Climate Finance Provided and Mobilised by Developed Countries in 2016-2020

Insights from disaggregated analysis

OECD
BETTER POLICIES FOR BETTER LIVES

Climate Finance and the USD 100 Billion Goal

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Context

At the 15th Conference of Parties (COP15) of the UNFCCC in Copenhagen in 2009, developed countries committed to a collective goal of mobilising USD 100 billion per year by 2020 for climate action in developing countries, in the context of meaningful mitigation actions and transparency on implementation (UNFCCC, 2009[1]). The goal was formalised in the Cancun Agreements adopted at COP16 (UNFCCC, 2010[2]). At COP21 in Paris, the annual USD 100 billion goal was extended to 2025 (UNFCCC, 2015[3]).

Since 2015, at the request of donor countries, the OECD has produced analyses of progress towards this goal1. These analyses are based on best-available data and a robust accounting framework, consistent with the outcome of COP24 agreed to by all Parties to the Paris Agreement as regards the funding sources and financial instruments related to reporting of information on financial resources provided and mobilised through public interventions (UNFCCC, 2019[4]).

OECD figures capture four distinct components of climate finance provided and mobilised by developed countries: (i) Bilateral public climate finance provided by developed countries' bilateral agencies and development banks; (ii) Multilateral public climate finance provided by multilateral development banks and multilateral climate funds, attributed to developed countries; (iii) Climate-related officially supported export credits, provided by developed countries' official export credit agencies, and (iv) Private finance mobilised by bilateral and multilateral public climate finance, attributed to developed countries.

As such, the climate finance figures presented in this report do not capture all finance for climate action in developing countries. Due to the geographical scope of the USD 100 billion goal, the figures include neither developing countries' domestic public climate finance, nor bilateral public climate finance between developing countries (so-called South-South cooperation), or multilateral and mobilised private climate finance attributable to developing countries. Further, the figures do not include either private finance catalysed by public policy interventions, for which there is no measurement methodology, or private finance invested in the absence of public interventions.

In 2022, the OECD published a first report "Aggregate Trends of Climate Finance Provided and Mobilised by Developed Countries in 2013-2020", which adds figures for 2020 to the previously published 2013-2019 time series, thereby providing an aggregate-level assessment against the initial target year of the goal (OECD, 2022[5]). The present report provides complementary analysis and insights by further exploring key trends within individual climate finance components as well as the distribution and concentration of climate finance provided and mobilised across different developing country characteristics and groupings. This report also considers questions relating to enabling environments, impacts and effectiveness of climate finance, as well as to meaningful mitigation action and transparency on implementation.

The report was jointly prepared by the OECD's Environment and Development Co-operation Directorates. It also benefited from dedicated 2020 data inputs by the OECD Trade and Agriculture Directorate (for the majority of export credits) as well as donor countries (provision of 2019-2020 bilateral public climate finance in advance of UNFCCC reporting, delayed to later in 2022).

[1] See OECD book series "Climate Finance and the USD 100 Billion Goal", at https://doi.org/10.1787/5f1f4182-en

Key messages

The OECD report "Aggregate Trends of Climate Finance Provided and Mobilised by Developed Countries in 2013-2020" (OECD, 2022[5]), released in July 2022, presented aggregate figures and trends to 2020, the initial target year of the USD 100 billion goal. The first section of the Key Messages recaps these.

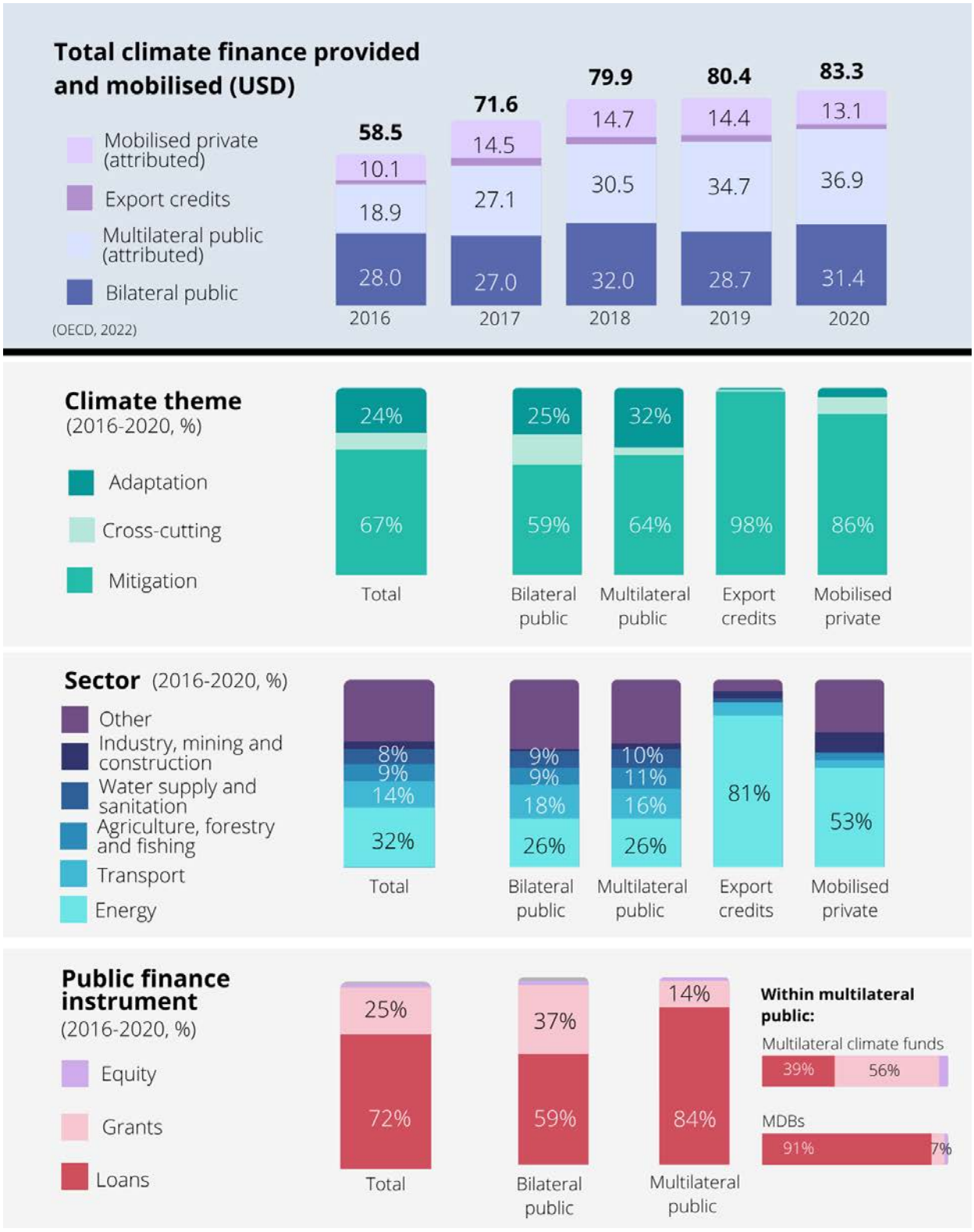
The present complementary report, focused on the period 2016-2020, provides disaggregated analysis and insights relating to the distribution and concentration of climate finance provided and mobilised across climate themes, sectors, financial instruments, as well as based on different developing country characteristics and groupings (see "Insights from observed trends", below). These insights may, however, not be representative of the wide range of individual characteristics of climate finance providers' portfolios or of developing country circumstances.

The report also considers questions relating to the impacts and effectiveness of climate finance, as well as to meaningful mitigation action and transparency on implementation (see "Insights on effectiveness, impacts and transparency", below).

Recap of 2020 figures and aggregate trends

- USD 83.3 billion was provided and mobilised by developed countries for climate action in developing countries in 2020. While increasing by 4% from 2019, this was USD 16.7 billion short of the USD 100 billion per year by 2020 goal.
- In 2020, public climate finance (both bilateral as well as multilateral attributable to developed countries) grew and continued to account for the lion's share of the total (USD 68.3 billion or 82%). Private finance mobilised by public climate finance (USD 13.1 billion) decreased slightly compared to earlier years, while climate-related export credits remained small (USD 1.9 billion).
- Mitigation finance still represented the majority (58%) in 2020, despite a USD 2.8 billion drop compared to 2019. Adaptation finance grew, in both absolute (USD 8.3 billion increase compared to 2019) and relative terms (34% in 2020 compared to 25% in 2019). Such an increase is, to a great extent, the result of a few large infrastructure projects. Cross-cutting activities remained a minority category (7%) almost exclusively used by bilateral public providers.
- Mitigation finance focused mainly (46%) on activities in the energy and transport sectors. In contrast, adaptation finance was spread more evenly across a larger number of sectors and focused on activities in the water supply and sanitation sector, and agriculture, forestry and fishing.
- As in all previous years, loans accounted for over 70% of public climate finance provided (71% or USD 48.6 billion in 2020, including both concessional and non-concessional loans). The share of grants was stable compared to 2019 (26% or USD 17.9 billion). Public equity investments continued to be very limited.
- Over 2016-2020, climate finance provided and mobilised mainly targeted Asia (42%) and middle-income countries (43% and 27% for lower- and upper-middle-income countries respectively). Further, 50% of the total was concentrated in 20 countries in Asia, Africa and the Americas that represented 74% of all developing countries' population.

Infographic 1. Climate finance provided and mobilised



Source: Based on Biennial Reports to the UNFCCC, OECD DAC and Export Credit Group statistics, complementary reporting to the OECD. Top figure adjusted from (OECD, 2022[5]).

Insights from disaggregated data analysis

Thematic split between mitigation and adaptation:

- Climate finance provided and mobilised by developed countries in 2016-2020 largely focused on mitigation in relatively high-emitting countries. The likely drivers of this trend include more readily-available pipelines of sizeable and financially sustainable projects for mitigation than for adaptation.
- The relative share of adaptation finance varied widely within and between country groups. Between 2016 and 2020, nearly half of total climate finance provided and mobilised for Small Island Developing States (SIDS) and Least Developed Countries (LDCs) targeted adaptation. Per capita adaptation finance in these countries was above the average for developing countries as a whole.
- Many developing countries, including LDCs, lack adequate capacity to develop and implement climate finance projects, as well as to access and manage international funding, thus preventing them from securing larger volumes of both adaptation and mitigation finance.

Public finance instruments:

- While loans represented the majority of both multilateral and bilateral public climate finance throughout 2016-2020, the instrument split varied significantly between provider types. The mandate and operating model of multilateral climate funds and bilateral aid agencies typically rely on paid-in contributions and budget allocations. As a result, these funds and agencies are able to commit more funds as grants. In contrast, the mandate and business model of many multilateral development banks (MDBs) and bilateral development finance institutions rely more on financial instruments that lead to repayment and interest (loans) or exit and return prospects (equity).
- Grants represented a much higher share of finance for adaptation and cross-cutting activities than for mitigation between 2016 and 2020. Grants typically support capacity building, feasibility studies, demonstration projects, technical assistance, and activities with low or no direct financial returns but high social returns. Public climate finance loans are often used to fund mature or close-to-mature technologies as well as large infrastructure projects with a future revenue stream, which are predominant for mitigation finance as well as in middle-income countries.
- Grants represented a larger share of climate finance for SIDS, LDCs and fragile states, compared to developing countries overall. Countries within these three categories often present economic and socio-political conditions that do not favour loan-based finance due to limited absorptive and repayment capacity. Recipient institutions and projects in middle- and high-income countries tend to have a relatively higher capacity to seek, absorb, deploy and repay loans.

Private finance mobilisation:

- Increasing private climate finance mobilisation has proved challenging. After increasing between 2016 and 2017, it stagnated over 2017-2019 and dropped in 2020. The ability of developed countries to mobilise private finance for climate action in developing countries is influenced by many factors. These include the composition of bilateral and multilateral providers' portfolios (mitigation-adaptation, instruments and mechanisms, geography, and sectors), policy and broader enabling environments in developing countries, as well as general macroeconomic conditions.
- Adaptation continued to represent a small share of total private climate finance mobilised. In contrast to many mitigation projects, notably in the energy sector, adaptation projects often lack the revenue streams needed to secure large-scale private financing. It is also challenging to mobilise private finance for activities that increase the resilience of smaller actors, e.g. small enterprises, and farmers.
- Public finance providers used different mechanisms to mobilise private finance in different country, sector and risk contexts. The data analysis in this report and a qualitative OECD survey of providers' portfolios confirmed the key role of project finance, guarantees and syndicated loans in

mobilising private finance at scale for large projects. Simple co-financing and credit lines were found to be well suited to target the mobilisation of relatively smaller actors.

- Most private climate finance was mobilised for projects in middle-income countries with relatively conducive enabling environments and relatively low-risk profiles. There are, however, differences between different types of providers. Overall, MDBs mobilised a larger proportion of private finance for developing countries with a relatively higher risk profile than bilateral providers and, even more so than multilateral climate funds.
- There are options for both providers and recipients to increase private finance mobilisation. This includes enhancing developing countries' national investment regulations and broader enabling environments, as well as the development of project pipelines and large-scale investment opportunities. On the provider side, the OECD survey suggests the potential to develop innovative financial mechanisms, and to better tailor the blending of public and private resources and instruments in different country, sector, and risk contexts.

Insights on effectiveness, impacts and transparency

- The analysis in this report is based on official climate finance data reported by bilateral and multilateral providers. Methodologies to track adaptation- and mitigation-specific finance as well cross-cutting finance differ between providers and may vary over time, both of which can impact the volumes and thematic split of climate finance. Investments in large infrastructure projects also contribute significantly to year-on-year variations of public and mobilised private finance figures. Further efforts by individual public climate finance providers to report detailed activity-level data and methodological changes are key to fulfilling basic analytical needs and building trust.
- Climate finance provided and mobilised by developed countries is a means to an end. Assessing its effectiveness is important but complex. Besides detailed activity-level impact analysis, it requires a holistic evaluation of changes achieved, which faces data limitations and difficulties to identify appropriate timeframes for evaluation and attribute causality. Moreover, effectiveness may be understood differently by different communities.
- Continued efforts from both providers and recipients to better measure impacts could contribute to enhanced effectiveness assessments. This would include addressing the following challenges:
  - Aggregation of information available on the mitigation and adaptation outcomes of climate finance provided and mobilised remains challenging because such information is reported using different methodologies, approaches and indicators.
  - Developed countries have committed to the USD 100 billion per year goal in the context of “meaningful mitigation actions and transparency on implementation”. Only very limited information is available on the uses and impacts of climate finance received by developing countries and on actions implemented. This is in part due to the non-mandatory nature of developing countries’ reporting requirements under the UNFCCC on these issues, and the limited capacity of developing countries to collate such information.
- There is a growing recognition that international action needs to look beyond direct climate-specific results, to be geared towards supporting, enabling and accelerating more generally the transition towards low greenhouse gas emissions and climate-resilient development. In this context, the integration by developing countries of climate change policies and targets (e.g. as laid out in Nationally Determined Contributions) into broader national development plans and processes is an important enabler for effective, country-owned climate action.

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Climate finance provided and mobilised: an analysis by climate theme

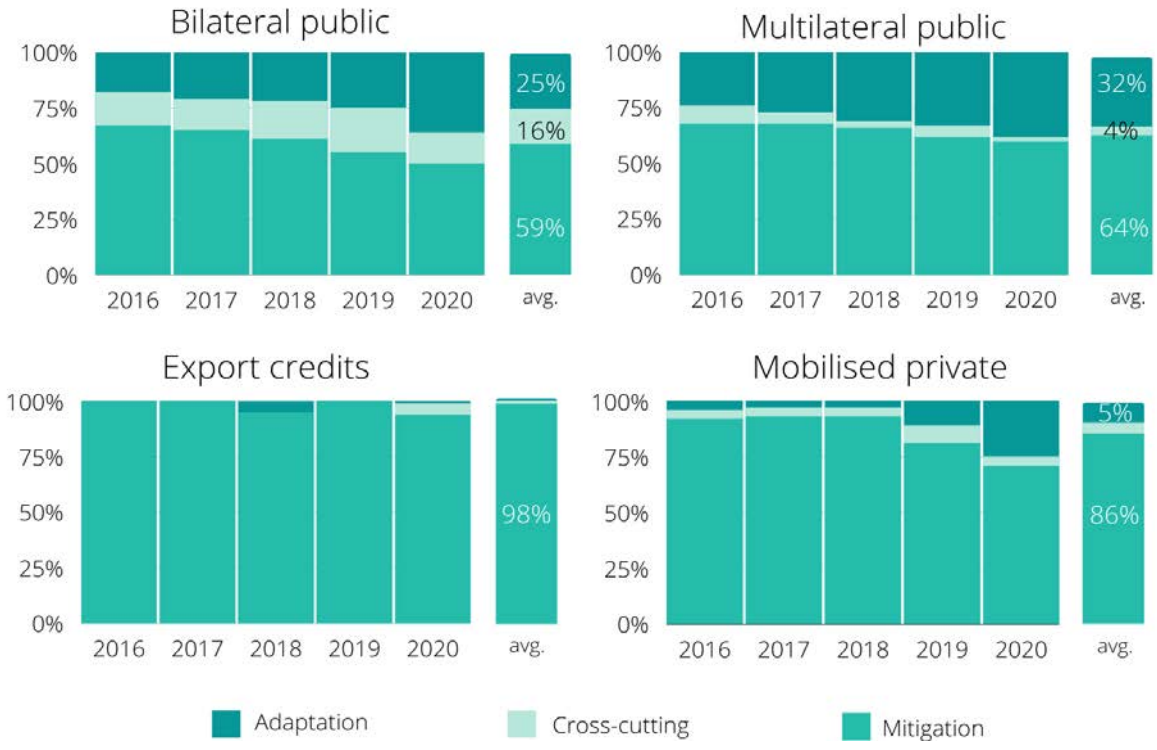
This Chapter provides disaggregated analysis and insights of the evolution of mitigation, adaptation and cross-cutting climate finance. It explores the characteristics of the climate theme split per provider types and sectors, and based on various recipient country characteristics and groups. The analysis covers all four climate finance components: bilateral public, multilateral public, export credits and mobilised private.

As presented in (OECD, 2022[5]), total climate finance provided and mobilised by developed countries for developing countries amounted to USD 83.3 billion in 2020. Of this total, USD 48.6 billion (58%) was for mitigation, USD 28.6 billion (34%) for adaptation, and USD 6.0 billion (7%) for cross-cutting activities. Between 2016 and 2020, adaptation finance grew the most in absolute and relative terms. In 2016, mitigation accounted for USD 42.2 billion (72%), adaptation for USD 10.1 billion (17%) and cross-cutting for USD 6.2 billion (11%).[2]

Climate theme split across the four climate finance components

In each of the four components, mitigation finance represented on average the largest share throughout the period 2016-2020, although its share varied considerably across the four (Figure 1). Mobilised private climate finance and export credits were almost exclusively mitigation-focused, whereas about one-fourth of public climate finance targeted adaptation.[3] Cross-cutting finance, which can relate to both mitigation and adaptation, represented a relatively large share of bilateral public finance (16% on average in 2016-2020), but less than 5% of multilateral public, export credits and mobilised private climate finance over the same period. Among multilateral providers, the share of cross-cutting finance was higher for multilateral climate funds (16%) than MDBs (2%). Both MDBs and climate funds provide and mobilised similar shares of adaptation-focused finance (32% and 30%, respectively).

Figure 1. Climate theme split by climate finance component in 2016-2020 (%)



Source: Based on Biennial Reports to the UNFCCC, OECD DAC and Export Credit Group statistics, complementary reporting to the OECD.

[2] The sum of individual climate theme components may not add up to totals due to rounding.

[3] For export credits, this thematic split is at least in part due to coverage biases, as available export credit data focuses almost solely on renewable energy-related transactions (see Annex A for further detail).

The share of finance targeting only adaptation remained below one-third in each component but increased in bilateral and multilateral public finance between 2016 and 2020. In particular, the share of adaptation finance in bilateral climate finance doubled, from 18% in 2016 to 36% in 2020. The share of adaptation finance in mobilised private witnessed a significant jump in 2019-2020, increasing from 11% to 25%. This increase is mainly due to one large-scale infrastructure project in an African LDC supported by a multilateral institution and reported with a large climate change adaptation component. This project exemplifies how single investments can contribute substantially to driving up climate finance across themes, sectors, or geographies, as further explored later in this Chapter (page 19).

Climate finance reported as cross-cutting relates to projects with both mitigation and adaptation benefits or to climate finance that was not yet allocated to mitigation and/or adaptation at the point of reporting, e.g. capacity-building grants, which the recipient will decide the use of. The share of cross-cutting finance progressively decreased for MDBs over the five years but remained relatively large for bilateral providers and multilateral climate funds. This difference is, however, likely due to different methodological and reporting practices, which in turn can have an impact on the volumes and thematic split of climate finance. In contrast to bilateral providers and multilateral climate funds, MDBs seldom use the cross-cutting category in their climate finance tracking and reporting, as they strive to separate the mitigation and adaptation components within individual projects addressing both objectives (MDB group, 2021[6]). For bilateral public climate finance, the format in which data is reported does not allow for conducting a granular analysis of the exact nature of the activities reported as “cross-cutting”. Nonetheless, it can be observed that in the last years an increasing number of bilateral providers have also strived to reduce the use of the cross-cutting category in reporting their climate finance contributions (see Annex A).

Climate themes across sectors

Mitigation finance focused significantly on the energy (46%) and transport (17%) sectors, which combined accounted for almost two-thirds of the total mitigation finance in 2016-2020. All other sectors accounted each for less than 6% of total mitigation finance. However, over the five years, mitigation finance targeting the energy sector decreased, both in relative (51% to 44%) and in absolute terms (USD 0.8 billion less in 2020 than in 2016). In contrast, mitigation finance steadily increased in sectors that in previous years were mainly linked to adaptation finance. This is the case for agriculture, forestry and fishing, as well as for water supply and sanitation, where mitigation finance more than tripled, both in relative and absolute terms, mainly driven by multilateral public climate finance. For example, the share of mitigation finance targeting agriculture, forestry and fishing almost quadrupled from 1.8% in 2016 to 7% in 2020 (i.e. a USD 2.5 billion increase).

