

#### Working paper

## The New Collective Quantified Goal and its sources of funding

### Operationalising a collective effort

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#### Abstract

Developed countries have an obligation to provide developing countries with climate finance to support their effective implementation of the UN Framework Convention on Climate Change and the Paris Agreement. The 'developed' and 'developing' country groups have starkly different responsibilities and capabilities with respect to the climate crisis. As the global economic and financial landscape and the relative weight and influence of many countries shift, the nuances between countries have resurfaced, particularly in deliberations over the New Collective Quantified Goal as the successor to the current climate finance commitments.

This paper highlights that many developing countries are voluntarily providing climate finance to other developing countries for climate action, but their contributions go largely unrecognised as they do not report on this provision. It suggests that contributions from new sources could be encouraged through the establishment of an appropriate burden-sharing modality, and/or the equitable enabling of other Parties' climate finance including the facilitation of voluntary support reporting, as well as by encouraging a wider set of sources to contribute to climate funds. These options, however, should be prefaced with developed country Parties fulfilling their existing, delayed commitment to provide and mobilise \$100 billion a year by 2020.

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## Contents

```
Acknowledgements / i
   Display items / iii
   Acronyms / iv
   Executive summary / 1
 Introduction / 5
1
2 How are countries categorised in the international climate change regime? / 9
 How much climate finance do countries provide? / 14
3
       Methodology / 14
   3.1
   3.2 Findings / 16
  Could selection thresholds encourage new sources of finance? / 22
4
   4.1 Methodology / 23
   4.2 Potential quantitative thresholds / 25
 Why do countries provide climate finance? / 33
5
       Methodology / 33
   5.1
   5.2 Perceived drivers justifying climate finance contributions / 34
6 How can more sources be encouraged to contribute to the NCQG? / 38
   References / 45
   Appendix 1 Timeline of selected finance-related provisions within the international
   climate change regime / 48
   Appendix 2 Climate finance provision by country in absolute terms, 2020 / 51
               Climate finance provision by country compared to share of global GNI,
   Appendix 3
   2020 / 58
   Appendix 4 Climate finance provision per person, 2020 / 65
   Appendix 5 Interview questions / 72
```

## Display items

#### Boxes

Box 1 Categorising Türkiye within the UNFCCC regime / 10
Box 2 Categorising Kazakhstan within the UNFCCC regime / 11
Box 3 Bilateral climate finance provision by non-Annex I countries: the example of China / 18

#### Tables

Table 1 The 30 largest climate finance providers in absolute terms, 2020 / 17Table 2 Non-Annex II countries contributing to the multilateral climate funds, 2020 / 19Table 3 The 30 largest climate finance providers ranked by provision per capita, 2020 / 20Table 4 List of non-Annex II countries that exceed a threshold based on indicators designed toassess their differentiated responsibilities and respective capabilities against Annex II countries in2023 / 26

**Table 5** List of non-Annex II countries that exceed a threshold based on indicators designed toassess their differentiated responsibilities and respective capabilities against Annex II countries in1990 / 29

#### Figures

**Figure 1** A comparison of per capita GNI (USD, 2021) of select countries, benchmarked against the median of Annex II countries in 1990 and 2021 / 31

**Figure 2** A comparison of per capita cumulative, territorial emissions ( $CO_2$ , 1850–2019) of select countries, benchmarked against the median of Annex II countries in 1990 and 2019 / 32

## Acronyms

ADB	Asian Development Bank
AfDB	African Development Bank
AIIB	Asian Infrastructure Investment Bank
BR	Biennial Report
CBDR-RC	common but differentiated responsibilities and respective capabilities
CIF	Climate Investment Funds
CO <sub>2</sub>	carbon dioxide
СОР	Conference of the Parties
СМА	Conference of the Parties serving as meeting of the Parties to the Paris Agreement
DAC	OECD Development Assistance Committee
EC	European Community
EU	European Union
GCF	Green Climate Fund
GEF	Global Environment Facility
GNI	gross national income
GNP	gross national product
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IsDB	Islamic Development Bank
MDB	multilateral development bank
MIGA	Multilateral Investment Guarantee Agency
NCQG	New Collective Quantified Goal
NSA	non-state actor
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
SIDS	Small Island Developing State
tCO <sub>2</sub>	tonnes of carbon dioxide
UNFCCC	United Nations Framework Convention on Climate Change

## Executive summary

The international climate change regime is grounded in the principle of 'common but differentiated responsibilities and respective capabilities, in light of different national circumstances' (CBDR-RC). One of the ways the principle of CBDR-RC has been operationalised is through the obligation of developed countries to provide developing countries with climate finance to support their effective implementation of the UN Framework Convention on Climate Change (UNFCCC) and the Paris Agreement.

