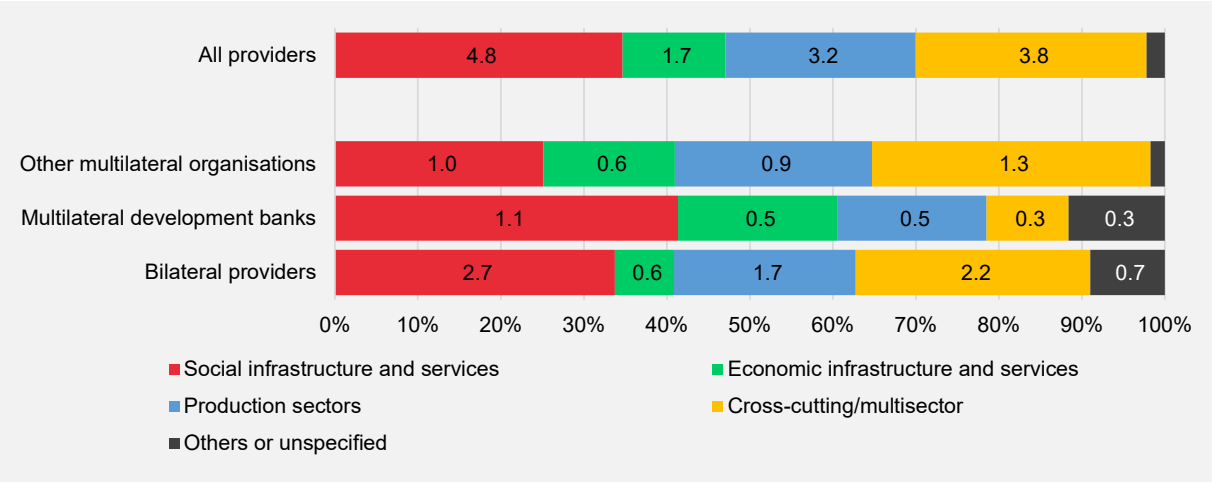
Source: TOSSD and CRS CRDF.

While MDBs provided almost all of their grants to recipient-country governments, bilateral providers used a more diverse range of institutions, such as NGO, networks and research institutes (30%) or multilateral entities (28%). Non-MDB multilateral organisations, notably the European Commission and environmental funds, channeled over a half of their adaptation grants through multilateral organizations (see Figure 16). This mostly relates to the environmental funds' arrangements with multilateral agencies that implement their projects.

2.3 Sectoral distribution

In 2019-23, a third of adaptation grants (USD 4.8 billion) was intended to foster social infrastructure and services, in particular water and sanitation, support to the government and civil society and healthcare. Production sectors were allocated nearly a quarter of climate adaptation grants (USD 3.2 billion), mostly focused on agriculture development. Adaptation grants in support of the energy sector, transport and other economic infrastructure amounted to USD 1.7 billion (12%). USD 3.8 billion (26%) was provided for cross-cutting activities that straddle over multiple sectors, such as general environmental protection, disaster risk reduction or urban and rural development.

Figure 17. Sectoral distribution of grants for adaptation, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.

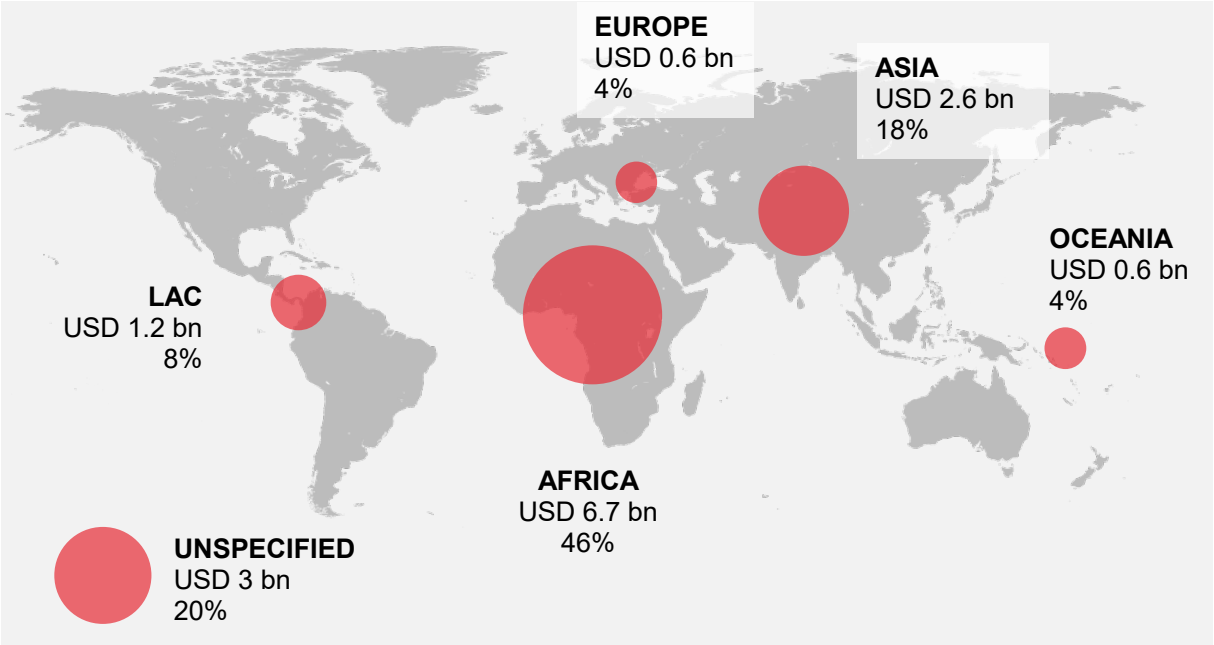
The share of social sectors was the greatest in grant financing by the MDBs, although—in absolute terms—bilateral providers allocated more than double grant finance for these sectors (see Figure 17). Cross-cutting and multi-sectoral activities were mostly supported by bilateral providers and non-MDB multilateral organizations. While the share of production sectors was comparable across all three types of providers, countries extended the largest volume (USD 1.7 billion).

2.4 Geographic allocation

During the five-year period, compared to other types of climate adaptation finance, grants were directed to a greater extent to countries with lower income levels and lower degree of socioeconomic development.

Africa was the foremost recipient of climate adaptation grants in 2019-23. With receipts of USD 6.7 billion per year on average, Africa was allocated nearly a half of the five-year grant total (see Figure 18). Indeed, almost all top recipients of adaptation grants in Sub-Saharan Africa, most notably Ethiopia, Mozambique and Somalia (see Figure 19). Two-thirds of adaptation grants for Africa were extended by a handful providers, namely IDA (26%), EC (14%), Germany (13%), United States (8%) and AfDBG (5%).

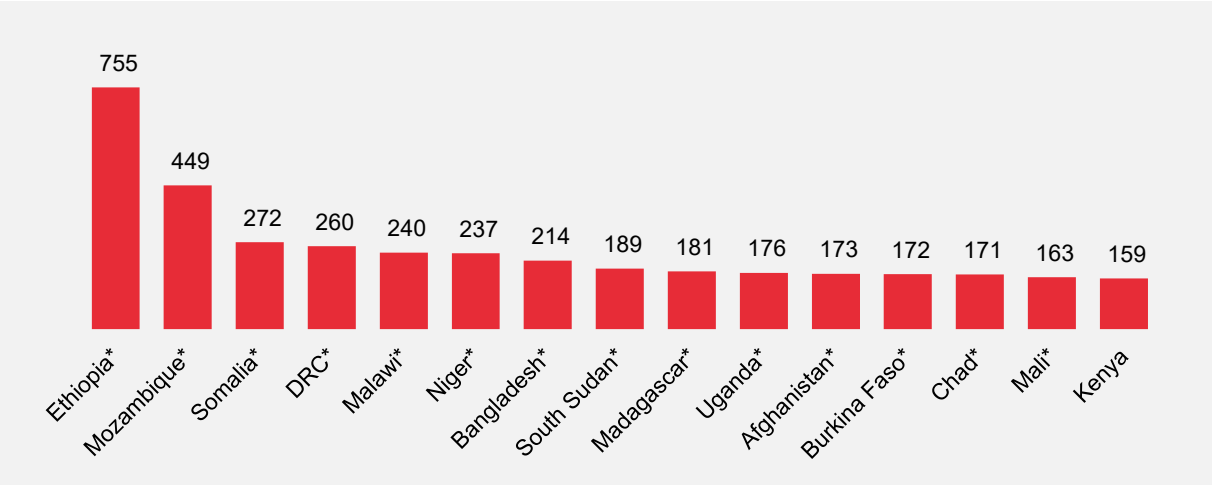
Figure 18. Regional allocation of grants for adaptation, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.
Note: LAC stands for Latin America and the Caribbean.

Asia was the second most significant recipient region of adaptation grants in 2019-23 (USD 2.6 billion per year; 18%), with a half of this region total targeting Bangladesh, Afghanistan, Yemen, Indonesia and Pakistan. Recipients in Latin American and Caribbean (LAC) were allocated USD 1.1 billion per year, while developing countries in Europe and Oceania each received around USD 0.6 billion. While grants constituted a minority share of climate adaptation finance for the LAC region and Europe, they were the main instrument type to support Oceania. Overall, 14 of top 15 recipients of adaptation grants were LDCs (see Figure 19). In addition, a total of USD 3 billion (20%) per year was provided for activities without a region-specific allocation. Such grants mostly include contributions to programmes implemented across multiple regions, expenditure for international policy processes or research activities.

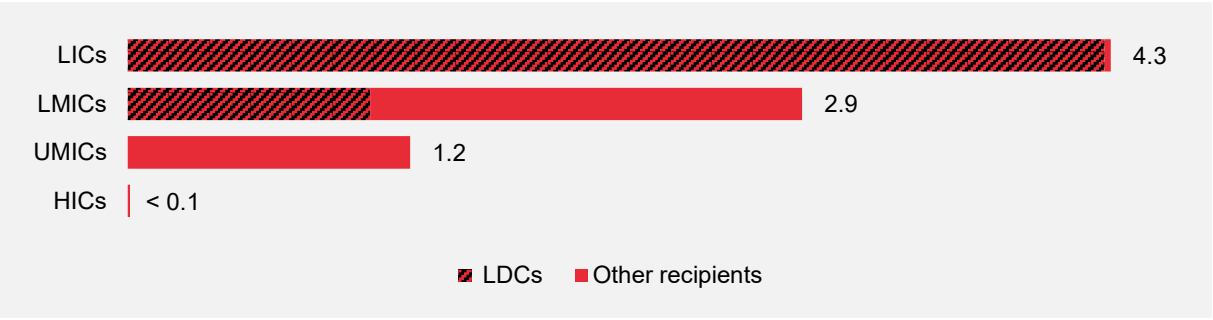
Figure 19. Top 20 recipients of grants for adaptation, 2019-23 average, USD million, 2023 prices



Source: TOSSD and CRS CRDF.
Note: DRC stands for Democratic Republic of the Congo. Recipients with an asterisk (*) are classified as Least Developed Countries (LDCs).

In terms of allocation by income, a half of country-allocable climate adaptation grants went to low-income countries (LICs), averaging at USD 4.3 billion per year in 2019-23 (see Figure 20). Additional USD 2.9 billion (35%) was provided to lower-middle income countries and USD 1.2 billion (15%) to upper-middle income countries (UMICs).

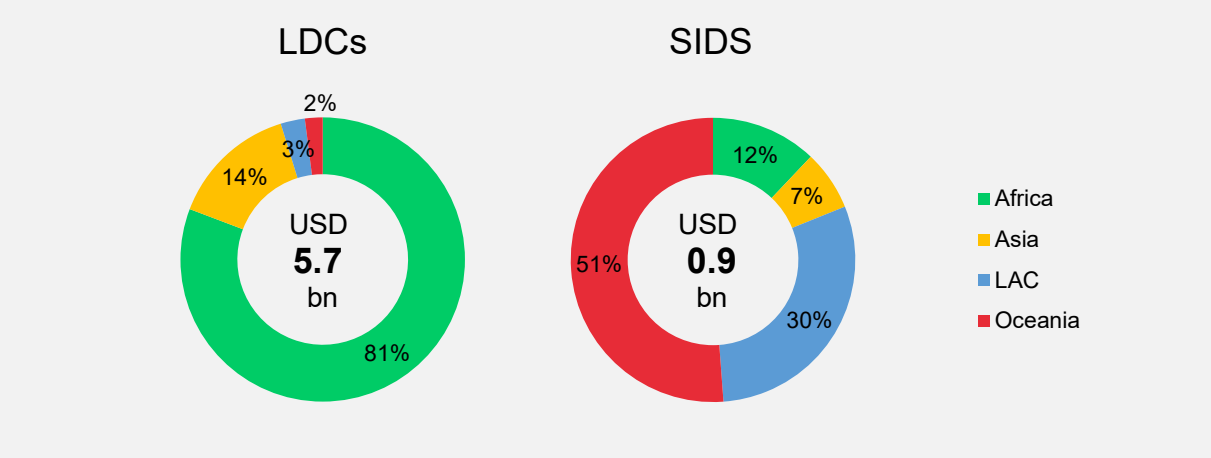
Figure 20. Grants for adaptation by income group, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.
Note: LICs stand for low-income countries, LMICs for lower-middle income countries, UMICs for middle-income countries and HICs for high- income countries.

All in all, LDCs were allocated USD 5.7 billion per year, constituting 61% of country-allocable climate adaptation grants and SIDS USD 0.9 billion (10%). While Africa received the bulk of all grants to the LDCs (81%), Oceanian countries and territories were allocated a half of adaptation grants for the SIDS. Caribbean SIDS received nearly a third (30%) of this financing (see Figure 21). In any case, grants were the most foremost type of finance used to support adaptation efforts in both recipient groups.

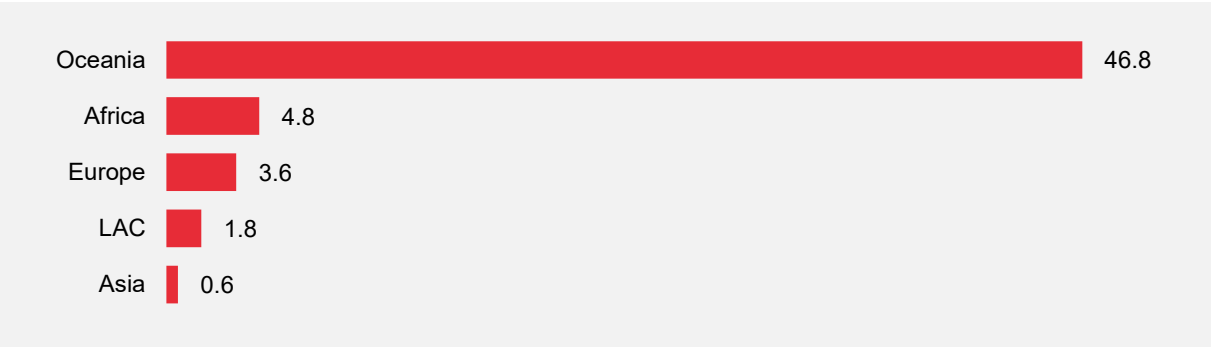
Figure 21. Grants for LDCs and SIDS, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.
Note: Since the LDC and SIDS categories partially overlap, the totals and shares presented in this chart should not be added up.