Compared to mitigation, adaptation finance was spread over a larger number of sectors. The largest two sectors were water and sanitation, as well as agriculture, forestry and fishing. These accounted for 21% and 19% respectively of total adaptation finance in 2016-2020, followed by multisector (13%) and transport sector (11%). Each of the other remaining sectors accounted for 5% or less of total adaptation finance on average. Over 2016 to 2020, the most noticeable increase in adaptation finance within a given sector was in transport, which more than quintupled, from USD 0.7 billion in 2016 to USD 4.7 billion in 2020. Over the same period support for activities related to health, population policies and programmes, and education also grew significantly, from USD 0.1 billion to USD 1.2 billion. Other sectors where climate finance grew quickly include business and other services, and social infrastructure and services.[4]

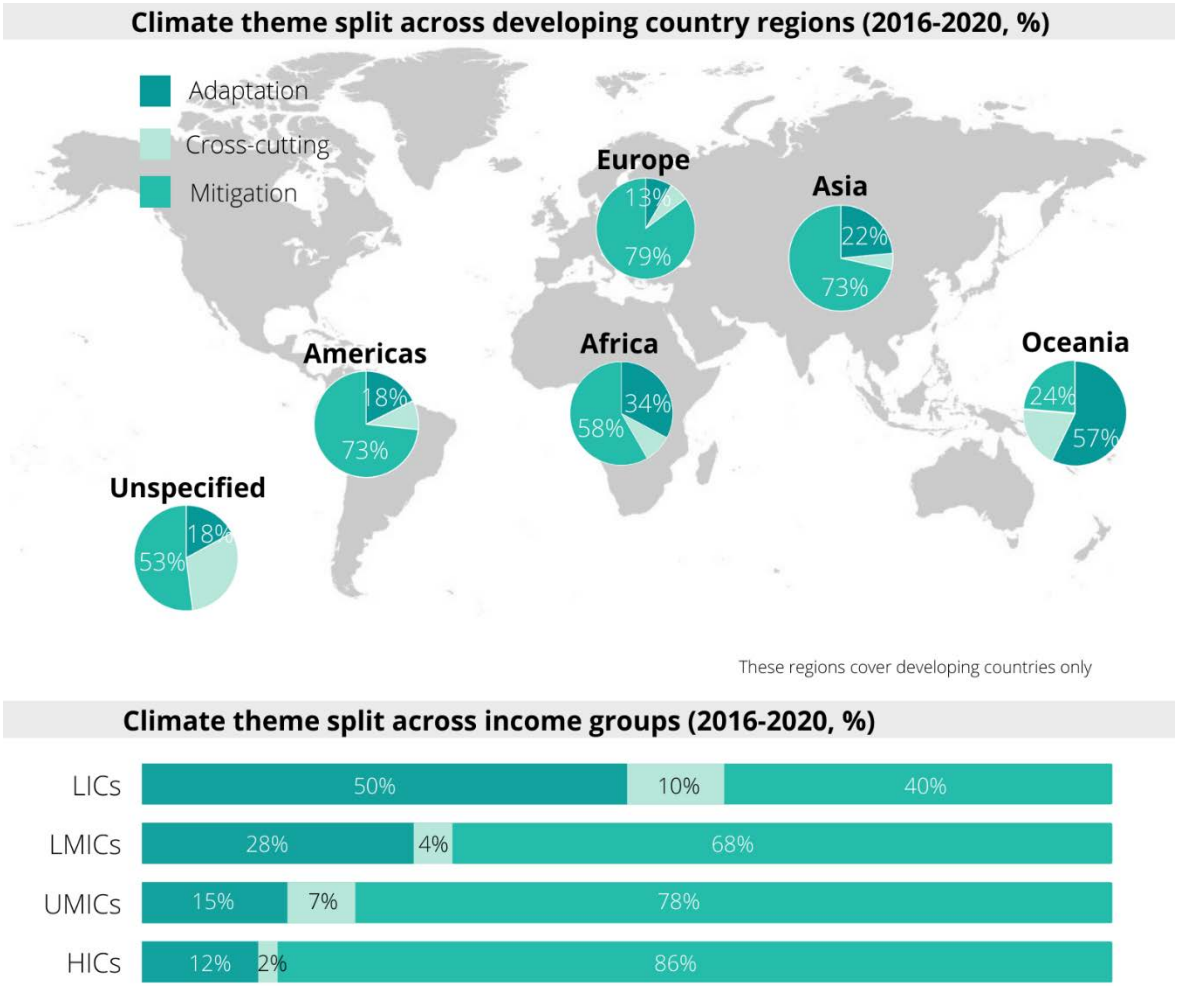
[4] Industry, mining and construction is the sector that expanded most significantly in 2016-2020, growing by 2200%, although from a very low base. This is however due to the above-mentioned large-scale infrastructure project.

In 2016-2020, cross-cutting finance, which is mainly reported by bilateral providers, for the most part, targeted the general environment protection sector (21%), agriculture, forestry and fishing (17%) and the so-called "multisector" (14%). These shares remained stable over the five years.

Climate themes across different recipient countries' groupings

Mitigation finance accounted for over two-thirds of total climate finance provided and mobilised within each region over the period 2016-2020, with the exception of Oceania (see Figure 2). Still, between 2016 and 2020, the share of adaptation finance provided or mobilised in each region increased, most notably in Africa, where it jumped from 25% in 2016 to 45% in 2020 (i.e. a USD 6.6 billion increase).[5] In all regions but Oceania, the share of cross-cutting finance remained small (less than 10%).

Figure 2. Climate theme across regions and income groups in 2016-2020 (%)



Note: This figure does not fully reflect developing countries' differences in terms of size, population, and other socio-economic conditions. The regions included cover developing countries only, as defined in Annex B.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC and Export Credit Group statistics, complementary reporting to the OECD.

[5] Adaptation finance towards Africa has increased steadily between 2016 and 2019, followed by a noticeable jump in 2019-2020 due to the aforementioned large infrastructure project supported by mobilised private climate finance.

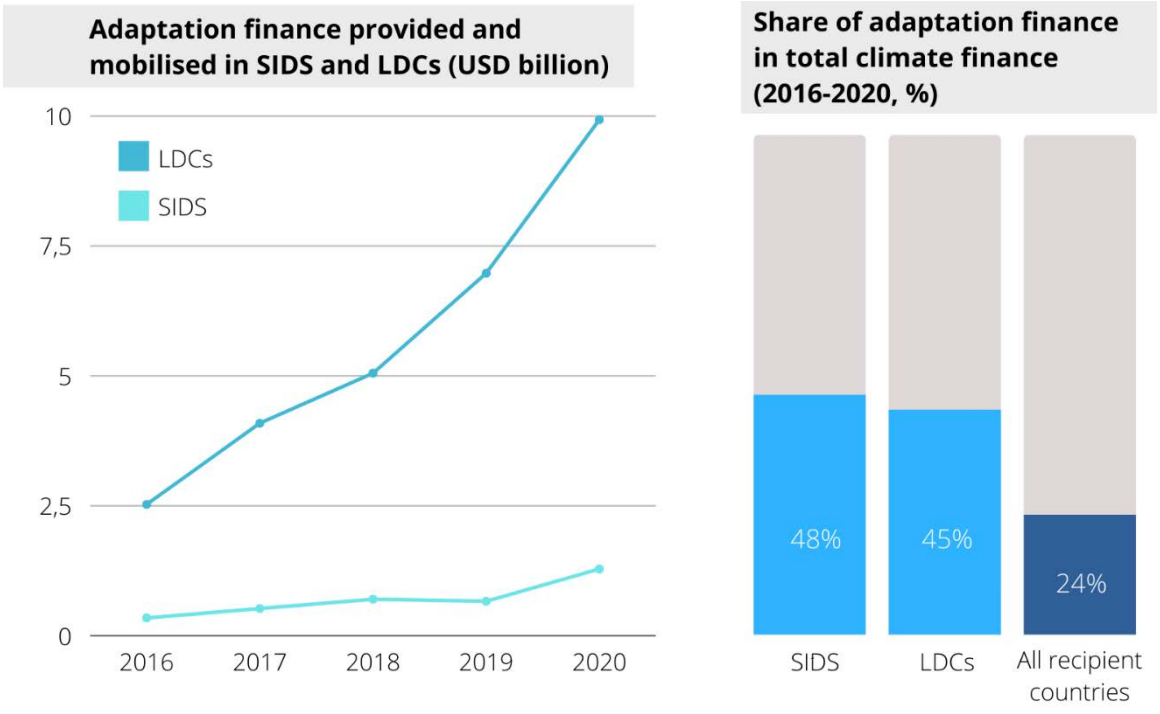
In relative terms, adaptation finance represented a larger share in regions with a relatively high number of lower-income countries (Africa, Asia) than regions with a greater number of middle-income countries (Europe, America). At an aggregate level, the lower the income group, the higher the share of adaptation finance and the lower the share of mitigation finance. In LICs, adaptation accounted for as much as 50% of total climate finance provided and mobilised, as opposed to 15% in UMICs. In contrast, the share of mitigation finance was 78% in UMICs and 40% in LICs. Low- and lower-middle-income countries benefitted together from two-thirds of adaptation finance in 2016-2020.

At the same time, aggregate trends may mask significant differences in country-specific trends. Within regions and country groupings, there is a considerable variation in the thematic split of climate finance for individual recipient countries. For instance, the share of adaptation finance for individual recipient countries ranged from 1% to 95% in 2016-2020. In half of the recipient countries, the share of adaptation finance increased over this period.

Adaptation finance for SIDS and LDCs

On average, nearly half of total climate finance provided and mobilised for SIDS and LDCs between 2016 and 2020 specifically targeted adaptation (48% and 45%, respectively) (Figure 3). Moreover, 12% and 7% of total climate finance provided and mobilised in SIDS and LDCs targeted cross-cutting objectives. Over the five years, a total of USD 3.6 billion were provided and mobilised for adaptation in SIDS and USD 28.6 billion in LDCs, i.e. an annual average of USD 0.7 billion and USD 5.7 billion.[6]

Figure 3. Adaptation finance provided and mobilised in SIDS and LDCs in 2016-2020



Note: SIDS and LDCs are listed in Annex B.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC and Export Credit Group statistics, complementary reporting to the OECD.

[6] Since these two country groupings overlap, these figures cannot be added up. A full list of SIDS and LDCs is available in Annex B.

On a per capita basis, SIDS benefitted from a per capita annual median of USD 33 for adaptation, which is nearly four times the adaptation per capita annual median for all developing countries (USD 9). In contrast, LDCs benefitted from USD 8 per capita.

In absolute terms, adaptation finance provided and mobilised in both SIDS and LDCs increased steadily over the five years. However, adaptation finance for SIDS and LDCs was relatively concentrated in a small number of countries. Between 2016 and 2020, more than 40% of total adaptation finance for LDCs was directed to only 5 of the 45 least developed countries. Similarly, 39% of adaptation finance for SIDS was directed to 5 of the 40 SIDS.

Public finance represented the overwhelming majority (98% and 93%) of total adaptation finance provided and mobilised in SIDS and LDCs. The share of mobilised private climate finance remained extremely low (2% on average), whereas that of export credits was close to zero. The year 2020 represents an exception, with 10% of adaptation finance for LDCs coming from the private mobilised component. This is, however, almost entirely due to the large-scale infrastructure project in one LDC as mentioned earlier.

Mitigation finance in high-emitting countries

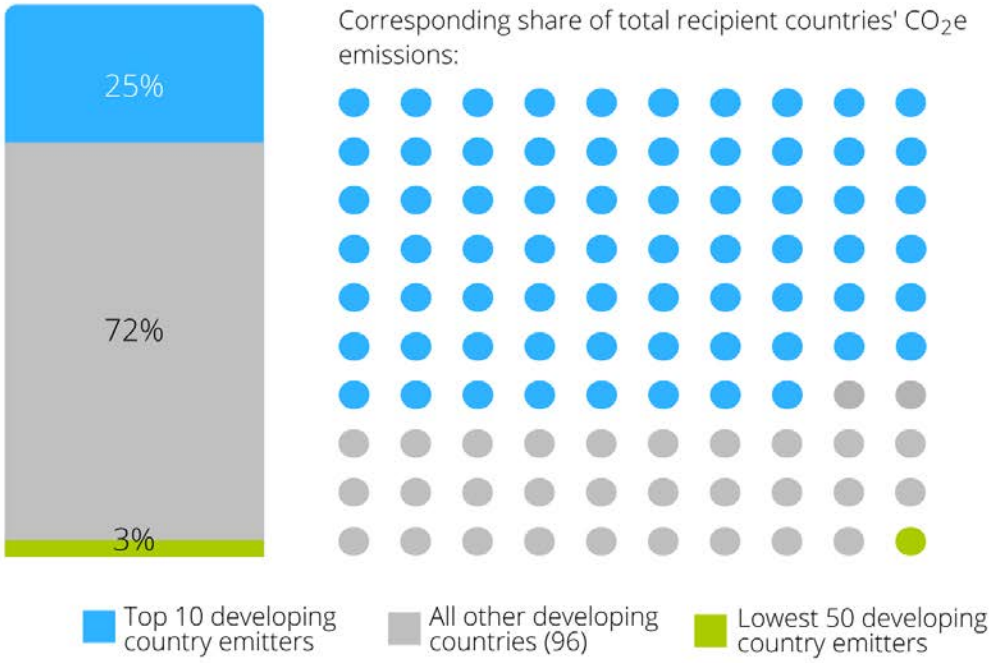
Different developing countries vary widely in terms of levels and composition of national GHG emissions, and large emitters tend to attract larger shares of climate finance in support of mitigation activities. The 10 developing countries with the highest overall level of CO_2e emissions in 2016-2019 (hereinafter "top 10 emitters")[7], and which represented 68% of total developing country CO_2e emissions in 2016-2019, benefitted from 25% of total mitigation finance provided and mobilised over 2016-2020. In contrast, the lowest 50 developing country emitters, representing 1% of total developing country CO_2e emissions, only benefitted from 3% of total mitigation finance provided and mobilised in 2016-2020 (Figure 4).

Looking at the median values of mitigation finance provided and mobilised per capita provides a different perspective that nuances the picture: the yearly median of per capita climate finance provided and mobilised in the top 10 developing countries' emitters was USD 3 per capita over 2016-2020, compared to USD 17 per capita in the lowest 50 emitters.

Only 3% of climate finance was provided and mobilised in 2016-2020 for the top 10 developing countries with the fastest growth in CO_2e emissions (in absolute terms) over 1990-2020. However, most of these fast-growing emitters are SIDS with very small populations, which also explains a significantly above-average median per capita USD 48 amount of mitigation finance provided and mobilised in these countries over 2016-2020.

[7] CO_2e emission data is sourced from the CAIT dataset (Climate Watch, 2022[72]). CAIT CO_2e emission data is only available for the 1990-2019 timeframe. Top 10 developing countries emitters have been identified as the first 10 recipient countries with the highest CO_2e emission average over 2016-2019. The top 10 fastest growing developing countries emitters have been identified as the first 10 recipient countries with the highest percentage change in emissions between 1990 and 2019.

Figure 4. Mitigation finance provided and mobilised across countries in 2016-2020 (%)



Note: Each dot represents 1%. This figure does not fully reflect developing countries' differences in terms of size, population, and other socio-economic conditions.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC and Export Credit Group statistics, complementary reporting to the OECD.

Insights from the disaggregated analysis of adaptation and mitigation finance

As presented in (OECD, 2022[5]) and detailed in previous sections, climate finance provided and mobilised by developed countries was predominantly mitigation-focused. While adaptation finance grew in absolute and relative terms, it continues to be primarily driven by the public sector and mainly targets lower-income and more vulnerable countries. This section unpacks possible explanations for these observed trends.

Climate finance provided and mobilised largely focused on mitigation

It is challenging to provide a comprehensive explanation for the trends in the thematic split of climate finance provided and mobilised by developed countries, due to the complexity of the international financial architecture, as well as the impact of large individual projects and adaptation and mitigation finance tracking methods. However, there may have been, to date, relatively stronger incentives for providers to prioritise climate finance for mitigation activities.

Firstly, the prospect of financial sustainability and returns, which are more easily attained in mitigation than in adaptation projects, provides an incentive for public and private stakeholders to invest. Mitigation activities often consist of infrastructure projects in the fields of energy generation (e.g. construction of power plants) and transport (e.g. construction of metro lines, railways), which often have an associated revenue stream and thus generate sufficient cash inflows to recover the initial investment and generate returns (Table 1). While adaptation finance can support large infrastructure projects (e.g. seawalls, raised roads and railways), many adaptation activities tend to focus on capacity-building or technical assistance that involve limited if any, financial returns. Moreover, there is an incentive for supporting "shovel-ready" projects (i.e. projects at advanced stages of development), which often are mitigation-related. In contrast,

there is less such incentive for projects that relate more to planning, communication or engagement, which are often found within adaptation activities (Moser et al., 2019[7]).

Table 1. Selected examples of mitigation- and adaptation-related activities

Climate theme	Project description	Available revenue stream for the benefit of the financer?
Mitigation	Design, construction and operation of a 33 MW solar photovoltaic (PV) power plant and 2.8 km of a 33kV transmission line.	Yes
	Construction of a 23 km metro line and purchase of a fleet of about 80 metro cars.	Yes
	Establishing an integrated regional solid waste management system consisting of collection, transfer, treatment using advanced waste-to-energy (WTE) technology	Yes
Adaptation	Construction of cisterns for the collection, storage and distribution of water.	Potentially
	Improving existing disaster risk reduction management plans at regional, national and local level.	No
	Contribute to improving the climate change resilience of small agricultural producers by channeling credit and basic technical assistance	Yes

Note: The examples were selected by the authors to provide a non-exhaustive overview of common adaptation- and mitigation-related activities supported by climate finance. This table is to be read in the broader context of the Chapter.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC and Export Credit Group statistics, complementary reporting to the OECD.

Secondly, the importance attributed over the years to mitigation in the context of climate action provides stronger planning and public governance incentives for mitigation projects compared to adaptation ones. While the urgency and importance of climate change adaptation have gained increased momentum in the last decade, mitigation has previously been more prominent in international and national climate policy. This is also in part because to mitigate climate change globally, collective effort from each country is needed. Adaptation, in contrast, depends on individual country context, and, for the most part, countries' adaptation action is pursued individually and independently of each other. In fact, while under the Paris Agreement countries "shall pursue domestic mitigation measures", a similar requirement is not included for adaptation measures (UNFCCC, 2015[8]).

Moreover, actions and targets needed to mitigate climate change are more easily identifiable (e.g. achieving net-zero emissions). In contrast, the availability of country-level impact assessments to form an agreed basis on which to design adaptation responses is more limited. As a result, many developing countries may have stronger planning and financial frameworks in place for mitigation-related activities (e.g. energy efficiency or renewable energy regulations, tax incentives, etc.).

Finally, there may be a political incentive for policymakers and climate finance providers to prioritise the implementation of activities that can demonstrably contribute to the goals of the Paris Agreement. In this context, the impacts of mitigation projects can be more easily measured and quantified (e.g. in terms of emission reductions) and assessed against national quantitative targets of emissions reductions, e.g. those included in countries' NDCs. In contrast, it is more difficult to define successful and effective adaptation projects and activities and assess their contribution toward national adaptation goals (see final Chapter).

Mitigation and adaptation finance focus on four economic sectors

Over half (63%) of total climate finance provided and mobilised is concentrated in four economic sectors: energy, transport, water and sanitation and agriculture, forestry and fishing, with mitigation finance focusing on the first two, and adaptation finance focusing on the last two. All these sectors are often included in recipient countries' NDCs or long-term development strategies, and offer opportunities for infrastructure-related projects, providing for an attractive investment destination.

The sectoral split of both mitigation and adaptation finance provided and mobilised in 2016-2020 broadly reflects the priority sectors identified in qualitative terms in the UNFCCC Standing Committee on Finance report on the "determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement" (hereinafter "UNFCCC Needs Determination Report") (UNFCCC SCF, 2021[9]). According to the report's findings, most needs for mitigation finance relate to energy; land use and forestry; transport; agriculture; and waste and sanitation. For adaptation finance, needs are mainly related to agriculture and water. A more recent private-sector study of the information communicated by developing countries through their NDCs reaches similar conclusions (Clima Capital Partners LLC and Aviva Investors, 2022[10]). According to its findings, developing countries' NDCs highlight energy generation, transport, and industry and mining as the most cited sectors where mitigation finance is needed. Both reports face some limitations and challenges in terms of coverage and methodologies used to assess and define developing countries' needs.[8] They nonetheless provide a broad indication of in which sectors adaptation and mitigation finance may be most needed in the next years.

The increasing trend in mitigation finance provided and mobilised for agriculture, forestry and fishing addresses sectors that are also important to reducing GHG emissions. According to the IPCC, the Agriculture, Forestry and Other Land Use (AFOLU) sector can play a critical role in achieving reductions in emissions that are in line with the temperature goal of the Paris Agreement (IPCC, 2022[11]). Several developing countries with a carbon- or climate-neutrality target include AFOLU in their pledges, and at least 86 developing countries adhered to the Global Methane Pledge (which, in addition to energy and waste, targets agriculture)[9] (Climate Action Tracker, 2022[12]; Global Methane Pledge, 2022[13]). Mitigation finance for agriculture, forestry and fishing focused on projects directed towards livestock production, reforestation and sustainable crops. Support in these areas can help developing countries close the investment gap needed to achieve emission reductions in AFOLU.

In contrast, many adaptation activities may not fall clearly into a defined sectoral classification, as reflected by the diversified sectoral split of adaptation finance. Water and sanitation as well as agriculture, forestry and fishing attract higher shares of support likely due to their vulnerability to climate change impacts. Agriculture in particular is one of the most exposed sectors to the impacts of climate change, and most adaptation finance towards agriculture supports projects for improved crop resilience, e.g. through the financing of irrigation schemes or capacity-building programmes on integrated soil fertility management. Further, water and sanitation and agriculture, forestry and fishing offer on average better returns on investments than other adaptation activities.

At the same time, the increasing trend in support for social sectors such as education, health and population policies is addressing sectors that are key to building resilience and adaptive capacity in the long-term, as they tackle the contextual conditions that render countries more vulnerable to climate change (Atteridge, Verkuijl and Dzebo, 2019[14]). The types of activities supported in these sectors include, for example, scholarships for high education in subjects relevant to climate action, programmes aimed at sensitizing citizens to the problem of climate change, or the purchase of medical equipment to address health issues that have been exacerbated by climate change. Similarly, the increasing trend of adaptation finance towards the risk preparedness sector stems in particular from growing support for projects to

[8] Challenges and limitations reported by both studies include: (a) inconsistencies across countries in the definition of "needs"; (b) inconsistencies across countries in the methodologies used to identify and estimate needs; (c) inconsistencies across countries in the sectoral definitions and subsequent sectoral classification of identified needs; and (d) gaps in the coverage of information, as a number of developing countries have not reported information on needs (UNFCCC SCF, 2021[9]; Clima Capital Partners LLC and Aviva Investors, 2022[10]).

[9] Participants joining the Pledge commit to a collective effort to reduce global methane emissions by at least 30% by 2030, compared to 2020 levels (Global Methane Pledge, 2022[13]).

establish or enhance early warning systems, which are key to helping developing countries avoid or reduce the damages caused by climate-related hazards.

Methodologies used to track climate-specific finance influence the thematic split of climate finance provided and mobilised

Trends in the thematic split of climate finance provided and mobilised are based on official activity-level reporting and thus, reflect the best-available data. In this context, however, the thematic split of climate finance in a given year and its year-on-year variations can be significantly influenced by the methodologies used by individual climate finance providers to identify mitigation- and adaptation-specific-specific finance as well as finance for cross-cutting activities, and possible changes in such methodologies.

Several activities supported by climate finance provided and mobilised target both climate mitigation and adaptation. When providers are not able to separate the two components, the project is marked as "cross-cutting". However, bilateral providers are increasingly striving to estimate mitigation- and adaptation-specific amounts of cross-cutting projects through the use of coefficients and reporting the resulting amounts as two separate lines of the same project.[10] Donor countries, as well as multilateral institutions, use different methodologies to estimate mitigation- and adaptation-specific finance, and to determine what share of a contribution targets adaptation as opposed to mitigation. In particular, while some countries determine the share of a contribution targeting adaptation on a case-by-case basis, most donors use standardised coefficients to estimate the portion of a contribution targeting adaptation or mitigation specifically. This issue is further discussed in Annex C and detailed in (OECD, 2022[15]).

The methodologies used by providers to track adaptation finance activities and estimate their adaptation-specific component (e.g. the use of coefficients), may have an impact on the volume and share represented by adaptation finance. Many adaptation activities falling under the water and sanitation; agriculture, forestry and fishing; energy and transport sectors are a component of larger and infrastructure-related mitigation projects. This is the case for mitigation projects that include considerations of activities for improving climate resilience or adaptation. For example, a mitigation activity involving the construction of a metro line may include an adaptation component that consists of rendering the infrastructure resilient to floods. Depending on the methodologies used by providers to estimate the value of such an adaptation component, the value of the adaptation component will vary significantly.

