
Assessing Bottom-Up Climate Finance Needs

Methodology

November 2025



CLIMATE
POLICY
INITIATIVE

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1. INTRODUCTION

Global climate finance has increased over the past decade, reaching an all-time high of [nearly USD 1.9 trillion per year in 2023](#). However, much more is needed to keep global temperature rises within 1.5°C and avoid the worst impacts of climate change (CPI, 2025). Since 2021, CPI has strived to support a collective understanding of the climate finance needed to reach net-zero carbon emissions by 2050, compiling and standardizing data on climate finance needs to provide the most comprehensive overview of the climate finance gap available to date. Accurately assessing the size of this global climate finance gap enables decision-makers to mobilize finance effectively, quickly, and to where it is most needed.

This document details the methodology used to produce our bottom-up climate finance needs estimates. Coupled with our wider [tracking and analysis of climate finance flows](#), this will help identify the largest climate finance gaps, track progress against climate targets, and better inform decision-makers and financial institutions on how to increase the speed, scale, and quality of climate finance.

While there is not yet a globally accepted official definition of “climate finance needs”, CPI distinguishes between two types of needs:

- **Top-down climate finance needs:** The estimated climate finance to fund the actions needed across different sectors to keep the average global temperature rise within 1.5°C by the end of this century. These needs are typically derived using predictive models for different sectors. Climate-compatible scenarios developed by different institutions can differ widely in the data, assumptions, model used, and (geographic or sectoral) scope.
- **Bottom-up climate finance needs:** The climate finance required by countries to reach their national climate targets, as stated in official documents such as [Nationally Determined Contributions \(NDCs\)](#). These needs include both the finance required to be raised domestically and the financial support required from international (public and private) sources.

Existing CPI work on climate finance needs has focused on top-down needs. CPI’s assessment of [global top-down climate finance needs](#) showed that annual climate finance flows must increase by at least sixfold on current levels, to reach USD 7.5 trillion per year between now and 2030, and over USD 8.8 trillion per year from 2031 to 2050. However, limited work has been done to date on assessing the scope of bottom-up climate finance needs on a global scale. **Assessing bottom-up needs is critical to understanding countries’ climate finance objectives and the required level of international support to reach their mitigation and adaptation goals.**

Top-down and bottom-up needs estimates each shed light on climate finance needs from a different perspective. Top-down needs take a sectoral and technology-based perspective outlining the sectors, technical solutions and actors that would be required (and feasible) to put the world on a climate-compatible pathway and the costs of doing so. On the other hand, bottom-up needs take a country perspective, outlining governments’ priorities as well as the domestic and international capital required to achieve national climate goals. Table 1 outlines differences in data coverage and complementarities between top-down and bottom-up needs estimates.

Table 1: Overview of top-down and bottom-up climate finance needs

	Top-down climate finance needs	Bottom-up climate finance needs
Climate objectives	The scenarios analyzed outline climate finance required to align to a net-zero pathway. When compared with current climate finance flows, top-down estimates can help to track progress against the objectives of the Paris Agreement, and identify related investment gaps.	NDCs outline measures and finance required to reach each country's specific climate objectives. Globally, the cumulated commitments as per currently submitted NDCs are insufficient to align to a net-zero pathway. As a result, bottom-up needs are materially lower than top-down needs.
Climate uses	Typically, the scenarios analyzed do not explicitly highlight whether the finance needs correspond to mitigation and/or adaptation measures. For this reason, the top-down approach does not analyze the split between mitigation, adaptation, and dual objectives.	While the level of granularity varies across countries, NDCs typically distinguish between finance required for mitigation, adaptation, and cross-cutting (dual objective) measures.
Sectoral/ sub-sectoral scope and granularity	Top-down needs estimates are usually provided at the sector and/or sub-sector level. As the sector categorization differs across scenarios, we match sectors/sub-sectors in the original scenarios with our Global Landscape of Climate Finance (GLCF) taxonomy to standardize the data and be able to compare finance needs across different sources.	While the level of granularity varies across countries, NDCs typically include costed needs by sector. In several cases, granularity is also available at the solution or project level.
Geographical scope and granularity	Scenarios analyzed typically have a global focus and do not provide granularity on the geographical breakdown of finance required.	Costed needs are prevalent in non-Annex I countries' NDCs. As a result, bottom-up data mainly focuses on EMDEs and is available at the country level.
Sources of finance	Scenarios analyzed do not provide any information on the sources of finance that would be able to fund the projected scenarios.	In their NDCs, countries typically specify whether finance will need to be raised domestically (unconditional needs) or internationally (conditional needs). As such, bottom-up estimates can give an indication of the magnitude of the international finance required.

In 2024, CPI published its first bottom-up climate finance needs database, collecting and aggregating climate finance needs from the 167 available NDCs submitted by 194 UNFCCC Parties that ratified the Paris.¹ Under the Paris Agreement, parties are required to submit an updated NDC every five years, enhancing ambition with each submission. The third round of NDCs, or NDCs 3.0., were due to be submitted to the UNFCCC by February 2025 and represent the latest and most ambitious generation of NDCs. As of September 30, 2025, 63 parties had submitted an updated NDC 3.0.

This document details the methodology used to produce our updated bottom-up climate finance needs estimates ("bottom-up needs" from here on), including the integration of climate finance need estimated in NDCs 3.0. Alongside our assessment of top-down needs and CPI's wider tracking and analysis of climate finance flows, this analysis can help identify the largest climate finance gaps at the country level, track progress against climate targets, and better inform

¹ Out of 198 UNFCCC Parties, as of 30 September 2025, Iran (Islamic Republic of), Libya and Yemen had not ratified the Paris Agreement and therefore had not submitted NDCs. The European Union and its 27 member states have submitted a joint NDC.

decision-makers and financial institutions on how to increase the speed, scale, and quality of climate finance. This work can also more accurately inform discussions surrounding international climate finance targets, such as the Baku to Belém Roadmap, and future NDC updates to improve and align the scoping of needs with the ambition of international support.

2. CPI'S APPROACH TO ESTIMATING BOTTOM-UP CLIMATE FINANCE NEEDS

Bottom-up needs take a country perspective, outlining domestic and international capital required to achieve national climate goals. CPI's bottom-up climate finance needs are derived from the collection and aggregation of climate finance needs as reported by countries in their NDCs. These needs include both the finance required to be raised domestically (unconditional needs) and the financial support required from international (public and private) sources (conditional needs).