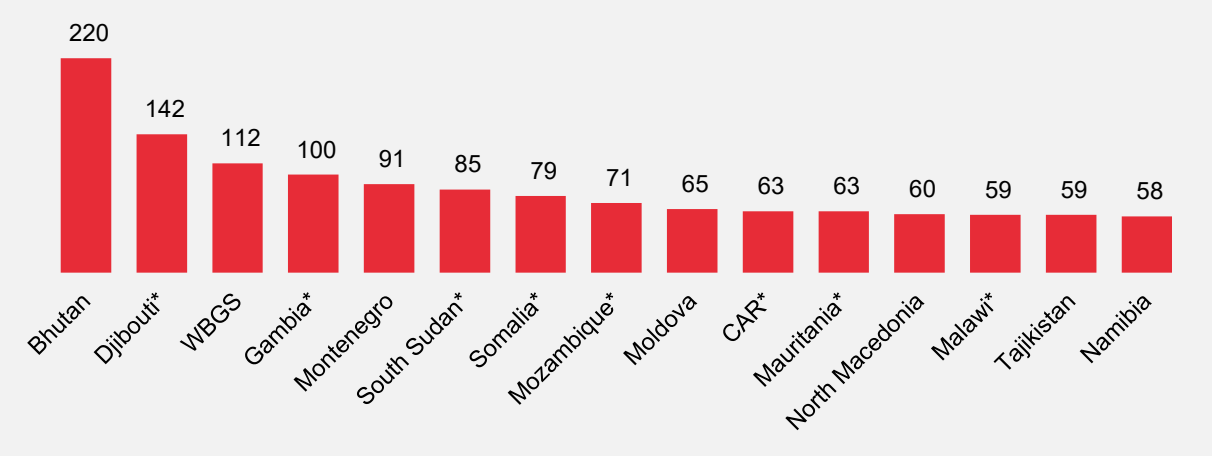
On a per-capita basis, however, Oceania received the largest sums in 2019-23 (USD 46.8), followed by Africa (USD 4.8) and Europe (USD 3.6). Per-capita receipts of adaptation grants in Latin America and the Caribbean and Asia amounted to less than USD 2 (see Figure 22).

Figure 22. Per-capita regional allocation of grants for adaptation, 2019-23 average, USD, 2023 prices



At the level of individual recipients, SIDS were allocated by far the highest amounts of grant financing per capita—the list of top 30 countries and territories with the highest per-capita receipts included 27 SIDS. Other top recipients beyond the SIDS mostly included countries and territories across the Asia and Africa, with Bhutan, Djibouti, West Bank and Gaza Strip and Gambia allocated over USD 100 per capita each (see Figure 23). Moreover, 7 of the top 15 per-capita recipients were LDCs.

Figure 23. Per-capita top 15 recipients of climate grants for adaptation (beyond SIDS), 2019-23 average, USD, 2023 prices



Source: TOSSD and CRS CRDF.
Note: WBGS stands for West Bank and Gaza Strip and CAR for Central African Republic. Recipients with an asterisk (*) are classified as Least Developed Countries (LDCs).

2.5 Vulnerability to climate change

Compared to loans, grants were directed to more vulnerable countries and territories to the greatest extent in 2019-23. In the same vein, countries with the lowest and lower vulnerability were allocated relatively the smallest shares.

During 2019-23, 61% (USD 5.7 billion) of country-allocable grants for adaptation were allocated to recipients assessed as more vulnerable to the effects of climate change (see Figure 24). Recipients with the highest vulnerability scores were allocated 15%, those with higher vulnerabilities 22%, and those with higher-middle vulnerability levels 24%. Compared to loans for adaptation, these shares are the greatest. On the contrary, less vulnerable countries were allocated USD 3.5 billion (37%), which is lower than in the case of loans, both concessional and non-concessional).

Figure 24. Distribution of grants for adaptation by physical vulnerability to climate change, 2019-23 average, USD billion, 2023 prices

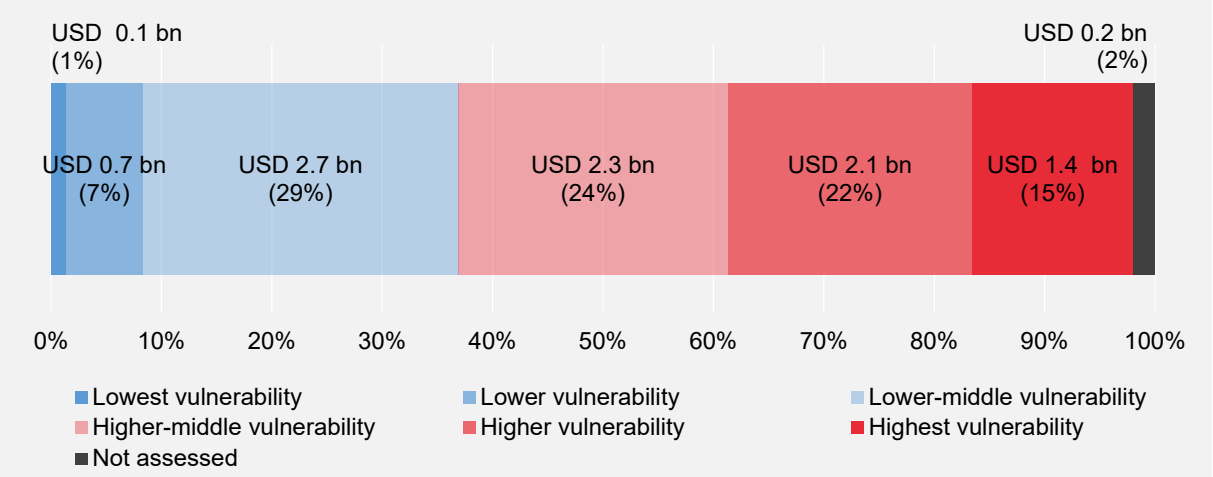
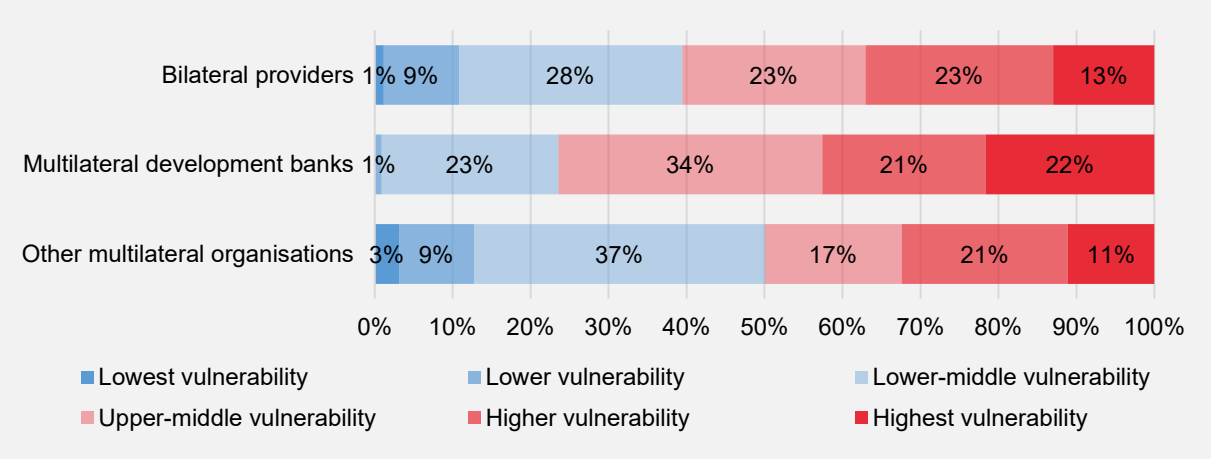


Figure 25. Distribution of grants for adaptation by provider type and physical vulnerability to climate change, 2019-23 average, USD, 2023 prices



Source: TOSSD and CRS CRDF.

Grants by the MDBs were the most focused on more vulnerable countries (see Figure 25). Adaptation grants to these recipients represented more than three-quarters of all adaptation grants by the MDBs, and those with the highest vulnerability 22%. On the contrary, MDB's grants for adaptation to recipients with lower and the lowest vulnerability profiles were remarkably low (1% and 0.1%). Furthermore, support to more vulnerable countries accounted for 60% of adaptation grants by bilateral providers, with the most vulnerable countries alone representing 13% of the bilateral total. Lastly, only a half of adaptation grants by other multilateral providers, such as UN entities and multilateral climate funds, targeted more vulnerable countries. Still, the share of grants to recipients with higher and the highest vulnerability levels was clearly greater than that to recipients with lower and the lowest vulnerabilities.

From a per-capita point of view, recipients with the highest vulnerability to climate change were allocated the largest volumes of climate adaptation grants (see Figure 26). The impact of SIDS is remarkable in this context: SIDS included, the most vulnerable countries and territories were allocated USD 218 per capita per year, and recipients with higher-middle vulnerability scores USD 49. SIDS excluded, however, the per-capita receipts by the most vulnerable countries drops to mere USD 9, a value largely comparable with other vulnerability categories.

Similarly, when we look at annual allocations relative to population size in different countries based on physical vulnerability to climate change (see Figure 27), it can be seen that per capita donations are heavily skewed towards the most vulnerable countries, which received an average of $6.2 per year (excluding SIDS) and $6.6 per year (including SIDS) over the period 2019-2023, an amount that is incomparable to that granted to intermediate categories.

Figure 26. Distribution of grants based on vulnerability to climate change and per capita income of recipient countries in dollars, 2019–2023 average, 2023 prices

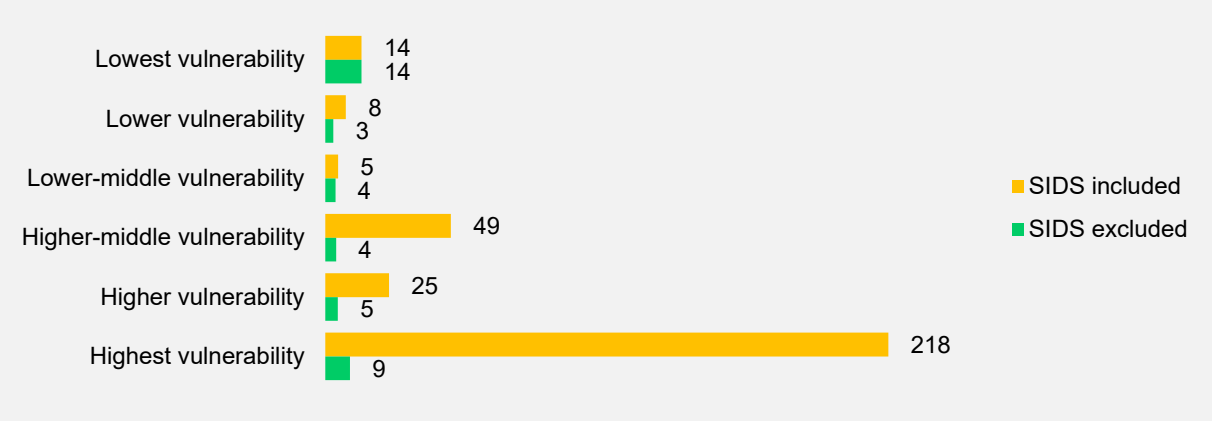
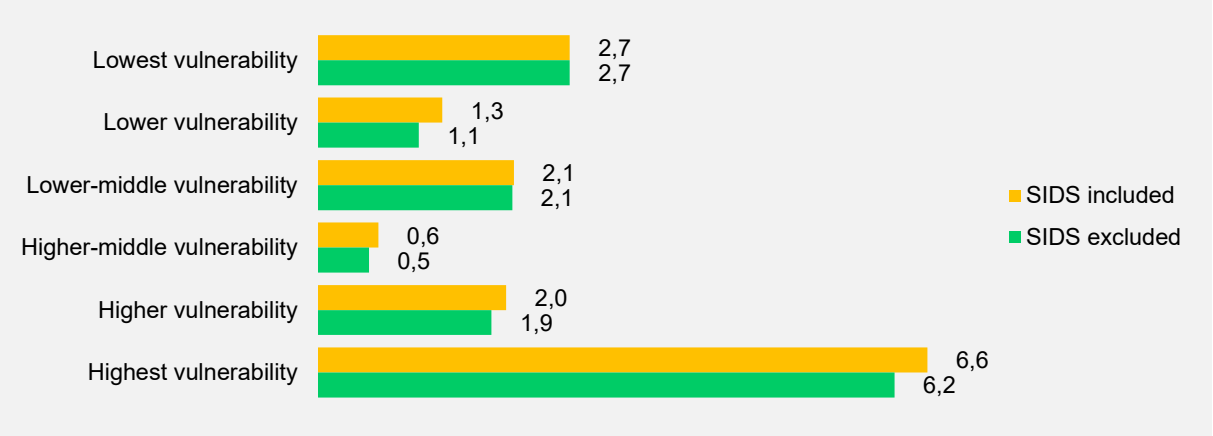


Figure 27. Per capita grant allocations based on physical vulnerability to climate change, 2019–23 average, in dollars, 2023 prices



Source: TOSSD and CRS CRDF
Note: See note above.

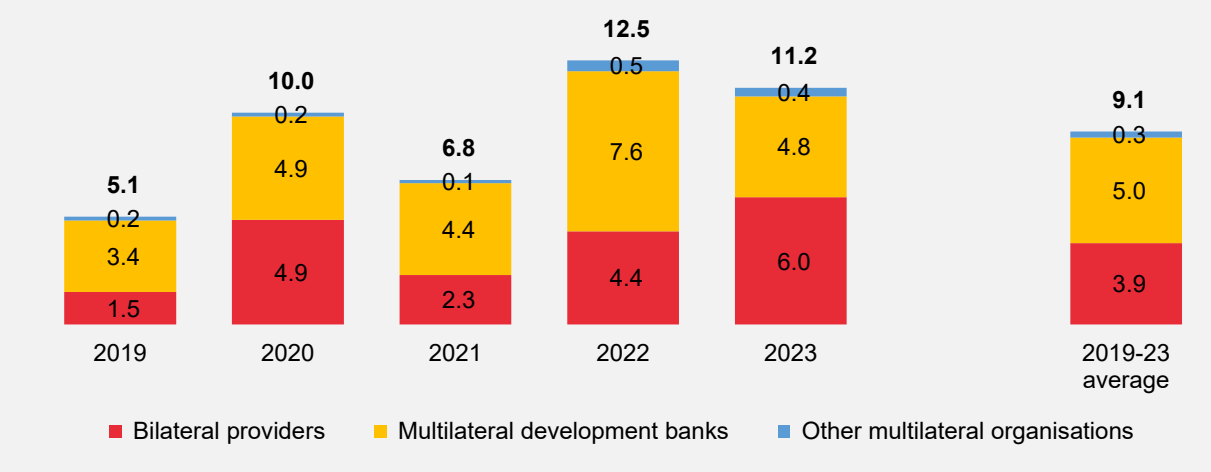
3. Focus on concessional loans

In this analysis, concessional loans include debt instruments that convey a grant element of at least 35%, calculated with the rate of discount of 5%, in line with the IMF concessionality rules. Such concessionality levels are usually achieved through sub-market interest rates and extended repayment periods. In general, concessional, or "soft" loans are seen as a form of aid and are typically used in lower income settings. Although concessional loans may contribute to indebtedness, they can build effectiveness through increased ownership by the borrower and shared responsibility.