Finally, lower shares of adaptation finance can also be related to challenges in tracking adaptation finance, mainly due to the lack of a precise definition of what could constitute adaptation, as well as its cross-cutting nature. These challenges are particularly relevant in the context of mobilised private finance, where activities aimed at improving resilience to climate change are rarely stand-alone but rather integrated into normal business operations and development activities and therefore often not reported separately (Brown et al., 2015[16]). Increased efforts in improving the identification of adaptation components of private investments can play an important part in better tracking private finance mobilised for adaptation.

Adaptation finance represented a larger share in vulnerable and/or poorer countries

The IPCC defines vulnerability as "the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change" (IPCC, 2022). In practice, some countries are more vulnerable to the impacts of climate change than others, based on their geographical location and socio-economic situation. SIDS, LDCs and LICs are amongst the most vulnerable countries to the adverse effects of climate change. For SIDS, this is due to their size, remoteness and exposure to natural hazards; for LDCs and LICs, it is

[10] For example, a provider may conclude that 95% of a USD 100,000 grant contributes to climate change mitigation, whereas the remaining 5% contributes to adaptation objectives. As a result, the grant is reported in two separate lines: USD 5,000 of adaptation finance, and USD 95,000 of mitigation finance.

because they are amongst the least able to recover from climate stresses and their economic growth is highly dependent on sectors vulnerable to the impacts of climate change. Furthermore, these groups of countries face severely constrained capacity and ability to mobilise domestic resources and access capital markets. In these countries, larger shares of adaptation finance are key to support not only infrastructure projects that help them improve their resilience to climate-related hazards and risks but also capacity-building activities that can also strongly contribute to their socio-economic development in the longer term.

At the same time, it is important to ensure these vulnerable and lower-income countries are not locked out of finance for infrastructure and mitigation. Currently, broader access to climate finance for large-scale projects may prove challenging for the poorest and most vulnerable countries. For example, there is documented evidence that SIDS and LDCs face challenges in accessing financing from multilateral climate funds due to the complexity of the application processes, for which there is a lack of technical capacity (OECD, 2018[17]; Garschagen and Doshi, 2022[18]; Caldwell and Larsen, 2021[19]). Data analysis shows that, at an aggregate level, vulnerable groups of countries receive higher shares of adaptation finance. However, existing literature (Doshi and Garschagen, 2020[20]), as well as a quantitative analysis conducted in the context of this report, find that there is no systematic link nor correlation between the level of estimated vulnerability at the country level (as defined by selected vulnerability indexes) and the amount or share of climate adaptation finance received or mobilised (see Box 1).

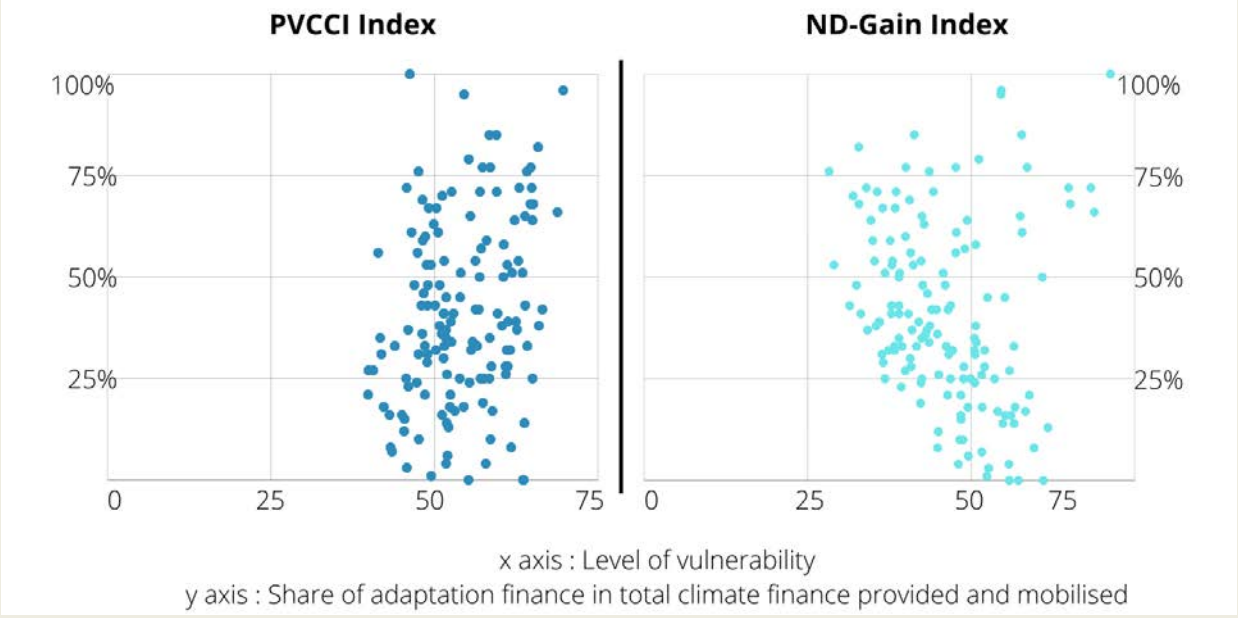
There are instead several other factors that can play a role, from a donor perspective, in the way finance is provided or mobilised across different regions. These could include historical or trade relationships with the donor country, or the recipient country's stated level of NDC ambition and/or other political priorities (Doshi and Garschagen, 2020[20]; Saunders, 2019[21]). Some studies point to the perceived institutional and regulatory capacity of recipient countries to absorb and use funds effectively as a key factor in the country's ability to attract climate finance (Barrett, 2014[22]; Doshi and Garschagen, 2020[20]).

In other words, there may be an implicit bias to support activities in countries that can put forward better project proposals that offer more secure returns and that possess a long history of managing funding. However, it is often challenging for most vulnerable and low-income countries to demonstrate fund management capacity and project implementation experience at the national level. Relatively underdeveloped local capital markets as well as the limited ability of such countries to secure and repay loans is another barrier that may prevent them from accessing larger quantities of finance. Financial and technical assistance for projects and local capital market development in frontier markets can therefore have an important development impact, by creating the conditions for future development assistance and private sector participation in the future.

Box 1. Country vulnerability level and adaptation finance provided and mobilised

A quantitative analysis was conducted to assess the relationship between recipient countries' vulnerability level and the amounts of adaptation finance provided or mobilised in that country, finding that there is no link nor correlation between the two (Figure 5. The level of vulnerability of recipient countries was analysed based on two alternative proxy indices: the Notre Dame-Global Adaptation Index (ND-GAIN) and the Physical Vulnerability to Climate Change Index (PVCCI) (Chen et al., 2015[23]; Feindouno, Guillaumont and Simonet, 2020[24]). Both these indices provide an indication of the level of vulnerability at the country level, although they both present some limitations. Measuring the level of vulnerability of a country is inherently difficult due to the broad nature of the concept of vulnerability itself, which does not offer a precise definition. Moreover, it is challenging to identify a single index capable of capturing the diverse manifestations of climate change and its impacts on a country. As a result, most vulnerability indices, including the ND-GAIN and PVCCI, are composed of sets of sub-indicators that capture different aspects of vulnerability (Chen et al., 2015[23]; Feindouno, Guillaumont and Simonet, 2020[24]). In the context of this analysis, the significant variation in country rankings across the two indices used implied that their value is largely dependent on the selection of sub-indicators that each index used and on the data used for their estimation (Feindouno and Guillaumont, 2019[25]). At the same time, vulnerability is most often context- and location-specific, and there are significant differences within countries in terms of exposure to, frequency and intensity of climate-related hazards (OECD, Forthcoming[26]). Yet, the level of disaggregation of the dataset used for this report did not allow for an analysis of which groups or communities adaptation finance is reaching within countries.

Figure 5. Share of adaptation in total climate finance provided and mobilised by level of vulnerability (per recipient country)



Source: Authors

Public climate finance provided: an analysis by financial instrument

This Chapter focuses on public climate finance provided by both bilateral and multilateral providers based on the three broad financial instrument categories of loans, grants and equity investments. The Chapter provides disaggregated analysis and insights per provider types, climate theme, sectors, and based on various recipient country characteristics and groups.

In 2020, total public climate finance provided by developed countries amounted to USD 68.1 billion, 82% of total climate finance in the same year (OECD, 2022[5]). Out of that total, USD 48.6 billion (71%) was in the form of loans, USD 17.9 billion (26%) in the form of grants, and USD 1.6 billion (2%) in the form of equity investments. In 2016, total public climate finance provided was USD 46.4 billion (79% of total climate finance in the same year), of which USD 33.3 billion were loans, USD 12.3 billion were grants and USD 0.8 billion were equity investments (OECD, 2022[5]).11 Between 2016 and 2020, while the volumes of each instrument increased, their respective shares in total public climate finance provided remained stable.

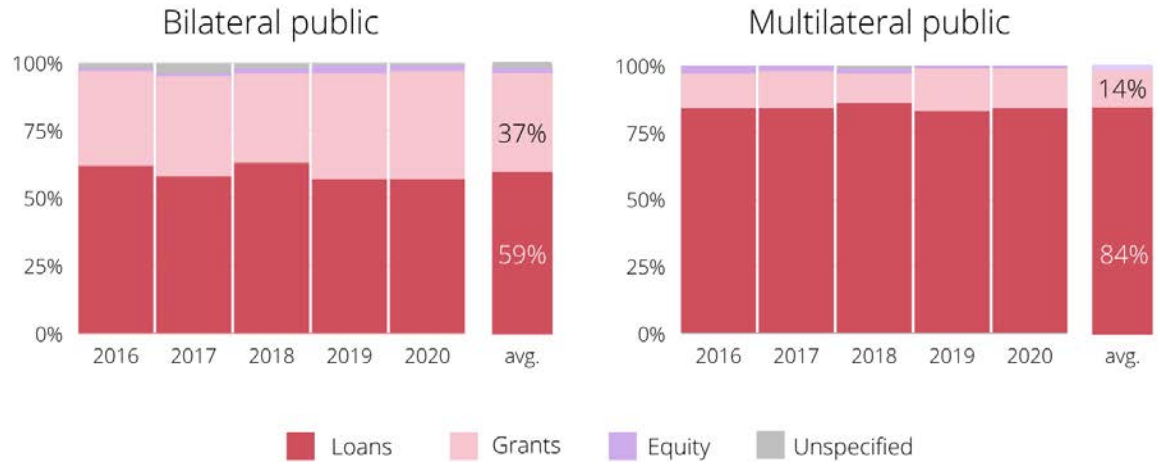
Public finance instruments (equity, grants, loans) analysed in the present Chapter underpin the financial mechanisms used by public finance providers to mobilise private finance, as analysed in the following Chapter. The only exceptions are guarantees and insurances, which are not included in the figures and analysis of public climate finance provided but are instead captured in the mobilised private finance component of the analysis (see Annex A).

Financial instrument split across bilateral and multilateral public finance

Loans represented the biggest share of the financial instrument split in both bilateral and multilateral public finance in 2016-2020, accounting for 59% of total bilateral public climate finance provided and 84% of total multilateral public finance provided (see Figure 6). These shares remained relatively stable across both bilateral and multilateral providers over the five-year period. Equity investments remained marginal in both bilateral and multilateral public, representing 2% in each.

Among multilateral providers, the instrument split varied considerably between MDBs and climate funds, primarily due to the different mandates and operating models of these two types of multilateral institutions (see page 28). The majority (91%) of climate finance provided via MDBs was extended in the form of loans. In contrast, the majority of climate finance provided via climate funds was provided in the form of grants (56%). As further discussed later in this Chapter, a similar distinction could be drawn within bilateral public climate finance, between development finance institutions and aid agencies.

Figure 6. Instrument split of public climate finance provided by provider type in 2016-2020 (%)



Note: Public guarantees are not accounted for as public finance but are instead captured as part of the analysis of private finance mobilised, presented in other figures and sections of this report.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC statistics and complementary reporting to the OECD.

[11] The sum of individual financial instruments may not add up to totals due to rounding.

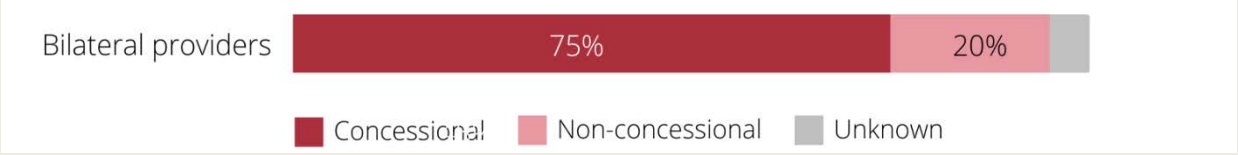
Importantly, public climate finance loans provided can be provided as concessional or non-concessional, depending on the country context, as well as on recipient and project characteristics. Box 2 highlights that the share of concessional and non-concessional loans varies significantly across the different climate finance components, while highlighting underlying definitional differences of concessionality between bilateral and multilateral providers.

Box 2. Concessional and non-concessional loans

A concessional loan is extended to a borrower on more preferential terms than those available on the market. Such preferential terms may include below-market interest rates, extended grace periods, or a combination of both. Concessionality is an essential part of development finance. The reporting of concessional and non-concessional loans is, however, underpinned by different definitions for DAC members on the one hand and for multilateral institutions on the other.

For DAC members, concessionality is a key ODA-eligibility criterion; only concessional loans are currently included in ODA. Grant elements are calculated using five elements: interest rate, grace period, maturity, type of repayment schedule and discount rate, with the latter of which being differentiated by DAC income group. Accordingly, for sovereign loans to be concessional, their grant element12 needs to be at least 45% for LDCs and other LICs, 15% for LMICs, and 10% for UMICs and multilateral institutions. Currently, loans to the private sector need to convey a grant element of at least 25% to be concessional (using a discount rate of 10%). Furthermore, the terms and conditions of ODA loans have to be consistent with the IMF Debt Limits Policy or the World Bank's Non-Concessional Borrowing Policy. In 2016-20, three-quarters of loans extended by donor countries were concessional (Figure 7).

Figure 7. Bilateral climate finance loans by concessionality level, in 2016-2020 (%)

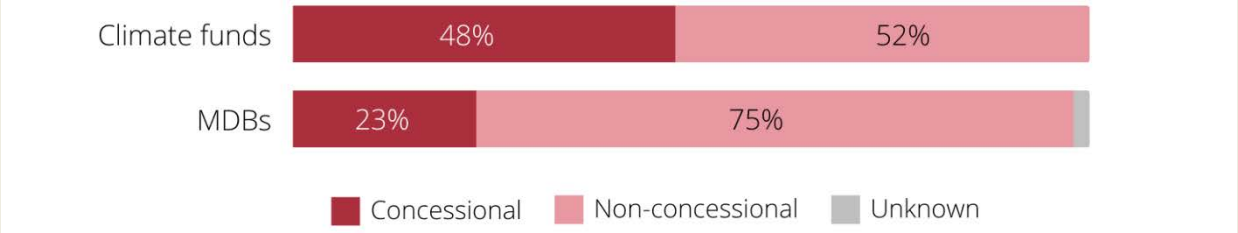


Source: Based on Biennial Reports to the UNFCCC

For lending by the MDBs and multilateral climate funds, concessionality relates to their ability to extend credit on financially-sustainable terms, based on their own financing costs. In this context, multilateral institutions require external grant resources to extend concessional loans. On the other hand, non-concessional loans are financially sustainable solely based on multilateral organisations' low cost of funding and preferred creditor status. Non-concessional multilateral loans may, therefore, still be extended on more preferential terms than those available on the market terms. The use of concessional or non-concessional loans by multilateral organisations depends on the recipient country's income level as well as considerations for its creditworthiness and debt sustainability. In general, MICs and HICs can access non-concessional multilateral loans. In 2016-2020, 48% and 23% of loans extended by multilateral climate funds and MDBs respectively were concessional (Figure 8). Due to the definitional differences outlined above, these percentages are not comparable to the percentages for bilateral providers.

[12] Grant element refers to the difference between the face value of a loan and the present value of the service payments the borrower will make over the lifetime of the loan, expressed as a percentage of the face value.

Figure 8. Multilateral climate finance loans by concessionality level, in 2016-2020 (%)



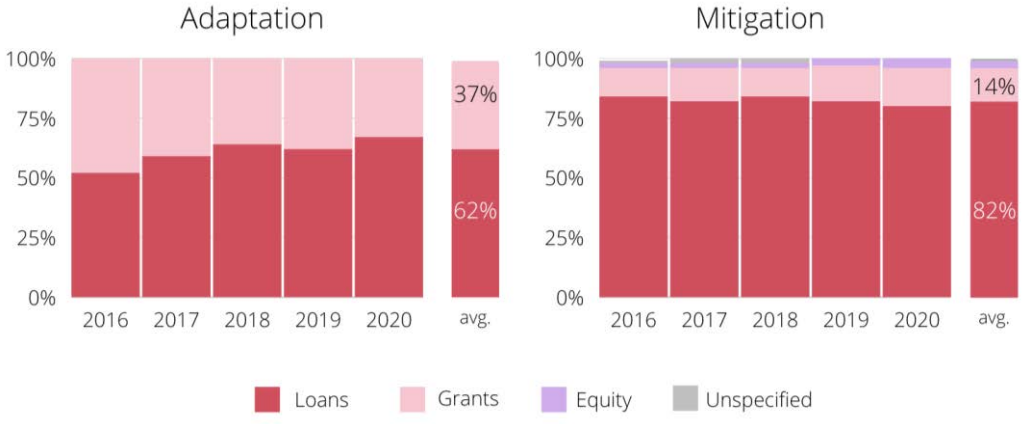
Source: Based on OECD DAC statistics and complementary reporting to the OECD.

Climate theme across public climate finance financial instruments

In the context of public climate finance, between 2016 and 2020, the majority of grants were extended to finance adaptation (42% of all grants) and cross-cutting activities (25% of all grants). In contrast, over two-thirds of both loans (71%) and equity (89%) supported mitigation activities. Over this timeframe, the volume of finance through public loans for adaptation activities rose from USD 5.1 billion in 2016 to USD 17.1 billion in 2020 (+240%).

In contrast, for mitigation, the shares of loans and grants in bilateral and multilateral public finance remained relatively stable over the five years, accounting on average for 82% and 14% of public mitigation finance, respectively (Figure 9). Yet, in absolute terms, reflecting the overall increase of total public climate finance provided between 2016 and 2020, grant-financed adaptation finance still increased by USD 3.4 billion.

Figure 9. Climate theme of public climate finance provided by financial instrument in 2016-2020 (%)



Note: Public guarantees are not accounted for as public finance but are instead captured as part of the analysis of private finance mobilised, presented in other figures and sections of this report.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC statistics and complementary reporting to the OECD.

The sectoral split of public finance varies considerably across different financial instruments. Over half (52%) of loans targeted the energy and transport and storage sectors. The 2016-2020 increase in public adaptation finance was mostly driven by an increase in adaptation loans in the water supply and sanitation as well as transport and storage sectors. In contrast, the three main sectors supported by grants, which

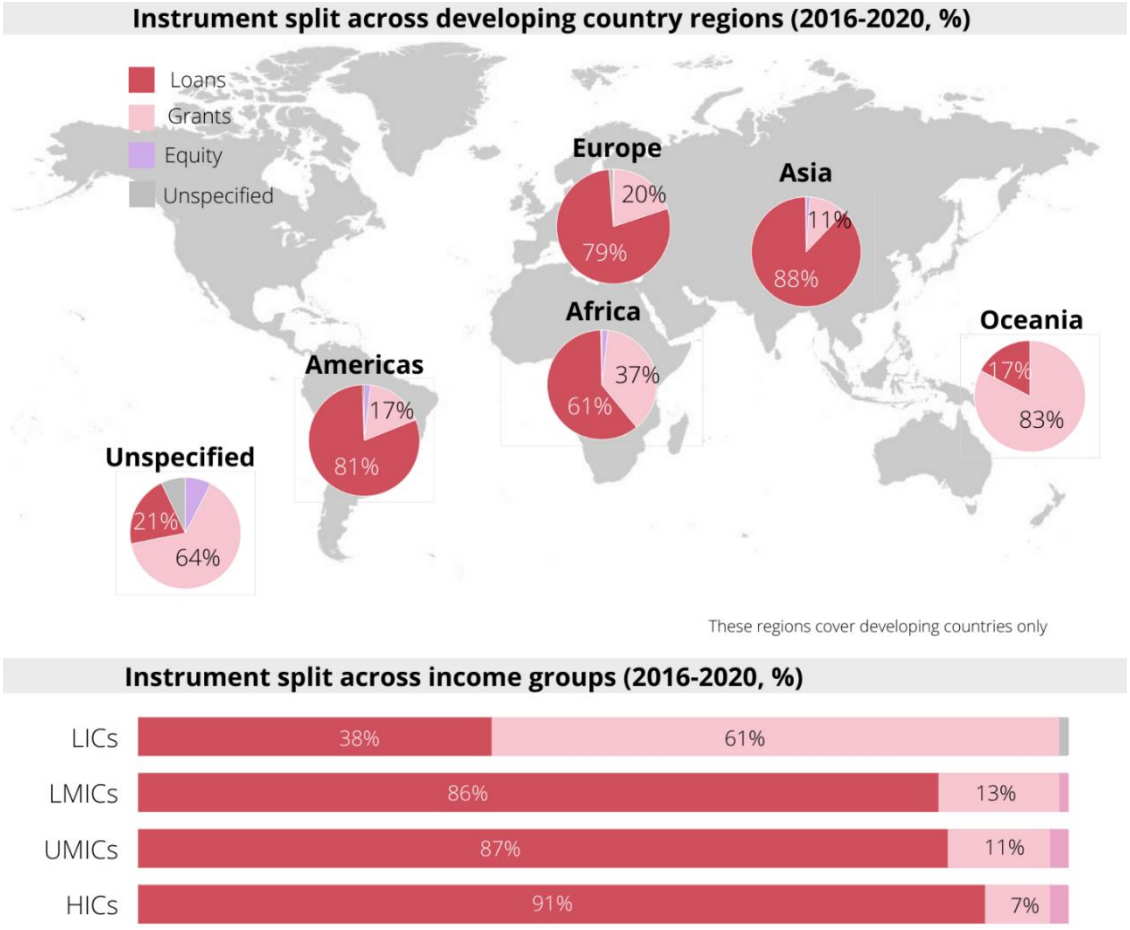
together represented 46% of all grants, were (in order) agriculture, forestry and fishing; energy and general environmental protection. For equity, 62% targeted the energy and banking and financial services sectors.

Financial instrument split across different recipient countries' groupings

The instrument split of public climate finance also varied considerably across regions (Figure 10). Loans accounted for more than three-quarters of total public climate finance in Asia (88%), the Americas (81%) and Europe (79%). In Africa, they accounted for 61% of the total, and in Oceania for only 17%. In relative terms, grants represented a larger share in regions with a relatively high number of poor or more vulnerable countries (Africa, Oceania) than regions with a greater number of middle-income countries (Europe, the Americas).

At an aggregate level, the lower the income group, the higher the share of grants. In LICs, grants represented 61% of total public climate finance provided. In contrast, total public finance provided in LMICs and UMICs was primarily based on loans, which accounted respectively for 86% and 87% of total climate finance provided in each group.