Currently there is no standardized methodology for countries to follow when estimating their climate finance needs and no defined structure or mandated topics which must be covered in countries' NDCs. While some countries estimate their climate finance needs using predictive models aligned to a 1.5°C pathway, in most cases, bottom-up needs are derived from a list of costed mitigation and adaptation measures or projects that countries aim to implement. Therefore, the scale and granularity of costed climate finance needs varies widely across countries. Currently, total stated bottom-up needs are insufficient to keep global temperature rises within 1.5°C (UNFCCC, 2023).

CPI's efforts focus on compiling estimates of climate finance needs as presented by countries, for needs that are required from both domestic (unconditional) and international (conditional) sources. Our goal is not to validate the approach and assumptions used by countries in estimating their climate finance needs, but instead to provide a **comprehensive overview of the scope and scale of bottom-up needs estimates to date**. This overview will illustrate how countries currently understand their climate finance needs, including, critically, how much external financial support non-Annex I countries² expect they require to meet mitigation and adaptation objectives.

² Annex I countries, as referenced in the Paris Agreement, are developed nations and economies in transition committed to reducing greenhouse gas emissions under international climate agreements. These include countries that were OECD members in 1992, plus countries with economies in transition in Central and Eastern Europe (UNFCCC, 2024a). Under the Paris Agreement, non-Annex I Parties are eligible to receive international support (either financial, technological, or capacity-building). Hence, many of them include conditional needs in their NDCs.

3. METHODOLOGICAL STEPS

COLLECTION OF BOTTOM-UP NEEDS DATA

To compile our bottom-up needs data, we have reviewed the latest available NDCs submitted by 167 UNFCCC Parties that ratified the Paris Agreement.³ All NDCs are recorded in a public online NDC registry maintained by the UNFCCC Secretariat (UNFCCC, 2024b).

For each NDC reviewed, we collected, where available, data on stated climate finance needs. Data was collected according to the following principles:

- **Prioritizing more recent data:** Whenever a country has communicated more than one NDC, we included needs data from the latest NDC available using a cutoff date of September 30, 2025. For 63 parties, their NDC 3.0 represented their latest submission. For the 104⁴ who had not yet submitted their NDC 3.0 by the cutoff date, their previous submission was considered. The assumption is that any new NDC takes precedence over previous ones.⁵
- **Prioritizing more granular data:** Whenever an NDC includes both sectoral aggregate needs and project-level estimated costs, we prioritized the latter to keep the data as granular as possible.
- **Including both conditional and unconditional needs:** By definition, bottom-up needs encompass both finance to be raised domestically and international support required. Whenever a country specified that financing was already received or allocated, we assumed the funding was already secured (and therefore not needed anymore) and excluded the amount.

Table 2 lists all the NDCs reviewed and used for our needs estimates for each country.

Table 2: NDCs used in our calculations to estimate bottom-up climate finance needs

Highlighted rows represent updated submissions from CPI's previous bottom-up database.

Country	NDC submission	Version ⁶	Submission year	Link
Central Asia and Eastern Europe				
Albania	NDC 1.0	2	2021	Link
Armenia	NDC 1.0	2	2021	Link
Azerbaijan	NDC 1.0	3	2023	Link
Belarus	NDC 1.0	2	2021	Link

³ This count includes the joint NDC submitted by the European Union for its 27 member states. In January 2025, the US withdrew from the Paris Agreement and was then removed from our bottom-up needs analysis.

⁴ Considers the European Union and its 27 members jointly as one member because the states submit a joint NDC.

⁵ An exception was made for Parties whose latest NDC does not include any quantified needs. In these cases, quantified needs from previous NDC were considered, if available.

⁶ Version refers to any subsequent revisions of NDC submissions. Revisions may contain minor changes in text, but do constitute a separate submission, with commitments remaining the same.

Country	NDC submission	Version ⁶	Submission year	Link
Bosnia and Herzegovina	NDC 1.0	2	2021	Link
Georgia	NDC 1.0	2	2021	Link
Kazakhstan	NDC 1.0	2	2023	Link
Kyrgyzstan	NDC 1.0	2	2021	Link
Montenegro	NDC 3.0	1	2025	Link
North Macedonia	NDC 1.0	2	2020	Link
Republic of Moldova	NDC 3.0	1	2025	Link
Russian Federation	NDC 3.0	1	2025	Link
Serbia	NDC 3.0	1	2025	Link
Tajikistan	NDC 1.0	2	2021	Link
Türkiye	NDC 1.0	1	2023	Link
Turkmenistan	NDC 1.0	2	2023	Link
Ukraine	NDC 1.0	2	2021	Link
Uzbekistan	NDC 1.0	2	2021	Link
Bulgaria	NDC 1.0*	3	2023	Link
Croatia	NDC 1.0*	3	2023	Link
Cyprus	NDC 1.0*	3	2023	Link
Estonia	NDC 1.0*	3	2023	Link
Hungary	NDC 1.0*	3	2023	Link
Latvia	NDC 1.0*	3	2023	Link
Lithuania	NDC 1.0*	3	2023	Link
Poland	NDC 1.0*	3	2023	Link
Romania	NDC 1.0*	3	2023	Link
Slovakia	NDC 1.0*	3	2023	Link
<i>*Joint EU submission</i>				
East Asia and Pacific				
Brunei Darussalam	NDC 1.0	1	2020	Link
Cambodia	NDC 3.0	1	2025	Link
China	NDC 1.0	2	2021	Link
Cook Islands	NDC 1.0	1	2016	Link
Fiji	NDC 1.0	2	2020	Link
Indonesia	NDC 1.0	3	2022	Link
Japan	NDC 3.0	1	2025	Link

Country	NDC submission	Version ⁶	Submission year	Link
Kiribati	NDC 1.0	2	2023	Link
Korea, Democratic People's Republic	NDC 1.0	2	2019	Link
Korea, Republic	NDC 1.0	3	2021	Link
Lao People's Democratic Republic	NDC 1.0	2	2021	Link
Malaysia	NDC 1.0	2	2021	Link
Marshall Islands	NDC 3.0	1	2025	Link
Micronesia (Federated States of)	NDC 3.0	1	2025	Link
Mongolia	NDC 3.0	1	2025	Link
Myanmar	NDC 1.0	2	2021	Link
Nauru	NDC 1.0	2	2021	Link
Niue	NDC 3.0	1	2025	Link
Palau	NDC 1.0	1	2016	Link
Papua New Guinea	NDC 2.0	2	2020	Link
Philippines	NDC 1.0	1	2021	Link
Samoa	NDC 1.0	2	2021	Link
Singapore	NDC 3.0	1	2025	Link
Solomon Islands	NDC 3.0	1	2025	Link
Thailand	NDC 2.0	3	2022	Link
Timor-Leste	NDC 1.0	2	2022	Link
Tonga	NDC 3.0	1	2025	Link
Tuvalu	NDC 3.0	1	2025	Link
Vanuatu	NDC 3.0	1	2025	Link
Viet Nam	NDC 1.0	3	2022	Link
Latin America and Caribbean				
Antigua and Barbuda	NDC 1.0	2	2021	Link
Argentina	NDC 2.0	3	2021	Link
Bahamas	NDC 1.0	2	2022	Link
Barbados	NDC 2.0	1	2025	Link
Belize	NDC 3.0	1	2025	Link
Bolivia (Plurinational State of)	NDC 3.0	1	2025	Link
Brazil	NDC 3.0	1	2024	Link
Chile	NDC 3.0	1	2025	Link
Colombia	NDC 3.0	1	2025	Link