Although 'developed' and 'developing' are the default categories in the climate regime, each includes countries with starkly different responsibilities and capabilities with respect to the climate crisis. Such nuances are not sufficiently captured within the climate regime but are becoming more prominent in discussions – particularly as countries deliberate over the New Collective Quantified Goal (NCQG).

The NCQG is the successor to the current climate finance commitment established at COP15 in Copenhagen in 2009, where developed countries committed to jointly mobilise \$100 billion a year by 2020. At COP21 in 2015, they agreed to continue this financial commitment through to 2025, at which point it will be replaced by the NCQG. As set out in the accompanying decision to the Paris Agreement, the NCQG reflects the continued need to support developing countries in their efforts to implement climate actions. The purpose of this paper is to support informed deliberations on future climate finance obligations. It also considers potential ways to operationalise the voluntary provisions regarding finance and incentivise new sources of finance.

This paper first summarises the historical background to the current country categorisations within the UNFCCC. In the UNFCCC, adopted in 1992, Parties were divided between countries listed in the Convention's Annex I, which committed to take the lead on emission reductions as a practical manifestation of the CBDR-RC principle, and countries, later known as non-Annex I Parties, which are not tied to the same obligations. A subset of Annex I countries – the Organisation for Economic Co-operation and Development (OECD) countries and European Community (EC) member states, known as Annex II countries – had further obligations to provide new and additional financial resources to developing country Parties.

However, the global economic and financial landscape, and the relative weight and influence of many countries, has changed significantly since 1992. Voluntary approaches for switching country categorisation brought forward at different points in the multilateral process never concluded, and few country classifications have changed. The references to 'developed/developing' countries in the Paris Agreement without the explicit references to the Annexes can be partly understood as a way to bypass the rigid Annex partition issue. The wording allows countries to self-differentiate in line with the broader bottom-up spirit of the Paris Agreement.

To date, no developing country has formally committed to climate finance provision. Developing countries have, however, made voluntary contributions to other developing countries for climate action, including through the Financial Mechanism of the UNFCCC. Non-Annex II countries do not report on this provision, especially under the UNFCCC regime, so their contributions go mostly unrecognised in the climate regime. This paper maps these voluntary contributions. New data suggests that China is the eleventh largest climate finance provider<sup>1</sup> in absolute terms in 2020 (at approximately \$1.2 billion), ahead of Annex II countries such as Norway (\$1.1 billion), Switzerland (\$840 million) and Australia (\$821 million). We also highlight South Korea as the largest non-Annex II country contributing to multilateral climate funds in 2020 (at \$26 million). India, Brazil and Russia also appear in the list of the top 20 providers of international climate finance, a striking finding considering that (with the exception of South Korea) the data reflects only their multilateral climate finance contributions and not any bilateral flows, and is consequently likely to be an underestimate. Using data from Tsang, Schape and Hackbarth (2023), this paper estimates that Chinese public bilateral climate-related finance was \$1.39 billion in 2017. If this figure were combined with official data on multilateral climate finance flows, China would have ranked as the sixth largest provider of international public climate finance to developing countries in 2017.

Applying the CBDR-RC principle to international climate finance provision requires some consideration of which countries have the responsibility and/or capability to provide resources. Accordingly, there is growing attention to possible criteria to identify potential contributors to the NCQG. This paper seeks to evaluate potential quantitative approaches for identifying which countries have the differentiated responsibilities and respective capabilities to provide more climate finance. The analysis also considers whether these thresholds could encourage the provision of more climate finance from new sources.

Three metrics are proposed that could speak to the CBDR-RC principle: gross national income (GNI) per capita, as a proxy for a country's economic capability to provide climate finance; cumulative territorial  $CO_2$  emissions per capita from 1990 to 2019, as a proxy for a country's responsibility for our changed climate; and vulnerability to climate change and readiness to adapt, as a proxy of a country's socio-political capability to respond to climate change.