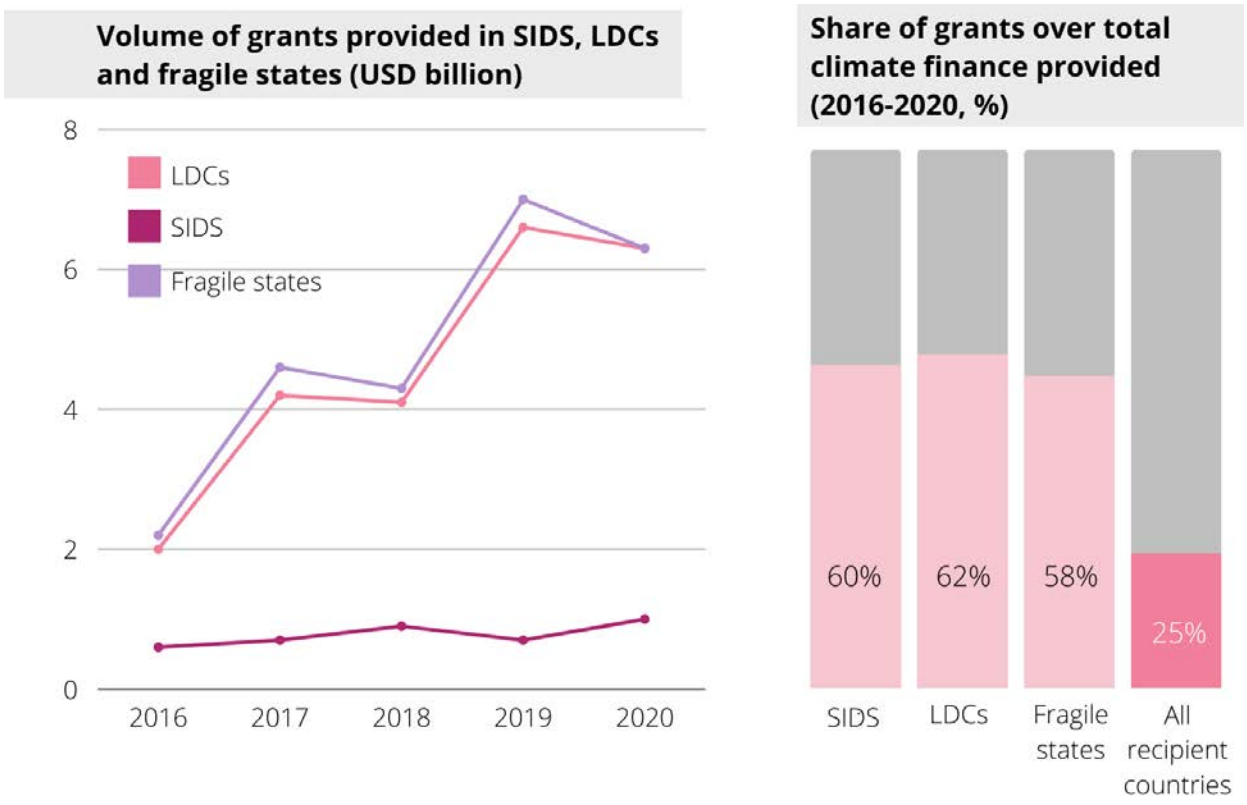
Figure 10. Instrument split of public climate finance provided across developing country regions and income groups in 2016-2020



Note: Public guarantees are not accounted for as public finance but are instead captured as part of the analysis of private finance mobilised, presented in other figures and sections of this report. This figure does not fully reflect developing countries' differences in terms of size, population, and other socio-economic conditions. The regions included cover developing countries only, as defined in Annex B. This figure does not fully reflect developing countries' differences in terms of size, population, and other socio-economic conditions.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC statistics and complementary reporting to the OECD.

On average, over 2016-2020 the share of climate finance provided via grants was higher in SIDS and LDCs than when considering all recipient countries. In SIDS, grants represented 60% and loans 40% of total public climate finance. In LDCs grants represented 62% and loans 37% (Figure 11). For both SIDS and LDCs the instrument split remained stable over the five years. Fragile states[13] offer a similar picture; over 2016-2020, more than half (58%) of total public finance provided in these countries was in the form of grants. Loans represented 41% and equity investments less than 1%. In each one of the three country groupings, one-quarter (25%) of loans targeted the energy sector, whereas about 20% of grants targeted the agriculture, forestry and fishing sector.

Figure 11. Volume and share of grants provided across SIDS, LDCs and fragile states



Note: This figure does not fully reflect developing countries' differences in terms of size, population, and other socio-economic conditions.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC statistics and complementary reporting to the OECD.

[13] Fragile states are generally defined as presenting weak capacities to carry out basic governance functions and lacking the ability to develop mutually constructive relations with society. Fragile regions or states are also more vulnerable to internal or external shocks such as economic crises or natural disasters (OECD, 2020[71]). The OECD multidimensional fragility framework measures fragility on a spectrum of intensity across five dimensions: economic, environmental, political, security and societal. Results from the 2020 framework identify 57 fragile states. Of these, 13 are classified as extremely fragile (OECD, 2020[71]).

Insights from the disaggregated data analysis of the instrument split in public climate finance

Findings from the data analysis of climate finance data presented in the previous sections indicate that public climate finance can be provided through a variety of financial instruments, as different public climate instruments serve different purposes in different contexts. While in aggregate, public climate finance is mainly extended via loans, the share of grants is higher in bilateral public finance and multilateral climate funds. Grants are mostly used to fund adaptation and cross-cutting activities, particularly in vulnerable and/or lower-income countries, whereas the share of loans is significantly higher in mitigation activities in middle-income countries. This section delves deeper into these observed trends.

The instrument split varies significantly between different types of public climate finance providers with different mandates and operating models

The substantive difference in the share of loans extended by MDBs as opposed to that of climate funds largely depends on differences in mandates and operating models. Many MDBs' business models are geared towards direct lending. They rely more heavily on financial instruments that imply repayment and interests (loans) or an exit and return (equity), although the extent to which this is the case differs depending on the mandate of each MDB (OECD, 2021[27]). Further, MDBs often finance relatively large infrastructure projects, within which debt financing plays a critical role.

In contrast, multilateral climate funds typically operate on the basis of disbursing paid-in contributions or replenishments by member countries over a given period, rather than using these as equity to capitalise their operating model and leverage for revolving development financing. As a result, such multilateral climate funds have a higher ability to extend grants than MDBs, including in support of non-income generating activities.

A distinction can also be drawn within the bilateral climate finance component, between aid agencies on the one hand and development finance institutions on the other hand. The former operate on a model similar to that of climate funds and the latter more on a business model similar to that of MDBs, although such characterisation needs to be nuanced on a case by case. However, the level of granularity of bilateral climate finance data reported by donor countries to the UNFCCC does not lend itself to further analysis of this distinction, as it does not include information on the extending agencies.

Grants mainly fund adaptation, demonstration and capacity-building activities, whereas loans focus more on mitigation and financially-sustainable projects.

Grants, loans and equity can all contribute to the economic development of developing countries and climate action. The use of different instruments generally evolves with the stage of socio-economic development of recipient countries (see concluding section of the next chapter), as well as varies across different types of projects and activities. Table 2 provides a selection of examples of different activities supported by loans, grants and equity in the energy and transport sectors.

Table 2. Selected examples of loans, grants and equity in the energy and transport sectors

Public finance instrument	Project description
Grant	Supporting the solar power electrification of public institutions, such as schools and hospitals in an LDC.
	Providing technical assistance to 15 megacities in Asia and South America to develop sustainable transport plans consistent with the Paris Agreement.
	Creation of environmentally and economically sustainable electric mini-grid systems for small remote rural communities.
Loan	Construction and operation of an urban metro rail transit system.
	Expansion of recipient country's geothermal generating capacity.
	Loan funding for climate resilient road maintenance works.
Equity	Direct investment in the construction of an additional metro line
	Participation in a Fund investing in power generation assets (using renewable energy and natural gas) in Sub-Saharan Africa, Southeast Asia and Latin America.
	Participation in an investment fund targeting SMEs that contribute to the achievement of SDGs and climate sustainability.

Note: Public guarantees are not accounted for as public finance but are instead captured as part of the analysis of private finance mobilised, presented in other figures and sections of this report. The examples in the present table were selected to provide an overview of the common grant-, loan- and equity-funded activities supported by climate finance. This selection is non-exhaustive and does not fully represent the breadth and variety of activities supported by climate finance provided through different instruments. This table is to be read in the broader context of the chapter. The descriptions of activities have been edited to remove any explicit reference to the recipient country or entity.
Source: Based on Biennial Reports to the UNFCCC, OECD DAC and Export Credit Group statistics, complementary reporting to the OECD.

Activities with low or no direct financial returns, but high expected economic or social returns often benefit from grants. This is notably the case for technical assistance or capacity building, which tend to be more frequent for adaptation than mitigation, as well as adaptation activities more generally (UNEP, 2021[28]). Grants can also be particularly effective to support the non-commercially attractive feasibility study or demonstration of early-stage clean technology innovation or to improve access to technologies and innovation in poor countries and isolated communities. In contrast, public loans are often used to fund financially-sustainable mature or close-to-mature technologies as well as large infrastructure projects with a future revenue stream, which are more often found in the context of mitigation activities, e.g. renewable energy power plants. The fewer adaptation activities financed by loans also mainly relate to infrastructure projects such as the construction of water treatment plants or sewerage systems.

Finally, equity investments can take the form of direct investments in companies and project finance special purpose vehicles (SPV)[14], or investments through funds and collective investment vehicles. Public climate finance provided as equity almost exclusively focuses on mitigation activities in the energy and transport sectors. Such public equity investment typically helps improve the financial viability of large projects to private investors, which may otherwise consider investments in developing countries too risky (OECD, 2014[29]). For these reasons, equity investments are mainly used by development finance institutions with a mandate to promote investment in the private sector, as well as to mobilise private finance.

Grants represented a larger share in more vulnerable and/or poorer countries

SIDS, LDCs and LICs benefitted on average from larger shares of grants compared to all recipients. On the one hand, this stems from the fact that they are mainly recipients of climate finance for adaptation activities, which are often supported by grants. On the other hand, these countries often present economic and socio-political conditions that do not favour loan-based investments and limit the absorptive capacity of debt financing more generally (OECD, 2021[27]). Notably, high level of government debt, which often

[14] Special Purpose Vehicles (SPVs) are legal entities that are created for a specific purpose. In the context of project finance they are often created to structure resources from a group of investors, typically including MDBs, bilateral DFIs and private investors, finding optimal risk distribution across the investor pool.

characterises these countries, may limit the country's borrowing capacity and make any further borrowing expensive in terms of high-interest rates (OECD, 2020[30]). Conversely, limited private and financial sector development limits the use of loans to finance activities by non-state actors.

Overall, capacity constraints with regard to skills, institutions, and management and other implementation constraints can increase the cost of investment (Drabo, 2021); (Gurara, Kpodar, Presbitero, & Tessema, 2021). In such context, infrastructure projects in particular can suffer from a lack of transparent and bankable project pipelines that could attract loans and equity investments (Bielenberg, Kerlin, Oppenheim, & Roberts, 2016); (OECD, 2018). Due to capacity constraints, many developing countries lack to date the ability to plan for and develop pipelines of e.g. low-emissions, climate-resilient infrastructure projects that are central to climate and development objectives (OECD, 2018). These capacity constraints typically correlate closely with development status and income levels. They are in fact a key characteristic of low levels of development, notably in lower-income countries, fragile states and small countries remote from markets and trade patterns.

In contrast, the share of loans in total climate finance received is significantly higher in MICs and HICs, compared to LICs, as economies at higher income levels can more readily absorb and deploy large-scale financial resources. MICS and HICs tend to have a relatively higher capacity to repay as well as more developed private sector and local capital markets and, correspondingly, attract larger shares of loans. Moreover, these groups of countries generally offer enabling environments more conducive to large infrastructure projects that lend themselves better to loans and equity investments.

Mobilised private climate finance: trends, insights and opportunities

This Chapter analyses trends in private climate finance mobilised. It explores the main characteristics in terms of mechanisms to mobilise private finance, climate themes, provider types, sectors as well as based on various recipient country characteristics and groups. It then outlines further insights on these trends, as well as perspectives on opportunities for increasing private finance mobilisation.

According to (OECD, 2022[5]), public climate finance provided by developed countries mobilised USD 13.1 billion in private finance in 2020. While this is an increase from 2016 (USD 10.1 billion), it represents a drop compared to the relatively stable levels observed in 2017 (USD 14.5 billion), 2018 (USD 14.7 billion) and 2019 (USD 14.4 billion).

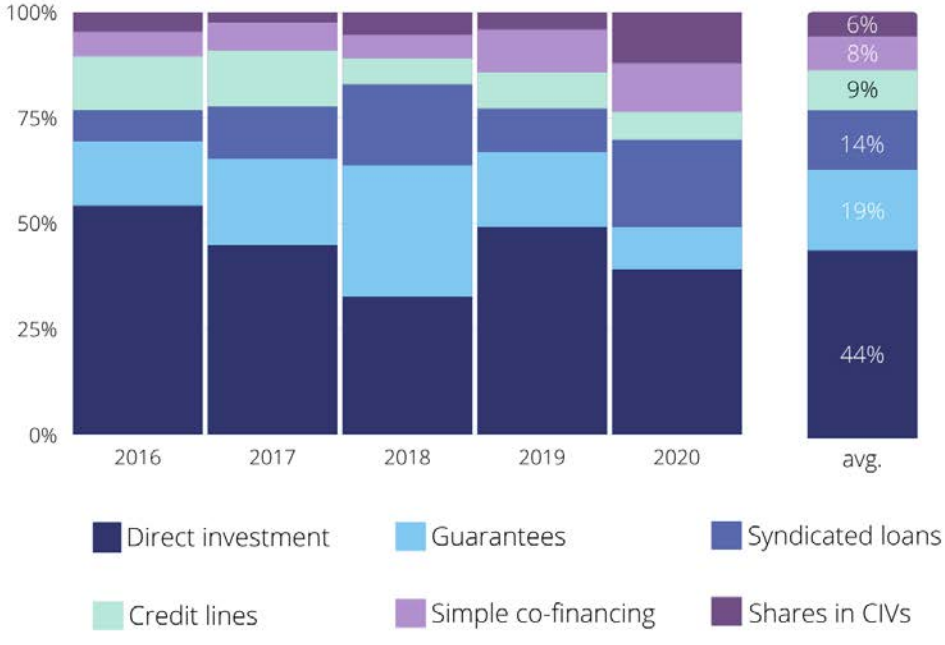
In practice, the ability of developed countries to mobilise private finance for climate action in developing countries is influenced by many factors. These include the composition of bilateral and multilateral providers' portfolios (mitigation-adaptation, instruments and mechanisms, geography, and sectors), policy and broader enabling environments in developing countries, as well as general macroeconomic conditions.

Characteristics of mobilised private climate finance

Public finance providers mobilise private finance through different types of mechanisms, as summarised in Figure 12. Except for guarantees, these mechanisms are underpinned by the public finance instruments (equity, grants, loans) analysed in the previous Chapter, e.g. shares in collective investment vehicles (CIVs) consist of equity investments, direct investment in companies and special purpose vehicles (SPVs) can take the form of equity or loans, simple co-financing involves grants or loans.

Direct investment in companies or SPVs mobilised nearly half (44%) of private climate finance over 2016-2020. Guarantees (19%), syndicated loans (14%), credit lines (9%), simple co-financing arrangements (8%), and shares in collective investment vehicles (CIVs, 6%) followed (Figure 12). However, there were significant year-on-year variations of private finance mobilised by each mechanism. This variation can relate not only to the volatile nature of private finance flows but also to the availability of project pipelines and investment opportunities that can be spread unevenly over time, as further discussed in later sections of this Chapter.

Figure 12. Private climate finance mobilised by leveraging mechanism in 2016-2020 (%)



Source: Based on OECD DAC statistics and complementary reporting to the OECD.

In terms of provider groups, between 2016 and 2020, the largest share of private climate finance mobilised was attributable to MDBs (57%), followed by bilateral providers (36%) and multilateral climate funds (7%) (Figure 13). For all three provider groups, direct investment in companies or SPVs mobilised the largest share of their private mobilisation totals (half of private finance mobilised by MDB and a third for both donors and climate funds). The role played by other mechanisms differs between provider types. For example, guarantees accounted for 20% of private finance mobilised by both MDBs and bilateral providers but are very seldom used by multilateral climate funds. Credit lines represented 20% of private climate finance mobilised by bilateral providers, while 19% of climate private finance mobilised by MDBs was through syndicated loans.

Figure 13. Private climate finance mobilised by provider group in 2016-2020 (%)



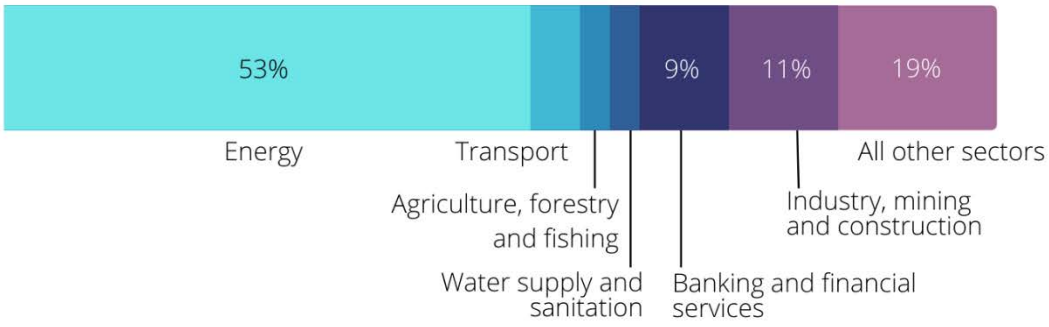
Source: Based on OECD DAC statistics and complementary reporting to the OECD.

Mitigation's overwhelming share (86%) in total private climate finance mobilised by developed countries over 2016-2020 is in part related to the constraints that commercial investment in adaptation projects faces. This leads to a very uneven spread of mobilised climate finance by sector, with the energy sector accounting for more than half of private climate finance (Figure 14). The remaining half of private climate finance mobilised over 2016-2020 was spread over a range of other sectors, most notably industry, mining and construction (11%); banking and financial services (9%); transport and storage (4%); and agriculture, forestry and fishing (4%). Yet, in 2020 private climate finance mobilised in the energy sector decreased significantly in both relative and absolute terms, dropping by USD 0.9 billion and accounting for only 35% of total climate finance mobilised in that year.

In contrast, over 2016-2020, private climate finance mobilised for adaptation mainly targeted the industry, mining and construction sector (36% of total adaptation private climate finance mobilised), although this was largely influenced by a large-scale energy infrastructure project in East Africa supported by an MDB in 2020.[15] Energy and water supply and sanitation followed, both accounting for 14% of the total adaptation finance mobilised over the five-year period. Unsurprisingly, sectors with no or very little shares of mobilised private climate finance for adaptation include health, government and civil society, and education.

[15] This project accounts for 46% of total private climate finance mobilisation for adaptation in 2020, and 25% of the 2016-20 total.

Figure 14. Private climate finance mobilised by sector in 2016-2020 (%)



Source: Based on OECD DAC statistics and complementary reporting to the OECD.

Between 2016 and 2020, private climate finance for sectors that often involve infrastructure projects, such as energy, transport and industry, mining and construction or communications, was mainly mobilised through mechanisms typically used in the context of project finance, i.e. guarantees, syndicated loans and direct investment in companies or SPVs. These three mechanisms accounted for more than 80% of mobilised private climate finance in these sectors. In contrast, in banking and financial services, credit lines, which are frequently employed in the context of local SME development, played a significant role.

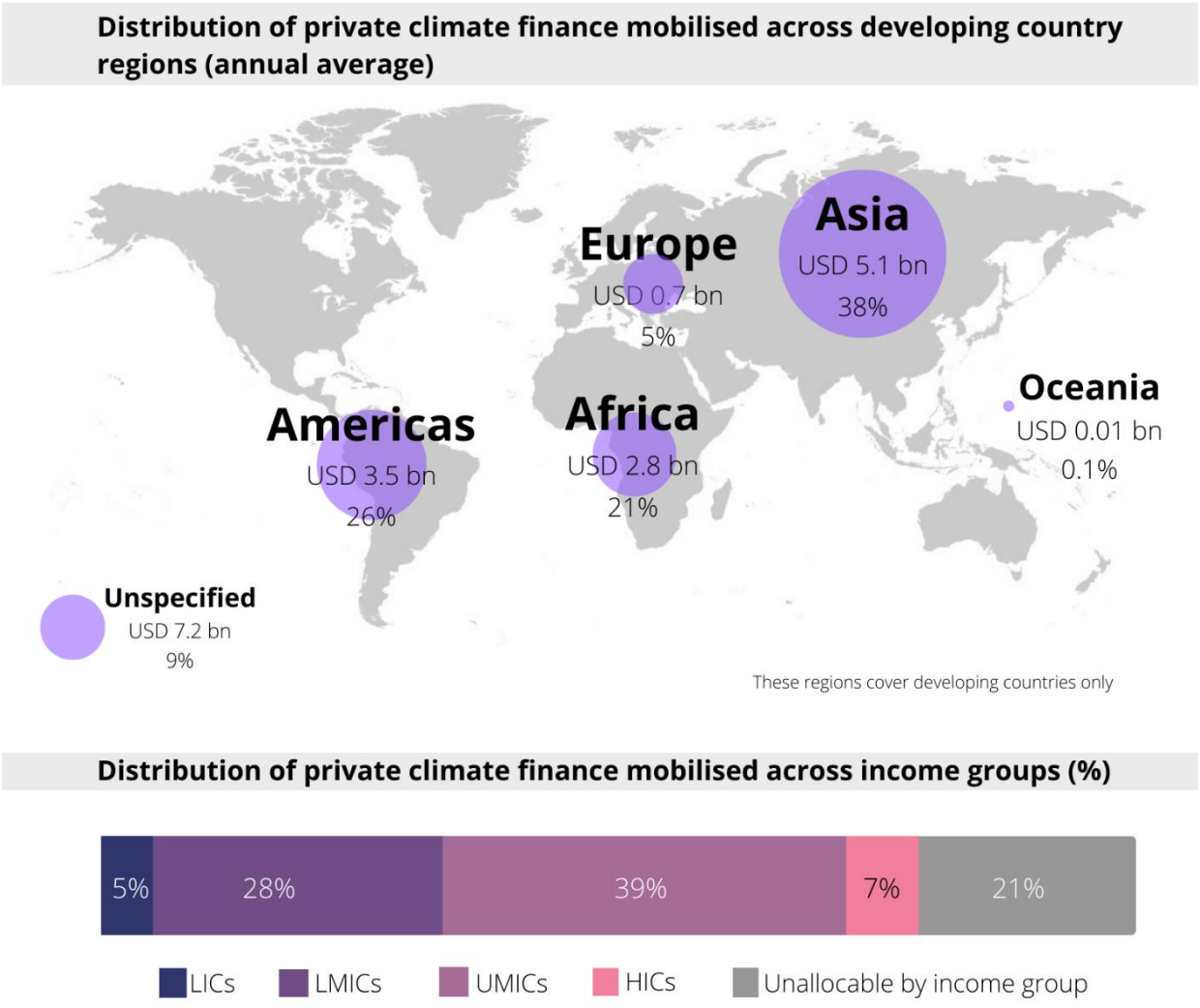
Mobilised private climate finance by recipient country grouping

Between 2016 and 2020, Asia was the main beneficiary region of private climate finance mobilised, representing 38% of the total. The Americas (26%) and Africa (21%) followed while Europe (5%) and even more so Oceania (0.1%) accounted for much smaller shares (Figure 15). The regional distribution of private finance mobilisation was relatively similar to that of total climate finance over the five years, except for a slightly greater focus on the Americas and somewhat lower on Asia and Africa.