Country	NDC submission	Version ⁶	Submission year	Link
Costa Rica	NDC 1.0	3	2020	Link
Cuba	NDC 3.0	1	2025	Link
Dominica	NDC 1.0	2	2022	Link
Dominican Republic	NDC 1.0	2	2020	Link
Ecuador	NDC 2.0	1	2025	Link
El Salvador	NDC 1.0	3	2021	Link
Grenada	NDC 2.0	2	2020	Link
Guatemala ⁷	NDC 1.0	3	2021	Link
Guyana	NDC 1.0	1	2016	Link
Haiti	NDC 1.0	2	2022	Link
Honduras	NDC 2.0	1	2025	Link
Jamaica	NDC 3.0	1	2025	Link
Mexico	NDC 1.0	3	2022	Link
Nicaragua	NDC 3.0	1	2025	Link
Panama	NDC 3.0	1	2025	Link
Paraguay	NDC 1.0	2	2021	Link
Peru	NDC 1.0	2	2020	Link
Saint Kitts and Nevis	NDC 1.0	2	2021	Link
Saint Lucia	NDC 3.0	1	2025	Link
Saint Vincent and the Grenadines	NDC 2.0	1	2025	Link
Suriname	NDC 2.0	2	2020	Link
Trinidad and Tobago	NDC 1.0	1	2018	Link
Uruguay	NDC 3.0	1	2024	Link
Venezuela (Bolivarian Republic of)	NDC 1.0	2	2021	Link
North Africa				
Algeria	NDC 1.0	1	2016	Link
Egypt	NDC 1.0	3	2023	Link
Morocco	NDC 3.0	1	2025	Link
Tunisia	NDC 3.0	1	2025	Link
Middle East				
Bahrain	NDC 1.0	2	2021	Link

⁷ Guatemala's NDC references that needs are estimated in an accompanying document, available [here](#). This document was reviewed and needs estimates were included in the database.

Country	NDC submission	Version ⁶	Submission year	Link
Iraq	NDC 1.0	1	2021	Link
Israel	NDC 1.0	2	2021	Link
Jordan	NDC 3.0	1	2025	Link
Kuwait	NDC 1.0	2	2021	Link
Lebanon	NDC 3.0	1	2025	Link
Oman	NDC 2.0	3	2023	Link
Qatar	NDC 1.0	2	2021	Link
Saudi Arabia	NDC 1.0	2	2021	Link
State of Palestine	NDC 1.0	2	2021	Link
Syrian Arab Republic	NDC 1.0	1	2018	Link
United Arab Emirates	NDC 3.0	1	2024	Link
Other Oceania				
Australia	NDC 3.0	1	2025	Link
New Zealand	NDC 1.0	2	2021	Link
South Asia				
Afghanistan	NDC 1.0	1	2016	Link
Bangladesh	NDC 3.0	1	2025	Link
Bhutan	NDC 2.0	2	2021	Link
India	NDC 1.0	2	2022	Link
Maldives	NDC 3.0	1	2025	Link
Nepal	NDC 3.0	1	2025	Link
Pakistan	NDC 3.0	1	2025	Link
Sri Lanka	NDC 3.0	1	2025	Link
Sub-Saharan Africa				
Angola	NDC 3.0	1	2025	Link
Benin	NDC 1.0	2	2021	Link
Botswana	NDC 3.0	1	2024	Link
Burkina Faso	NDC 1.0	2	2021	Link
Burundi	NDC 1.0	2	2021	Link
Cabo Verde	NDC 1.0	2	2021	Link
Cameroon	NDC 1.0	2	2021	Link
Central African Republic	NDC 1.0	2	2022	Link
Chad	NDC 1.0	2	2021	Link

Country	NDC submission	Version ⁶	Submission year	Link
Comoros	NDC 1.0	2	2021	Link
Congo, Republic	NDC 1.0	2	2022	Link
Côte d'Ivoire	NDC 2.0	2	2022	Link
Congo, Democratic Republic	NDC 1.0	2	2021	Link
Djibouti	NDC 1.0	1	2016	Link
Equatorial Guinea	NDC 1.0	2	2022	Link
Eritrea	NDC 1.0	1	2018	Link
Eswatini	NDC 3.0	1	2025	Link
Ethiopia	NDC 3.0	1	2025	Link
Gabon	NDC 2.0	2	2022	Link
Gambia	NDC 2.0	2	2021	Link
Ghana	NDC 1.0	2	2021	Link
Guinea	NDC 1.0	2	2021	Link
Guinea-Bissau	NDC 1.0	2	2021	Link
Kenya	NDC 3.0	1	2025	Link
Lesotho	NDC 3.0	1	2025	Link
Liberia	NDC 3.0	1	2025	Link
Madagascar	NDC 2.0	1	2024	Link
Malawi	NDC 1.0	2	2021	Link
Mali	NDC 1.0	2	2021	Link
Mauritania	NDC 1.0	2	2021	Link
Mauritius	NDC 3.0	1	2025	Link
Mozambique	NDC 1.0	2	2021	Link
Namibia	NDC 1.0	3	2021	Link
Niger	NDC 1.0	2	2021	Link
Nigeria	NDC 3.0	1	2025	Link
Rwanda	NDC 1.0	2	2020	Link
Sao Tome and Principe	NDC 3.0	1	2025	Link
Senegal	NDC 1.0	1	2021	Link
Seychelles	NDC 3.0	1	2025	Link
Sierra Leone	NDC 1.0	2	2021	Link
Somalia	NDC 3.0	1	2025	Link
South Africa	NDC 1.0	2	2021	Link