At the heart of the negotiations around climate finance provision is the question of why a country would channel public funds to developing countries. Through semi-structured interviews with climate finance negotiators and experts, the paper unearths some of the reasons underpinning climate finance provision to identify narratives and mechanisms that can encourage further contributions. Of course, there is a legal basis for the provision of climate finance by developed countries under both the Convention and the Paris Agreement. However, both Annex II and non-Annex II countries also emphasise aims such as fostering a spirit of solidarity and upholding

<sup>1</sup> This paper refers to South–South cooperation and financial flows as 'climate finance' as a shorthand only and does not seek to imply any arguments in favour or against Party views in the ongoing debate on the definition of 'climate finance'.

the principle of climate justice. Most interviewees also noted domestic imperatives, such as opportunities to support national commercial interests; enhance national and economic security; cater to domestic audiences for political benefit; or gain greater influence in multilateral decision-making processes. Thus, countries provide climate finance for a number of tactical – and at times seemingly opposing – reasons that nonetheless coexist within the same narrative.

The paper concludes by identifying a number of options that could be considered to incentivise additional sources of climate finance. These are not mutually exclusive. Ideally, they would be more effective if they are implemented as a package and in synergy with other governance processes outside of the UNFCCC regime, such as international financial institution and multilateral development bank reform. However, before encouraging contributions from new sources, developed country Parties should make up the existing shortfall in the commitment to provide and mobilise \$100 billion a year by 2020, and provide reassurances of their continued and scaled-up commitments. Such reassurance in addition to facilitated reporting and scaled-up private sector mobilisation would pave the way for an equitable operationalisation. Once developed country Parties have delivered on this front, the following approaches may unlock additional sources of finance:

- Establishing an appropriate burden-sharing modality or agreement for Annex II countries as well as any other self-differentiated developed countries under the NCQG. A burdensharing system could enhance fairness among countries that have assumed responsibility for climate finance provision, and thereby create the political space and accountability necessary to spur increased contributions. It would also provide greater predictability for recipient countries.
- Enabling 'other Parties' sources as per Article 9(2) of the Paris Agreement. Enabling 'other Parties' to provide or continue to provide support voluntarily is crucial. The NCQG should recognise and incentivise South–South cooperation, and acknowledge that such support can be provided in the form of both direct financial resources and non-financial contributions including technology transfer, capacity-building and preferential trade agreements. The NCQG deliberations should consider the creation of voluntary sub-goals or qualitative aspects that encourage the increase in these provisions. This may need to be heavily caveated to demonstrate that it is on the basis of solidarity and cannot be perceived as an obligation.
- Facilitating reporting of voluntary support from 'other Parties' in their Biennial Reports. Adequate and predictable resources will be essential for many 'other Parties' to report any climate finance that they provide or mobilise. Financial resources are important, but so is political support given the potential risk for a developing country providing voluntary support: that country may do so to show commitment to collective ambition but end up being increasingly considered as a developed country, with all the attendant potential obligations. Safeguards and reassurances should therefore be provided to protect voluntary contribution or self-differentiation under the Paris Agreement.
- Encouraging diverse stakeholders to contribute to the climate funds under the NCQG. Many sub-national actors, corporates and financial institutions have made voluntary climate commitments, for example to reach net-zero emissions by 2050. The NCQG offers an

opportunity to invite voluntary contributions to international climate finance from these actors. With its mandate to invite non-Party stakeholders to the technical deliberations, the NCQG can explore ways of making the financial architecture more effective and tailor approaches to each stakeholder group. Such efforts must not be about transferring responsibility away from those currently obligated under the UNFCCC, but about fostering a more systemic approach to financing climate actions in order to achieve the goals of the Paris Agreement.

## 1 Introduction

The international climate change regime is grounded in the principle of 'common but differentiated responsibilities and respective capabilities, in light of different national circumstances' (CBDR-RC) (UNFCCC, 1992). One of the ways that the principle of CBDR-RC has been operationalised is through the obligation of developed countries to provide developing countries with climate finance to support their implementation of the UNFCCC and the Paris Agreement, with the aim of strengthening the global response to the threat of climate change and ultimately stabilising the climate system (Peel, 2016).