At an aggregate level, significantly larger shares of private climate finance were mobilised in MICs (notably UMICs) compared to other income groups: MICs represented 67% of private climate finance mobilised for individual countries in 2016-2020, compared to 7% for HICs, and only 5% for LICs, with the remaining 21% being unallocated by country. Mitigation represented 91% of private climate finance mobilised in MICs while adaptation represented over 50% of private climate finance mobilised in LICs.

Between 2016 and 2020, mobilised private climate finance showed a high degree of concentration with 10 recipient countries benefitting from more than half (55%) of total private climate finance that was allocated to individual countries. The concentration is even more significant when looking at the top-10 countries in terms of private adaptation finance, for which the share was 81%. The top 10 UMICs and the top 10 LICs benefitted respectively from 97% and 99.7% of private climate finance mobilised for adaptation within each income group. The high concentration of private climate finance for the LICs and adaptation is, however, mainly due to the aforementioned large-scale energy infrastructure project in an LDC.

Figure 15. Concentration of private climate finance mobilised across developing country regions and income groups in 2016-2020



Note: Note: This figure does not fully reflect developing countries' differences in terms of size, population, and other socio-economic conditions. The regions included cover developing countries only, as defined in Annex B. This figure does not fully reflect developing countries' differences in terms of size, population, and other socio-economic conditions.
Source: Based on OECD DAC statistics and complementary reporting to the OECD.

Private climate finance mobilised in SIDS, LDCs and fragile states

In 2016-2020, SIDS, LDCs and fragile states accounted for 1%, 8% and 16% of total private climate finance mobilised, which corresponds to a yearly average of USD 0.1 billion, USD 1.1 billion and USD 1.7 billion respectively. Over the period, adaptation represented 38% of total private climate finance mobilised in LDCs (15% without the aforementioned large-scale energy infrastructure project) and only 6% in SIDS.

Private climate finance mobilised in both SIDS and LDCs was concentrated in a small number of countries. In 2016-2020, 62% of total climate finance mobilised in LDCs benefitted only five of the least developed countries, and as much as 87% of total private climate finance mobilised in SIDS benefitted only five of the island states. Almost two-thirds (64%) of private climate finance mobilised for the SIDS was allocated to the countries and territories in the Caribbean region. For fragile states, the picture is slightly more nuanced, as 54% of total private climate finance for fragile states benefitted only five countries.

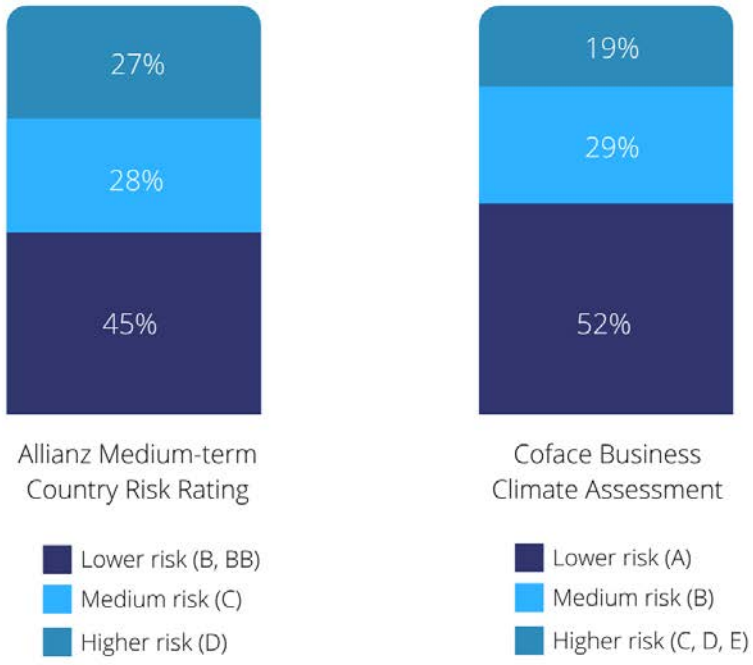
Trends of mobilised private climate finance based on a selection of country risk ratings

Risk can deter private investment if perceived as too high and/or if not reduced by public interventions. In addition to project-specific impediments for private investments, other risks relate to more general aspects of political and regulatory as well as macroeconomic, legal or business conditions of specific countries and regions, as further discussed in later sections of this Chapter (see page 39). This section makes use of two readily-available complementary composite indicators to analyse private finance mobilised by developed countries in different country risk contexts and levels: the Allianz Medium-Term Country Risk Rating (which captures a wide spectrum of different types of risks), and the Coface Business Climate Assessment, which focuses on the business environment and risk of default (Allianz, 2022[31]; Coface, 2022[32]).

The main conclusion is that over 2016-2020 public climate finance providers mostly mobilised private climate finance for projects in countries with medium or relatively low-risk profiles (Figure 16):

- Based on the Allianz Medium-Term Country Risk Ratings, mobilised private climate finance predominantly benefited countries with a lower risk rating (B/BB), accounting for 45% of the total.
- Using the Coface Business Climate Assessment, approximately 52% of private climate finance was mobilised for projects in countries with the lowest risk rating (A).
- Private climate finance mobilised for countries with the riskiest ratings, i.e. D for the Allianz rating or C, D and E for the Coface rating, accounted for 27% and 19% respectively.

Figure 16. Private climate finance mobilised by country risk rating in 2016-2020 (%)

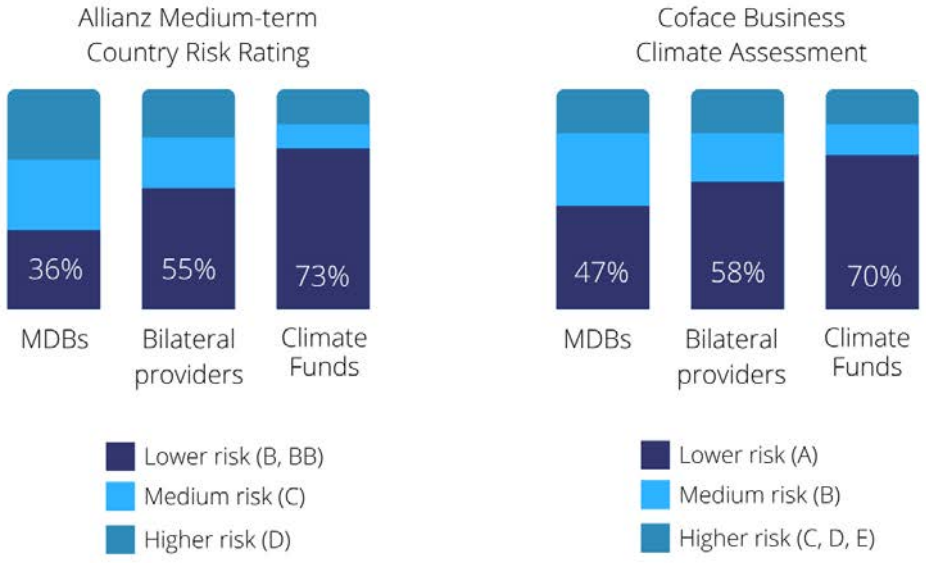


Source: Based on OECD DAC statistics and complementary reporting to the OECD.
Note: the Allianz Medium-Term Country Risk Rating captures a wide spectrum of different types of risks while the Coface Business Climate Assessment focuses on the business environment and risk of default (Allianz, 2022[31]; Coface, 2022[32]).

MDBs appear to mobilise private finance in more risky environments than donor countries and multilateral climate funds. The higher the risk, the higher the share of private climate finance mobilisation by the MDBs and the lower the share by countries and climate funds (Figure 17):

- Based on the Allianz Medium-Term Country Risk Ratings, MDBs mobilised a comparable sum of private finance in 2016-2020 across all three risk categories (B/BB, C and D), whereas private climate finance mobilised by climate funds and donors was rather concentrated in countries with lower risk profiles (B/BB). While only 36% of private climate finance mobilised by the MDBs was in countries with the lower risk (B.BB), it was 55% in the case of donor countries and 73% for the climate funds.
- Using the Coface Business Climate Assessment, 53% of private climate finance mobilised by MDBs served countries with medium and higher risk ratings (B, C, D and E). The share decreased to 42% for donor countries and only 30% for multilateral climate funds (noting that, for climate funds, this relates to a single project in a South American HIC).

Figure 17. Private climate finance mobilised by country risk rating and provider group in 2016-2020 (%)



Source: Based on OECD DAC statistics and complementary reporting to the OECD.
Note: the Allianz Medium-Term Country Risk Rating captures a wide spectrum of different types of risks while the Coface Business Climate Assessment focuses on the business environment and risk of default (Allianz, 2022[31]; Coface, 2022[32]).

In 2016-20, guarantees were used predominantly in medium to high-risk countries. Based on the Coface Business Climate Assessment, 30% of private finance mobilised by guarantees was in countries with a medium risk profile (B-, C- and D-rated), whereas it was only 15% in lower risk countries (A-rated). The Allianz Medium-Term Country Risk Ratings indicate that 39% of private climate finance mobilised by guarantees was in higher risk countries (D-graded), 22% in medium risk countries (C-graded) and only 12% in the less risky countries (B/BB-graded). These findings suggest that the lower the economic and political uncertainties and the more favourable the business climate, the lesser the need for guarantees to mobilise private finance for climate projects.

Insights from the disaggregated analysis of private climate finance mobilised

This section unpacks possible explanations for the trends observed above. In doing so, it further draws on relevant literature as well as a qualitative OECD survey (hereafter referred to as the 2022 OECD survey). The 2022 OECD survey was conducted to update information on bilateral and multilateral providers'

development finance portfolios, with a particular focus on mechanisms and instruments designed to mobilise private finance, as well as to gather qualitative insights from providers on the main incentives and obstacles to mobilise private finance for sustainable development and climate action.[16]

Adaptation continued to represent a minor share of total climate finance mobilised

Over 90% of adaptation finance provided and mobilised by developed countries in 2016-2020 stemmed from public sources (Figure 1 in Chapter 1). While adaptation expenditures can stimulate private sector activity, with direct benefits for the economy, they often lack clear revenue streams (e.g. via payment by end users) and, as a result, do not meet private sector investment criteria.

Moreover, adaptation activities may be less attractive to private investors who tend to operate with shorter time horizons than those that characterise future scenarios of climate impacts. Therefore, it is often challenging to make a business case for adaptation projects with long payback times and whose benefits are conditional on future climate scenarios with high degrees of uncertainty (UNEP, 2021[28]). Public sources are most needed in support of projects and activities that have high social returns and lower financial returns, or where particularly vulnerable or marginalised countries and communities need support (Pauw et al., 2021[33]). It is in this context that public finance actors can substitute for market actors by extending grants or long-term loans at concessional terms.

The results of the 2022 OECD survey further underlined that adaptation projects often lack the size and scalability potential sought by the private sector. Several providers also mentioned a lack of knowledge by private investors about existing or possible adaptation projects, as well as higher project costs in some cases. In contrast, providers indicated to have a greater capacity to mobilise private investors for projects that contribute to climate change mitigation in sectors they understand well and with clearly identified projects such as energy, transport and industry.

There are opportunities to increase private sector involvement in adaptation-related projects, notably via improving enabling environments in the respective sectors that need to become well-adapted and resilient. Governments can for example set policy targets that help implement their commitment to enforcing resilience and invest in legal and regulatory frameworks that facilitate public-private partnerships. The 2022 OECD survey also underlined the need to structure and formulate adaptation projects and programmes in a way that involves potential private investors from the very design stage of the financing opportunities.

Overall, to generate and scale adaptation investments, it is important to understand and distinguish between adaptation investments that can be provided by the private sector in response to needs and demand for adaptation products and services; and where adaptation investments take the form of public investments that provide economic benefits, but no financial business model. In this regard, access to and the cost of finance have strong impacts on what are economically efficient adaptation investments in a given context (Mullan and Ranger, forthcoming[34]).

Different mechanisms aim to mobilise private finance in different contexts

Activity-level data collected by the OECD on private climate finance mobilised covers the main mechanisms used by DFIs and MDBs i.e. guarantees, syndicated loans, shares in collective investment vehicles (CIVs), direct investment in companies or special purpose vehicles (SPVs), credits lines and

[16] The survey was carried out in March-June 2022, administered by the Development Co-operation Directorate through the DAC Working Party on Development Finance Statistics (WP-STAT) in close collaboration with the OECD-led Research Collaborative on Tracking Finance for Climate Action. It was sent to 57 providers (30 bilateral providers and 27 multilateral institutions). Complete or partial responses were received from 21 and 16 bilateral and multilateral institutions respectively, including most of the providers mobilising large volumes of private finance. More details available at oe.cd/mobilisation.

simple co-financing arrangements. Annex A (Table A A.2) offers an overview of leveraging mechanisms and their uses for different types of activities and in different contexts.

The 2022 OECD Survey on providers' portfolios confirmed the key role played by project finance, guarantees and syndicated loans for mobilising private finance, whether for climate action or more broadly. Some providers underlined the effectiveness of guarantees in mobilising private finance in nascent markets through risk mitigation. Others also mentioned the role of syndicated loans in decreasing early entrant costs and encouraging developers to enter the market as well as the ability of credit lines to support local SME development through better access to finance.

Financial innovation is an important factor for expanding providers' mobilisation portfolios. While many providers generally referred to the relatively traditional and well-established mechanisms when mobilising private finance (e.g. syndicated loans, guarantees, credit lines and project finance), some also highlighted the need to explore new and innovative mechanisms to attract private investment. For instance, several bilateral and multilateral actors mentioned the potential of public anchor investment or bond subscriptions for building local private bond markets more generally. Others indicated that they consider establishing or expanding guarantee programmes. A number of bilateral providers also referred to their capitalisation of MDB-administered or other blended finance funds and facilities that aim at mobilising private finance for climate purposes. In addition, some providers have started exploring possible approaches to attract institutional investors, such as through portfolio investment solutions.

Most private climate finance was mobilised for projects in middle-income countries with relatively conducive enabling environments and low-risk ratings

Developing countries' socio-economic conditions play a fundamental role to attract private finance and investment. Enabling environments relate to a wide range of features, such as sector-specific regulatory framework, as well as overall investment policy and facilitation, competition policy, trade policy, and financial market policy (Ang, Röttgers and Burli, 2017[35]; OECD, 2015[36]; OECD, 2021[37]). Other factors play a role in determining a country's ability to absorb and scale-up investment, such as the country's implementation and enforcement capacity, human capital, qualified workforce, the existing stock of economic infrastructure, and integration into global trade systems. Further, a functioning financial system plays a central role in facilitating the mobilisation, and effective allocation of and access to finance for investment (Levine, 1996[38]). Finally, there are cross-cutting enablers for investments: data and information; governance, public and private financial systems and processes; access to technology (OECD/The World Bank/UN Environment, 2018[39]; OECD, 2021[27]; OECD, 2019[40]).

The enabling environment and absorptive capacity of countries tend to advance with economic development and income levels. The data analysis presented earlier indicates that developed countries mainly mobilised private climate finance in countries with existing economic infrastructure and a degree of market maturity, which typically are MICs. Many of the underlying investment opportunities related to project finance involve private equity and debt mobilised through syndicated loans, guarantees and direct investments.

The modest mobilisation totals in the riskiest countries (Figure 16 above) may relate to the limited capacity for private sector development due to a high degree of political and macroeconomic uncertainties than the need for de-risking mechanisms at the level of individual investments. For example, only 15% of private climate finance mobilised for the riskiest countries (E-graded, using the Coface Business Climate Assessment) was mobilised through guarantees, a typical de-risking instrument.

On the other hand, as further discussed in the next section, developing countries with relatively well-functioning markets and regulatory frameworks can mobilise private finance without further international public climate finance being provided. Hence, within such frameworks, external public finance interventions may have limited additionality for climate projects in profitable sectors such as energy and industry in

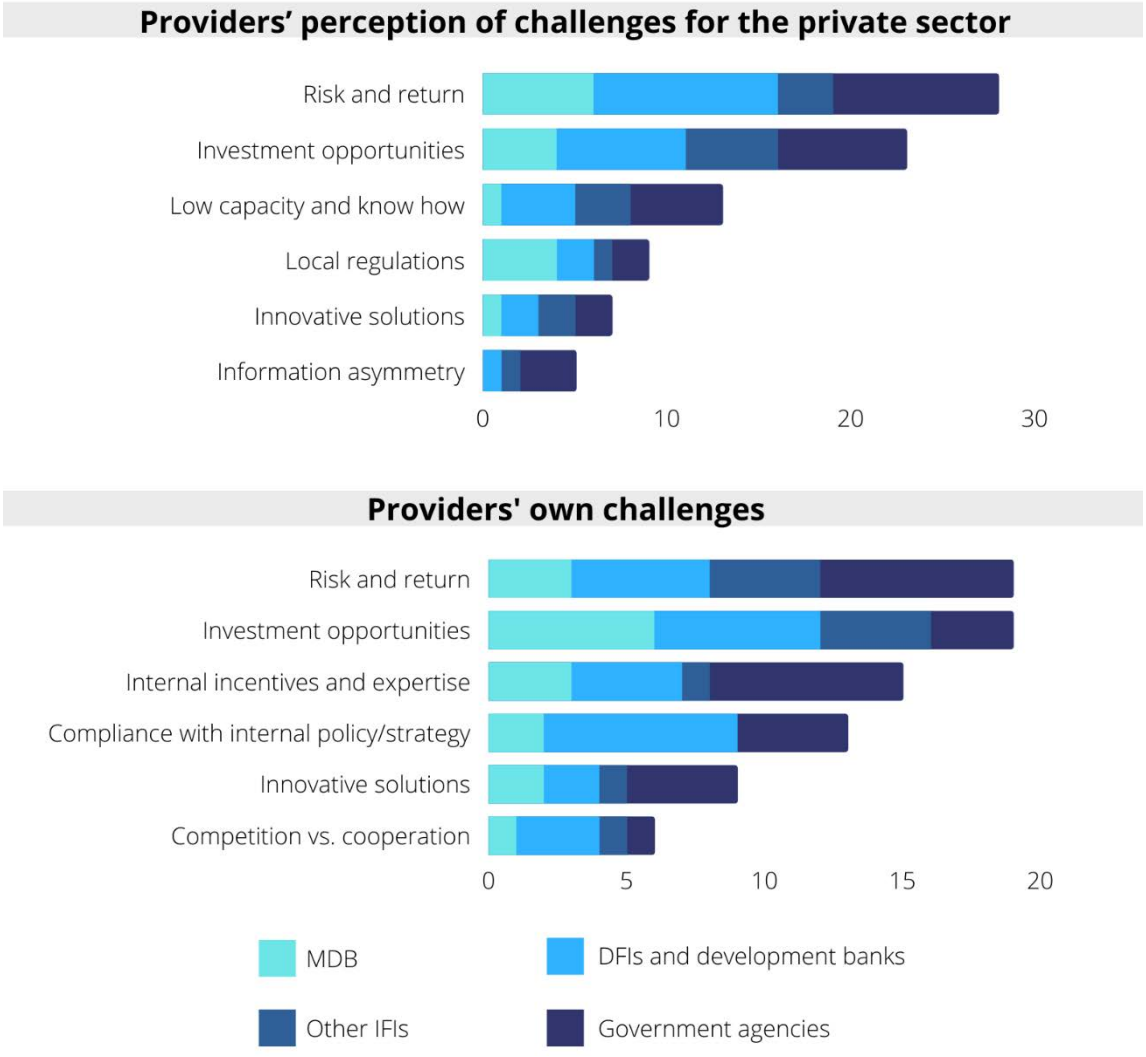
developing countries that may be financed entirely by private investors (see the right end of Figure 19 further down). As such where private financiers do not directly benefit from any kind of developed countries' public finance intervention or leveraging mechanism, they are not considered mobilised by developed countries' and thus, as already mentioned in the Context section of the report, fall out of the scope of the accounting framework of the present analysis.

Opportunities for increasing private finance mobilisation

Challenges to be overcome

Increasing private climate finance mobilisation has proved challenging. The 2022 OECD survey of providers gathered information on factors, which may affect their ability to mobilise private finance in developing countries, including for climate action. The two foremost challenges identified are high risks and relatively low investment returns, as well as a lack of investment opportunities and project pipeline development (Figure 18).

Figure 18. Main challenges identified by providers for scaling up private mobilisation



Source: 2022 OECD DAC Survey on Providers' Portfolios.

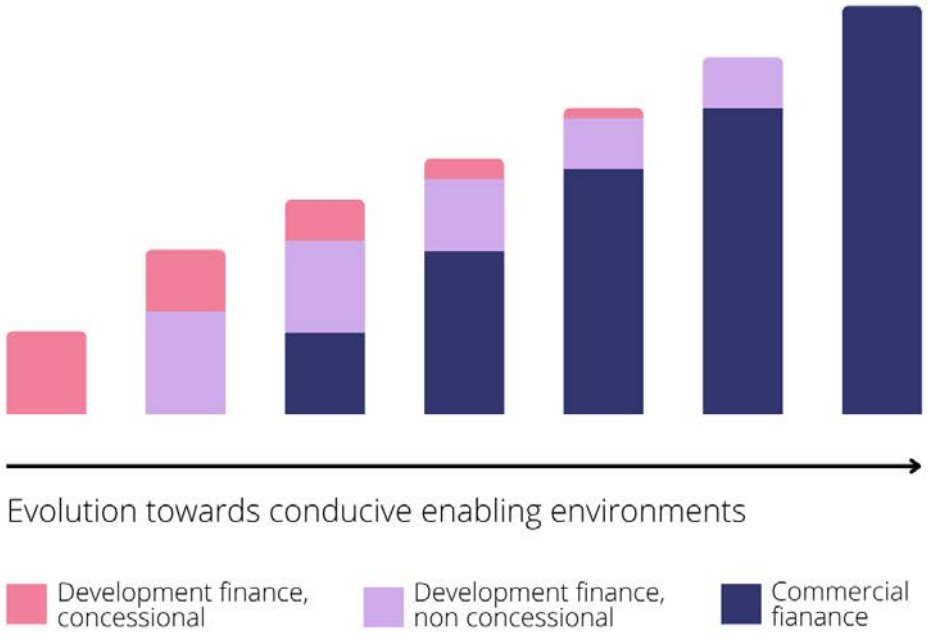
Other challenges for public actors included a lack of internal incentives and expertise (for institutions not traditionally focused on the private sector), and growing competition among public actors. Limited local capacities in developing countries and compliance with local regulations were identified as additional barriers to private investors. Further, a lack of financial innovation was identified as a limiting factor for both the public provider and private sector sides.

Addressing the challenges faced by investors in developing countries and scaling up the volumes of mobilised private climate finance to close the climate finance gap will require, in the coming years, a more profound and radical shift of providers' portfolios. Experience-sharing between providers could help drive behaviour change and contribute to strengthening institutions' financial capacities and expertise (e.g. developing green bond ecosystems to attract private investors). More comprehensive reporting and disclosure on co-financing schemes involving private finance would not only greatly benefit peer learning but could also contribute to reducing the high-risk perception.

Tailoring the blending of public and private resources and instruments in different country, sector, and risk contexts

Figure 19 offers a stylised presentation of the differentiated blending of public and private finance in different contexts and development stages. Initially, public finance has a key role to play in supporting developing countries in enhancing enabling environments that are key for unlocking private mobilisation. This includes support for the development and implementation of mitigation and adaptation policies and actions needed to attract investment and finance. Over time, this can lead to a dynamic evolution, where private finance and investments can be catalysed in maturing markets without the need for continued use of public international finance, thereby allowing direct mobilisation by public finance to shift towards less advanced economies, more recent technologies, and investments requiring demonstration and de-risking in new markets (OECD, 2018[41]; OECD, 2018[42]).

