



FONDATION POUR LES ÉTUDES  
ET RECHERCHES  
SUR LE DÉVELOPPEMENT  
INTERNATIONAL

## Appendix: methodological considerations

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

### Key concepts

#### Definition of climate finance and monitoring methods

This data base considers climate finance, and climate adaptation finance in particular. The United Nations Framework Convention on Climate Change (UNFCCC) defines climate finance as resources aimed “at reducing emissions and enhancing greenhouse gas sinks, reducing vulnerability, and strengthening the resilience of human and ecological systems to the adverse effects of climate change. It also includes financing for actions identified in a country's nationally determined contribution, adaptation communication, national adaptation plan, long-term low-emission development strategy, or any other national plan aimed at implementing and achieving the objectives of the Paris Agreement and the Convention.”<sup>1</sup>

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

#### *Measurement basis: commitments rather than disbursements*

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

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

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<sup>1</sup> See Sixth Annual Assessment and Overview of Climate-related Financial Flows by the UNFCCC Standing Committee on Finance: [unfccc.int/sites/default/files/resource/UNFCCC\\_BA6\\_ES\\_Web\\_FINAL.pdf](https://unfccc.int/sites/default/files/resource/UNFCCC_BA6_ES_Web_FINAL.pdf)

### *Joint BMD-IDFC Principles<sup>2</sup>*

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

- Joint Methodology for Tracking Climate Change Adaptation Finance<sup>3</sup>
- Common principles for tracking climate change mitigation finance.<sup>4</sup>

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

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

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

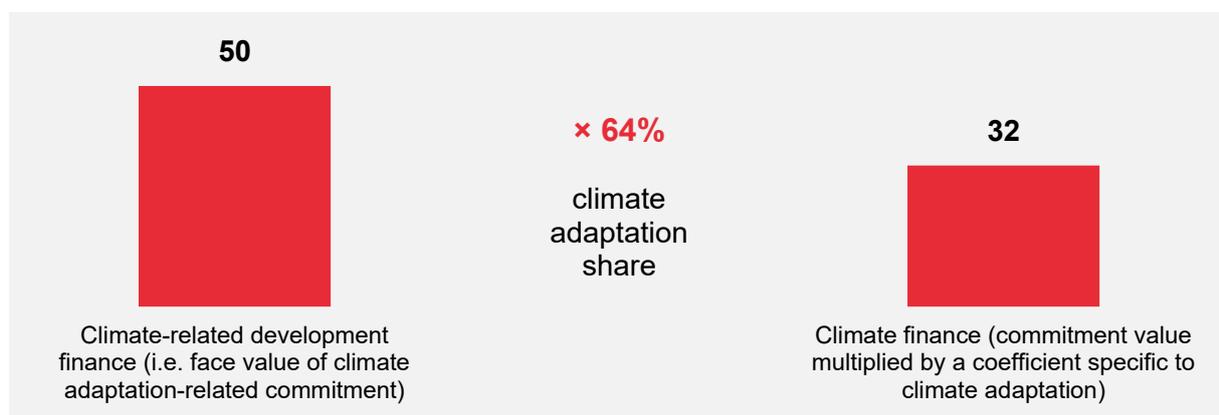
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<sup>2</sup> MDBs Multilateral development banks; *IDFC International Development Finance Club*, a network of 27 national, regional and bilateral development banks.

<sup>3</sup> See Joint Methodology for Tracking Climate Change Adaptation Finance, [thedocs.worldbank.org/en/doc/20cd787e947dbf44598741469538a4ab-0020012022/original/20220242-mdbs-joint-methodology-climate-change-adaptation-finance-en.pdf](https://thedocs.worldbank.org/en/doc/20cd787e947dbf44598741469538a4ab-0020012022/original/20220242-mdbs-joint-methodology-climate-change-adaptation-finance-en.pdf)

<sup>4</sup> Common principles for tracking climate mitigation finance, [documents1.worldbank.org/curated/en/514141645722484314/pdf/Common-Principles-for-Climate-Mitigation-Finance-Tracking.pdf](https://documents1.worldbank.org/curated/en/514141645722484314/pdf/Common-Principles-for-Climate-Mitigation-Finance-Tracking.pdf)

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



## Bilateral climate finance

There is a link between bilateral donors' annual reports on development finance (OECD, TOSSD) and climate finance (UNFCCC biennial transparency reports - RTB). In general, Parties to the Paris Agreement calculate their climate finance by applying fixed or semi-fixed coefficients to their development finance. The value of the coefficient depends on the DAC Rio marker used in their OECD reports. In concrete terms, activities marked with a Rio marker that have adaptation for:

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

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

Table 1. Simplified table of coefficients to calculate climate finance

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

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

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

In addition, climate adaptation funding by all other donors using Rio markers is also calculated by applying coefficients of 100% or 40%, depending on the value of the marker. Furthermore, climate funding from donors who report their data exclusively to TOSSD is calculated by applying a coefficient of 100%. According to a qualitative analysis, activities identified as contributing to SDG 13 (Climate Action) very explicitly incorporate climate

objectives, which could justify the 100% coefficient. For the purposes of this analysis, the climate intensity of these activities was therefore equated with the DAC's main marker.