3.1 Volume and key providers

Between 2019 and 2023, the annual volume of concessional loans allocated to climate change adaptation increased significantly, from USD 5.1 billion to USD 11.2 billion, representing an increase of 120% in five years. This growth reflects a growing awareness of adaptation needs in developing countries but remains marked by high volatility from year to year. On average, annual commitments amounted to USD 9.1 billion over the period, well above the 2019 level but well below estimated needs. The momentum is mainly driven by two years of rapid expansion (2020 and especially 2022), while 2021 represents a cyclical trough. Over the period, there was an average annual growth of around +17%, but these average masks fluctuations reflecting dependence on political and economic cycles in donor countries. Indeed, between 2021 and 2022, the volume of loans allocated increased by nearly 84% in just one year, following a 32% drop between 2020 and 2021. This clearly illustrates the volatility of this type of financing (see Figure 28).

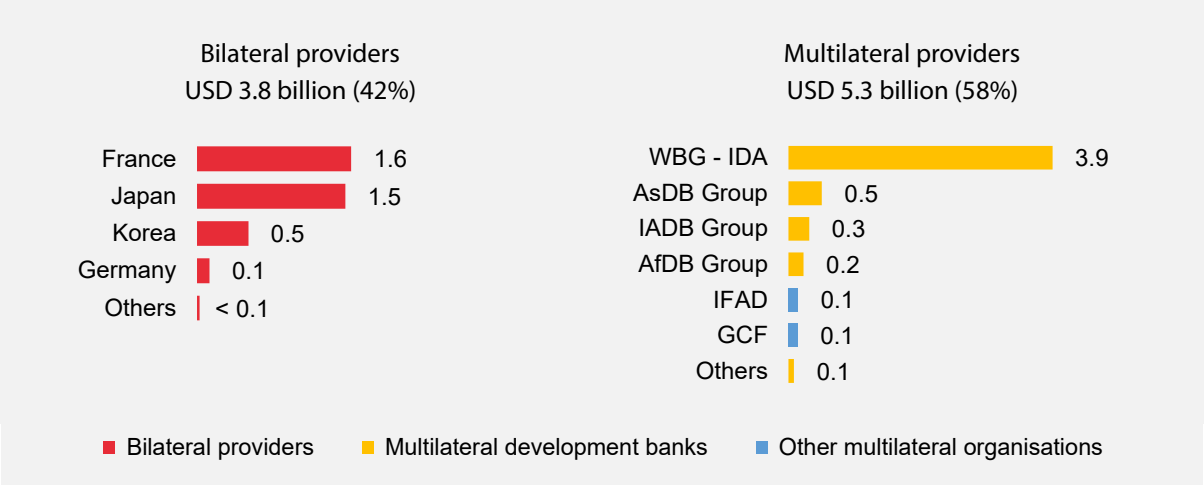
Figure 28. Volume of concessional loans for adaptation in 2019-23, USD billion, 2023 prices



The breakdown between different types of donors reveals an alternation between bilateral and multilateral leadership, reflecting the diversity of strategies and funding channels. However, the structure of concessional financing for adaptation between 2019 and 2023 relies mainly on multilateral providers, which account for an average of 55% of annual volumes (USD 5 billion),

compared with 43% for bilateral donors (USD 3.9 billion). This distribution reflects the predominance of multilateral channels, which are considered more stable, less politically conditioned, and better suited to long-term interventions. Among these actors, the International Development Association (IDA) stands out with an average of USD 3.9 billion per year, accounting for more than 40% of the global total and nearly 80% (78%) of multilaterals loans. It far outstrips other regional banks such as the AsDB (0.5 billion), the IADB (0.3 billion), and the AfDB (0.2 billion). Nevertheless, funding is also concentrated in the hands of a few major donor countries, led by France (USD 1.6 billion per year) and Japan (USD 1.5 billion per year), which together account for 80% of bilateral loans. In short, the financing dynamic is characterized by multilateral leadership that is highly polarized around the World Bank, and a bilateral pillar dominated by a handful of industrial powers, reinforcing the structural asymmetry of the global climate finance system (see Figure 29).

Figure 29. Main providers of concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices

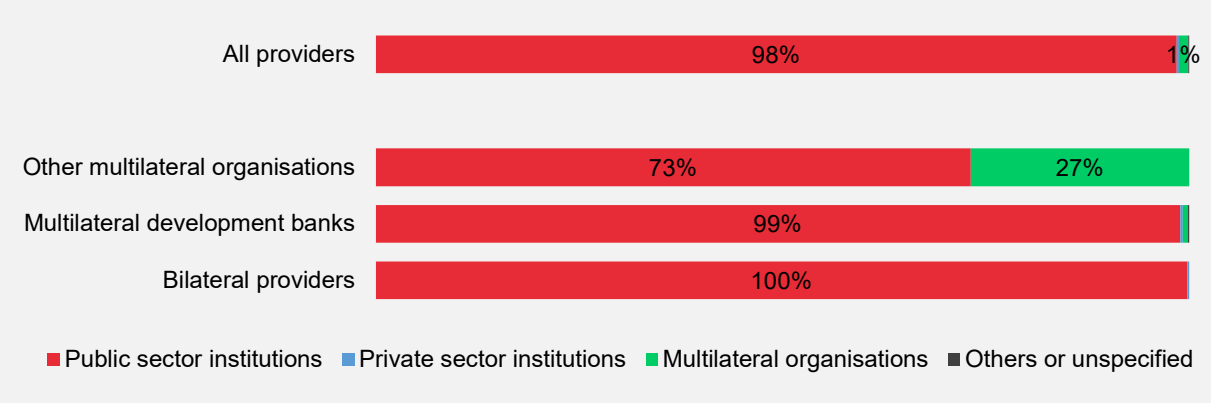


Source: TOSSD and CRS CRDF.

3.2 Channels of delivery

Almost all concessional loans for adaptation (98%) are channelled through public sector institutions. This figure reaches 100% for bilateral donors and 99% for multilateral development banks, highlighting the extremely public nature of the current concessional lending architecture. The use of private or mixed channels is virtually non-existent, which contrasts with recurring calls to mobilize the private sector more in climate finance. However, other multilateral organizations (excluding banks), on the other hand, have a more diversified profile: 73% of their loans go through public institutions, but 27% are channelled mainly through multilateral organizations (see Figure 30).

Figure 30. Main channels of delivery of concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices

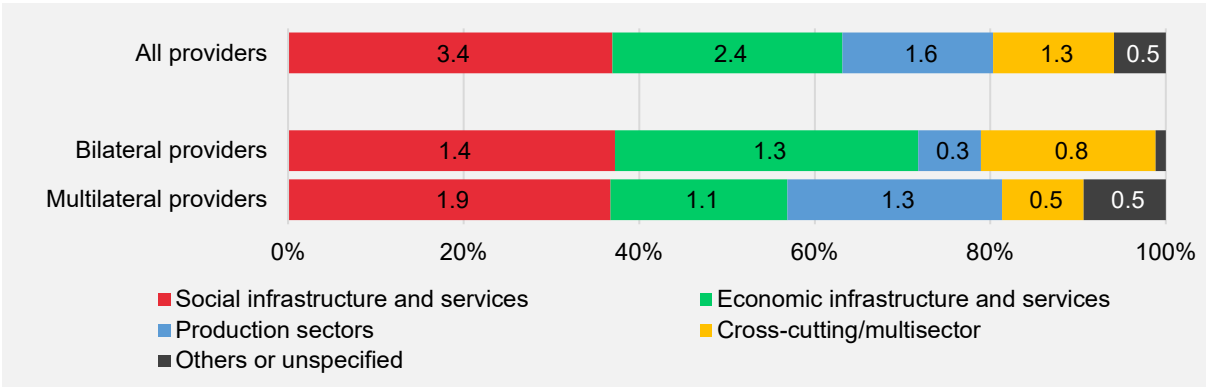


Source: TOSSD and CRS CRDF.

3.3 Sectoral distribution

Among all providers, concessional loans for adaptation are concentrated in two main areas over the 2019-23 period: (i) social infrastructure and services (education, health, drinking water, housing, etc.), which account for USD 3.4 billion on average, or 37% of the total; (ii) economic infrastructure and services (energy, transport, telecommunications, etc.), which account for USD 2.4 billion on average, or 26%. Together, these two areas absorb more than two-thirds of total financing. Multisectoral or cross-cutting sectors mobilize USD 1.3 billion on average, or 14%, while productive sectors receive USD 1.6 billion per year on average, or 17% of the total (see Figure 31).

Figure 31. Sectoral distribution of concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices



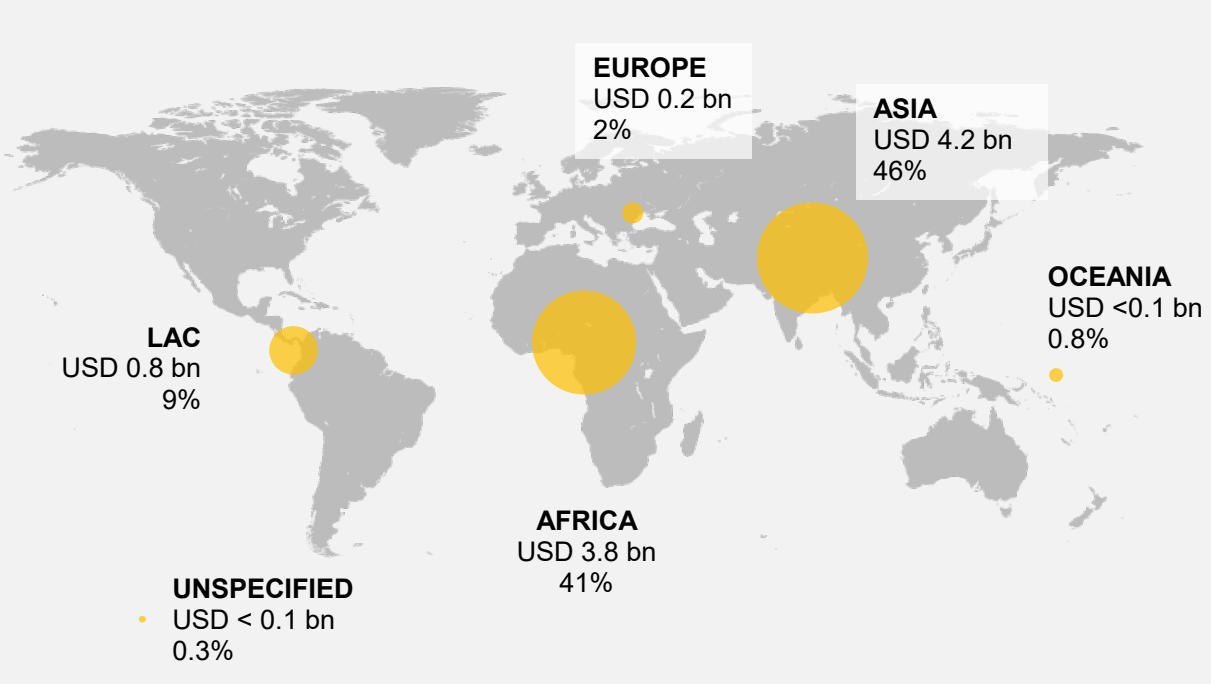
Source: TOSSD and CRS CRDF.

While bilateral donors allocate a significant portion of their funding to economic and social services, multilateral donors, who also prioritize these same services, play a major role in financing the productive sector, accounting for 25% (or nearly one-third) of their funding and more than 80% of total funding from all donors in this same sector.

3.4 Geographic allocation

The regional distribution of concessional loans for adaptation between 2019 and 2023 highlights a strong geographical concentration, largely focused on Asia and Africa, which both account for 87% of total financing (see Figure 29). Asia leads the way with an average of USD 4.2 billion, or 46% of the total, followed by Africa with an average of USD 3.8 billion, or 41%, mostly accounted for sub-Saharan countries. Latin America and the Caribbean (USD 0.8 billion, 9%) receive a modest share despite the vulnerability of certain countries, particularly island states, while Europe (USD 0.2 billion, 2%) and Oceania (<USD 0.1 billion, 0.8%) appear very marginally in this allocation (see Figure 32).

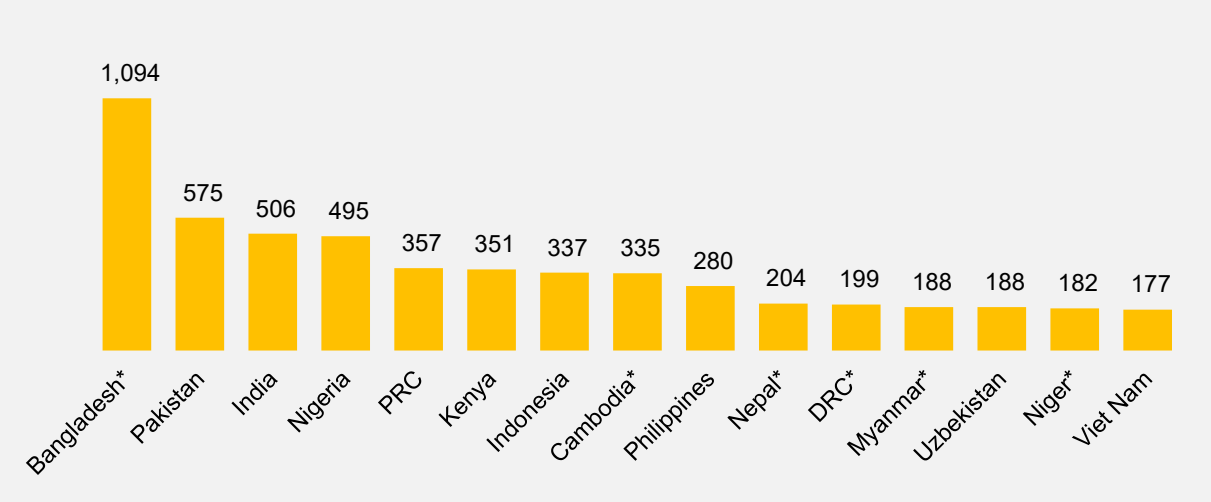
Figure 32. Regional allocation of concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.
Note: LAC stands for Latin America and the Caribbean.

Bangladesh alone receives $1,094 million, or 20% of the total received by the 20 main recipient countries. Together with Pakistan (£575 million) and India (£506 million), the top three countries account for nearly 40% of flows, and the top four (including Nigeria) alone absorb nearly 50% of the total. The gap between the first and second countries is striking, with Bangladesh receiving twice as much as Pakistan. Conversely, countries at the bottom of the ranking, such as Vietnam (£177 million), receive six times less. At the regional level, Asia dominates, with 11 of the 20 countries in the ranking and 78% (the top three quarters) of funding, while sub-Saharan Africa, although highly exposed to climate impacts, receives only 22% of the total across just four countries. Six recipients are least developed countries (LDCs), which receive 40% of the total, a significant figure but one that also highlights the fact that middle-income countries receive an equivalent or even higher share (see Figure 33).