While the definition of climate finance is still the subject of deliberation, an operational definition has emerged from the UNFCCC's Standing Committee on Finance, whereby 'climate finance aims at reducing emissions, and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts' (SCF, 2022). Noting this definition, it is important to underscore that divergent views still remain among Parties. One key area of difference relevant to sources of funding for a new climate finance goal is that 'many Parties defined climate finance as referring solely to international funding from developed to developing countries' (UNFCCC, 2022a). As this is an ongoing debate, it is noted that this paper refers to South–South cooperation and financial flows as 'climate finance' as a shorthand only and does not seek to imply any arguments in favour or against Party views in the ongoing debate on the definition of 'climate finance'.

Climate finance is one of the most visible and contentious issues in climate diplomacy. Developed countries have consistently fallen short of their collective commitment to jointly mobilise \$100 billion a year by 2020 (OECD, 2022). While there is no agreed approach among developed countries to sharing the burden of this goal, the US is overwhelmingly responsible for a significant share of the climate finance gap, with one analysis suggesting it provided just 5% of its fair share in 2020. Australia, Canada, Italy and Spain are also notably falling short in both absolute and relative terms (Colenbrander et al., 2022). Further, the \$100 billion goal is incommensurate with the scale of needs of developing countries, costed at a cumulative minimum of \$5.8–5.9 trillion between now and 2030 (SCF, 2021).

Beyond the inadequacy of the finance committed, which results from a political process, developed countries have also been criticised for the quality of climate finance, including the fragmentation of finance delivery channels and associated high transaction costs for developing countries (Khan et al., 2019); the large share of resources provided on non-concessional or minimally concessional terms (Carty et al., 2020); and the unpredictability of climate finance provision (Hattle, 2021). Developed countries therefore have not fulfilled their responsibility to provide 'scaled up, new and additional, predictable and adequate funding' to address the needs of developing countries as they respond to climate change (UNFCCC, 2009).

Against this backdrop, it is important to recognise that developing countries are not a homogenous bloc: it is constituted of least developed countries, small islands developing states, low- and middle-income countries. Hence, the CBDR-RC principle also applies within the group. The terms 'developed' and 'developing', as used in the UNFCCC processes, disguise substantial heterogeneity within each country category. Developed countries include Switzerland, with a per capita GDP of \$91,992 in 2021, as well as Greece, at \$20,193. It includes Australia, with per capita emissions of 15.3 tonnes of carbon dioxide (tCO<sub>2</sub>) in 2019, as well as Portugal, with per capita emissions of  $4.3tCO_2$  (World Bank, 2023a; 2023b). The bloc also includes the US, the world's largest economy when measured by nominal GDP. Meanwhile, the developing countries category includes Singapore, with a per capita GDP of \$72,294 in 2021, and Burundi, at \$222. It includes Qatar, with per capita emissions of  $32.8tCO_2$  in 2019, as well as Malawi, with per capita emissions of  $0.1tCO_2$  (World Bank, 2023a; World Bank, 2023b). The bloc also includes China, the world's largest economy when measured using real GDP (i.e. GDP at purchasing power parity). Both the 'developed' and 'developing' categories therefore include countries with starkly different contributions to the climate crisis.

Such nuances are not sufficiently captured within the current climate regime, which depends on broad country categories with no clear criteria and an unwieldy mechanism to operationalise voluntary contributions. This is not a new challenge. Indeed, '[t]he question of how and when developing countries should assume stronger commitments ... constitutes the central political dilemma of the climate change regime' (Depledge, 2009). However, the challenge has become more pronounced over the last 20 years given the rapid economic development – and consequent increase in emissions – of a subset of countries that could formerly be straightforwardly considered 'developing', but whose status is now more open to question.

Tensions over the operationalisation of the CBDR-RC principle manifest most explicitly in the context of climate finance. Which countries should be obliged to provide climate finance, how much should they provide and on what terms? These questions have been routinely raised in climate negotiations for over a decade, but answers are now needed more urgently than ever as countries deliberate over the New Collective Quantified Goal (NCQG).