Figure 19. Stylised representation of the blending of public and private finance in different contexts and development stages



Source: Adjusted from (OECD, 2018[41]).

However, evidence from the data analysed earlier shows that the financing mix for some large-scale projects and other investment opportunities remained largely dominated by public finance, leaving little space for private finance mobilisation. For example, although project finance equity comes usually from private sources, complementary debt financing often involved syndicated loans arranged and participated primarily by official development actors, such as the MDBs, bilateral DFIs and developing countries' own national development banks, with private lenders playing a marginal role or being absent at all. Particularly in contexts conveying high risks, the availability of concessional finance may prove more of a priority than seeking private sector co-investment.

In this context, low-income countries, LDCs and SIDS would be situated further to the left in the representation of Figure 9, as they generally face more constraints to attract private finance and investment than higher-income level countries with relatively higher absorptive capacity and more conducive enabling environments. Given these constraints, successfully enhancing mobilisation, which would see them move towards the right, would be an important factor to enable enhanced climate action. To do so, however, they would require more basic capacity support involving more concessional international public finance for accelerating progress in that direction, notably by building capacities.

Capacity constraints are typically further exacerbated in countries such as SIDS, where small and often dispersed populations often translate into relatively low numbers of qualified staff working in key capacities, challenge governments' ability to provide basic services and hamper the creation of sizable domestic markets and private sector (OECD, 2018[17]). Providers can support SIDs and LDCs to overcome the constraints they face. Not least, this can include support for access to public climate finance, for example by simplifying approval processes for access to finance of small and low-risk projects, or funding access to high-quality expertise that can assist countries in meeting the requirements needed for project proposals (Caldwell and Larsen, 2021[19]).

Ultimately, effective climate mitigation and adaptation action takes place in and is shaped by the socio-economic situation of each country. The scale and type of climate finance provided and mobilised differ depending on each developing country's characteristics. Enhancing the enabling environment for climate action and investment has two key dimensions: efforts to enhance the policy and regulatory environment, alongside building core capacities at the country level.

Considerations relating to transparency, impacts and effectiveness

To complement the findings on climate finance provided and mobilised presented in OECD (2022) and in the previous Chapters of the present report, this final Chapter summarises key challenges and opportunities for measuring and assessing the effectiveness of support provided, as well as information and experience available to date in doing so.

Measuring the levels of climate finance provided and mobilised by developed countries in the context of the USD 100 billion goal has been a focus area of numerous stakeholders and organisations to date, including the OECD. However, as climate finance is a means to an end, it is also important to assess its effectiveness in supporting developing countries' mitigation and adaptation actions. Moreover, developed countries committed to the USD 100 billion goal in the context of "meaningful mitigation actions and transparency on implementation". Understanding the efforts of developing countries to create this context, as well as the impacts and uses of climate finance provided and mobilised is key to ultimately maximising the effectiveness of such finance.

The effectiveness of climate finance can be understood as its overall ability to attain its stated objectives. These stated objectives can vary widely, and thus effectiveness may have different meanings in different contexts and for different communities (OECD, 2019[43]; World Bank, 2020[44]; Ellis, Caruso and Ockenden, 2013[45]; Ye Zou and Ockenden, 2016[46]; CIF and Itad, 2020[47]). For example, the climate and development communities may emphasise the importance for climate finance to meet the urgent and immediate needs of climate-vulnerable countries, which may not be a priority for the private sector. Questions of how to achieve the effectiveness of development finance have been at the centre of international discussions on development co-operation. In this context, the Global Partnership on Effective Development Co-operation, endorsed by 162 countries and territories and adhered to by 52 international organisations, identifies four core principles of what constitutes effective co-operation: 1) ownership; 2) focus on results; 3) partnerships; and 4) transparency and shared responsibility (Global Partnership for Effective Development Co-operation, 2011[48]).

Measuring the effectiveness of climate finance provided/mobilised and received is not straightforward – even once stated objectives have been agreed. This difficulty in measuring effectiveness is mainly because there are inherent limitations to establishing causal links between country-level outcomes and international support, as the former depend on a multitude of different factors such as national policy choices and broader macroeconomic conditions. A further key challenge relates to the temporal aspects of measuring effectiveness. Some climate interventions will show immediate results, whereas others will lead to results that materialise after a longer timeframe. Identifying a specific point in time for assessing effectiveness can therefore be particularly complex for climate finance interventions aimed at long-term impacts (Ellis, Caruso and Ockenden, 2013[45]; OECD, 2019[43]; Ye Zou and Ockenden, 2016[46]). This challenge is particularly acute where climate finance is not provided to produce direct outcomes, but rather to enable local actors to take action e.g. through enhanced capacity.

Despite these challenges, it is possible to produce evidence of relevance to assessing the effectiveness of specific mitigation and adaptation interventions by relying on the use of benchmarks and performance indicators. Mitigation interventions usually aim at reducing GHG emissions, and several proxies for measuring the effectiveness of such interventions are readily identifiable and used in many cases, e.g. emission of greenhouse gas (GHG) avoided or tonnes of CO_2 (equivalent) reduced or avoided. Many multilateral and bilateral public climate finance providers now include such information in their annual reports and project assessment documentation. However, aggregation of such information remains challenging as different providers report using different methodologies, approaches and indicators.

The final impacts of adaptation interventions, as well as mitigation interventions focused on non-tangible outcomes such as policy interventions or capacity building, are more difficult to measure directly. Hence, they are typically assessed using broader results indicators (Ellis, Caruso and Ockenden, 2013[45]; OECD, 2019[43]; Assouyouti, 2021[49]; Vallejo, 2017[50]; Lamhauge, Lanzi and Agrawala, 2013[51]). International climate finance providers use a range of indicators in this context, including:

- The number of beneficiaries (e.g. number of people supported in preparing to adapt, anticipate or absorb climate-related shocks and stresses);
- Physical infrastructure and assets improved (e.g. kilometres of roads rendered climate-resilient);
- Increased use of resilience tools, instruments and strategies by public and private actors.

Beyond such broad indicators, assessing adaptation progress also requires sector-specific metrics, mainly because concrete adaptation outcomes differ in different sectors or policy areas. For example, the Global Commission on Adaptation proposed a suite of such metrics, including e.g. the proportion of agricultural area under productive and sustainable agriculture, the proportion of the rural population who live within 2 km of an all-season road, or improvements in human productivity in the face of increasing climatic variability (Leiter et al., 2019[52]).

The availability of data and information needed to measure effectiveness and progress against defined indicators, however, remains a key challenge. The current UNFCCC reporting framework, which will remain in place until 2024 before being replaced by the Paris Agreement's Enhanced Transparency Framework (see further below), requests non-Annex I countries[17] to include in their Biennial Update Reports (BURs)[18] a number of elements that can be particularly useful in monitoring and assessing effectiveness of international support. These elements include information on mitigation actions implemented and their effects and on financial support received from developed countries (UNFCCC, 2012[53]). Such regular reporting on mitigation actions implemented could help to better understand their impacts e.g. on national GHG emissions. In addition, the activity-level reporting of information on financial support received can be particularly useful for tracking the use of overall inflows of climate finance in any given developing country.

To date, information on mitigation actions implemented and financial support received is only partially available. It is reported by non-Annex I countries at varying levels of detail (Falduto and Ellis, 2019[54]; Ellis et al., 2018[55]). This can be explained by the difficulty in assessing impacts (particularly of adaptation projects) and the non-mandatory nature of developing countries' reporting requirements under the UNFCCC on these issues. Moreover, current UNFCCC reporting guidelines for biennial update reports (BURs) do not make an explicit link between the reporting on financial support received and mitigation actions implemented, i.e. they do not provide any indication as to whether developing countries shall or should indicate how any mitigation action reported was funded (UNFCCC, 2012[53]). For these reasons, BURs do not constitute a comprehensive basis for assessing the use and impacts of financial support under the UNFCCC.

Many non-Annex I Parties face significant capacity constraints in tracking, gathering and collating the information needed to prepare reports under the UNFCCC. On the ground, climate finance is directed toward multiple actors at national and sub-national levels. In practice, it is the national governments that are reporting such information. This renders detailed tracking particularly complex and challenging in the absence of sophisticated tracking systems (Ellis et al., 2018[55]). While international support has been provided to some developing countries for the preparation of BURs[19], many countries state in their BURs that they do not have the technical, staffing and financial resources needed to be able to compile the information requested. As of August 2022, 75 non-Annex I countries had not yet submitted a BUR (UNFCCC, 2022[56]).

The ETF of the Paris Agreement, which provides new reporting guidelines for Parties to the UNFCCC starting from 2024, can play an important role in incentivising both developed and developing countries' efforts in enhancing transparency. In particular, as part of the new guidelines on the reporting of information on financial support received, developing countries will be requested to include in their Biennial

[17] Non-Annex I Parties to the UNFCCC are those countries that are not listed in the Annex I of the Convention and consist mostly of developing countries. The list of developing countries considered for the quantitative analysis conducted in the first three chapters of this report includes more countries than those in the non-Annex I list.

[18] Biennial Update Reports (BURs) are reports submitted by non-Annex I Parties to the UNFCCC. BUR reporting guidelines are outlined in decision 2/CP.17 (UNFCCC, 2012[53])

[19] Notably via the Global Environment Facility Umbrella Programme for the Preparation of National Communications and BURs to the UNFCCC.

Transparency Reports (BTRs) information on the status of the activity supported by financing received (e.g. “ongoing”, “completed”, etc.) as well as on its impacts and estimated results.

At the same time, developing countries’ reporting to the UNFCCC will likely continue to provide only an indicative and limited picture of the support being received and its use due to the complexity of tracking financial flows, and the non-mandatory nature of reporting of this informational element under the ETF. Many developing countries need to develop or strengthen their ability to effectively track and report information on climate finance received and on the implementation of actions that such finance supports (UNFCCC SCF, 2021[9]). Nonetheless, such information, even if limited, will inform a better understanding of the “context of meaningful mitigation action and transparency of implementation” for the USD 100 billion goal, as well as contribute to an improved understanding of the effectiveness of climate finance for both national and international purposes. More broadly, strengthened efforts from both providers and recipients of climate finance in reporting more comprehensively on the impacts of international support can greatly contribute to these aims.

Importantly, strengthened reporting of information on the use, impacts and results of climate finance interventions is important not only for accountability. It can also help identify developing countries' priorities and outstanding challenges, which in turn can help make international support more targeted to address them. Overall, there is a growing recognition that international action needs to look beyond direct results, to be geared towards supporting, enabling and accelerating the transition towards low greenhouse gas emissions and climate-resilient development (OECD/The World Bank/UN Environment, 2018[39]), which has an impact on the approaches for assessing results. The actions required to achieve the goals of the Paris Agreement are inherently linked to countries’ overall national development plans and processes. Indeed, the UN Addis Ababa Action Agenda, stresses that each country has primary responsibility for its own economic and social development and highlights the role of national policies and development strategies (UN DESA, 2015[57]). Consistent with this understanding, supporting the integration of developing countries’ climate change considerations and policies into development strategies, plans and processes is a basic condition and enabler for effective, country-owned climate action (OECD, 2019[58]).

Annex A. Data and methodology

Methodological framework

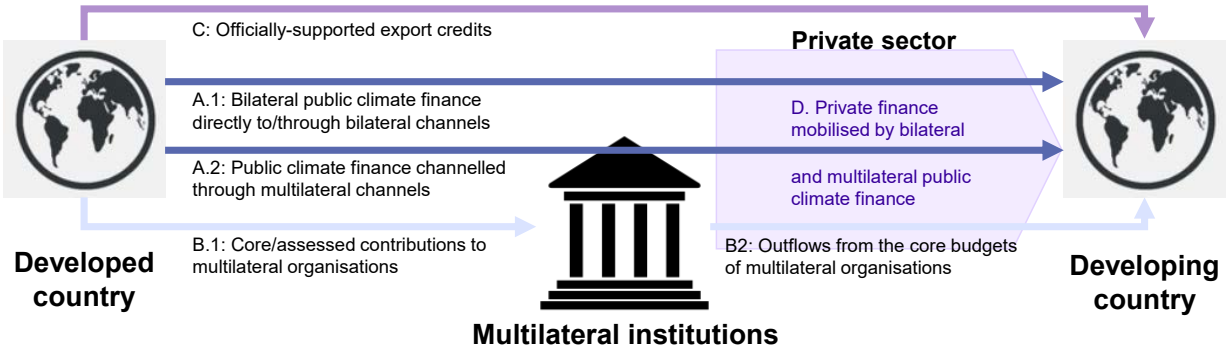
The accounting framework that underpins the analysis presented in the first three chapters of this report is consistent with the one used for previous OECD reports. It was initially developed in 2015 to estimate climate finance provided and mobilised by developed countries to developing countries in 2013-14. The framework was used subsequently in (OECD, 2019[59]), (OECD, 2020[60])and (OECD, 2021[61]), which extended the estimated period to 2017, 2018 and 2019, respectively. It is also consistent with the outcome, agreed by all countries, of the UNFCCC COP24 as regards the modalities for the accounting of financial resources provided and mobilised through public interventions.

The figures of total climate finance provided and mobilised by developed countries for climate action in developing countries are based on four distinct components (Figure A A.1):

- Bilateral public climate finance: public climate finance commitments (excluding export credits) by developed countries for developing countries. Such commitments are made either directly or through intermediaries (NGOs and civil society, networks, partnerships, universities and research institutes, private for-profit institutions, and other bilateral channels) (flow A.1) or as earmarked (non-core) funding through multilateral channels (flow A.2).
- Multilateral public climate finance attributable to developed countries: climate finance provided by multilateral development banks (MDBs) and multilateral climate funds (flow B.2) to developing countries, as well as climate-specific contributions by developed countries to multilateral bodies for which climate outflow data are unavailable (flow B.1).
- Officially supported climate-related export credits: financial support extended by developed countries' export credit agencies for climate-related projects in developing countries (flow C).
- Mobilised private climate finance attributable to developed countries consists of that proportion of finance from private sources mobilised by bilateral and multilateral public finance interventions in support of climate activities in developing countries which can be attributed to developed countries (flow D).

The OECD DAC and OECD ECG databases, as well as climate finance data reported by countries to the UNFCCC, are dynamic, which implies that they can accommodate data modifications and updates if needed and requested by the providers.

Figure A A.1. Simplified illustration of international development and climate finance architecture



Note: Outflows from the core budget of multilateral organisations and private finance mobilised by multilateral organisations are adjusted to only reflect the share attributable to developed countries.
Source: Authors

Developed countries' bilateral public climate finance

The bilateral climate finance component includes annual financial commitments or disbursements for 2013-2020 from developed countries to developing countries' governments, as well as NGOs, research institutes, private sector, networks and public-private partnerships operating in developing countries. Finance listed as "bilateral climate finance" excludes all forms of export credit financing to avoid double counting with the separate export credit component. It also excludes any coal-related financing. With the exception of the United States, bilateral climate finance data also exclude developmental guarantees, which are accounted instead for their mobilisation effect under the mobilised private finance component.

Data sources and geographical coverage

Bilateral climate finance data are in principle sourced from Table 7(b) of the Common Tabular Format (CTF) tables that accompany Annex I Parties' Biennial Reports (BRs) to the UNFCCC. The fifth biennial reports (BR5), covering the years 2019 and 2020, were in principle due on 1st January 2022. However, at the time of the data analysis and drafting for this report, such data were not yet available due to delays in official reporting to the UNFCCC.[20] Therefore, for 2019 and 2020, bilateral public climate finance data were sourced as follows:

- For individual Member States of the European Union, data were sourced from the publicly-disclosed information communicated annually to the European Commission under the EU Monitoring Mechanism Regulation (for 2019 data) and under the EU Regulation on the Governance of the Energy Union and Climate Action (for 2020 data). Some Member States of the European Union provided ad-hoc data submissions to the OECD instead, due to methodological differences between their reporting to the UNFCCC and under the EU Regulations.
- For all other developed countries and the European Union itself, 2019 and 2020 climate finance data were provided to the OECD in advance of official reporting to the UNFCCC.

[20] Decision 6/CP.25, adopted at COP25, changes the due date of the submission of the fifth biennial reports by Annex I Parties. Accordingly, the fifth BR to the UNFCCC, including 2019 and 2020 climate finance data, is due to be reported "as early as the due date for the annual GHG inventory submission for the inventory year 2020 is provided to the UNFCCC (e.g., 15 April 2022), but no later than 31 December 2022" (UNFCCC, 2020[69]).

Methodological considerations

While Annex II countries are required to report bilateral climate finance flows to the UNFCCC using a common format (that is, Table 7(b) of the CTFs), working in-depth with the data reported as done for the present report makes it possible to identify significant inconsistencies in terms of methodologies, categorisations, and definitions adopted across countries. While most OECD DAC members base their reporting to the UNFCCC on the climate-related development finance data they report to the OECD DAC, bilateral climate finance data reported to the UNFCCC are neither as detailed (fewer data fields) nor as standardised as data reported to the OECD DAC statistical system (some leeway allowed). Annex C further analyses this issue.

It is observed that climate finance reporting to the UNFCCC varies across countries in three main areas that have a significant impact on the amount reported:

- **Currency conversion**: The figures presented in this report are based on reporting by countries in USD, when available. Exchange rates used to estimate amounts in USD vary across countries, although the vast majority use the "Annual Average Dollar Exchange Rates for DAC Members". Where countries provided climate finance in another currency, the amount was converted using the "Annual Average Dollar Exchange Rates for DAC Members".
- **Commitments and disbursements**: Countries may report either financial commitments or disbursements to the UNFCC. Most choose to report either on "disbursed" or on "committed" climate finance. However, a limited number of countries combine both, depending on the financial instrument. As a result, figures of bilateral climate finance presented in this report are based on a combination of (a majority of) commitment and (a minority of) disbursement data. Exchange of information with countries and ad-hoc requests for further clarification ensured that double counting has been avoided for countries that reported both. Overall, disbursement data almost exclusively relate to grants.
- **Climate-specific amounts**: Table 7(b) of the CTFs requires countries to report information on the climate-specific amount of a contribution; that is the share of a contribution that targets climate change specifically. Countries adopt different approaches to calculate the climate-specific amount of a contribution (see Annex C for further detail).

Data harmonisation and quality checks

The UNFCCC guidelines for the reporting of financial information by Parties included in Annex I to the Convention (decision 9/CP.21), and the guiding footnotes to table 7(b) of the CTFs provide limited guidance to countries on how to fill in the CTFs. Each reporting parameter of table 7(b) includes a list of standardised categorisations (labels) that Annex I countries can use to report on different aspects of a contribution.

However, data labels and descriptions used vary significantly across countries, particularly for recipients and sectors. For the purpose of this report, and to allow for meaningful aggregation and analysis of data, bilateral climate finance data included by Annex I countries in the relevant CTFs had to be harmonised and re-coded into a set of defined categorisations. These encompass:

- **Funding source**: Labels made available in table 7(b) include: ODA, OOF, and Other. Limited variance in the use of these labels was observed across countries. When countries report a contribution as a combination of ODA and OOF, or as "other", an exchange of information took place with donor countries to clarify the source.
- **Financial instrument**: Financial instrument labels made available by table 7(b) were: grant, concessional loan, non-concessional loan, equity, and other. A number of countries used sub-variants of these categorisations, e.g. "syndicated loan", "interest subsidy", etc. Financial

instruments have been re-coded according to the categorisation of loans, grants, equity, export credits, and development guarantees.

- **Type of finance**: Type of finance categorisations made available by table 7(b) include: mitigation, adaptation, and cross-cutting. No variance across countries was observed in the labels used, and no additional harmonisation work was needed.
- **Sectors**: Type of sectoral categorisations made available by table 7(b) include: energy, transport, industry, agriculture, forestry, water and sanitation, cross-cutting, and other. Most countries however report sectors at a higher level of granularity. To facilitate comparability with other climate finance components included in this report, sectors were re-coded to the highest level of granularity available so as to correspond to standardised DAC sectoral classification. Great variation in the use of sectoral labels was observed.
- **Recipients**: The CTF reporting field "recipient country/region/project/programme" does not include any standardised labels for countries to use. Because of the broad reporting scope of this reporting parameter, great variance is observed across countries in terms of reporting format, level of detail and wording. Recipient countries were re-coded as regions or sub-regions when multiple countries belonging to the same geographical area were listed for a single contribution.

For a number of observations, it was not possible to harmonise and re-code sectors and recipients. The recipient country and/or sector of these contributions were marked as "Unspecified" under either category. This was the case for a number of contributions, for which activity-level data were not available. For example, a number of contributions were marked as being directed to a list of (specified) multiple countries belonging to different geographical areas and/or sectors. In such cases, and as it was not specified by countries, it was not possible to assess what shares of the contribution would target each recipient/sector.

With regards to earmarked (i.e., multi-bilateral) contributions to UN agencies, NGOs, and IGOs, there are no commonly-agreed UNFCCC guidelines on whether these are to be reported in CTF table 7(a) or 7(b). Where these contributions were reported in table 7(a), they have been included in the bilateral climate finance figures. For these contributions, the recipients were marked as "global/unallocated".

Potential for facilitating and improving data analysis

While standardised reporting across countries of status and type of finance, financial instruments and funding source has significantly improved over time, a number of challenges related to the reporting of recipients and sectors continue hindering data analysis. To enhance the transparency of reporting and facilitate data analysis, as well as to limit the risk of errors, it would be helpful if countries were to report information on bilateral climate finance in a format that could be easily read and processed by a computer ("machine-readable"), limiting the need for manual work in the context of data harmonisation. For this purpose, as analysed in more depth by the OECD/IEA Climate Change Expert Group (Falduto and Ellis, 2019[54]), it would be useful to ensure that:

- Data are reported, to the extent possible, according to standardised labels prompted by the CTFs.
- Recipient countries and/or regions are indicated in a dedicated data field, separately from the project and programme title. Given that this reporting option is not possible within current CTFs, including the name of a country at the beginning of a text string (e.g. in the "Recipient country/region/project/programme" field) would facilitate the identification and isolation of the recipient for data analysis purposes.
- Data are reported, wherever applicable, at the activity level. This implies avoiding reporting contributions aggregated per, e.g., disbursing agency.

Multilateral public climate finance attributable to developed countries

The multilateral public climate component covers climate-related commitments by multilateral development banks (MDBs), multilateral climate funds and other multilateral organisations, sourced from their core resources (sometimes referred to as ordinary capital). These are subsequently attributed to developed countries (see Table A A.1 below).

Outflows from trust funds and special-purpose programmes administered by multilateral organisations are not included in the multilateral public component. Inflows to such funds and programmes are considered as provider countries' bilateral climate finance and are, in principle, reported in the CTF tables submitted to the UNFCCC and captured under the present analysis under the "bilateral public" finance component. Work is ongoing in the context of Total Official Support for Sustainable Development (TOSSD) to deliver, among other things, activity-level data on outflows (including climate-related) from trust funds and similar vehicles managed by multilateral organisations. This could enhance the granularity of future analyses. In addition, the figures also include contributions by developed countries (inflows) to multilateral organisations, for which standardised climate finance outflow data are unavailable at present; this is particularly the case for specialised UN agencies, such as UNDP or UNEP.

The multilateral public climate dataset includes all modalities and financial instruments that constitute long-term financial flows. This includes grants, equity investments, mezzanine/hybrid finance and debt instrument with a maturity of over one year. Short-term debt operations (notably short-term trade finance operations) are excluded. To avoid double-counting other climate finance components, multilateral guarantees and other unfunded contingent liabilities are presented under private finance mobilised in case they cover private finance. They are excluded in case they cover public finance, again, so as to avoid double counting.