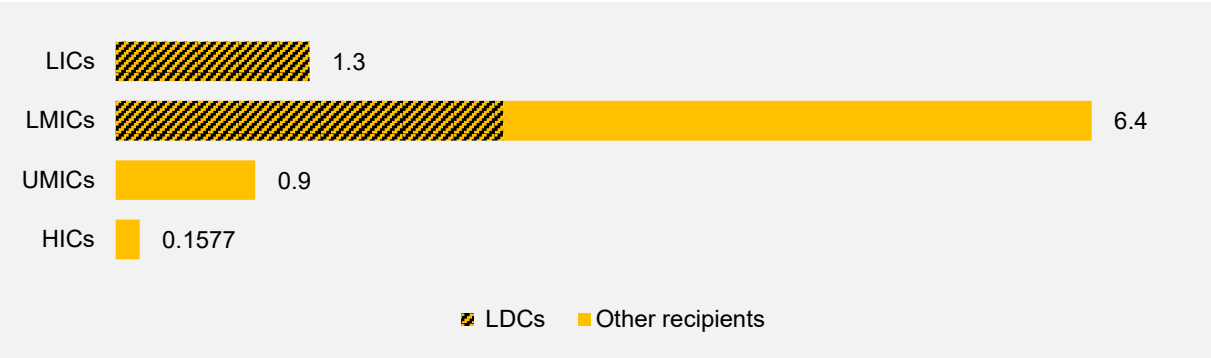
Figure 33. Top 20 recipients of concessional loans for adaptation, 2019-23 average, USD million, 2023 prices



Source: Creditor Reporting System (CRS), Total Official Support for Sustainable Development (TOSSD).
Note: DRC stands for Democratic Republic of the Congo. Recipients with an asterisk (*) are classified as Least Developed Countries (LDCs).

Overall, in 2019-2023, the distribution of concessional loans is largely dominated by lower middle-income countries (LMICs), less than half (but almost) of which are LDCs, receiving $6.4 billion out of a total of $8.8 billion, or 73% (see Figure 34). Other income groups are poorly represented. Low-income countries (LICs), which are often the most vulnerable, receive only $1.3 billion, or just 15% of the total. Least developed countries (LDCs) are only beneficiaries in the LICs and LMICs categories and remain absent from the funding allocated to upper middle-income countries (UMICs) and high-income countries (HICs), which receive funding despite their lower vulnerability, representing 12% of the total.

Figure 34. Concessional loans for adaptation by income group, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.
Note: LICs stand for low-income countries, LMICs for lower-middle income countries, UMICs for middle-income countries and HICs for high-income countries.

On a per capita basis, Oceania receives by far the highest allocation ($5.9 per capita), accounting for 49% of total concessional lending, a result largely influenced by the presence of small island developing states (SIDS). Africa ranks second ($2.7 per capita), but the gap with Oceania remains considerable ($3.2 billion, or a 26% difference; see Figure 35), particularly for countries classified as least developed countries (LDCs). This trend is confirmed in Figure 36, which includes many African and Asian LDCs (7 out of 15, or nearly half), such as Cambodia, which ranks first ($99), Djibouti ($68) and Rwanda ($39). However, some regions, such as Latin America, have low regional averages ($1.3 per capita), despite the occasional presence of well-funded countries (Honduras, Nicaragua, Bolivia). The same is true for Asia, which receives only $1 per capita, or 0.2$ per capita less than developing European countries.

Figure 35. Per-capita regional allocation of concessional loans for adaptation, 2019-23 average, USD, 2023 prices

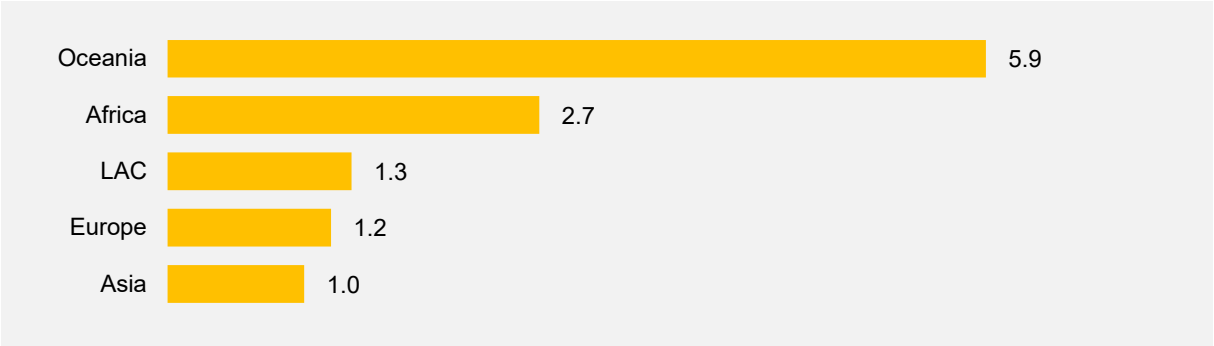
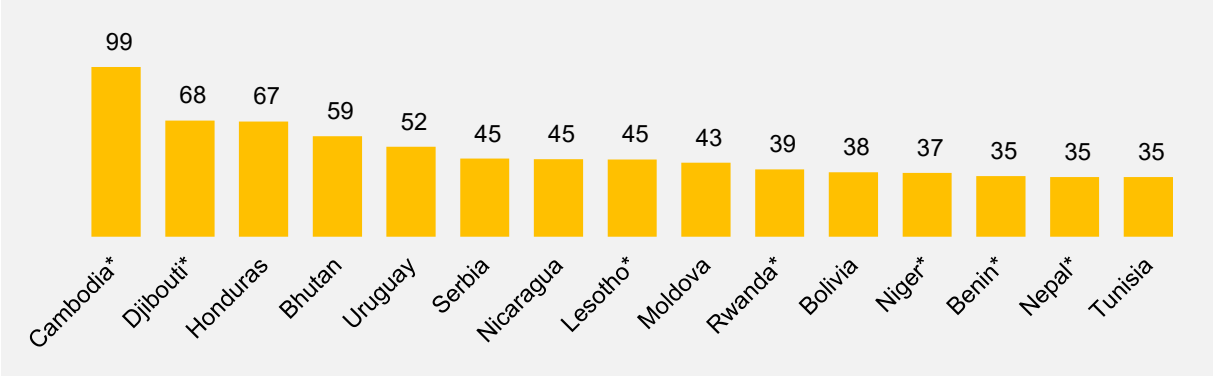


Figure 36. Per-capita top 15 recipients of concessional loans for adaptation (beyond SIDS), 2019-23 average, USD, 2023 prices



Source: TOSSD and CRS CRDF. Recipients with an asterisk (*) are classified as Least Developed Countries (LDCs).

3.5 Vulnerability to climate change

Between 2019 and 2023, the distribution of concessional loans between countries with below-average vulnerability (52%) and those with above-average vulnerability (48%) appears balanced. However, nearly half of these loans are granted to countries with 'below-median' vulnerability (42%), while only 5% are granted to the most vulnerable countries (maximum vulnerability). Although countries considered highly vulnerable and above the median (excluding countries

with maximum vulnerability) still receive 43% of concessional loans, or nearly $4 billion, they receive only 20% on average when considered independently (see Figure 37).

Figure 37. Distribution of concessional loans for adaptation by physical vulnerability to climate change, 2019-23 average, USD billion, 2023 prices

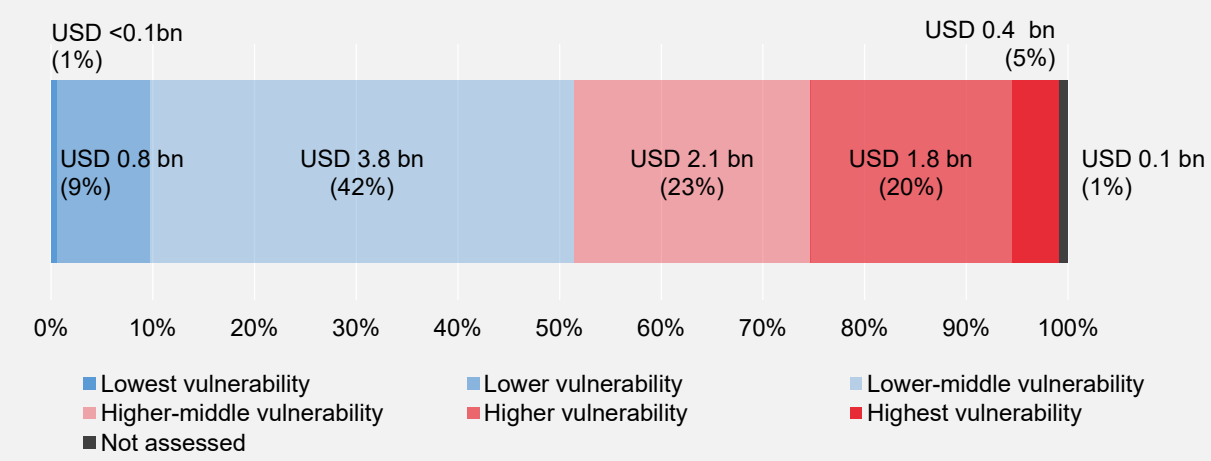
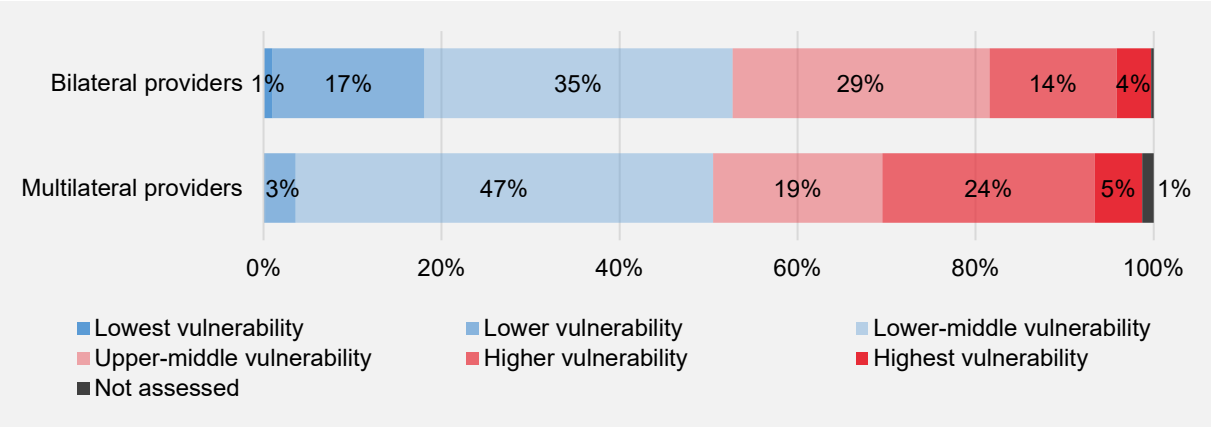


Figure 38. Distribution of concessional loans for adaptation by provider type and physical vulnerability to climate change, 2019-23 average, USD, 2023 prices



Source: TOSSD and CRS CRDF.

Bilateral and multilateral donors distribute concessional loans in a broadly comparable manner: approximately half of the amounts are granted to countries classified as more vulnerable and the other half to less vulnerable countries (see Figure 38). Multilateral donors differ slightly in that a slightly higher proportion of their funding is granted to countries with 'high vulnerability' (24% compared to 14% for bilateral donors), while bilateral donors grant more funding to countries with 'above-median vulnerability' (29% compared to 19% for multilateral donors). This relatively balanced distribution suggests that there is no clear and preferential targeting of concessional financing towards countries most exposed to climate impacts. However, it is noteworthy that multilateral donors provide nearly 50% of financing to countries with 'below median' vulnerability.

From a per capita perspective, concessional loans for climate change adaptation are not distributed strictly in proportion to countries' physical vulnerability. While countries with minimal vulnerability receive an average of $8 per capita, including or excluding SIDS, this amount does not systematically increase with the level of vulnerability (see Figure 39). In fact, countries classified as "above median" and "high" vulnerability receive the highest per capita amounts ($15 and $17 respectively), but only when small island developing states (SIDS) are included in the averages; otherwise, they are the lowest recipient countries. Conversely, non-SIDS countries appear to be systematically underfunded, even when they are highly vulnerable (only $4 per capita on average for countries with maximum vulnerability).

Similarly, when we look at annual allocations relative to population size in different countries based on physical vulnerability to climate change, we can see that, unlike grants, concessional loans (see Figure 40) favour countries with intermediate vulnerability, particularly those in the 'below median vulnerability' category ($3 per capita; including or excluding SIDS), while the most vulnerable countries receive only a modest amount ($1.9 to $2).

Figure 39. Distribution of concessional loan based on vulnerability to climate change and per capita income of recipient countries in dollars, 2019–2023 average, 2023 prices

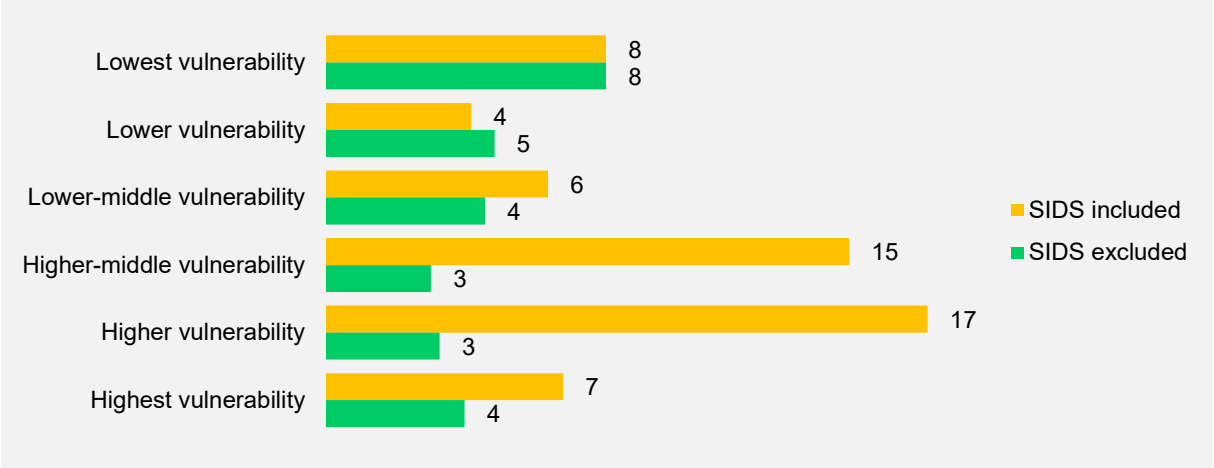
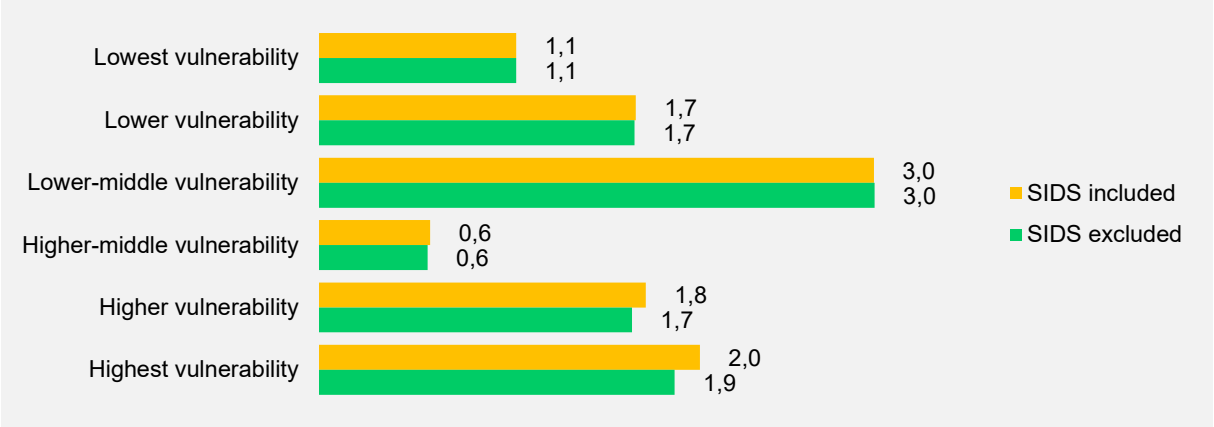


Figure 40. Per capita concessional loan allocations based on physical vulnerability to climate change, 2019–2023 average, in dollars, 2023 prices



Source: TOSSD and CRS CRDF.