The NCQG is the successor to the current climate finance commitment established at COP15 in Copenhagen in 2009, where developed countries made a commitment to jointly mobilise \$100 billion a year by 2020. At COP21 in Paris in 2015, Parties further agreed that the \$100 billion target would serve as the annual floor for international climate finance up to 2025, when the new goal – the NCQG – will be adopted. At COP26 in Glasgow, Parties agreed to establish an ad hoc work programme for 2022–2024 to deliberate on the NCQG. As of June 2023, the technical expert dialogues on the NCQG have explored the needs and priorities of developing countries; the roles of public and private finance actors; access to climate finance; the temporal scope of the NCQG; quantity, mobilisation and provision of financial sources; and options for structuring the NCQG. However, there has been little structured discussion around recipients and sources under the new climate finance goal. The purpose of this paper is to inform deliberations around how developing countries can be encouraged to make new voluntary contributions under the climate regime, specifically with respect to providing and mobilising climate finance. The paper recognises that enabling the operationalisation of provisions referring to voluntary efforts by developing countries will be a phased process, and part of this paper is devoted to acknowledging the many developing countries that already voluntarily contribute international climate finance or undertake South– South cooperation, on top of public expenditure devoted to domestic climate action. The paper also provides options to encourage additional contributions within the global climate change regime. These options seek to advance implementation of the CBDR-RC principle, and other voluntary provisions included in the Paris Agreement, through a more nuanced approach to 'differentiated responsibilities' and 'respective capabilities' than the country categories under the climate regime.

The paper is intended to be read and used by two key audiences:

- 1. Government officials involved in negotiations at the UNFCCC and making decisions around international climate finance.
- 2. Civil society representatives seeking to accelerate the provision and mobilisation of climate finance, while holding climate laggards to account and increasing the total volume of climate finance.

The authors encourage readers to consider these findings in parallel with our earlier working paper, *A fair share of climate finance*? (Colenbrander et al., 2022), which draws attention to the developed countries that account for the current shortfall in climate finance. The aim of both pieces of research is to increase the total volume of international climate finance in order to accelerate achievement of the long-term goals of the Paris Agreement. The ideal sequence for achieving this aim would be that the developed countries which have lagged on climate finance provision over recent years meaningfully help to meet and exceed the current \$100 billion a year goal; thereafter, some developing countries would be encouraged to voluntarily provide, mobilise and report on climate finance, ultimately moving into a full operationalisation of the provisions under the international climate change regime. The intention of this paper is therefore not to discount past climate finance failures or shift responsibility for climate finance, but to ensure that negotiators take advantage of the NCQG deliberations to design a climate finance system that is fit for purpose today and meaningfully helps to achieve a low-emission, climate-resilient future.

The next section of this paper provides a brief history of country categories within the international climate change regime, including case studies of countries that have previously sought to change their status. Section 3 analyses how much climate finance developing countries already voluntarily provide and mobilise, challenging prevailing perceptions of a two-tier system. Section 4 evaluates the value of proposed selected quantitative thresholds in the context of enabling the operationalisation of voluntary contributions by developing countries within the climate regime. Section 5 explores why developed and developing countries have chosen to provide and mobilise international climate finance, in an effort to understand the diverse

motivations among individuals, government ministries and countries and identify lessons that could be useful in encouraging more provision and mobilisation. In the final section, we offer some options – within and beyond the UNFCCC – to recognise the existing climate finance contributions of many developing countries, as well as to spur contributions from those developing countries that are in a position to make them.

# 2 How are countries categorised in the international climate change regime?

Responsibility for climate finance provision in the UNFCCC has been tied to explicit country categories: Annex I and Annex II. The Copenhagen Accord, the Cancun Agreements and the Paris Agreement each entail a distinct and intentional evolution in the classification of countries, increasingly adopting the terms 'developed' and 'developing' in place of the traditional Annex categories. However, a range of other classifications and categories have also emerged in the finance negotiations. This section charts some of these developments, providing the necessary context to evaluate potential options to recognise and incentivise climate finance contributions from developing countries for the implementation of Nationally Determined Contributions (NDCs) made by Parties to the Paris Agreement. Appendix 1 includes a detailed timeline of key decisions made by Parties from 1992 to 2015.

In the UNFCCC, adopted in 1992 ahead of the Earth Summit in Rio de Janeiro, Parties were divided between industrialised countries listed in the Convention's Annex I and non-industrialised countries, later known as non-Annex I Parties. The 41 Parties in Annex I include the countries that were members of the Organisation for Economic Co-operation and Development (OECD) in 1992, plus countries with economies in transition (the EIT Parties), including Russia, the Baltic States and several Central and Eastern European states. Over 150 other Parties were categorised as non-Annex I. The categorisation of Parties as either Annex I or non-Annex I has been regarded as the cornerstone of the international climate regime (Yamin and Depledge, 2004; Depledge, 2009).