Country	NDC submission	Version ⁶	Submission year	Link
South Sudan	NDC 2.0	2	2021	Link
Sudan	NDC 1.0	3	2022	Link
Togo	NDC 1.0	2	2021	Link
Uganda	NDC 1.0	3	2022	Link
United Republic of Tanzania	NDC 1.0	2	2021	Link
Zambia	NDC 3.0	1	2025	Link
Zimbabwe	NDC 3.0	1	2025	Link
United States and Canada				
Canada	NDC 3.0	1	2025	Link
Western Europe				
Andorra	NDC 3.0	1	2025	Link
Austria	NDC 1.0*	3	2023	Link
Belgium	NDC 1.0*	3	2023	Link
Denmark	NDC 1.0*	3	2023	Link
European Union	NDC 1.0*	3	2023	Link
Finland	NDC 1.0*	3	2023	Link
France	NDC 1.0*	3	2023	Link
Germany	NDC 1.0*	3	2023	Link
Iceland	NDC 3.0	1	2025	Link
Ireland	NDC 1.0*	3	2023	Link
Liechtenstein	NDC 2.0	1	2025	Link
Luxembourg	NDC 1.0*	3	2023	Link
Monaco	NDC 3.0	1	2025	Link
Netherlands	NDC 1.0*	3	2023	Link
Norway	NDC 3.0	1	2025	Link
Portugal	NDC 1.0*	3	2023	Link
San Marino	NDC 1.0	1	2018	Link
Spain	NDC 1.0*	3	2023	Link
Sweden	NDC 1.0*	3	2023	Link
Switzerland	NDC 1.0	1	2024	Link
United Kingdom	NDC 3.0	1	2025	Link
Vatican City	NDC 3.0	1	2025	Link
<i>*Joint EU submissions</i>				

DATA EXTRACTION AND STANDARDIZATION

For all the countries listed in Table 2, we extracted bottom-up needs data, which was available either within the main NDC text, in data tables, or in NDC appendices. Data was available at varying levels of granularity, as depicted in Table 3.

Table 3: Levels of data granularity in NDCs⁸

	Level of granularity	Description	Number of NDCs	
			Annex I	Non-Annex I
Least granular  Most granular	No needs quantified	The NDC does not quantify any finance needs.	12	41
	Total aggregate needs	Only overall climate finance needs are presented, with no thematic or sectoral distinction.	2	10
	Thematic aggregate needs	Needs are costed for mitigation and/or adaptation.	0	27
	Sectoral aggregate needs	Needs are costed for different sectors (e.g., for energy or agriculture).	1	22
	Project- or action-level needs	The NDC costs needs at the project or action level.	1	51

Data was prioritized by the highest level of granularity available, except when granular data was insufficient to capture all described needs. For example, if only a few actions were costed, but total or thematic aggregates were available, the aggregates were included to give a fuller picture of the scope of the bottom-up needs. In this case, the project-level needs would be excluded from analysis to avoid double counting. However, if only partial data was available (e.g., only certain sectors or project needs are costed) we included these needs in the absence of aggregate data.

Original data extracted from the different NDCs varied widely in terms of sector classification, timeframe considered, currency year, and type of value. To compare and aggregate the bottom-up needs, we standardized the data along these variables, as described in the sub-sections below.

SECTOR CLASSIFICATION

The sector/technology classification used in NDCs can vary significantly even within the same sector. The sector/technology classification used in the NDCs was also often inconsistent with the taxonomy used by CPI to categorize climate finance flows in our Global Landscape of Climate Finance (GLCF) analyses, making it hard to compare flows and needs data.

⁸ Where the NDC contains multiple levels of granularity (e.g., thematic average for adaptation but project-level for mitigation), the most granular level is counted in Table 3. For a more detailed breakdown at the country-level, see Appendix II.

In addition, we only included needs for projects or technologies that can be strictly categorized as climate solutions. Various NDCs estimated finance required for measures such as building new fossil fuel power plants, which may be considered essential transition or development finance in some countries.

Once the original data was extracted, we matched each data point with sectors and sub-sectors in CPI's GLCF taxonomy (see Appendix I), and excluded any technologies that cannot be classified as climate finance from our calculations. This improved how comparable and consistent needs estimates are across CPI climate finance flows.

TIMEFRAME CONSIDERED

Per the Paris Agreement, NDCs should be set and updated every five years after a country submits its initial NDC (UN, 2024). Following the ratification of the Paris Agreement, NDCs were submitted in different years, and according to countries' own methodologies and climate objects. Therefore, they currently include different targets and timeframes (e.g., to 2025, 2030, or beyond).

We do not make any assumptions to extend needs estimates beyond the timeframe presented in the source. The timeframe for each data point is collected as presented in the NDCs and at the most granular level possible. Whenever an NDC includes measures/actions targeting different years (e.g., 2025 and 2030), different timeframes are considered for each measure/action.

Where the timeframe or target year for a specific measure/action is unclear or not specified, the general timeframe of the NDC is used (e.g., the timeframe during which the country has committed to climate objectives, such as GHG reductions). If a number of years/months is given (e.g., 'over the next ten years'), the publication year is used as the start of the timeframe.

CURRENCY YEAR

Most bottom-up needs estimates found were expressed in nominal (current) USD, with different sources being published in different years. Where not stated in the original source, we assumed the currency year in which needs estimates were expressed to be the year of publication. Where bottom-up needs were expressed in currencies other than USD, conversion rates were applied based on the currency year of the source (see Table 4).

Table 4: Exchange rates for currency conversion to USD

Currency	Currency year	Conversion rate to USD
AED (Emirati dirham)	2023	0.27
AED (Emirati dirham)	2023	0.27
AUD (Australian dollar)	2025	0.64
AUD (Australian dollar)	2022	0.69
BAM (Bosnian convertible mark)	2022	0.54
BRL	2023	0.20

Currency	Currency year	Conversion rate to USD
CAD (Canadian dollar)	2021	0.80
CAD (Canadian dollar)	2025	0.71
CFA (West African franc)	2021	0.0018
COP (Colombian peso)	2020	0.0002
EUR (Euro)	2016	1.1
EUR (Euro)	2020	1.14
EUR (Euro)	2021	1.18
EUR (Euro)	2022	1.05
EUR (Euro)	2025	1.10
MDL (Moldovan leu)	2025	0.06
MUR (Mauritius rupee)	2025	0.02
MYR (Malaysian ringgit)	2016	0.24
VES (Venezuelan bolivar)	2021	0.06
XCD (East Caribbean dollar)	2022	0.37

Source: Exchange Rate Calculator, available [here](#).