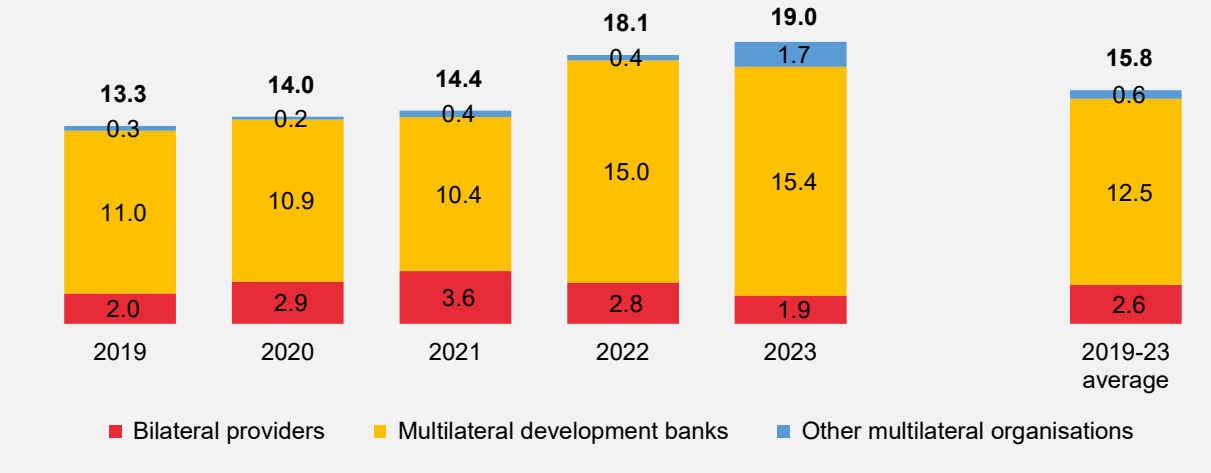
4. Focus on non-concessional loans

In this analysis, non-concessional loans include debt instruments that convey a grant element lower than 35%, calculated with the rate of discount of 5%, in line with the IMF concessionality rules. Although non-concessional loans are usually not seen as aid, it can be a very effective instrument for strengthening the capacities of the private sector or developing hard infrastructure. Moreover, non-concessional loans are extended to governments that are less in need of concessional resources.

4.1 Volume and key providers

During 2019-23, 35 development finance providers allocated USD 15.8 billion per year on average in non-concessional loans to support developing countries' adaptation to climate change (see Figure 41). New loan signatures[6] followed a slightly growing trend during the first three years to then rise by +26% to USD 18.1 billion in 2022, and then by +5% to USD 19 billion in 2023. Non-concessional loans were the largest type of climate adaptation finance (see Figure 2).

Figure 41. Volume of non-concessional loans for adaptation in 2019-23, USD billion, 2023 prices

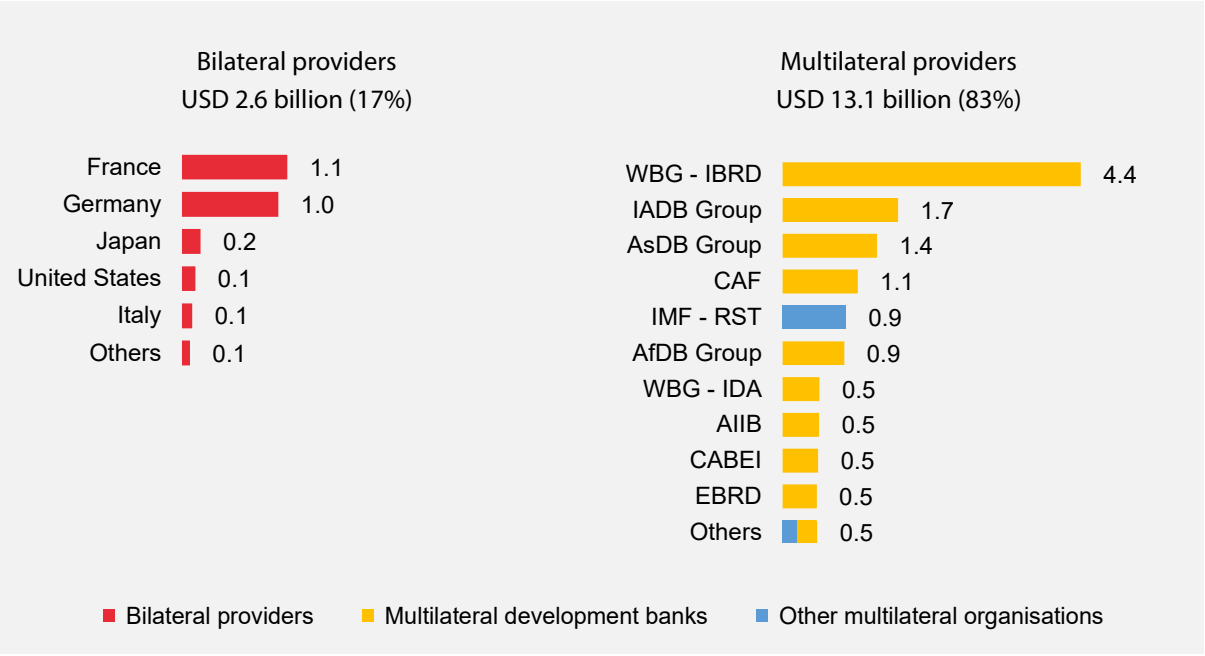


A large majority of non-concessional loans for adaptation was provided by multilateral organisations (USD 13.1 billion; 83%). This financing was driven by the WBG (primarily IBRD; 28%) and regional development banks, most notably IADB Group (11%), AsDB Group (9%), CAF (7%) and AfDB Group (6%). Overall, the MDBs accounted for 80% of the non-concessional total for adaptation. The RST of IMF was by far the largest non-MDB multilateral lender of non-concessional finance for adaptation, followed by GCF and IFAD. Bilateral providers signed non-concessional adaptation loans amounting to USD 2.6 billion per year (17%). Nearly a half of the

[6] Available data represent new loan commitments, or signatures, for each year. Committed amounts may be disbursed during multiple years.

bilateral total was signed by France and Germany. In addition, Team Europe (EU Member States, EC and EIB combined) provided 19% of non-concessional loans in 2019-23 (see Figure 42).[7]

Figure 42. Main providers of non-concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices



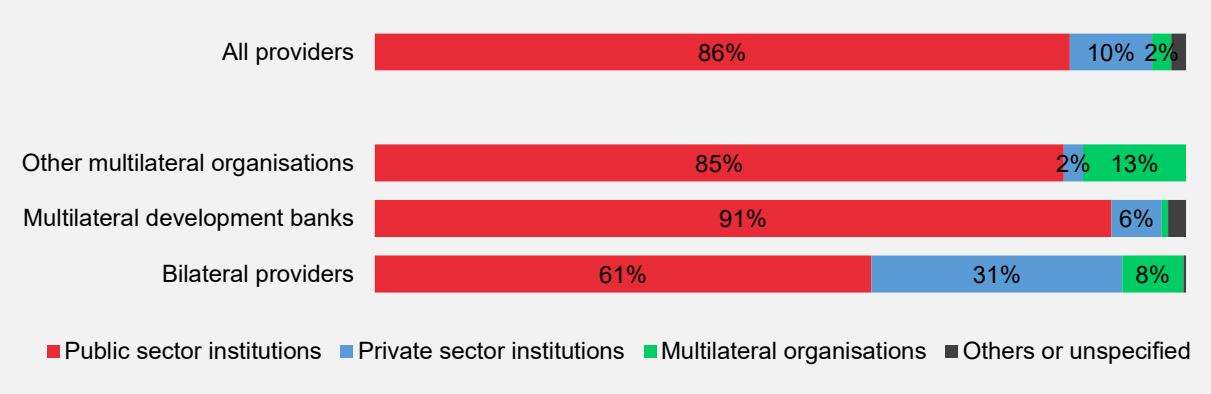
Source: TOSSD and CRS CRDF.
Note: The amount representing the Resilience and Sustainability Trust (RST) of the International Monetary Fund (IMF) is a two-year average as it only became operational in 2022.

4.2 Channels of delivery

In 2019-23, a majority of non-concessional loans for adaptation (USD 13.5 billion; 86%) were provided to the governments of recipient countries (see Figure 43). The bulk of this finance was provided by the MDBs (84%). The second most significant channel type was the private sector (USD 1.6 billion; 10%), primarily used to deliver adaptation finance by bilateral providers and the MDBs (USD 0.8 billion each). Among bilateral providers, most of this financing came from France's AFD and Proparco and Germany's DEG while IDB Invest of the IADB Group was by far the largest multilateral provider channelling non-concessional loans through the private sector. Multilateral organisations channelled around 2% of non-concessional loans for adaptation in 2019-23. This mostly included countries' programme-specific contributions to a handful of MDBs and GCF's arrangements with its multilateral accredited entities (e.g. AsDB, BOAD, CABEI, IADB, IBRD or IFAD).

[7] The volume of non-concessional loans for adaptation by the EIB may be underestimated. Since the level of concessionality of EIB's lending activities cannot be assessed at the commitment stage, it is not included in this calculation.

Figure 43. Main channels of delivery of non-concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices

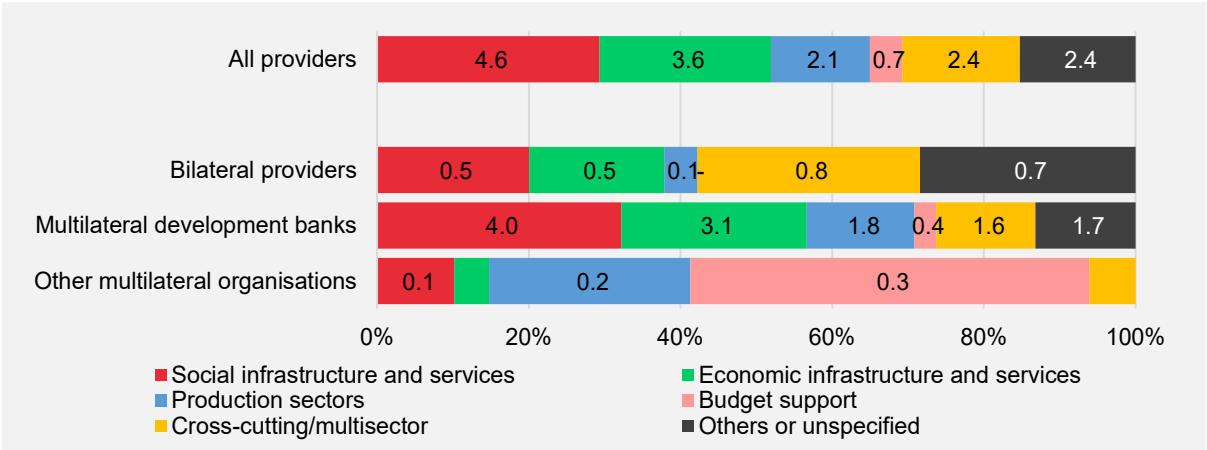


Source: TOSSD and CRS CRDF.

4.3 Sectoral distribution

In 2019-23, over a half of non-concessional loans for climate change adaptation was aimed to promote social and economic infrastructure (respectively 29% and 23%). Financing to social infrastructure mostly targeted water supply and sanitation and support to government and civil society whereas transport and financial services were the most supported economic sectors. USD 2.4 billion per year (16%) was signed for multisectoral or crosscutting activities, chiefly urban development, environmental protection and disaster risk reduction. An equal amount for was unspecified due to data sensitivity issues (see Figure 44).

Figure 44. Sectoral distribution of non-concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.

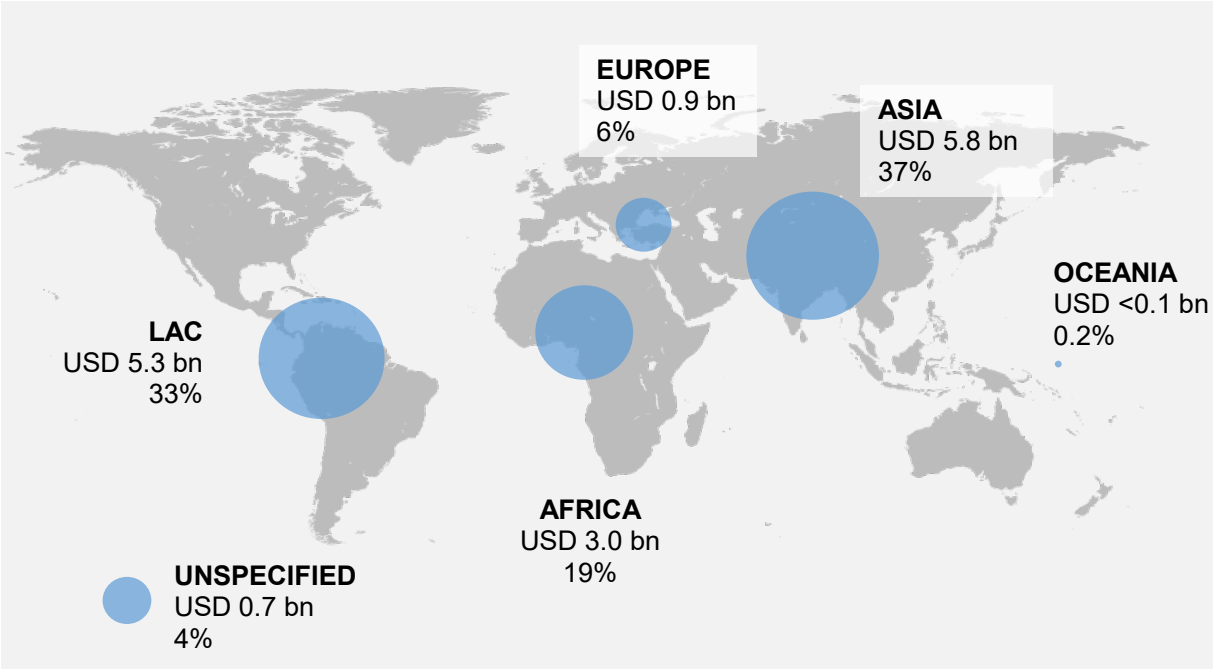
While the MDBs mostly supported social, economic and production sectors, bilateral providers' non-concessional loans mainly supported multisectoral activities, followed by social and economic sectors. Multilateral organizations also supported their recipients' adaptation to

climate change through budget support. For non-MDB multilateral institutions, this mainly refers to RST's non-concessional lending.

4.4 Geographic allocation

Non-concessional loans for adaptation were mostly provided to relatively more advanced, middle-income economies. More than three-quarters (70%) of this financing was allocated to developing countries in Asia (USD 5.8 billion per year; 37%) and Latin America and the Caribbean (USD 5.3 billion; 33%). Africa was provided an annual average of USD 3 billion (19%), followed by middle-income countries in Europe that were allocated 6% of the non-concessional total. Signatures for recipients in Oceania were insignificant (see Figure 45).