#### *Data sources*

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

- **OECD statistics on development finance**, including the dataset entitled 'Climate-related development finance, recipient perspective' (FDLC) for the years 2019-2023. This dataset is based on donor reports on development finance via the OECD's Creditor Reporting System (CRS). The FDLC dataset includes activities targeting climate objectives, using DAC Rio markers or multilateral climate components;<sup>5</sup>
- **Total Official Support for Sustainable Development (TOSSD)**. This dataset includes cross-border flows to TOSSD recipients, expenditure on international public goods, global challenges and development enablers, as well as private financing mobilised. TOSSD is managed by the International Forum on TOSSD, composed of traditional providers, G77 member countries, and international organisations. The Forum Secretariat is hosted by the OECD.<sup>6</sup>

The FDLC database is enriched with the following TOSSD elements:

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

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

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<sup>5</sup> See [www.oecd.org/en/topics/sub-issues/development-finance-for-climate-and-the-environment.html](http://www.oecd.org/en/topics/sub-issues/development-finance-for-climate-and-the-environment.html)

<sup>6</sup> See [tossd.online/](http://tossd.online/)

actions through export credits and private finance mobilised, which are not included in this analysis.

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

#### *Other sources*

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

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

## Concessional

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

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

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

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

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

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

There are several parameters used for assessing loan concessionality in the context of development finance (and by extension climate finance), among which OECD rules on Official Development Assistance (ODA) and IMF concessionality rules. This analysis used the IMF concessionality rules as they are stricter in terms of discount rates and concessionality thresholds (see **Erreur ! Source du renvoi introuvable.**) and thus allow for a more conservative estimation of which loans are likely subsidised and which are not.<sup>7</sup>

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

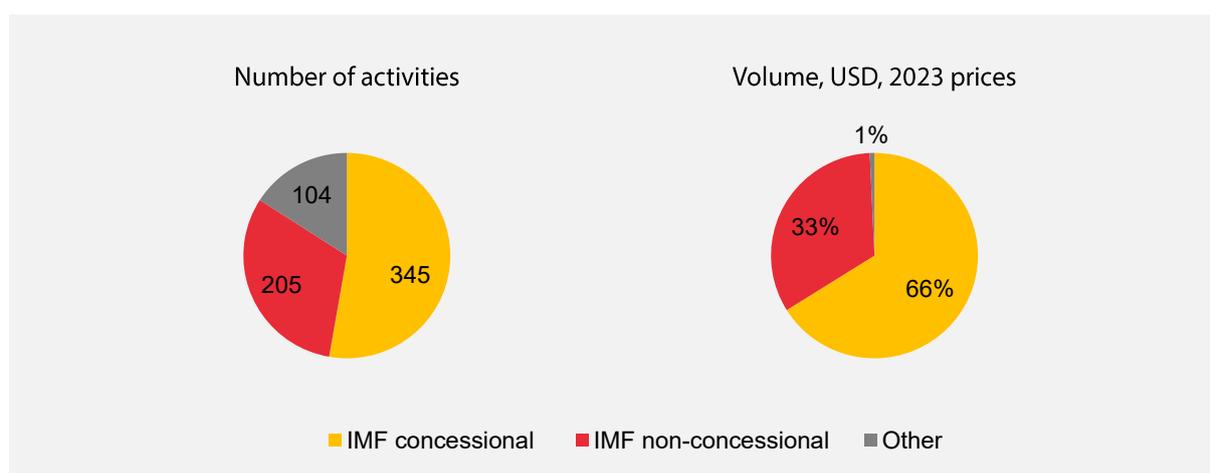
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<sup>7</sup> The concessionality levels of ODA flows are calculated using risk-adjusted discount rates (5%/6%/7%/9%) and concessionality thresholds (10%/25%/45%). The IMF rules, in contrast, used a unified discount rate (5%) and concessionality threshold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

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

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

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



### Avoiding double counting

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

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

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

#### *Temporary nature of the database*

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

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

## Analytical categories

The dataset includes the following fields and analytical categories:

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

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

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

## Abbreviations

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

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