To improve consistency and comparability of data, we standardized all investment needs estimates to 2023 USD billion, taking into account the inflation rates shown in Table 5.

Table 5: Inflation rates for currency conversion

Original currency year	Conversion rate to 2023 USD
2011	1.35
2015	1.29
2016	1.27
2017	1.24
2018	1.21
2019	1.19
2020	1.18
2021	1.12
2022	1.04
2023	1.00
2024	0.97
2025	0.95

Source: US Inflation Calculator, available [here](#).

TYPE OF FINANCE

For each need collected, we described the amount of finance that is (i) unconditional, (ii) conditional or (iii) unspecified, which are defined as follows:

- (i) **Unconditional:** Finance needs to be met using domestic resources.
- (ii) **Conditional:** Finance needs to be met through international financial support.
- (iii) **Unspecified:** Finance needs for which it is unclear or not specified if they are unconditional or conditional.

Where the type of finance required is specified, finance needs may be expressed as a combination of 'unconditional' and 'conditional', or else be described as fully 'unconditional' or fully 'conditional'. Any remaining finance that cannot be classified as 'unconditional' or 'conditional' is considered 'unspecified'.

Information on the type of finance was collected as specified in the NDCs and at the most granular level available. For instance, if the amount of 'unconditional' and 'conditional' finance was specified for each measure/action, this was recorded at the project level. Alternatively, if the NDC specified the unconditional/conditional breakdown at an aggregate level (e.g., '3% of all needs will come from national sources'), the same breakdown was applied to all relevant measures/actions in the NDC. If there is no description of unconditional or conditional needs, all needs are described as 'unspecified'.

Where the document described finance that has already been secured and/or allocated towards climate goals and/or measures in the NDC, this finance is considered separately as **'received finance'**. Total needs are calculated as total costs minus finance received.

TYPE OF VALUE

Investment needs in the NDCs are generally expressed as either (i) cumulative needs or (ii) annual needs over a timeframe.

All bottom-up needs data collected were converted to annual needs as follows:

- i) **Cumulative needs:** In these instances, we describe the annual investment as the cumulative needs divided by the number of years, unless otherwise indicated in the NDC.
- ii) **Annual needs:** In these instances, we took the average annual investment for each year as per the NDC.

Whenever an NDC expressed a needs estimate as a range rather than as a single value, we collected data for both the *low* and *high* values, and added a *mean* value into our database.

4. DATA COVERAGE AND GAPS

Since there is no required standardized methodology for countries to determine climate finance needs in their NDCs, granularity and coverage varied widely across the documents reviewed. Quantified needs data within an NDC did not always represent a comprehensive sum of the country's needs. In some cases, only **partially costed** data was available (e.g., only certain sectors or project needs were costed). Within NDCs that **fully costed** total needs, varying levels of data granularity were available.

Data coverage also varied over climate objective/theme (mitigation or adaptation). While many NDCs quantified needs for both climate objectives, they were sometimes determined at different levels of granularity. Others quantified needs for just one of the two climate objectives. Table 6 below describes the distribution of coverage and granularity by climate objective in the NDCs reviewed.

Table 6: Data coverage by climate objective across NDCs reviewed

Coverage/Granularity	Number of NDCs		
	Both mitigation and adaptation	Mitigation	Adaptation
Fully costed	75	10	6
Partially costed	9	11	3
No costs included	53		

5. DATA AND METHODOLOGY LIMITATIONS

To clarify the global climate finance needs landscape, CPI has developed a novel approach to capturing all existing bottom-up needs estimates in a clear and digestible manner. We make best efforts to ensure a rigorous method to compile and standardize bottom-up needs estimates in an impartial manner, though some limitations remain that affect the effectiveness of our approach and the completeness of results. Our needs estimates should, therefore, be interpreted with the following data and methodology limitations in mind.

DATA LIMITATIONS

As described in Section 4, data coverage across NDCs reviewed varied widely, with less than half of all NDCs reviewed providing comprehensive (fully costed) climate finance needs. Since for many countries, no or limited data was available, this limits our ability to provide a comprehensive assessment of global bottom-up needs.

Where data was available, we sometimes faced the following challenges when trying to include, process, and standardize the data. These challenges, in some cases, limited our ability to use the data for the final calculations.

- **Data format.** Data was extracted manually from NDCs that are available in text format (either as PDF or Word documents). This is a highly time-consuming process that increases the possibility of mistakes and omissions.
- **Data interpretation.** NDCs sometimes include miscalculations or unclear wording, which made the interpretation of data difficult. In the cases of miscalculations (e.g., project-level data did not align with aggregate data in the same NDC), CPI privileged the more granular data. Where wording was unclear (e.g., on conditionality of finance), CPI adopted a conservative approach and listed the type of finance as ‘unspecified’ where applicable. In cases where NDCs could be interpreted in different ways, we have validated our interpretation and approach with external partners.
- **Data standardization.** Different countries define sectors, or even climate finance, differently. Thus, the way needs are categorized may differ greatly from one country’s NDC to another’s. In many cases, the NDC may provide only a brief description of what is included under each costed need, and there are no accompanying methodology documents that could provide more detail. This may affect our ability to correctly standardize data collected based on CPI’s taxonomy (see Section 3).
- **Data granularity.** Data granularity varies widely across NDCs (see Section 4). Countries may integrate needs for interventions that have limited climate relevance (e.g., fossil fuels, health, education) into their NDCs. For instance, some countries include measures involving a shift from higher-emission fossil fuel sources (e.g., coal) to lower-emission sources (e.g., natural gas). While these measures would result in a reduction of greenhouse gas emissions, they would also lead to a high-carbon infrastructure lock-in. Where data granularity allows, CPI takes a conservative approach and excludes non-climate finance needs from total bottom-up

needs. However, where needs are quantified at a broad and/or not well-defined level, and it is not possible to identify and isolate finance needs for high-carbon activities (e.g., fossil fuels), these activities may be included in total needs numbers.

METHODOLOGY LIMITATIONS

Our needs estimates compile and standardize data from a wide variety of scenarios. Our goal is to provide a comprehensive understanding of climate finance needs as expressed by countries in their NDCs.

Nevertheless, aggregating bottom-up needs data from different countries brings a number of challenges that should be kept in mind when interpreting our needs estimates.