Figure 45. Regional allocation of non-concessional loans for adaptation, 2019-23 average, USD billion, 2023 prices

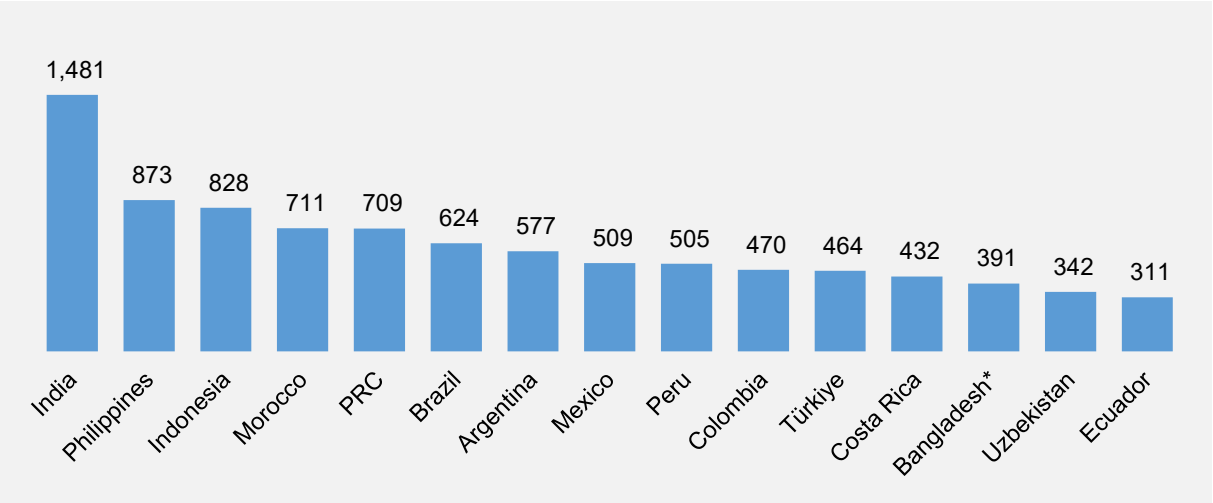


Source: TOSSD and CRS CRDF.
Note: LAC stands for Latin America and the Caribbean.

India, Philippines, Indonesia, Morocco and People's Republic of China were each allocated more than USD 0.7 billion per year, together accounting for a third of the country-allocable total (see Figure 46). Moreover, all top 15 recipients are middle-income countries and only one of them (Bangladesh) is an LDC. None of these 15 recipients is a Sub-Saharan country.

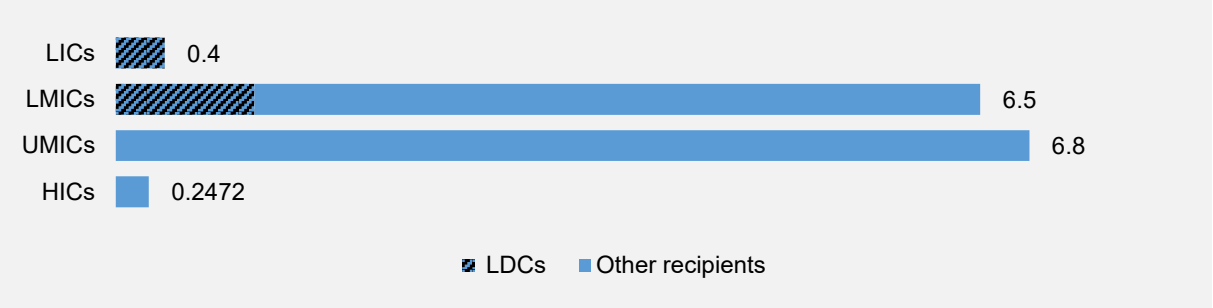
Overall, an overwhelming 96% of non-concessional loans were allocated to middle-income countries (see Figure 47). Upper-middle income countries alone accounted for a half (49%) of the total in 2019-23 and lower middle-income countries 46%. Only USD 0.4 billion (3%) was provided to the LICs, with a half of this group total allocated to three recipients: Rwanda, Uganda and Mozambique. Three high-income recipients (Panama, Chile and Uruguay) were provided USD 0.2 billion (2%) of non-concessional loans per year during the five-year period.

Figure 46. Top 20 recipients of non-concessional loans for adaptation, 2019-23 average, USD million, 2023 prices



Source: Creditor Reporting System (CRS), Total Official Support for Sustainable Development (TOSSD).
Note: PRC stands for People's Republic of China. Recipients with an asterisk (*) are classified as Least Developed Countries (LDCs).

Figure 47. Non concessional loans for adaptation by income group, 2019-23 average, USD billion, 2023 prices



Source: TOSSD and CRS CRDF.
Note: LICs stand for low-income countries, LMICs for lower-middle income countries, UMICs for middle-income countries and HICs for high-income countries.

LDCs were allocated USD 1.4 billion (10% of country-allocable average) per year of non-concessional loans and SIDS only USD 0.4 billion (3%). Non-concessional lending to these recipients was mostly driven by IDA, AfDB and IsDB. The IADB Group also played an important role in the Caribbean SIDS. All in all, however, non-concessional loans constituted the smallest share of adaptation finance for the LDCs (13%). In the case of SIDS, they represented around a quarter of total adaptation finance in 2019-23.

On a per-capita basis, developing countries and territories in Latin America and the Caribbean received the highest amount (USD 8.2), followed by middle-income countries in Europe (USD 5.9). Recipients in Africa were allocated USD 2.1 of non-concessional financing per capita and those in Asia USD 1.3 (see Figure 48). Six of the top 20 per-capita recipients were SIDS, namely Dominica, Seychelles, Saint Vincent and Grenadines, Palau, Antigua and Barbuda and Belize, with per-capita receipts ranging from USD 25 to USD 130. SIDS excluded, the largest per-

capita sums were allocated to Costa Rica (USD 426), followed by Georgia and Panama (see Figure 49). The list of top 15 recipients per capita does not include any LDC or LIC and only one of them is a country in Sub-Saharan Africa.

Figure 48. Per-capita regional allocation of non-concessional loans for adaptation, 2019-23 average, USD, 2023 prices

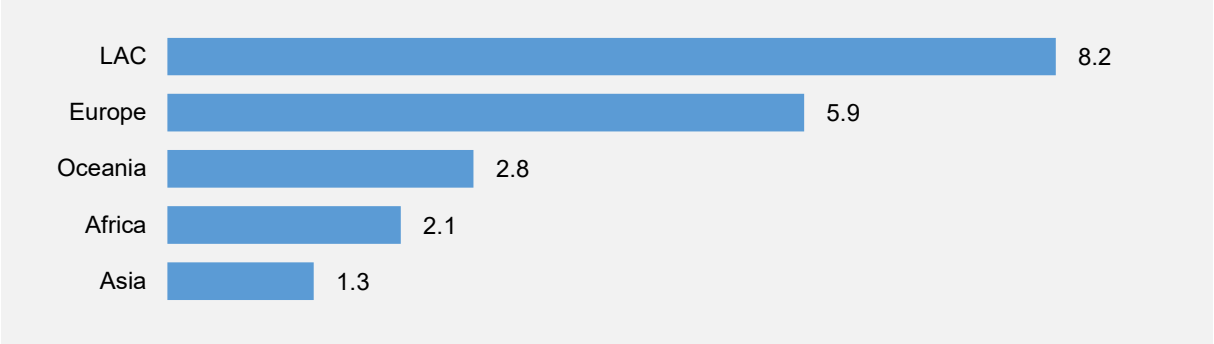
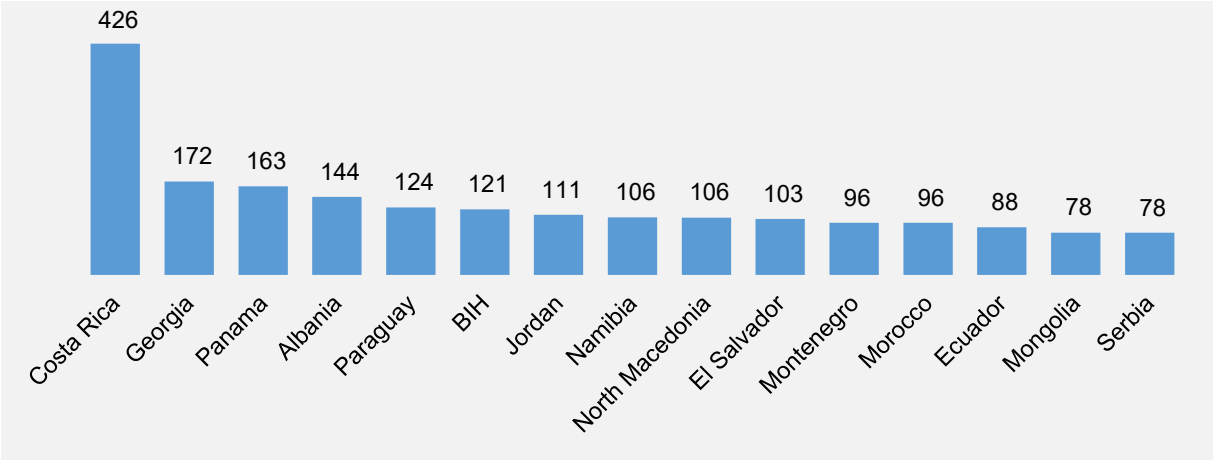


Figure 49. Per-capita top 15 recipients of non-concessional loans for adaptation (beyond SIDS), 2019-23 average, USD, 2023 prices



Source: TOSSD and CRS CRDF.
Note: BIH stands for Bosnia and Herzegovina.

4.5 Vulnerability to climate change

In 2019-23, over a half of non-concessional loans for adaptation (USD 7.3 billion) were allocated to countries and territories showing above-average vulnerability to climate change (see Figure 50). Of this, 30% was allocated to recipients with higher-middle vulnerability, 19% was to those with higher vulnerability levels, and 2% the highest degree of vulnerability. The remaining 47% was allocated to countries with lower vulnerability.

Figure 50. Distribution of non-concessional loans for adaptation by physical vulnerability to climate change, 2019-23 average, USD billion, 2023 prices

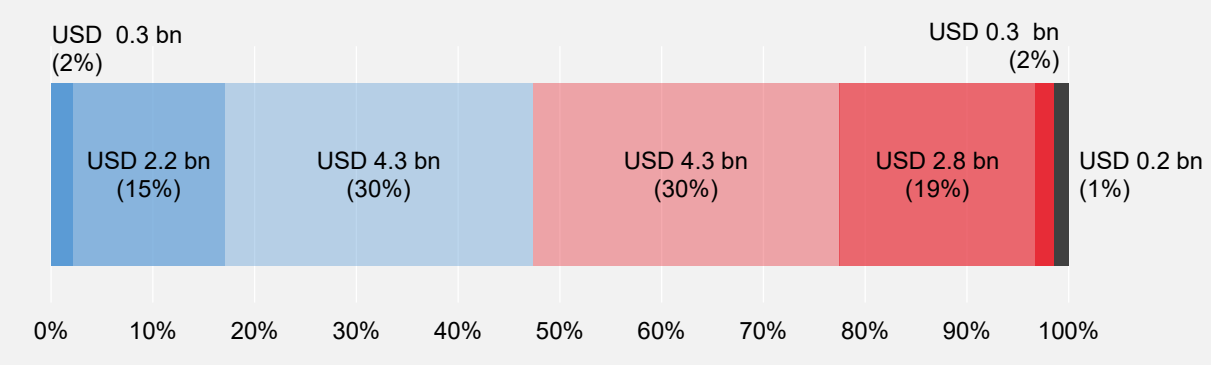
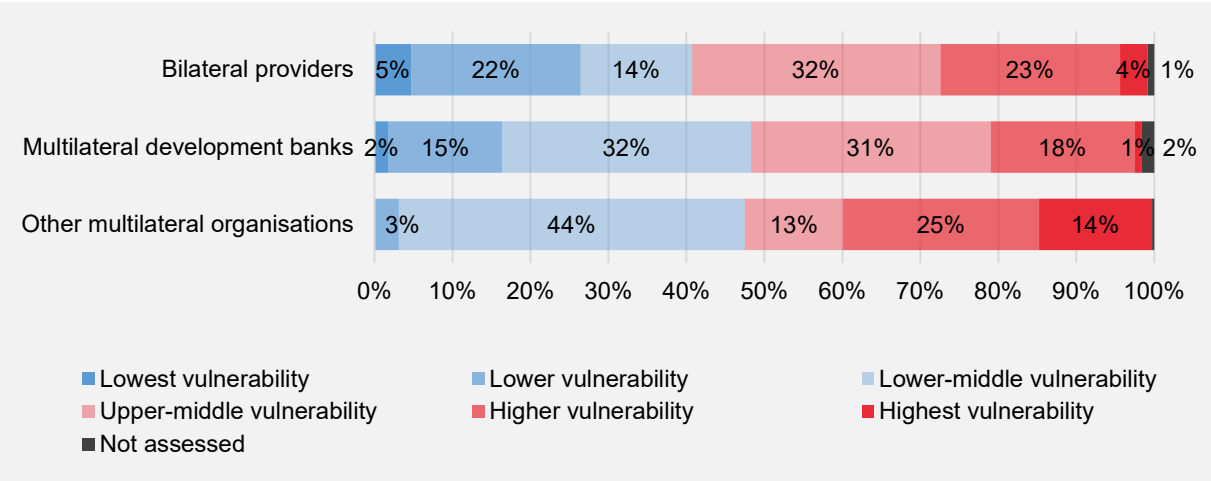


Figure 51. Distribution of non-concessional loans for adaptation by provider type and physical vulnerability to climate change, 2019-23 average, USD, 2023 prices



Source: TOSSD and CRS CRDF.

Multilateral organizations allocated slightly over a half of their non-concessional loans to countries with above-average vulnerability levels (see Figure 51). In relative terms, financing by non-MDB multilateral organization was targeted to the greatest extent to recipients with higher and highest vulnerability levels (together 39%). These providers did not sign non-concessional loans for countries with the lowest vulnerability. This trend was further nuanced by the MDBs and bilateral providers as they allocated similar portions to countries with higher/highest vulnerability levels, and lower/lowest on (see Figure 51): bilateral providers allocated 27% to either group, while for the MDBs it was 19% for recipients with higher/highest vulnerabilities, and 17% with lower/lowest.

From a per-capita perspective, recipients with the lowest or middle vulnerability were allocated the largest amounts. With the exception of the higher-middle vulnerability group, the impact of SIDS was limited. Overall, the per-capita receipts for most vulnerability groups were between USD 5 and USD 10 (see Figure 52). These observations are in stark contrast with vulnerability trends of adaptation grants.

Finally, when we look at annual allocations relative to population size in different countries based on physical vulnerability to climate change, we can see that non-concessional loans (see Figure 53) are overwhelmingly concentrated in the least vulnerable countries, which receive up to $6.6 per capita, while the most vulnerable countries receive virtually no such funding ($0.9 to $1.2).