Data sources and geographical coverage

Data on multilateral core budget outflows are sourced from the standardised activity-level data on development finance collected for the purpose of the OECD DAC (CRS) statistics and TOSSD, using a consolidated CRS-TOSSD template. The geographic coverage of the multilateral outflow data is limited to countries and territories included on the DAC List of ODA Recipients (OECD, 2022[62]). As illustrated in the section below on country groupings, the DAC List of ODA Recipients significantly overlaps but is not identical to the list of non-Annex I Parties to the UNFCCC. For multilateral organisations active in non-Annex I Parties, which are not on the DAC List of ODA Recipients, the CRS-TOSSD dataset is complemented with relevant activity-level data sourced from annual reports, providers' online databases and the International Aid Transparency Initiative (IATI).

Multilateral outflows reported using the CRS-TOSSD template include a range of statistical categories. These include standardised information on, for instance, recipients, sectors, instruments, and channels of delivery and modalities (e.g. projects versus technical assistance) and climate theme where relevant. Such standardised data were extensively used in this report to conduct disaggregated analyses.

Concerning multilateral agencies for which no project-level outflow data are available, as mentioned above, the analysis uses inflows included by Annex I Parties in table 7(a) of the Biennial Reports to the UNFCCC. In those cases, the only information available was the climate theme, i.e. the corresponding volumes are labelled as "unallocated" in relation to other analytical dimensions such as sector and geography.

Methodological considerations

Reporting on multilateral outflows by means of the CRS-TOSSD template is built upon on statistical definitions and standards. This results in a dataset that is more coherent than for bilateral climate finance reported to the UNFCCC, notably in terms of point of measurement (all commitment based), currency

conversion and sectoral classifications. However, in terms of tracking climate finance, multilateral organisations currently report using two different methods:

- The MDB methodologies for tracking climate change adaptation and mitigation finance (MDB group, 2021[6]): While these two MDB approaches fundamentally differ in nature, they are intended to deliver quantified indications of the extent to which individual activities contribute to or promote adaptation and/or mitigation (multilateral climate components). The MDB method on adaptation does so by capturing the incremental cost of adaptation activities. The MDB method for tracking mitigation finance is based on a "positive" list of activities in sectors that reduce greenhouse gas (GHG) emissions and are compatible with low-emission development.
- The Rio markers methodology (OECD-DAC, 2016[63]): Used initially by DAC members only, many multilateral climate funds (e.g. AF, GEF, and NDF) based their climate-related reporting for the years covered by this report on the DAC Rio markers method.

A key methodological point behind the multilateral public climate finance figures is considering only the share of multilateral climate commitments attributable to developed countries. Multilateral institutions are typically funded or capitalised by core contributions from both developed and developing countries. Institutions that operate with a financial business model use these contributions as a basis for raising additional finance from the capital markets.

A specific methodology is, therefore, needed to calculate, for each institution, the share of its outflows attributable to developed countries, with the remainder being attributable to developing countries. Such calculation takes into account the most recent and historical replenishment participations by individual countries, as well as, where applicable, the institutions' capacity to raise funds from the capital markets (OECD, 2019[64]). The resulting attribution shares can be found in Table A A.1. These attribution percentages are also applied to the amounts mobilised from the private sector by the multilateral agencies' interventions.

Table A A.1. Calculated shares of multilateral climate finance attributable to developed countries

Type of Institution	Institution name	Abbreviation	2015	2018	2020
Multilateral Development Banks	African Development Bank	AfDB	59.0%	56.4%	61.2%
	African Development Fund	AfDF	94.0%	93.6%	93.4%
	Asian Development Bank	AsDB	71.0%	71.4%	71.6%
	Asian Development Bank Special Fund	AsDF	96.0%	95.2%	N/A
	Asian Development Bank Credit Guarantee and Investment Facility	CGIF	N/A	N/A	42.8%
	Asian Infrastructure Investment Bank	AIIB	N/A	27.3%	28.6%
	Black Sea Trade and Development Bank	BSTDB	N/A	N/A	44.2%
	Caribbean Development Bank	CDB	N/A	34.6%	34.6%
	Central American Bank for Economic Integration	CABEI	N/A	N/A	5.2%
	Council of Europe Development Bank	COEB	N/A	93.7%	93.7%
	Development Bank of Latin America	CAF	N/A	4.6%	4.8%
	European Bank for Reconstruction and Development	EBRD	89.0%	91.4%	91.4%
	European Investment Bank	EIB	99.0%	100.0%	100.0%
	International Bank for Reconstruction and Development	IBRD	70.0%	69.9%	71.3%
	International Development Association	IDA	95.0%	95.9%	95.9%
	Inter-American Development Bank	IADB	74.0%	73.6%	73.9%
	Inter-American Development Bank Special Fund		73.0%	72.5%	N/A
	IDB Invest	IDB Invest	N/A	33.6%	34.4%
	International Finance Corporation	IFC	64.1%	65.4%	65.4%
	International Investment Bank	IIB	N/A	52.2%	51.7%

	Multilateral Investment Guarantee Agency	MIGA	64.3%	66.1%	66.2%
	North American Development Bank	NADB	N/A	N/A	63.2%
	Private Infrastructure Development Group	PIDG	N/A	99.5%	99.5%
Multilateral Climate Funds	Adaptation Fund	AF	100.0%	100.0%	100.0%
	Climate Investment Funds	CIFs	100.0%	99.0%	99.9%
	Global Environment Facility Trust Funds	GEF	98.0%	98.0%	97.6%
	Global Environment Facility Least Developed Countries Fund	GEF LDCF	100.0%	100.0%	100.0%
	Global Environment Facility Special Climate Change Fund	GEF SCCF	100.0%	100.0%	100.0%
	Green Climate Fund	GCF	N/A	99.6%	99.0%
	International Fund for Agricultural Development	IFAD	N/A	74.2%	71.0%
	Nordic Development Fund	NDF	100.0%	100.0%	100.0%

Note: The 2015 percentages apply to 2013, 2014 and 2015 multilateral climate finance outflow data. The 2018 percentages apply to 2016, 2017 and 2018 data, and those for 2020 to 2020. For some multilateral institutions, the 2015 and 2018 were adjusted compared to the ones previously used, to reflect retroactive data updates (see Table A A.4).
Note 2: The merger of the AsDB ordinary capital resources (OCR) balance sheet with the lending operations of the AsDF and the transfer of the IADB-FSO assets to the IADB OCR became effective at the start of 2017. Climate finance outflows from the GCF, the IDB Invest (previously Inter-American Investment Corporation; IIC) and the AIIB were first recorded in OECD DAC statistics in 2015, 2016 and 2017 respectively. Climate finance outflows from IFAD, CEB and CAF were first included in the present figures in 2018 and those from BSTDB, CABEI, NADB and PIDG in 2020 (climate finance in relation to these institutions was recorded either at the inflow point or was not covered altogether).
Source: OECD calculations based on annual reports and websites of each of the listed institutions.

Transparency considerations

In principle, CRS-TOSSD data reported by multilateral organisations, including on climate, are collected and made publicly available at the activity level. However, some institutions face persisting confidentiality constraints, notably for private sector projects, which in turn thwarts transparency of development and climate finance. Although progress has been achieved and more data become available over time, some MDBs continue to choose to anonymise or aggregate their data. For example, IFC climate finance data continue to be accessed in a virtual data room accessible by a limited number of OECD staff and only aggregates by recipient, sector and climate focus are exported for further use. This data securitisation is on top of non-disclosure agreements signed between the IFC and OECD. Work is ongoing to further rationalise this data reporting practice. Activity-level data reporting is, however, not only essential transparency and accountability mechanism but also a prerequisite for conducting basic data quality assurance by the OECD.

More generally, further transparency on MDB climate finance data would benefit the international community. While MDBs report their outflows to the OECD based on DAC statistical standards, they have also since 2013 published their climate finance numbers in dedicated annual joint MDB reports (OECD, 2019[64]). For most of the MDBs, the accounting basis used to develop the joint MDB reports is different from that of the OECD DAC, e.g. in terms of point of measurement, geographical scope, and/or instrument coverage. The joint MDB reports are intended to communicate on MDBs' performance to the shareholders, rather than provide international statistics relevant to UNFCCC discussions. Accordingly, MDBs currently do not make their activity-level datasets that underpin the joint MDB reports publicly available, which makes it challenging to conduct comparisons and partial reconciliation with the data recorded in the OECD DAC database. Overall, sharing transparent and granular data with the OECD is critical for harmonisation and comparability purposes.

Developed countries' climate-related export credits

Officially-supported export credits are the third component included in the report. Although extended primarily to support national export and facilitate international trade, export credits can also contribute to climate action by supporting projects with climate mitigation or adaptation benefits.

Data on climate-related export credits originate from two sources:

- The vast majority of the data are sourced from the OECD Export Credit Group's (ECG) database on officially-supported export credits, which contains activity-level transaction data reported by official export credit agencies (ECAs). The ECG statistics includes two main types of export credit transactions: loans extended directly by ECAs and private loan guaranteed (or insured) by ECAs. Both types are accounted for on their face value and a gross basis. Importantly, the ECG database only covers export credits with a repayment term of two years or more that were provided in conformity with the Arrangement on Officially Supported Export Credits (OECD, 2022[65]). For this report, data sourced from the ECG database only include transactions explicitly targeting renewable energy, climate change mitigation and adaptation, and water projects were included. In practice, such data covers almost only renewable energy-related transactions.
- Some countries provide export support outside of that reported under the Arrangement, i.e. beyond the ECG database. Concerning 2016-20, eight countries reported such complementary data: Austria, Canada, Italy, France, Japan, Spain, Switzerland and the United States. These countries either provided one-off data inputs directly to the OECD for the purpose of this report series or by including export credits in their biennial climate finance reporting to the UNFCCC. The reported data is mainly related to renewable energy, with a few transactions in the water and sanitation, transport, telecommunications and agriculture sectors. Where relevant, export credit transactions supporting coal-related activities were excluded.

To avoid double-counting across these data sources, all export credit data that were made available for the purpose of this report were carefully reviewed, cross-checked and netted out. For example, export-credit activities reported by countries to the UNFCCC as part of Biennial Reports were excluded from the bilateral climate finance component and included in the export credit component only if not already captured by the OECD export credit database.

In terms of general methodological considerations, export credit data are collected on a commitment basis. Furthermore, data sourced from the ECG database are converted to USD using monthly average exchange rates relating to the monthly commitment.

Private finance mobilised by developed countries

This fourth and last component captures private finance mobilised by public bilateral and multilateral climate finance. The methodology that underpins the dataset allows to only take into account private finance specifically mobilised by and attributable to developed countries' interventions, as well as avoid double-counting among public climate finance providers where jointly mobilising private finance.

Data source and coverage

Under a high-level mandate from development ministers, the OECD DAC has developed an international standard for measuring the amounts mobilised from the private sector by official development finance interventions, including for climate. Work has been carried out jointly with the OECD-led Research Collaborative on Tracking Finance for Climate Action, as well as in close collaboration with experts from bilateral development finance institutions, aid agencies and relevant ministries, as well as the MDBs and

other multilateral organisations. Based on multiple years and successive rounds of research, stakeholder consultations, surveys and methodological developments, the methodology is considered comprehensive. Since 2017, data collections on private finance mobilisation has been fully implemented in the regular CRS reporting cycles, as well as in TOSSD since 2019.

The scope of the OECD DAC methodology for measuring the amounts mobilised from the private sector covers the main mechanisms used by development finance providers, including syndicated loans, guarantees, credit lines, direct investment in companies or special purpose vehicles (SPVs), shares in collective investment vehicles (CIVs) and simple co-financing arrangements. Work is ongoing to develop criteria and guidance to include some technical assistance activities in the measurement.

In order to avoid double-counting when multiple official financiers co-invest together with the private sector, the methodology attributes the amounts mobilised following an instrument-specific approach which takes into account the role (e.g. arranger of syndications) and position (investment seniority) played by each official actor. In addition, as a matter of principle, the mobilisation methods take into account the role played by all official actors involved, including both international and domestic public agencies (e.g. national development banks).

Consistently with data coverage that underpinned previous OECD figures of mobilised private climate finance in 2016 and 2017 (OECD, 2019[1]), almost all Annex I Parties (both DAC members and relevant non-DAC countries) and multilateral agencies that work with the private sector report their mobilisation data to OECD development finance statistics.

Table A A.2. Mechanisms and instruments in the OECD DAC measure or private finance mobilised

Leveraging mechanism	Definition, use and purpose	Typical financial instruments used by public finance providers	Typical mobilised private finance
Syndicated loans	Syndicated loans are defined as loans provided by a group of lenders (called a syndicate) who work together to provide funds to a single borrower. They are often employed to provide debt liquidity to project finance SPVs (often to implement large-scale infrastructure projects) or other borrowers, such as local finance institutions or enterprises.	Standard loans, subordinated loans	Private lenders participating in the loan syndication.
Guarantees	Guarantees are legally binding agreements under which the guarantor agrees to pay part or the entire amount due on a loan, equity or other instrument in the event of non-payment by the obligor or loss of value in case of investment.	Guarantees and other unfunded contingent liabilities	Private equity investments and loans to SPVs and companies as well as portfolios of private local finance institutions.
Shares in CIVs	Shares in collective investment vehicles (CIVs) represent investments in pooling vehicles, such as investment funds and facilities, which typically use such finance to foster local SME development.	Equity investments, loans, and mezzanine finance (rarely)	Private equity investments in the CIVs.
Direct investment in companies and SPVs	In the context of project finance, this mechanism refers to mobilising private investments in SPVs which are neither covered by official guarantors nor part of a syndicated loan. Beyond project finance, direct investment in companies refers to loans, mezzanine finance and equity investments in enterprises alongside with private investors to provide liquidity for expansion purposes.	Equity investments, mezzanine finance, standard loans, bonds and other debt instruments	In the context of project finance: private equity investments or private debt financing in SPVs (if not through syndicated loans). Beyond project finance: private debt financing (not syndicated) and equities invested in enterprises.
Credit lines	Credit lines refer to a standing credit amount which can be drawn upon by borrowers (typically local finance institutions) for on-lending purposes mainly to SMEs. Usually, the borrowers are requested to top-up the lenders' investments from their own resources. In some cases, the local SMEs and other end-borrowers are requested to expand equity when using the credit.	Standard loans, subordinated loans	Top-up funds by private local finance institutions and in certain cases also equity investments in the end-borrowers (if required).
Simple co-financing	Simple co-financing arrangements refer to various business partnerships, B2B programmes, business surveys, matching programmes, co-financing of specific projects and similar arrangements where official providers extends finance in co-financing with the private sector. It usually involves official grants.	Standard grants, standard loans	Private co-finance of specific projects in the field or in the context of business partnerships.

Source: OECD Development Assistance Committee statistics.

Methodological considerations

It can be more or less difficult to measure and report private finance mobilised depending on the mechanism. Credit lines and shares in CIVs involve financial intermediaries. For this reason, determining the climate relevance of downstream investments can be challenging due to the limited availability of information at the point of the public finance intervention on the actual downstream use of the finance. In contrast, information on the climate focus of activities without an intermediary, such as direct investment in companies and SPVs, investment guarantees, syndicated loans for infrastructure projects, or simple co-financing arrangements, is typically available at the commitment stage of the public finance intervention.

For a majority of cases, the point of measurement for private finance mobilisation is when the information becomes available to all co-financiers in individual projects, such as at the commitment or financial closure stage. Still, the mobilisation effect of shares in CIVs and direct investment in companies can stretch over a significant period of time, which sometimes requires reporting on a disbursement or ex-post basis.

Similarly to the multilateral public finance, mobilised private climate finance by multilateral providers only reflects the shares attributed to developed countries (see Table A A.1). The climate relevance of mobilised private finance is reported by providers to the OECD DAC based on either the DAC Rio marker (for bilateral providers and multilateral climate funds) or the MDB methodologies (for MDBs). The extent to which private finance mobilised contributes to climate change mitigation and/or adaptation is determined by the climate relevance or percentage of the official finance intervention mobilising private finance. For example, if an MDB loan with a mitigation component of 75% mobilises private finance, this very percentage is applied to the mobilised private amount. Amounts of mobilised private finance tagged for climate based on Rio markers are accounted for at their face value.

Data on private climate mobilisation collected by the OECD DAC or estimated for the purpose of this report are converted to USD using the nominal annual average exchange rates. These are presented in Table A C.4.

Potential for facilitating and improving data analysis

DAC members and the multilateral community have been sharing data on their private finance mobilisation with the OECD at the project level since the inception of this work in 2013, following the OECD DAC statistical standards and definitions for comparability purposes. These data were primarily used for various analytical outputs of the OECD, presenting highly aggregated trends. To respond to increasing needs for transparency in the development and climate finance communities, in 2018, DAC members agreed on data disclosure rules that allow a broader range of stakeholders to use those data.

In recent years, however, some MDBs indicated that they face data confidentiality constraints when reporting to the OECD on amounts mobilised from the private sector, including for climate action. A joint working group involving MDBs, DAC members, and the OECD Secretariat was launched in 2019 to address these issues and to explore solutions for the MDBs to continue providing these data to the OECD. This led to the development of an online data analytical tool (OECD, 2022[66]). Addressing client confidentiality obligations of MDBs, the tool presents the following aggregates: by recipient and group of providers or by provider and main sector or by provider and region. Each of these presentations can be further broken down by leveraging mechanism and amount type (total mobilised vs. total mobilised for climate). Further, data sharing and non-disclosure agreements have to be signed to date with the AsDB, EBRD, EIB, IDB Invest and IFC.

Historical data revisions

With a growing volume of statistical evidence on climate finance over past years, specific data entries underpinning the report series were revised to further improve and refine the accuracy of the analysis and findings it puts forward.

These retroactive revisions cover the following areas:

- **Adjustments resulting from updated reporting by providers:** With evolving quality and comprehensiveness of data reporting, some providers retrospectively revised their past reporting to address errors or improve the consistency of their data. Examples of such adjustments include removing guarantees from reports on multilateral organisations' outflows (as guarantees do not constitute flows unless called) or reclassification of financial instruments. Although such data resubmissions had a limited impact on the aggregate trends, some may have affected certain topical breakdowns for the years 2016 to 2020.
- **Adjustments resulting from expanded data checks**: In the context of the further disaggregated data analysis conducted for the purpose of the present report, a few isolated data processing errors were identified and corrected. This notably concerns the use of adjusted currency

conversion rates used for two providers in 2017 and 2019. The most notable impact of this is an upward adjustment of export credit totals for the concerned years.

- **Adjustments to shares for attributing multilateral climate finance to developed countries:** As part this year's update of the attribution shares applicable to climate finance in 2020 and onwards, some institution-specific shares used on previous years and 2018-2019 in particular were revised. These corrections were mainly aimed at adapting the attribution shares to the broader definition of the developed countries, not only including Annex II parties but also other European Union Member States (see Table A A.3). In addition, a limited number of corrected attributions shares related to improved availability of information inputs and technical errors. The impact of these revisions on the overall trends is negligible though.

The adjustments resulting from these historic revisions are summarised in the below two tables. At an aggregate level, these adjustments do not impact the overall trends and key messages put forward by previous OECD reports within the "Climate Finance and the USD 100 Billion Goal" book series.

Table A A.3. Impact of historic data revisions on volumes of climate finance provided and mobilised (USD billion variation)

Component	2017	2018	2019
Bilateral public climate finance	N/A	N/A	-0.1
Multilateral public climate finance	-0.4	+0.9	+0.6
Climate-related export credits	+0.9	+0.6	N/A
Mobilised private finance	N/A	+0.1	+0.4
Total	+0.4	+1.6	+0.8

Note: The Total may not add up exactly due to rounding.

Table A A.4. Impact of revisions of the shares for attributing multilateral climate finance to developed countries in 2018-19 (percentage point of the difference)

Type of institution	Institution name	Abbreviation	2018 attribution %
Multilateral Development Banks	African Development Bank	AfDB	-1.8%
	African Development Fund	AfDF	Unchanged
	Asian Development Bank	AsDB	Unchanged
	Asian Development Bank Special Fund	AsDF	Unchanged
	Asian Development Bank Credit Guarantee and Investment Facility	CGIF	Unchanged
	Asian Infrastructure Investment Bank	AIIB	Unchanged
	Black Sea Trade and Development Bank	BSTDB	Unchanged
	Caribbean Development Bank	CDB	+4.8%
	Central American Bank for Economic Integration	CABEI	Unchanged
	Council of Europe Development Bank	CEB	-4.7%
	Development Bank of Latin America	CAF	-0.5%
	European Bank for Reconstruction and Development	EBRD	+2.6%
	European Investment Bank	EIB	+1.4%
	International Bank for Reconstruction and Development	IBRD	+2.0%

Type of institution	Institution name	Abbreviation	2018 attribution %
	International Development Association	IDA	+3.1%
	Inter-American Development Bank	IADB	Unchanged
	Inter-American Development Bank Special Fund		Unchanged
	IDB Invest	IDB Invest	Unchanged
	International Finance Corporation	IFC	+1.3%
	International Investment Bank	IIB	Unchanged
	Multilateral Investment Guarantee Agency	MIGA	+1.9%
	North American Development Bank	NADB	Unchanged
	Private Infrastructure Development Group	PIDG	-0.5%
Multilateral Climate Funds	Adaptation Fund	AF	Unchanged
	Climate Investment Funds	CIFs	Unchanged
	Global Environment Facility Trust Funds	GEF	Unchanged
	Global Environment Facility Least Developed Countries Fund	GEF LDCF	+0.1%
	Global Environment Facility Special Climate Change Fund	GEF SCCF	+0.5%
	Green Climate Fund	GCF	Unchanged
	International Fund for Agricultural Development	IFAD	Unchanged
	Nordic Development Fund	NDF	Unchanged

Annex B. Country groupings

For the purpose of this report's analysis and figures, the following classifications are used:

- "Developed countries", which include Annex II Parties to the Convention, as well as other countries who are Member States of the European Union, and in addition Liechtenstein and Monaco (Table A B.1)

"Developing countries", which refer to countries and territories included on the DAC List of ODA Recipients for 2018 development finance and/or on the non-Annex I list of Parties to the UNFCCC (Note: Note by Türkiye: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Türkiye recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye shall preserve its position concerning the "Cyprus issue". Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Türkiye

- Table A B.2, Table A B.3, and Table A B.4). Sub-categories of developing countries are further identified: SIDS, LDCs and fragile states.

Countries and territories that do not fall in these categories (most notably the Russian Federation (Russia) are not covered by the analysis.