In the original Convention text, Annex I countries committed to take the lead on emission reductions as a practical manifestation of the CBDR-RC principle. A subset of Annex I countries – the OECD and European Community (EC) member states, known as Annex II countries – had further obligations to provide new and additional financial resources to developing country Parties (Article 4.3). This also included a specific obligation to support developing country Parties 'that are particularly vulnerable to the adverse effects of climate change' to meet the costs of adaptation (Article 4.4). Non-Annex I Parties had only qualitative obligations and more lenient reporting requirements, and were eligible for financial and technological assistance to help them address climate change.

Procedures set out in the Convention, and to a lesser extent the Kyoto Protocol (1997), refer to the adoption and amendment of the Annexes. The unspoken intention was that, as non-Annex I countries' economies grew and their emissions rose, they could voluntarily join Annex I.

However, in practice there have been few proposals to revise membership of the Annexes and fewer yet proposals from countries to be included in Annex I or Annex II. When proposals have been put forward, both developed and developing countries have objected at different points.

Three amendments have been made to include countries in Annex I and one to remove a country from Annex II. The case studies of Türkiye and Kazakhstan in Boxes 1 and 2 illustrate the inflexible procedures for amending the Annexes, a function of the entrenched attitudes of the Parties. The case of Kazakhstan is particularly striking, illustrating how the need to secure consensus from all Parties to change categories has enabled developing countries to block greater climate ambition among their members where it might establish a precedent formalising commitments. This type of challenge was considered in the deliberations leading to the decision at COP19, in Warsaw. There, countries were invited to prepare and submit intended Nationally Determined Contributions (iNDCs), signifying a shift towards self-determination that is now embodied by the Paris Agreement.

#### Box 1 Categorising Türkiye within the UNFCCC regime

Türkiye was included in the UNFCCC as an Annex II country. This may have been at its request to signal its status as a developed country (Birpinar, 2019) or because it was an OECD member. It was warned against taking this stance due to the associated obligations, which the country subsequently was not comfortable fulfilling. Türkiye therefore refrained from ratifying the Convention.

To change Annexes, Türkiye needed to make every effort to achieve consensus among all Parties; if that route was exhausted, a change in status could be adopted by a three-quarters majority of the Parties present and voting. While it immediately had support from Pakistan and Kazakhstan, the country mostly had to negotiate Party by Party to gain backing for its position. Its applications to exit Annex II via COP decisions were blocked until COP7 in Marrakesh in 2001, after which Türkiye ratified the Convention in 2004.

Türkiye was kept in Annex I, but with its 'special circumstances' recognised (UNFCCC, 2001a). However, the country persisted in trying to exit from Annex I, pursuing this through COP meetings. Realising that the consensus approach embodied in the Draft Rules of Procedure gave the country considerable power to veto a multilateral agreement, high-level meetings and specific negotiations were organised in the run-up to COP21 in Paris. Ultimately, the proposal to delete Türkiye from Annex I was rejected due to objections by both the developed countries and the G77+China. Some of Türkiye's concerns about its access to climate finance were partially resolved in negotiations led by the French Presidency, and Türkiye accepted the Paris Agreement in 2015.

#### Box 1 Categorising Türkiye within the UNFCCC regime continued

Türkiye attempted to exit Annex I again before COP26 in Glasgow by tabling a position paper (UNFCCC, 2021). It stated that non-Annex I status 'would enable Türkiye to take further steps for climate action'. Türkiye's proposal was premised on its negligible historical responsibility for greenhouse gases and its developing country status according to the IMF, OECD DAC and World Bank (a categorisation based on income): in other words, similar selection thresholds to those evaluated in this paper in Section 4. Türkiye also pointed out that four countries (Chile, Colombia, Costa Rica, Israel) which became OECD members after 1992 are not included in Annex I. However, it withdrew this agenda item at the opening session of COP26 in Glasgow to show its willingness to work constructively (IISD, 2021).

#### Box 2 Categorising Kazakhstan within the UNFCCC regime

New entrants were added to Annex I in 1997 as part of the time-limited review of Annexes mandated under Article 4.2(g): the Czech Republic, Croatia, Liechtenstein, Monaco, Slovakia and Slovenia. In 1999, Kazakhstan proposed amending Annex I to add itself. This proposal met with opposition at COP5 in 1999, with some influential developing countries objecting in case it set a precedent. The other entrants to Annex I had been the new EU members, with relatively advanced economies, but Kazakhstan's circumstances were more akin to those of a middle-income country (Depledge, 2009).