Figure 52. Distribution of non-concessional loan based on vulnerability to climate change and per capita income of recipient countries in dollars, 2019–2023 average, 2023 prices

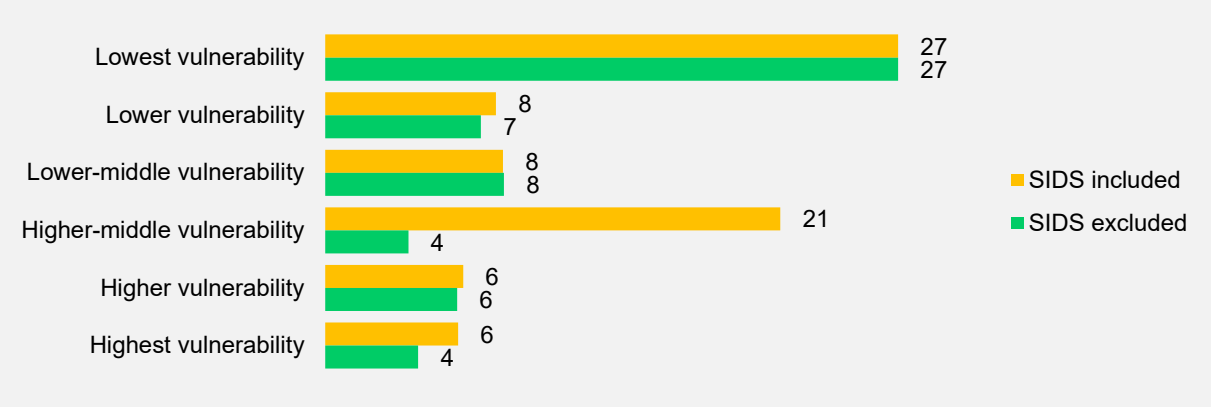
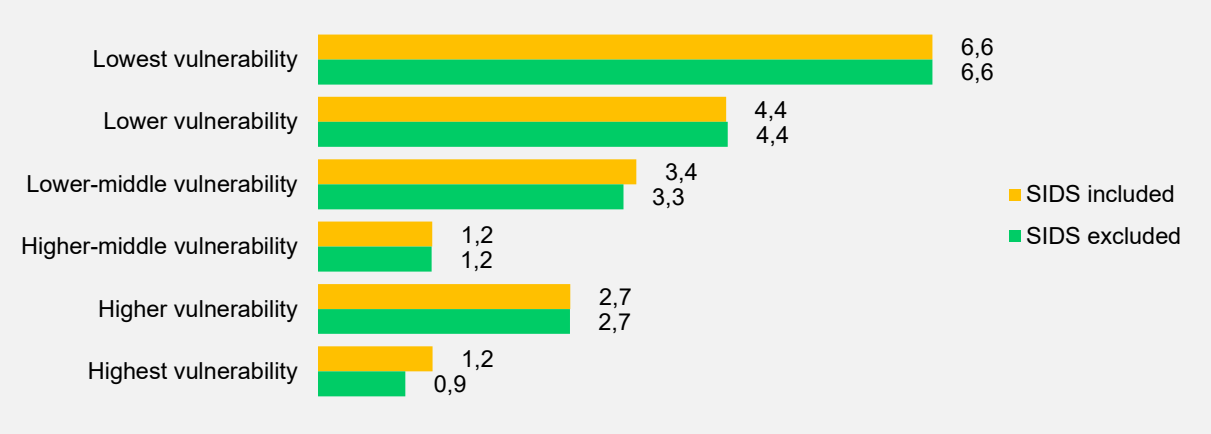


Figure 53. Per capita non-concessional loan allocations based on physical vulnerability to climate change, 2019–2023 average, in dollars, 2023 prices



Source: TOSSD and CRS CRDF.
Note: See note above.

Conclusion

During the last year under review, total international funds for adaptation reached $48.2 billion. Although it is difficult to quantify the needs of the entire developing world, the funding gap is considerable. For example, the World Resources Institute has projected that the developing world will need $340 billion per year in adaptation finance by 2030, from both public and private sources.[8]

The decline in adaptation aid commitments (grants plus concessional loans) in 2023 (-9%) is therefore worrying. This concerns multilateral aid, which fell by a total of 28% compared to 2022. On the other hand, bilateral aid has increased slightly (15%). This decline in multilateral commitments is surprising given that donor contributions to international organizations grew by 15% in 2023, which allowed overall development aid payments to remain stable in 2023 (+1.6%). The decrease in multilateral commitments for adaptation accompanied a much smaller decrease (-2.4%) in the total commitments of these institutions. The decline in adaptation aid is all the more worrying as it is likely to accelerate with the drastic reduction in international aid in 2024 (-7.1% in disbursements) and even more so in 2025, when, according to DAC forecasts (April 2025), it could fall by between 9% and 17%. As for 2026, the outlook is particularly bleak. The steady increase in non-concessional loans does not compensate quantitatively or qualitatively for the decrease in aid (grants and concessional loans), given the significant differences between recipient countries.

When we consider the channels through which adaptation flows are channelled (mainly governments) and the sectors of intervention (social sectors and rural areas), we see the importance of international finance for development policy and the fight against poverty. However, concern stems not only from the amounts of climate finance, but also from its instruments.

Climate finance for adaptation mainly takes the form of loans (62% on average during the period 2019-2023), due in particular to the weight of multilateral organisations, which are responsible for 64% of flows. As a result, low-income countries, which are generally too indebted and too poor to borrow, receive only a relatively small share of adaptation funding commitments (15% or 19% if regional flows are excluded). Similarly, only 35% of the corresponding funding has been allocated directly to LDCs. However, due to their low past growth, low-income countries are not significantly responsible for CO_2 emissions and climate change, even though they appear to be particularly vulnerable to global warming.

Thus, the most worrying aspect of climate finance for adaptation is its distribution based on the vulnerability of different countries to climate change. Commitments to relatively vulnerable countries (on average over the period 2019-2023) accounted for only 53% of flows. The most vulnerable countries received only 6% of total funding. The least vulnerable countries receive 2% of funding, and countries with low vulnerability receive 11%.

[8] Cited by Nancy Lee, Samuel Matthews and Bekir Armutlu (2024) 'MDB Strategies in the Most Climate-Vulnerable Countries: Is Adaptation a Priority?', Centre for Global Development, p. 2.

Aid (grants plus concessional loans) dominates in the most vulnerable countries: 89% of flows are committed to these countries or to highly vulnerable countries (55%) (Figure 12). This contrasts sharply with non-concessional flows, which are most prevalent in low-vulnerability countries (around 62%). Ultimately, nearly half of the flows for adaptation (all three categories of instruments combined) are allocated to less vulnerable countries (47%). As a result, per capita resources allocated are modest in vulnerable countries, with the exception of SIDS. The purely descriptive analysis conducted here[9] raises questions about the effectiveness of finance for adaptation:

- Could some of the funds allocated to countries with low vulnerability be redirected to countries that need them most due to their high vulnerability? Countries with minimal and low vulnerability receive significant resources to adapt to climate change, about one-third of which is in the form of aid (Figures 10 and 12);
- This new distribution would also mean that some of the non-concessional flows would become concessional, probably at the cost of a reduction in volumes. Under what conditions would this be possible?

This new approach mainly concerns multilateral lenders (particularly development banks), which account for 85% of non-concessional loans: would it be desirable for them to increase the concessionality of their loans, rather than simply increasing their volume?

[9] This analysis should be supplemented by an analysis of the 'selectivity' of flows for adaptation. For each donor and for the vulnerability and per capita income criteria, a weighted average indicator for recipient countries should be calculated, comparable across different sources of flows. On the other hand, it will also be possible to measure not the average impact, but the marginal impact of the vulnerability and per capita income of each recipient by econometrically estimating the elasticity of each type of flow in relation to these selectivity variables. By calculating the average vulnerability to climate change of recipient countries, we can see the extent to which each source of funding for adaptation has, in fact, been directed more or less towards vulnerable countries according to their level of vulnerability, while the marginal impact of vulnerability (or elasticity) attempts to show the extent to which each source has been specifically sensitive to the degree of vulnerability of recipient countries in its allocation choices. See Guillaumont P., Guillaumont Jeanneney S. (2024) 'Assessing the "selectivity" of aid, taking into account the vulnerability of countries', Ferdi Brief Note B261, January.

Appendix: methodological considerations

This appendix explains the methodology and sources underlying database used for the analysis presented in this paper. It covers several key concepts, such as climate adaptation finance and concessionality. This database received funding from the French Development Agency.

Key concepts

Definition of climate finance and monitoring methods

This data base considers climate finance, and climate adaptation finance in particular. The United Nations Framework Convention on Climate Change (UNFCCC) defines climate finance as resources aimed "at reducing emissions and enhancing greenhouse gas sinks, reducing vulnerability, and strengthening the resilience of human and ecological systems to the adverse effects of climate change. It also includes financing for actions identified in a country's nationally determined contribution, adaptation communication, national adaptation plan, long-term low-emission development strategy, or any other national plan aimed at implementing and achieving the objectives of the Paris Agreement and the Convention."[10]

In quantitative terms, climate finance refers to the share of each relevant activity that is exclusively devoted to supporting climate change adaptation, mitigation, or both simultaneously (see Figure A1). Climate adaptation finance therefore corresponds to the share specifically dedicated to supporting climate change adaptation. These shares are expressed using coefficients, or components, ranging from 0% to 100%. Importantly, the methodology used for calculating climate finance varies across donors.

Measurement basis: commitments rather than disbursements

All data collected applies to commitments. Although disbursements would undoubtedly provide a more accurate estimate of actual flows to recipient countries, a dataset based on commitments is more comprehensive because:

- The methods used to track climate finance are primarily designed for and applied to commitments;
- Some multilateral organisations do not yet report detailed data on their disbursements.

Joint BMD-IDFC Principles[11]

Multilateral development banks (MDBs) report on their climate finance through joint annual reports between MDBs on the one hand and IDFC members on the other, which are based on the following methodological frameworks:

[10] See Sixth Annual Assessment and Overview of Climate-related Financial Flows by the UNFCCC Standing Committee on Finance: unfccc.int/sites/default/files/resource/UNFCCC_BA6_ES_Web_FINAL.pdf

[11] MDBs Multilateral development banks; *IDFC International Development Finance Club,* a network of 27 national, regional and bilateral development banks.

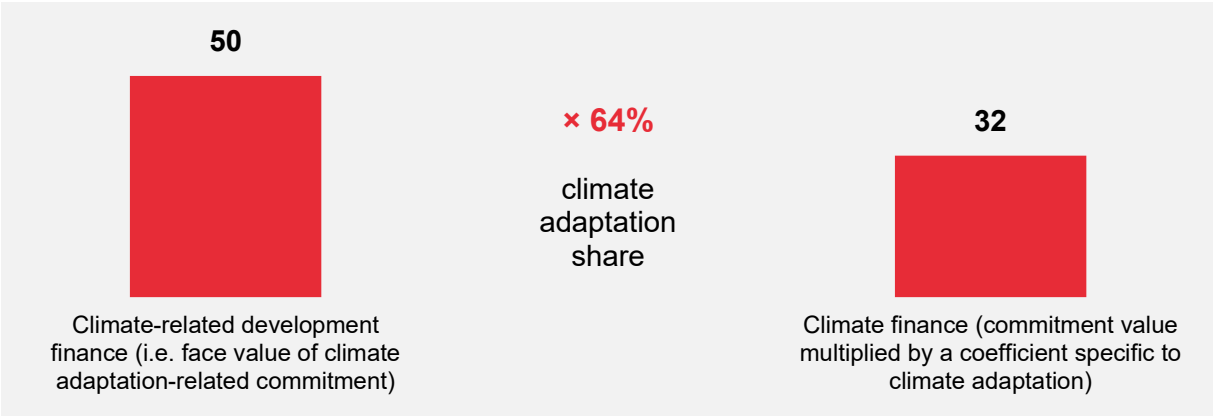
- Joint Methodology for Tracking Climate Change Adaptation Finance[12]
- Common principles for tracking climate change mitigation finance.[13]

These joint principles and methods provide guidance for identifying climate finance and calculating the shares of specific activities that explicitly contribute to climate change adaptation and/or mitigation (see Figure A1). In this context, the joint methodology on adaptation uses either an incremental or a proportional approach:

- The additive approach estimates the additional costs associated with the activities necessary to adapt the project to climate change compared to a baseline scenario where the project would aim to achieve the expected results without taking physical climate risks into account;
- The proportional approach refers to estimated adaptation finance as a proportion of multilateral development bank finance corresponding to the adaptation activities included in a project.

The climate finance components thus obtained are reported annually in the OECD's statistics on development finance. Components representing funding for both adaptation and mitigation are reported separately from those dedicated solely to adaptation or solely to mitigation. Multilateral climate components are mainly reported for commitments.

Figure A1. Calculating climate finance from climate-related development finance



Bilateral climate finance

There is a link between bilateral donors' annual reports on development finance (OECD, TOSSD) and climate finance (UNFCCC biennial transparency reports - RTB). In general, Parties to the Paris Agreement calculate their climate finance by applying fixed or semi-fixed coefficients to their

[12] See Joint Methodology for Tracking Climate Change Adaptation Finance, thedocs.worldbank.org/en/doc/20cd787e947dbf44598741469538a4ab-0020012022/original/20220242-mdbs-joint-methodology-climate-change-adaptation-finance-en.pdf

[13] Common principles for tracking climate mitigation finance, documents1.worldbank.org/curated/en/514141645722484314/pdf/Common-Principles-for-Climate-Mitigation-Finance-Tracking.pdf

development finance. The value of the coefficient depends on the DAC Rio marker used in their OECD reports. In concrete terms, activities marked with a Rio marker that have adaptation for:

- Principal (primary) objective is mostly applied a climate finance coefficient of 100%;
- Significant (secondary) objective is applied a climate finance coefficient of 100% or lower;
- Not targeting are disregarded (equal to a coefficient of 0%).

This method of converting bilateral donors' development financing into climate finance is reproduced in Table 1, which summarises the coefficients and assumptions.

Table 1. Simplified table of coefficients to calculate climate finance

Provider	Climate finance coefficient used in reporting to UNFCCC		Climate finance coefficient used in this analysis	
	Principal	Significant	Principal	Significant
Australia	Case by case	Case by case	100%	Case by case
Austria	100%	50%	100%	50%
Belgium	Case by case	Case by case	100%	40%
Canada	100%	30%	100%	30%
Czechia	100%	100%	100%	100%
Denmark	100%	50%	100%	50%
Estonia	Other	Other	100%	40%
European Commission	100%	40%	100%	40%
Finland	Case by case	Case by case	100%	40%
France	Case by case	Case by case	100%	40%
Germany	100%	50%	100%	50%
Greece	100%	40%	100%	40%
Hungary	Other	Other	100%	40%
Iceland	100%	100%	100%	100%
Ireland	100%	40%	100%	40%
Italy	100%	40%	100%	40%
Japan	100%	50%	100%	50%
Lithuania	Other	Other	100%	40%
Luxembourg	Other	Other	100%	40%
Netherlands	100%	40%	100%	40%
New Zealand	100%	30% or 50%	100%	40%
Norway	100%	40%	100%	40%
Poland	100%	100%	100%	100%
Portugal	100%	40%	100%	40%
Slovak Republic	Case by case	Case by case	100%	40%
Slovenia	100%	100%	100%	100%
Spain	100%	50%	100%	50%
Sweden	100%	40%	100%	40%
Switzerland	85%	85% or 50%	85%	50%
United Kingdom	Case by case	Case by case	100%	40%
United States	Other	Other	100%	40%

Source: Results of the survey on the coefficients applied to Climate Change Rio marker data when reporting to the UNFCCC: one.oecd.org/document/DCD/DAC/STAT(2024)28/REV1/en/pdf

As shown in the table above, where bilateral providers calculate their climate finance on a case-by-case basis or otherwise, without using fixed or semi-fixed coefficients, this analysis assumes a 100% coefficient for activities reported with a principal objective, and 40% for those with a significant objective. The latter value is consistent with the practice of the largest bilateral donors that use fixed coefficients—the average of fixed coefficients used by Canada, Germany, Italy and Japan is 42.5% and median is 45%.