- Many countries have not quantified needs within their NDCs, with some establishing action plans with quantified needs in other external documents (e.g., National Adaptation Plans, National Communications, national sector strategies, etc.). While CPI hopes to expand work in the future to cover additional bottom-up needs estimations, the current database covers only NDCs. **Results should therefore not be interpreted as total needs for all countries, but instead as the total needs available in NDCs to date.**
- As the data collected comes directly from NDCs prepared and submitted by countries, the quality of bottom-up needs estimations is only as good as the quality of the underlying methodologies, assumptions, and approaches used to develop these estimates at the country level. The level of accuracy and refinement of needs estimates varies widely across NDCs and depends, at least in part, on each country's institutional capacity and resources. Therefore **results should be interpreted keeping in mind that the quality of needs estimates in NDCs and approaches used can vary widely across countries.**
- While the sum of all mitigation targets in the NDCs should align with a 1.5°C pathway, the ambition of current NDCs is insufficient to reach the goals of the Paris Agreement (UNFCCC, 2023). Therefore, **results should be interpreted as the current scope of what countries have quantified as climate finance needs and not as the total capital required for a net zero pathway**, which is much greater in scale (CPI, 2024).

APPENDIX I: CLIMATE FINANCE TAXONOMY USED IN CPI GLOBAL LANDSCAPE ANALYSES

Sector	Sub-sector	Mitigation or adaptation solution	Additional information and examples
Energy Systems	Power & Heat Generation	Biofuel/Biomass-fired	If a project's GHG emissions reductions are demonstrated compared with technically and economically viable alternatives
		Geothermal	
		Hydropower ⁹	If a project's GHG emission reductions are demonstrated compared with technically and economically viable alternatives
		Hydrogen fuel cell	Using green hydrogen only
		Off-grid (renewables only)	Renewables only
		Other marine	Wave, Tidal, etc
		Solar – concentrated solar power	
		Solar – photovoltaic	Utility-scale and distributed
		Wind – offshore	
		Wind – onshore	
		Carbon capture use and storage in fossil fuel power plants	Incremental costs of CCUS technology only
		Waste-to-energy	E.g., incineration, gasification, pyrolysis and plasma with clear mitigation benefits
		Multiple	Unspecified renewable energy projects or projects that combine multiple energy sources
		Renewable retrofit	Energy efficiency in existing renewable power assets
		Resilient infrastructure and infrastructure for resilience	E.g., reduction in river flows leading to loss of generation from a hydroelectric plant
	Power & Heat Transmission & Distribution	District heating	Fueled by renewable energy only
		Smart grid	
		Mini grids	
		Power Grid – Retrofit	Retrofits that lead to clear energy efficiency gains

⁹ CPI does not count finance for large hydro projects from the private sector, or public sector finance for projects that do not demonstrate mitigation potential.

Sector	Sub-sector	Mitigation or adaptation solution	Additional information and examples
		Power Grid – New	That enable the integration of renewable power capacity
		Resilient infrastructure and infrastructure for Resilience	E.g., undergrounding of power lines
	Fuel Production	Biogas	Production of biogas connected to natural gas pipelines
		Biofuel	Biofuel production
		Hydrogen from renewables	
	Fuel Transmission & Distribution	NA	E.g., green hydrogen pipelines
	Policy & National Budget Support & Capacity Building	NA	
	Other/Unspecified	NA	Other energy projects, including general energy access development with clear mitigation and/or adaptation benefits
Industry	Industrial, Extraction, and Manufacturing Processes	Non-energy and fugitive GHG reduction	E.g., substitutions in industrial processes with associated GHG cuts
		Carbon capture use and storage	Excluding Energy sector – Incremental cost only
		Energy-use improvements and other GHG cuts	Energy consumption and GHG cuts in industrial processes
		Substitution with hydrogen from renewables	Industrial processes using hydrogen shifting from FF-based Hydrogen to RE-based hydrogen
	Industry Infrastructure & Warehouse	Energy efficiency	Low-consumption warehouses and light industry buildings
		Resilient infrastructure and infrastructure for resilience	E.g., improve the resilience of existing industrial plant/flood protection, etc.
	Policy & National Budget Support & Capacity Building	NA	
	Other/Unspecified	NA	
Waste	Solid Waste	Infrastructure and management (including recycling)	
	Policy & National Budget Support & Capacity Building	NA	
	Other/Unspecified	NA	

Sector	Sub-sector	Mitigation or adaptation solution	Additional information and examples
Water & Wastewater	Water Supply & Sanitation	Efficient large infrastructure	
		Basic water access	
	Waste Water Treatment	Infrastructure and management	Greenfield or brownfield projects that reduce methane or nitrous oxide emissions through wastewater, fecal sludge, or septage management
		NA	
	Policy & National Budget Support & Capacity Building	NA	Ex. Improved catchment management planning and regulation of water abstraction
	Other/Unspecified	NA	
Buildings & Infrastructure	Building & Infrastructure Construction Work	Energy efficiency - new construction	
		Energy efficiency - retrofit	
		Resilient infrastructure and infrastructure for resilience	
	HVAC & Water Heaters	Renewable energy-based hvac	
		Solar thermal water heaters	
		Energy efficient HVAC	Efficient cooling, etc.
	Appliances & Lighting	Efficient lighting systems (incl. public lighting)	E.g., LEDs
	Policy & National Budget Support & Capacity Building	NA	E.g., more robust building regulations and improved enforcement
	Other/Unspecified	NA	
Transport	Private Road Transport	Battery EVs	
		EV chargers	
	Rail & Public Transport	Modal shift policy support	
		Energy efficiency retrofits	Fleet Retrofit with clear energy efficiency gains
		New bus, light or heavy rail fleet and related infrastructure	With associated modal shifts from a higher-carbon transport mode. FF-powered rail engines are excluded
	Waterway	Energy efficiency - retrofit	Fleet Retrofit
		New low-carbon fleet and related infrastructure	
	Aviation	Energy efficiency - retrofit	
		Modal shift policy support	