Table A B.1. Developed countries

Australia	European Union	Latvia	Portugal
Austria	Finland	Liechtenstein	Romania
Belgium	France	Lithuania	Slovak Republic
Bulgaria	Germany	Luxembourg	Slovenia
Canada	Greece	Malta	Spain
Croatia	Hungary	Monaco	Sweden
Cyprus	Iceland	Netherlands	Switzerland
Czech Republic	Ireland	New Zealand	United Kingdom
Denmark	Italy	Norway	United States
Estonia	Japan	Poland	

Note: Note by Türkiye: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Türkiye recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye shall preserve its position concerning the "Cyprus issue". Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Türkiye

Table A B.2. Developing countries: Non-Annex Parties in the DAC List of ODA Recipients (2020 flows)

Afghanistan	Dominican Republic	Libya	Saint Lucia
Albania	Ecuador	Madagascar	Saint Vincent and the Grenadines
Algeria	Egypt	Malawi	Samoa
Angola	El Salvador	Malaysia	Sao Tome and Principe
Antigua and Barbuda	Equatorial Guinea	Maldives	Senegal

Argentina	Eritrea	Mali	Serbia
Armenia	Eswatini	Marshall Islands	Sierra Leone
Azerbaijan	Ethiopia	Mauritania	Solomon Islands
Bangladesh	Fiji	Mauritius	Somalia
Belize	Gabon	Mexico	South Africa
Benin	Gambia	Micronesia	South Sudan
Bhutan	Georgia	Moldova	Sri Lanka
Bolivia	Ghana	Mongolia	Sudan
Bosnia and Herzegovina	Grenada	Montenegro	Suriname
Botswana	Guatemala	Morocco	Syrian Arab Republic
Brazil	Guinea	Mozambique	Tajikistan
Burkina Faso	Guinea-Bissau	Myanmar	Tanzania
Burundi	Guyana	Namibia	Thailand
Cabo Verde	Haiti	Nauru	Timor-Leste
Cambodia	Honduras	Nepal	Togo
Cameroon	India	Nicaragua	Tonga
Central African Republic	Indonesia	Niger	Tunisia
Chad	Iran	Nigeria	Turkmenistan
China (People's Republic of)	Iraq	Niue	Tuvalu
Colombia	Jamaica	North Macedonia	Uganda
Comoros	Jordan	Pakistan	Uzbekistan
Congo	Kazakhstan	Palau	Vanuatu
Costa Rica	Kenya	Panama	Venezuela
Côte d'Ivoire	Kiribati	Papua New Guinea	Viet Nam
Cuba	Kyrgyzstan	Paraguay	West Bank and Gaza Strip
Korea	Lao People's Democratic Republic	Peru	Yemen
Democratic Republic of the Congo	Lebanon	Philippines	Zambia
Djibouti	Lesotho	Rwanda	Zimbabwe
Dominica	Liberia	Saint Kitts and Nevis	

Table A B.3. Developing countries: Non-Annex I Parties beyond ODA Recipients (2020 flows)

Andorra	Chile	Qatar	Seychelles
Bahamas	Cook Islands	Korea	Singapore
Bahrain	Israel	San Marino	Trinidad and Tobago
Barbados	Kuwait	Saint Kitts and Nevis	United Arab Emirates
Brunei Darussalam	Oman	Saudi Arabia	Uruguay

Note: The following countries and territories graduated from the DAC List of ODA Recipients during 2013-20: Barbados, Croatia, Mayotte, Oman and Trinidad and Tobago (2011); Anguilla and Saint Kitts and Nevis (2014); Chile, Seychelles, Uruguay (2018) and Cook Islands (2020).

Table A B.4. Developing countries: ODA Recipients beyond the Non-Annex I Parties (2020 flows)

Belarus	Montserrat	Tokelau	Ukraine
Kosovo	Saint Helena	Türkiye	Wallis and Futuna

Table A B.5. Small Island Developing States (2020 flows)

Antigua and Barbuda	Dominica	Maldives	Saint Kitts and Nevis	Timor-Leste
Bahamas	Dominican Republic	Marshall Islands	Saint Lucia	Tonga
Bahrain	Fiji	Mauritius	Saint Vincent and the Grenadines	Trinidad and Tobago
Barbados	Grenada	Micronesia	Samoa	Tuvalu
Belize	Guinea-Bissau	Montserrat	Sao Tome and Principe	Vanuatu
Cabo Verde	Guyana	Nauru	Seychelles	
Comoros	Haiti	Niue	Singapore	
Cook Islands	Jamaica	Palau	Solomon Islands	
Cuba	Kiribati	Papua New Guinea	Suriname	

Table A B.6. Least Developed Countries (2020 flows)

Afghanistan	Djibouti	Malawi	Somalia
Angola	Eritrea	Mali	South Sudan
Bangladesh	Ethiopia	Mauritania	Sudan
Benin	Gambia	Mozambique	Tanzania
Bhutan	Guinea	Myanmar	Timor-Leste
Burkina Faso	Guinea-Bissau	Nepal	Togo
Burundi	Haiti	Niger	Tuvalu
Cambodia	Kiribati	Rwanda	Uganda
Central African Republic	Lao People's Democratic Republic	Sao Tome and Principe	Vanuatu
Chad	Lesotho	Senegal	Yemen
Comoros	Liberia	Sierra Leone	Zambia
Democratic Republic of the Congo	Madagascar	Solomon Islands	

Note: The following countries graduated from the list of LDCs during 2013-20: Samoa (2015) and Equatorial Guinea (2018).

Table A B.7. Fragile contexts as defined by the OECD (2020 flows)

Afghanistan	Equatorial Guinea	Liberia	South Sudan
Angola	Eritrea	Libya	Sudan
Bangladesh	Eswatini	Madagascar	Syrian Arab Republic
Burkina Faso	Ethiopia	Mali	Tajikistan
Burundi	Gambia	Mauritania	Tanzania
Cambodia	Guatemala	Mozambique	Togo
Cameroon	Guinea	Myanmar	Uganda
Central African Republic	Guinea-Bissau	Nicaragua	Venezuela
Chad	Haiti	Niger	West Bank and Gaza Strip
Comoros	Honduras	Nigeria	Yemen
Congo	Iran	Pakistan	Zambia
Côte d'Ivoire	Iraq	Papua New Guinea	Zimbabwe
Democratic People's Republic of Korea	Kenya	Sierra Leone	
Democratic Republic of the Congo	Lao People's Democratic Republic	Solomon Islands	
Djibouti	Lesotho	Somalia	

Note: The following countries are considered extremely fragile contexts: Afghanistan, Burundi, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Haiti, Iraq, Somalia, South Sudan, Sudan, Syrian Arab Republic, Yemen.

Regions and sub-regions

Section 2 analyses climate finance by region and sub-region. The classifications used in this report are inspired by the M49 standard of the United Nations to the extent possible, as well as the DAC regional groupings (UNSD, 2022[67]; OECD, 2022[62]). Climate finance that is not allocable by region because is grouped under "unspecified". This includes inflows to multilateral organisations or financing for activities with a multi-regional reach.

Table A B.8. List of developing countries and territories by region and sub-region (2020 flows)

Region	Sub-region	Country
Africa	North Africa	Algeria, Egypt, Libya, Morocco, Tunisia
	East Africa	Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, South Sudan, Sudan, Tanzania, Uganda, Zambia, Zimbabwe
	West Africa	Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Saint Helena, Senegal, Sierra Leone, Togo
	Central Africa	Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe
	Southern Africa	Botswana, Eswatini, Lesotho, Namibia, South Africa
Asia	Central Asia	Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
	East Asia	Brunei Darussalam, Cambodia, China, Democratic People's Republic of Korea, Korea, Lao People's Democratic Republic, Indonesia, Malaysia, Mongolia, Philippines, Singapore, Thailand, Timor-Leste, Viet Nam
	South Asia	Afghanistan, Bangladesh, Bhutan, India, Maldives, Myanmar, Nepal, Pakistan, Sri Lanka
	Middle East	Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Türkiye, United Arab Emirates, West Bank and Gaza Strip, Yemen
Europe	N/A	Albania, Andorra, Belarus, Bosnia and Herzegovina, Kosovo, Moldova, Montenegro, North Macedonia, San Marino, Serbia, Ukraine
Americas	Central America	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama
	South America	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela
	Caribbean	Antigua and Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago
Oceania	N/A	Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna

The main divergences from the UN M49 standard in this report are that:

- Central Asia includes all post-soviet countries in Asia, except Russia, namely Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
- Western Asia is replaced with the Middle East, whereas relevant post-soviet countries (Armenia, Azerbaijan, and Georgia) are included in Central Asia (see above).
- Sudan is included in Eastern Africa, rather than Northern Africa.

The main reason for these divergences is to ensure consistency with the DAC classification, which is used in the context of the underlying data on multilateral public and private finance mobilised. Moreover, provider countries and other countries and territories are excluded from the individual regions.

Although the regions identified often group countries and territories sharing specific attributes they differ significantly in terms of size, population, income, GNI, and other statistical categories. As a result, such regions should only be viewed as a tool that facilitates geographic analyses.

Income groups

The income group classification used in the context of the climate finance figures in this report is primarily based on the World Bank (WB) Country and Lending Groups classification for 2020. With regards to territories that were included in the climate finance dataset but are not covered by the WB classification, namely the Cook Islands, Niue, Montserrat and Tokelau, the income group was retrieved from the DAC List of ODA Recipients for reporting on aid in 2018, 2019 and 2020.

Table A B.9. List of developing countries and territories by income group (2020 flows)

Category	Countries
Low-income countries and territories (LICs)	Afghanistan, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Democratic People's Republic of Korea, Democratic Republic of the Congo, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Rwanda, Sierra Leone, Somalia, South Sudan, Syrian Arab Republic, Tanzania, Togo, Uganda, Yemen
Lower-middle income countries and territories (LMICs)	Angola, Bangladesh, Belize, Bhutan, Bolivia, Cabo Verde, Cambodia, Cameroon, Comoros, Congo, Côte d'Ivoire, Djibouti, Egypt, El Salvador, Eswatini, Ghana, Haiti, Honduras, India, Indonesia, Iran, Kenya, Kiribati, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Mauritania, Micronesia, Mongolia, Morocco, Myanmar, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Philippines, Samoa, Sao Tome and Principe, Senegal, Solomon Islands, Sudan, Tajikistan, Timor-Leste, Tunisia, Ukraine, Uzbekistan, Vanuatu, Viet Nam, West Bank and Gaza Strip, Zambia, Zimbabwe
Upper-middle income countries and territories (UMICs)	Albania, Algeria, Argentina, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Botswana, Brazil, China, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, Equatorial Guinea, Fiji, Gabon, Georgia, Grenada, Guatemala, Guyana, Iraq, Jamaica, Jordan, Kazakhstan, Kosovo, Lebanon, Libya, Malaysia, Maldives, Marshall Islands, Mauritius, Mexico, Moldova, Montenegro, Namibia, Nauru, North Macedonia, Panama, Paraguay, Peru, Saint Lucia, Saint Vincent and the Grenadines, Serbia, South Africa, Sri Lanka, Suriname, Thailand, Tonga, Türkiye, Turkmenistan, Tuvalu
High-income countries and territories (HICs)	Andorra, Antigua and Barbuda, Bahamas, Bahrain, Barbados, Brunei Darussalam, Chile, Israel, Korea, Kuwait, Oman, Palau, Qatar, Saint Kitts and Nevis, San Marino, Saudi Arabia, Seychelles, Singapore, Trinidad and Tobago, United Arab Emirates, Uruguay
Not classified	Cook Islands, Montserrat, Niue, Saint Helena, Tokelau, Venezuela, Wallis and Futuna

Annex C. Climate finance and development finance

The purpose of this section is to relate data and figures on climate finance provided and mobilised by development countries as presented in (OECD, 2022[5]) and in the first three Chapters of the present report, with development finance data and reporting practices. To this end, this section looks at the relationship between:

- On the one hand, climate finance as reported by developed countries to the UNFCCC (which correspond to the data used to inform the present report), and climate-related development finance reported by (mostly) those same countries to the OECD DAC. This comparison focuses on finance from bilateral providers.
- On the other hand, public climate finance provided as captured in the present report and total development finance, with such comparison capturing both bilateral and multilateral public finance.

Climate finance and climate-related development finance

Characteristics of the climate-related data collected by the OECD-DAC

The OECD-DAC uses a set of markers (the "Rio Markers") to track to what extent the development finance recorded in the DAC's Creditor Reporting System (CRS) supports the objectives of the UN Environmental Conventions (so-called "Rio Conventions"). Rio markers data is available since 2000 for climate change mitigation (as well as for biodiversity and desertification), and since 2009 for climate change adaptation.

Rio markers are mandatory reporting items for DAC members' ODA activities, while reporting on Other Official Flows (OOFs, composed of non-concessional or non-developmental flows) is voluntary. Other bilateral donors or multilateral institutions can also report the Rio markers on the activities submitted to the CRS, on a voluntary basis. Multilateral climate funds typically do so, while MDBs rely on their own methodology (see Annex A above)

The Rio markers methodology tracks to what extent climate objectives are integrated into development co-operation portfolios, through a three-tier scoring system:

- Principal (score 2) when the objective (climate change mitigation or adaptation) is explicitly stated as fundamental in the design of, or the motivation for, the activity.
- Significant (score 1) when the objective (climate change mitigation or adaptation) is explicitly stated but it is not the fundamental driver or motivation for undertaking it.
- Not targeted (score 0) meaning that the activity was examined but found not to target the objective (climate change mitigation or adaptation) in any significant way.

The Rio markers apply to activities as a whole, i.e. the score given applies to all components of an activity, some of which may be more climate-related than others. The markers do not track the exact amount of climate finance, rather they track to what extent development finance integrates climate as a principal or as a significant objective of the activities recorded (so to what extent development finance is related to climate). For this reason, the markers are considered descriptive rather than strictly quantitative measure.

Climate-related development finance data collected by the DAC fully adhere to the CRS reporting standards, with over fifty information fields for each activity collected, such as provider, recipient, commitments, disbursements, channel, sector, development co-operation modality, other policy markers (such as gender equality) and voluntary fields (such as the SDG focus). The methodology adopted for the data collection is included in the CRS-Statistical directives, available online. The OECD-DAC Secretariat performs quality checks on the data received. The data are published yearly in a homogeneous format.

Main differences between OECD-DAC bilateral climate finance-related data and bilateral climate finance data to the UNFCCC

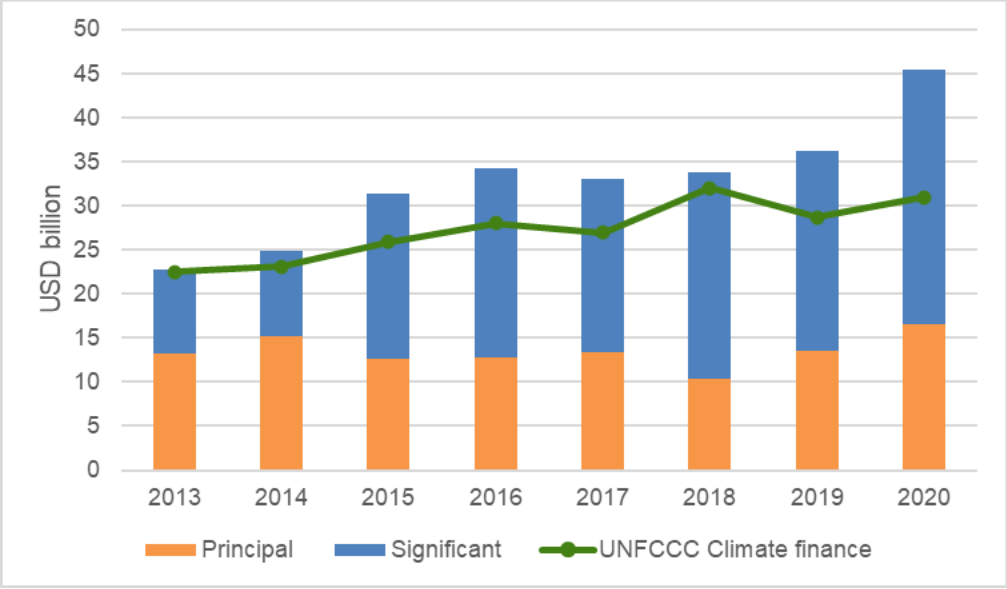
To track progress towards the USD 100 billion goal, this report considers bilateral climate finance data reported to the UNFCCC (see Annex A), and not the bilateral climate-related data provided to the OECD-DAC using the Rio markers methodology. There are several differences between the two sets of data, which include:

- **Objective:** Climate finance data has the objective of accounting towards the USD 100 billion goal, according to the principles set by the Convention. OECD-DAC data has the objective of tracking the mainstreaming of climate objectives in development finance.
- **Methodology**: Climate finance is reported to the UNFCCC as an exact monetary value. Rio markers are a descriptive measure.
- **Available details:** the OECD-DAC dataset contains more fields (including sectors, modalities, commitments and disbursements, channels, start and end date, SDGs, policy markers et al.) than the UNFCCC Common Tabular Format.
- **Data standardisation:** UNFCCC data is less standardised and specific than OECD DAC data. For example, climate finance can be reported to the UNFCCC either on a commitment or on a disbursement basis, but both disbursements and commitments must be reported to the OECD. UNFCCC sector taxonomy is not standardised, while OECD purpose codes classification must be followed by all reporters.
- **Quality checking:** UNFCCC records data as reported by members, while OECD Secretariat runs extensive quality checks and provide members feedback on their submissions.
- **Country coverage:** the list of countries reporting to the DAC does not coincide with the list of Annex II Parties to the Convention (see Annex B).
- **Timeline:** OECD data is updated annually, UNFCCC bilateral climate finance data is reported biennially.

Interlinkages and respective trends

Despite the differences, climate-related bilateral development finance reported to the OECD and bilateral climate finance reported to the UNFCCC have also strong interlinkages and overlaps, as illustrated by Figure A C.1. Public climate finance activities are, for the most part, also development finance activities. The majority of DAC members use their Rio markers data reported to the OECD as a starting point for their submission to the UNFCCC, through the use of coefficients and other adjustments.

Figure A C.1. Respective and comparative trends in bilateral public climate finance and bilateral climate-related development finance, both concessional and non-concessional



Note: Comparison between UNFCCC climate finance data and OECD-DAC Rio Markers (USD commitments, 2020 constant prices, concessional and non-concessional bilateral climate finance, excluding export credits). The same set of reporters was selected (Azerbaijan, Kazakhstan, Republic of Korea and United Arab Emirates were excluded from CRS data, while Bulgaria, Croatia, Cyprus, Lithuania, Lichtenstein, Malta and Romania from UNFCCC data). 2020 climate finance data are preliminary.
Source: See Annex A and Annex B.

To increase transparency on the interlinkages between climate and climate-related data he OECD-DAC Secretariat holds regular surveys on the use of coefficients (and other adjustments) to Rio markers data when submitting climate finance data to the UNFCCC. A first survey was circulated in 2018 followed by one in 2020 (OECD, 2020[68]), and a third in 2022 (OECD, 2022[15]).

According to the (provisional) results 2022 survey the majority of DAC members use the Rio markers data submitted to the OECD as a starting point to build their climate finance submissions to the UNFCCC. Most DAC members apply fixed coefficients to the activities marked significant and principal, in particular:

- Activities scored as principal with a Rio marker are in most cases associated with a 100% coefficient when reporting to the UNFCCC. One country uses a coefficient of 85%.
- Activities scored as significant with a Rio marker are associated with a much wider range of fixed coefficients. In most cases, members apply a fixed coefficient between 30% and 50% to these activities. Few members apply a fixed coefficient of 100%. For one member the coefficient applied to the activities marked significant is differentiated by sector code.

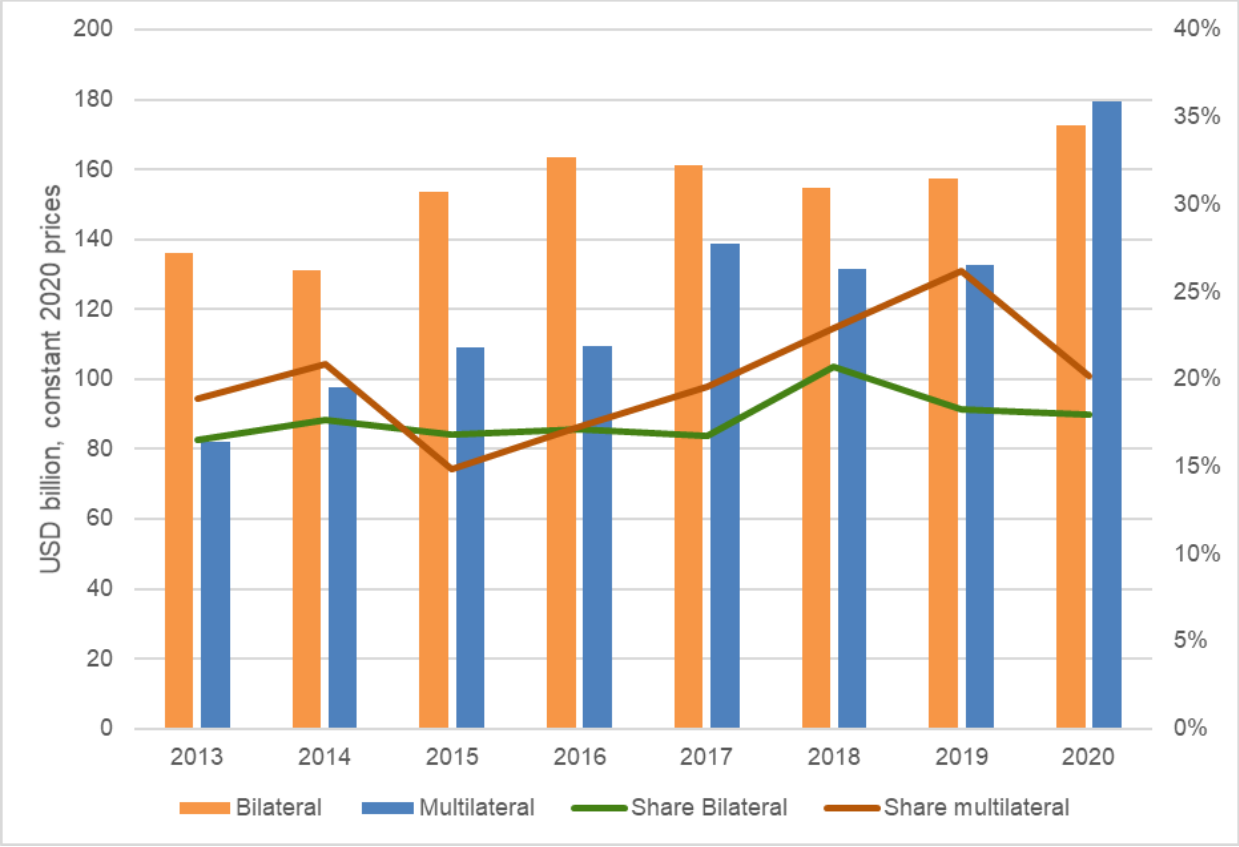
Some members however have separate systems, managed by independent institutions, to produce the climate finance data for the UNFCCC and climate-related data for the OECD. In these cases, the interlinkages and overlaps are less straightforward.

Public climate finance in the context of development finance

Ultimately climate finance needs to be framed in the broader context of bilateral and multilateral development finance, for which the OECD provide detailed statistics. Figure A C.2 presents the indicative shares represented by bilateral and multilateral climate finance (calculated from the amounts presented in

(OECD, 2022[5]) and used as a basis for the analysis in the body of the present report) in total amounts of bilateral and multilateral development finance (as reported to the OECD DAC) with the shares of. It can be noted that the annual share is relatively more stable for the bilateral part (between 15 and 20%) than for the multilateral part (between 15% and 27%).

Figure A C.2. Bilateral and multilateral development finance commitments, and shares of climate finance (USD billion)



Note: All DAC members, concessional only

Source: Bilateral and multilateral development finance commitments is sourced from the OECD-DAC CRS. For the source of bilateral and multilateral climate finance, please refer to Annex A.

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Climate Finance Provided and Mobilised by Developed Countries in 2016-2020

This report provides disaggregated data analysis of climate finance provided and mobilised in 2016-2020 across climate finance components, themes, sectors, and financial instruments. It also explores key trends and provides insight relating to the distribution and concentration of climate finance provided and mobilised across different developing country characteristics and groupings. The concluding chapter of the report provides further insights on the impacts and effectiveness of climate finance, as well as meaningful mitigation action and transparency on implementation. The findings complement the OECD report "Aggregate Trends of Climate Finance Provided and Mobilised by Developed Countries in 2013-2020".

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