In addition, climate adaptation funding by all other donors using Rio markers is also calculated by applying coefficients of 100% or 40%, depending on the value of the marker. Furthermore, climate funding from donors who report their data exclusively to TOSSD is calculated by applying a coefficient of 100%. According to a qualitative analysis, activities identified as contributing to SDG 13 (Climate Action) very explicitly incorporate climate objectives, which could justify the 100% coefficient. For the purposes of this analysis, the climate intensity of these activities was therefore equated with the DAC's main marker.

Data sources

This dataset combines two categories of public data, both downloaded in the second quarter of 2025:

- **OECD statistics on development finance**, including the dataset entitled 'Climate-related development finance, recipient perspective' (FDLC) for the years 2019-2023. This dataset is based on donor reports on development finance via the OECD's Creditor Reporting System (CRS). The FDLC dataset includes activities targeting climate objectives, using DAC Rio markers or multilateral climate components;[14]
- **Total Official Support for Sustainable Development (TOSSD)**. This dataset includes cross-border flows to TOSSD recipients, expenditure on international public goods, global challenges and development enablers, as well as private financing mobilised. TOSSD is managed by the International Forum on TOSSD, composed of traditional providers, G77 member countries, and international organisations. The Forum Secretariat is hosted by the OECD.[15]

The FDLC database is enriched with the following TOSSD elements:

- Adaptation activities by donors that only report to TOSSD. This mainly includes South-South providers in Latin America and Asia, as well as several multilateral organisations. Activities aimed at climate change adaptation are identified via the SDG field, the keywords #ADAPTATION and the descriptive fields if they clearly indicate that they relate to adaptation objectives;
- Cross-border resource flows to TOSSD recipients that are not ODA recipients. This includes countries and territories that were on the DAC List of ODA Recipients for 2015 (the date of publication of the Addis Ababa Agenda) but have since been excluded, namely Antigua and Barbuda, the Cook Islands, Chile, Seychelles and Uruguay.

[14] See www.oecd.org/en/topics/sub-issues/development-finance-for-climate-and-the-environment.html
[15] See tossd.online/

The climate adaptation finance dataset does not use UNFCCC data for practical and methodological reasons. OECD and TOSSD data cover a broader scope, including more comprehensive data in terms of analytical categories and the number of reporting entities. Furthermore, OECD and TOSSD statistics benefit from a higher degree of methodological standardisation and are reported annually. However, calculating climate finance based on OECD and TOSSD data may result in slight quantitative discrepancies compared to the UNFCCC's biennial transparency reports (BTRs). These discrepancies are mainly due to the use of different exchange rates, the measurement point (commitments versus a combination of commitments and disbursements), the non-standardised estimation of climate-specific amounts, the definition of developing countries, etc. In addition, UNFCCC Parties may report on their climate actions through export credits and private finance mobilised, which are not included in this analysis.

Some bilateral development banks from the 'North', such as AFD, are members of the IDFC and calculate their climate finance according to the joint MDB-IDFC principles. However, this data is not currently reported to either the OECD or TOSSD.

Other sources

Other datasets, classifications and sources used in this analysis include:

- Human Development Index (HDI), published by the United Nations Development Programme (UNDP): hdr.undp.org/data-center/human-development-index#/indicies/HDI
- World Bank (WB) lending groups: datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups
- 2023 list of Least Developed Countries (LDCs), published by the Office of the United Nations High Representative for LDCs, Landlocked Developing Countries and Small Island Developing States (OHRLLS): www.un.org/ohrlls/content/least-developed-countries
- 2023 list of Small Island Developing States (SIDS), published by OHRLLS: www.un.org/ohrlls/content/list-sids
- 2023 list of Landlocked Developing Countries (LLDCs), published by OHRLLS: www.un.org/ohrlls/categories/lldcs
- Population 2023 by country, published by the World Bank: data.worldbank.org/indicator/SP.POP.TOTL
- Physical vulnerability index to climate change, published by FERDI: ferdi-indicators.shinyapps.io/PVCCI/
- List of TOSSD codes: tossd.org/methodology/

Concessionality

One of the objectives of this study is to understand the role of concessionality in providers' allocation behaviour. The analysis therefore distinguishes between grants, subsidised (concessional) loans and non-subsidised (non-concessional) loans.

While grants are fully concessional by nature, the concessionality of debt instruments depends on their terms and conditions, including:

- Maturity (loan duration from commitment to last repayment of principal);
- Grace period (loan duration from commitment to the first repayment of principal);
- The rate of interest;
- Repayment schedule (frequency of principal and interest payments).

These terms and conditions are mathematically compared to those available at the market. Parametric discount rates are used as approximative market interest rates. In general, the grant element (concessionality level) rises with:

- Extended maturity;
- Longer grace period;
- Lower rate of interest;
- Smaller frequency of principal and interest payments.

In typical development loans, the interest rate plays the most significant role in the grant element calculation. Also, only loans with below-market interest rates have an element of grant. Others are automatically non-concessional.

There are several parameters used for assessing loan concessionality in the context of development finance (and by extension climate finance), among which OECD rules on Official Development Assistance (ODA) and IMF concessionality rules. This analysis used the IMF concessionality rules as they are stricter in terms of discount rates and concessionality thresholds (see Table 2) and thus allow for a more conservative estimation of which loans are likely subsidised and which are not.[16]

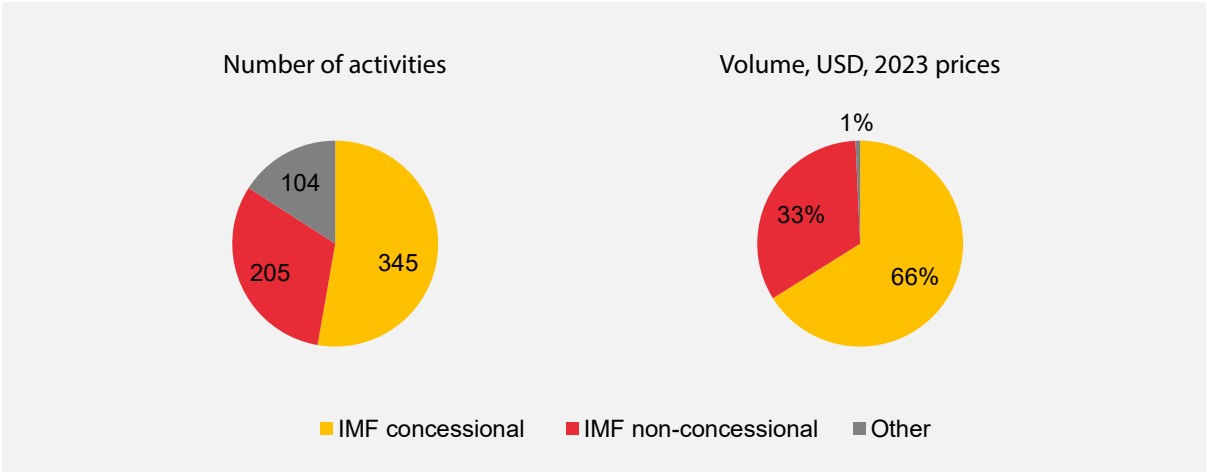
This choice involved harmonising OECD and TOSSD data, since according to TOSSD, the concessionality of each debt is assessed according to IMF concessionality rules, while OECD statistics use several methods and rules, including those relating to ODA flows and others for disbursements by multilateral organisations. By way of illustration, one-third of loan commitments classified as ODA flows are not concessional according to IMF rules (see Figure A2).

[16] The concessionality levels of ODA flows are calculated using risk-adjusted discount rates (5%/6%/7%/9%) and concessionality thresholds (10%/25%/45%). The IMF rules, in contrast, used a unified discount rate (5%) and concessionality threshold (35%).

Table 2. Discount rates and thresholds used in CRS and TOSSD

Flow type	Database	Recipient	Discount rates	Concessionality thresholds
ODA flows	OECD Creditor Reporting System (CRS)	LICs and LDCs	9%	45%
		LMICs	7%	25%
		UMICs	6%	10%
		MDBs and global institutions	5%	10%
		Other regional institutions	6%	10%
Multilateral outflows		Any	5%	35%
Any	TOSSD	Any	5%	35%

Figure A2. Climate adaptation financing reported as ODA flows according to IMF concessionality



Avoiding double counting

In addition, the combined dataset was thoroughly reviewed to exclude activities that could result in double counting between inflows and outflows from multilateral institutions or representing costs in provider countries. Here are some concrete examples of activities that were removed:

- Contributions to the Climate Investment Funds (CIF), the Global Environment Facility (GEF), the International Fund for Agricultural Development (IFAD), the Poverty Reduction and Growth Trust (PRGT), the Private Infrastructure Development Group (PIDG) and others. These inflows were most likely intended to strengthen the core resources of these institutions (rather than specific programmes, trust funds, etc.), which would result in double counting with the outflows from these institutions.
- Capital increases for development finance institutions (DFIs) in provider countries. Since the outflows from these agencies are included in the dataset, this would result in double counting with capital increases.

- Costs charged to students, development (and climate) awareness in provider countries, and administrative costs.

Temporary nature of the database

The database was created in June 2025 and does not take into account any subsequent changes made to the data by the OECD or the Secretariat of the International Forum on TOSSD.

This analysis does not use the UNFCCC dataset for practical and methodological considerations. For instance, the OECD and TOSSD data have a greater coverage, including more complete data in terms of analytical categories and number of reporters. Also, the OECD and TOSSD statistics enjoy a greater degree of methodological standardisation and are reported annually. At the same time, however, the calculation of climate finance based on the OECD and TOSSD dataset can result to minor quantitative divergences from the UNFCCC BTRs.

Analytical categories

The dataset includes the following fields and analytical categories:

Data field name	Data field description
Year	Year of commitment/signature of the reported activity.
Provider code	CRS-TOSSD code of the provider country of multilateral organisation.
Provider name	Name of the provider country or multilateral organisation.
Provider abbreviation	Abbreviation of the provider country or multilateral organisation.
Provider type	Type of provider.
Extending agency code	CRS-TOSSD code for the sub-provider entity (agency, trust fund etc.) committing the transaction.
Extending agency name	Name of the sub-provider entity (agency, trust fund etc.) committing the transaction.
CRS-TOSSD identification number	CRS-TOSSD unique identification number.
Project number	Provider's own identification code, as reported.
Recipient code	CRS-TOSSD code of the recipient country, territory or region, as reported.
ISO-3 code	ISO-3 code of the recipient country or territory.
Recipient name	Name of the recipient country, territory or region.
Sub-region name	Name of the sub-region to which the recipient country, territory or region belongs.
Region name	Name of the region to which the recipient country, territory or region belongs.
WB lending group (2025)	The WB lending group for the calendar year 2023, indicating the income group of the recipient country or territory.
LDCs (2025)	A binary indication whether the recipient country or territory belongs to the UN list of Least Developed Countries as of 2025.
SIDS (2025)	A binary indication whether the recipient country or territory belongs to the UN list of Small Island Developing Countries as of 2025.

Data field name	Data field description
LLDCs	A binary indication whether the recipient country or territory belongs to the UN list of Land-Locked Developing Countries as of 2025.
Vulnerability – MVI	Multidimensional Vulnerability Index, as calculated by UN.
Vulnerability - PVCCI	Physical Vulnerability to Climate Change Index, as calculated by FERDI.
HDI (2023)	Human Development Index, as calculated by UN.
Flow type	Type of flow in DAC statistics or TOSSD, as relevant.
IMF concessionality (TOSSD)	A binary indication whether the loan is concessional according to IMF rules (concessional threshold of 35%, calculated using the rate of discount 5%).
Tracking method	A method used for tracking climate theme: DAC Rio markers, MDB climate components or TOSSD keywords.
Climate theme	An indication whether an activity aims at climate change mitigation only or also climate change mitigation (overlap or cross-cutting).
Rio marker: adaptation	If the tracking method is Rio markers, the marker value for mitigation.
Climate finance coefficient	A coefficient used for calculating climate finance.
Climate finance adaptation coefficient	A coefficient used for calculating climate finance for adaptation.
Commitment (USD thousand)	Amount committed or signed in thousands of USD dollars.
CF adaptation amount (USD thousand)	Amount of climate finance in thousands of USD dollars, calculated as commitment × climate finance adaptation coefficient.
Commitment (USD thousand) - 2023 prices	Amount committed or signed in thousands of USD dollars, adjusted to 2023 prices.
CF adaptation amount (USD thousand) - 2023 prices	Amount of climate finance in thousands of USD dollars, calculated as commitment × adaptation coefficient, adjusted to 2023 prices.
Channel code	CRS-TOSSD channel code (level 1), as reported.
Channel name	Title of the channel code (level 1).
Parent channel code	More generic channel code (level 2).
Parent channel name	Title of the more generic channel code (level 2).
Grandparent channel code	Most generic channel code (level 3).
Grandparent channel name	Title of the most generic channel code (level 3).
Purpose code	CRS-TOSSD purpose/sector code (level 1), as reported.
Purpose name	Title of the purpose/sector code (level 1).
Sector code	More generic purpose/sector code (level 2).
Sector name	Title of the more generic purpose/sector code (level 2).
Sector group code	Most generic purpose/sector code (level 3).
Sector group name	Title of the most generic purpose/sector code (level 3).
Cooperation modality code	CRS-TOSSD co-operation modality code, as reported.
Cooperation modality name	Title of the co-operation modality code (level 1).
Modality group code	More generic code of co-operation modality (level 2).

Data field name	Data field description
Modality group name	Title of the more generic code of co-operation modality (level 2).
Financial instrument code	CRS-TOSSD financial instrument code, as reported.
Financial Instrument name	Title of the financial instrument code (level 1).
Financial Instrument group code	More generic financial instrument code (level 2).
Financial Instrument group name	Title of the more generic financial instrument code (level 2).
Type of finance (analytical category)	Categories of financial instruments developed for analytical purposes: grants, concessional loans, non-concessional loans, equity, other or unspecified.
Project Title	Project title or short description of the reported activity.
Description	Detailed description of the reported activity.
Notes	Notes if needed.

Abbreviations

ADF	African Development Fund
AfDBG	African Development Bank Group
AsDBG	Asian Development Bank Group
CRDF	Climate Related Development Finance Dataset
CRS	Creditor Reporting System
DAC	Development Assistance Committee
EC	European Commission
EU	European Union
FAO	Food and Agriculture Organization of the United States
FERDI	Fondation pour les Etudes et Recherches sur le Développement International
GCF	Green Climate Fund
GEF	Global Environment Facility
HDI	Human Development Index
HICs	High Income Countries
IADBG	Inter-American Development Bank Group
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
LDCs	Least Developed Countries
LICs	Low Income Countries
LLDCs	Landlocked Developing Countries
LMICs	Lower Middle-Income Countries
MICs	Middle Income Countries
ODA	Official Development Assistance
OHRLLS	Office of the High Representative for the Least Developing Countries and Small Island Developing States
PVCCI	Physical Vulnerability to Climate Change Index
SDG	Sustainable Development Goals

SIDS	Small Island Developing States
TOSSD	Total Official Support for Sustainable Development
UMICs	Upper Middle-Income Countries
UN	United Nations
UNDP	United Nations Development Programme
USD	United States Dollars
WBG	World Bank Group

“Sur quoi la fondera-t-il l’économie du monde qu’il veut gouverner ? Sera-ce sur le caprice de chaque particulier ? Quelle confusion ! Sera-ce sur la justice ? Il l’ignore.”

Pascal

FERDI

Créée en 2003, la **Fondation pour les études et recherches sur le développement international** vise à favoriser la compréhension du développement économique international et des politiques qui l’influencent.

Contact
www.ferdi.fr
contact@ferdi.fr
+33 (0)4 43 97 64 60