Sector	Sub-sector	Mitigation or adaptation solution	Additional information and examples
	Policy & National Budget Support & Capacity Building	NA	
	Transport-oriented Infrastructure and Urban Development	Infrastructure for non-motorized transports	
		Resilient Infrastructure and Infrastructure for Resilience	E.g., Use of revised codes for infrastructure design that consider increased frequency or severity of extreme events
	Other/Unspecified	Modal Shift with Associated GHG Emission Cuts	
Information and Communications Technology	Data Centers	NA	New highly energy-efficient centers or energy-efficient retrofits
	Telecommunication Networks	NA	New highly energy-efficient networks or energy-efficient retrofits
		Resilient Infrastructure and Infrastructure for Resilience	
	Policy & National Budget Support & Capacity Building	NA	
	Other/Unspecified	NA	
Agriculture, Forestry, Other land uses and Fisheries	Agriculture	Sustainable crops, agro-forestry, livestock production	E.g., investments in crops that are more resilient to climate extremes and change
		Supply chain management (commercialization, primary processing, and storage)	
		Financial services for sustainable production, commercialization, storage, and processing	
	Forestry	Afforestation, Reforestation, Forest Conservation, sustainable management of existing forest, including extraction of non-timber products	
		Supply chain management (commercialization, primary processing, and storage)	
	Fisheries	Sustainable fish production	
		Supply chain management (commercialization, primary processing, and storage)	
	Food & diet	Food waste and low-carbon diets	
	Policy & National Budget Support & Capacity Building	NA	
	Unspecified / Multiple	NA	

Sector	Sub-sector	Mitigation or adaptation solution	Additional information and examples
Others & Cross-sectoral	Policy & National Budget Support & Capacity Building	NA	
	Biodiversity, Land & Marine Conservation	NA	
	Disaster-risk Management	NA	Ex. Integration of climate change scenarios and climate risk assessments into disaster-risk plans and preparedness
	Other/Unspecified	NA	

APPENDIX II: NDC SCOPE AND COVERAGE LIST

Highlighted rows represent updated submissions from CPI's previous bottom-up database.

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
Central Asia and Eastern Europe					
Albania	non-Annex I	No	N/A	N/A	N/A
Armenia	non-Annex I	No	N/A	N/A	N/A
Azerbaijan	non-Annex I	No	N/A	N/A	N/A
Belarus	Annex I	No	N/A	N/A	N/A
Bosnia and Herzegovina	non-Annex I	Yes	Mitigation only	Partially costed	Total only
Bulgaria*	Annex I	No	N/A	N/A	N/A
Croatia*	Annex I	No	N/A	N/A	N/A
Cyprus*	Annex I	No	N/A	N/A	N/A
Estonia*	Annex I	No	N/A	N/A	N/A
Georgia	non-Annex I	No	N/A	N/A	N/A
Hungary*	Annex I	No	N/A	N/A	N/A
Kazakhstan	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only
Kyrgyzstan	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Latvia*	Annex I	No	N/A	N/A	N/A
Lithuania*	Annex I	No	N/A	N/A	N/A
Montenegro	non-Annex I	Yes	Mitigation only	Fully costed	Total only
North Macedonia	non-Annex I	No	N/A	N/A	N/A
Poland*	Annex I	Yes	Mitigation only	Partially costed	Sector
Republic of Moldova	non-Annex I	No	N/A	N/A	N/A
Romania*	Annex I	No	N/A	N/A	N/A
Russian Federation	Annex I	No	N/A	N/A	N/A
Russian Federation	Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Serbia	non-Annex I	No	N/A	N/A	N/A

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
Slovakia*	Annex I	Yes	Adaptation only	Fully costed	Thematic total
Tajikistan	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only
Türkiye	Annex I	No	N/A	N/A	N/A
Turkmenistan	non-Annex I	No	N/A	N/A	N/A
Ukraine	Annex I	No	N/A	N/A	N/A
Uzbekistan	non-Annex I	No	N/A	N/A	N/A
<i>*Joint EU submission</i>					
East Asia and Pacific					
Brunei Darussalam	non-Annex I	No	N/A	N/A	N/A
Cambodia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
China	non-Annex I	No	N/A	N/A	N/A
Cook Islands	non-Annex I	No	N/A	N/A	N/A
Fiji	non-Annex I	Yes	Mitigation only	Fully costed	Thematic total
Indonesia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Japan	Annex II	No	N/A	N/A	N/A
Kiribati	non-Annex I	Yes	Mitigation only	Partially costed	Project-level
Korea, Democratic People's Republic	non-Annex I	No	N/A	N/A	N/A
Korea, Republic	non-Annex I	Yes	Mitigation only	Fully costed	Thematic total
Lao People's Democratic Republic	non-Annex I	Yes	Mitigation only	Fully costed	Project-level
Malaysia	non-Annex I	Yes	Adaptation only	Fully costed	Thematic total
Marshall Islands	non-Annex I	No	N/A	N/A	N/A
Micronesia (Federated States of)	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Mongolia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Myanmar	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level
Nauru	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level
Niue	non-Annex I	Yes	Mitigation only	Partially costed	Project-level
Palau	non-Annex I	Yes	Mitigation only	Partially costed	Project-level

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
Papua New Guinea	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Philippines	non-Annex I	No	N/A	N/A	N/A
Samoa	non-Annex I	No	N/A	N/A	N/A
Singapore	non-Annex I	No	N/A	N/A	N/A
Solomon Islands	non-Annex I	Yes	Adaptation only	Partially costed	Project-level
Thailand	non-Annex I	No	N/A	N/A	N/A
Timor-Leste	non-Annex I	No	N/A	N/A	N/A
Tonga	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Tuvalu	non-Annex I	No	N/A	N/A	N/A
Vanuatu	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Viet Nam	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	MI: Sector, AD: Thematic
Latin America and Caribbean					
Antigua and Barbuda	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only
Argentina	non-Annex I	No	N/A	N/A	N/A
Bahamas	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only
Barbados	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Belize	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Bolivia (Plurinational State of)	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Brazil	non-Annex I	Yes	Adaptation only	Partially costed	Project-level
Chile	non-Annex I	Yes	Adaptation only	Fully costed	Sector
Colombia	non-Annex I	Yes	Adaptation only	Fully costed	Sector
Costa Rica	non-Annex I	No	N/A	N/A	N/A
Cuba	non-Annex I	Yes	Mitigation only	Partially costed	Project-level
Dominica	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level
Dominican Republic	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Ecuador	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
El Salvador	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level
Grenada	non-Annex I	Yes	Mitigation only	Fully costed	Thematic total
Guatemala	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Guyana	non-Annex I	Yes	Adaptation only	Fully costed	Thematic total
Haiti	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Honduras	non-Annex I	No	N/A	N/A	N/A
Jamaica	non-Annex I	No	N/A	N/A	N/A
Mexico	non-Annex I	Yes	Mitigation only	Fully costed	Thematic total
Nicaragua	non-Annex I	No	N/A	N/A	N/A
Panama	non-Annex I	No	N/A	N/A	N/A
Paraguay	non-Annex I	No	N/A	N/A	N/A
Peru	non-Annex I	No	N/A	N/A	N/A
Saint Kitts and Nevis	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Saint Lucia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Saint Vincent and the Grenadines	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level
Suriname	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level
Trinidad and Tobago	non-Annex I	Yes	Mitigation only	Fully costed	Thematic total
Uruguay	non-Annex I	No	N/A	N/A	N/A
Venezuela (Bolivarian Republic of)	non-Annex I	Yes	Mitigation only	Partially costed	Project-level
Middle East					
Bahrain	non-Annex I	No	N/A	N/A	N/A
Iraq	non-Annex I	No	N/A	N/A	N/A
Israel	non-Annex I	No	N/A	N/A	N/A
Jordan	non-Annex I	No	N/A	N/A	N/A
Kuwait	non-Annex I	No	N/A	N/A	N/A
Lebanon	non-Annex I	Yes	Adaptation only	Partially costed	Thematic total
Oman	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
Qatar	non-Annex I	No	N/A	N/A	N/A
Saudi Arabia	non-Annex I	No	N/A	N/A	N/A
State of Palestine	non-Annex I	Yes	Mitigation only	Fully costed	Project-level
Syrian Arab Republic	non-Annex I	No	N/A	N/A	N/A
United Arab Emirates	non-Annex I	Yes	Mitigation only	Partially costed	Sector
Northern Africa					
Algeria	non-Annex I	No	N/A	N/A	N/A
Egypt	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Morocco	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Tunisia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Other Oceania					
Australia	Annex I	Yes	Both	Partially costed	Sector
New Zealand	Annex I	No	None	N/A	N/A
South Asia					
Afghanistan	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Bangladesh	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Bhutan	non-Annex I	Yes	Mitigation only	Partially costed	Project-level
India	non-Annex I	No	N/A	N/A	N/A
Maldives	non-Annex I	No	N/A	N/A	N/A
Nepal	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Pakistan	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Sri Lanka	non-Annex I	Yes	Adaptation only	Fully costed	Thematic total
Sub-Saharan Africa					
Angola	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Benin	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Botswana	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	MI: Sector, AD: Thematic
Burkina Faso	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
Burundi	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Cabo Verde	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Cameroon	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Central African Republic	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Chad	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	MI: Sector, AD: Thematic
Comoros	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	MI: Sector, AD: Thematic
Congo, Democratic Republic	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Congo, Republic	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Côte d'Ivoire	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Djibouti	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Equatorial Guinea	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Eritrea	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	MI: Thematic, AD: Sector
Eswatini	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
Ethiopia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Gabon	non-Annex I	Yes	Mitigation only	Fully costed	Project-level
Gambia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Ghana	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Guinea	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	MI: Project-level, AD: Thematic
Guinea-Bissau	non-Annex I	Yes	Mitigation only	Fully costed	Sector
Kenya	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Lesotho	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
Liberia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Madagascar	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Malawi	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Mali	non-Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level
Mauritania	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	MI: Project-level, AD: Sector
Mauritius	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only
Mozambique	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only
Namibia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Niger	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Nigeria	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total
Rwanda	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
São Tome and Principe	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Senegal	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Seychelles	non-Annex I	No	N/A	Fully costed	N/A
Sierra Leone	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only
Somalia	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
South Africa	non-Annex I	Yes	Both mitigation and adaptation	N/A	Thematic total
South Sudan	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Sudan	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Togo	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Project-level
Uganda	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Thematic total

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
United Republic of Tanzania	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Total only
Zambia	non-Annex I	Yes	Mitigation only	Fully costed	Total only
Zimbabwe	non-Annex I	Yes	Both mitigation and adaptation	Fully costed	Sector
United States and Canada					
Canada	Annex I	Yes	Both mitigation and adaptation	Partially costed	Project-level
Western Europe					
Andorra	non-Annex I	No	N/A	N/A	N/A
Austria*	Annex II	No	N/A	N/A	N/A
Belgium*	Annex II	No	N/A	N/A	N/A
Czechia*	Annex I	No	N/A	N/A	N/A
Denmark*	Annex II	No	N/A	N/A	N/A
European Union*	Annex II	No	N/A	N/A	N/A
Finland*	Annex II	No	N/A	N/A	N/A
France*	Annex II	No	N/A	N/A	N/A
Germany*	Annex II	No	N/A	N/A	N/A
Greece*	Annex II	No	N/A	N/A	N/A
Iceland	Annex II	No	N/A	N/A	N/A
Ireland*	Annex II	No	N/A	N/A	N/A
Italy*	Annex II	No	N/A	N/A	N/A
Liechtenstein	Annex I	No	N/A	N/A	N/A
Luxembourg*	Annex II	No	N/A	N/A	N/A
Malta*	Annex I	No	N/A	N/A	N/A
Monaco	Annex I	Yes	Both mitigation and adaptation	Fully costed	Total
Netherlands*	Annex II	No	N/A	N/A	N/A
Norway	Annex II	No	N/A	N/A	N/A
Portugal*	Annex II	No	N/A	N/A	N/A
San Marino	non-Annex I	No	N/A	N/A	N/A
Slovenia*	Annex I	No	N/A	N/A	N/A
Spain*	Annex II	No	N/A	N/A	N/A
Sweden*	Annex II	No	N/A	N/A	N/A

Country	Country classification	Needs quantified?	Thematic scope (mitigation/adaptation)	Coverage	Granularity
Switzerland	Annex II	No	N/A	N/A	N/A
United Kingdom	Annex II	No	N/A	N/A	N/A
Vatican City	Related to Annex I Party	No	N/A	N/A	N/A
<i>*Joint EU submission</i>					

REFERENCES

Climate Policy Initiative (CPI). 2025. Top-down Climate Finance Needs. Available at: <https://www.climatepolicyinitiative.org/publication/top-down-climate-finance-needs/>

CPI. 2025. Global Landscape of Climate Finance 2025. Available at: <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2025/>

United Nations Framework Convention on Climate Change (UNFCCC). 2024a. Parties & Observers (accessed 31 August 2024). Available at: <https://unfccc.int/parties-observers#:~:text=Annex%20I%20Parties%20include%20the%20industrialized%20countries%20that,States%2C%20and%20several%20Central%20and%20Eastern%20European%20States>

UNFCCC. 2024b. NDC Registry (accessed 31 August 2024). Available at: <https://unfccc.int/NDCREG>

UNFCCC. 2023. Nationally determined contributions under the Paris Agreement. Synthesis report by the secretariat. Available at: <https://unfccc.int/documents/632334>

United Nations (UN). 2024. United Nations Treaty Collection: 7. d Paris Agreement (accessed 31 August 2024). Available at: https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=en

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