Kazakhstan consequently failed in its bid to amend Annex I, but it notified its intent to be bound by Annex I commitments. However, COP7 subsequently noted that Kazakhstan would become an Annex I Party for the purposes of the Kyoto Protocol, but that it would remain a non-Annex I Party for the purposes of the Convention. This arrangement would enable the country to benefit from the more favourable financial and technical assistance possibilities available to non-Annex I countries (Yamin and Depledge, 2004). Thus, the Annex structures interacted in complicated ways across the main Convention treaty and the provisions of the Kyoto Protocol.

The world has changed since 1992. Income and indebtedness levels have risen across many countries and more countries are becoming or have become industrialised. The rigidity of the Annex structures meant that the Convention and the Kyoto Protocol were not able to accommodate the rapid economic development and rising carbon footprint of many non-Annex I countries (Deleuil, 2012), even if those states wanted to introduce voluntary targets or commitments under the Convention. Voluntary approaches within the Annexes were proposed

multiple times, including by Argentina and Small Island Developing States (SIDS), but were interpreted by the G77+China as back-door attempts to introduce new responsibilities for developing countries (Depledge, 2009). Even when the original basis for classifying countries evolved – for instance when Israel, Mexico or South Korea joined the OECD – the Annexes were not adjusted in tandem. Implementation of the CBDR-RC principle thus did not keep pace with economic changes and the commensurate growth in emissions from developing countries – even though they do remain below historical emissions from developed countries.

At the same time, it became increasingly apparent through the 2000s that most developed countries were not fulfilling their differentiated responsibilities under the climate regime. The US and Australia had not ratified the Kyoto Protocol; other Annex I countries – with the exception of the UK and Germany – were not on track to meet their emission reduction targets. For vulnerable developing countries, the need for support to cope with climate change was becoming clearer and dissatisfaction was growing with the inadequacies and inflexibilities of the Global Environment Facility (GEF) as the only operating entity of the UNFCCC financial mechanism at that time.

There was therefore an impasse between developed and developing countries as defined in the Annexes. The failures of most developed countries to fulfil their promises frustrated developing countries that were beginning to see the impacts of climate change upon their people and economies. Meanwhile, rising emissions from a subset of developing countries fuelled concern about curtailing climate change among developed countries, particularly given the perceived relationship between climate action and economic competitiveness in a period when jobs and industries were moving offshore.

A new series of dialogues began within the regime in 2005 to explore long-term cooperative action beyond the commitments embedded in the Annexes. Key elements of the dialogue relating to climate finance included:

- The decision in the Bali Action Plan (COP13) to establish a finance track (UNFCCC, 2007).
- The collective commitments by developed countries in the Copenhagen Accord (COP15) and officially noted by the COP in the Cancun Agreements (COP16) establishing the first collective quantified goals for the provision and mobilisation of climate finance, i.e. the commitment promised fast-start finance at \$30 billion over 2010–2012 as well as the \$100 billion per year by 2020 commitment (UNFCCC, 2009).
- The establishment of the Green Climate Fund and the Standing Committee on Finance in the Cancun Agreements (COP16) in 2010.

Subsequent finance decisions, especially those adopted between 2011 and 2014, paved the way for several provisions of the Paris Agreement related to climate finance, the enhanced transparency framework for support and the Global Stocktake (see Appendix 1).

The Paris Agreement negotiated at COP21 reiterates that 'Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention' (Article 9.1). However, the Paris Agreement marks a significant evolution of earlier decisions in two ways. First, there are no references to the Annex categories in the Agreement. Instead, the terms 'developed' and 'developing' become the primary dichotomy, albeit with considerably more differentiation with respect to subsets of countries' capacities and vulnerabilities (Pauw et al., 2019). The transformative new structure allows for developing countries to increase their ambition over time, in line with voluntary provisions within the climate regime. There are ongoing legal debates regarding the prevalence of one text over another: do the original Annex structures still apply as they are contained in the framework treaty, or have they been superseded by the language of the Paris Agreement?

Second, 'Other Parties are encouraged to provide or continue to provide such support voluntarily' (Article 9.2), 'to communicate biennially [ex-ante climate finance] information on a voluntary basis' (Article 9.5), and biennially to provide transparent information on support provided and mobilised (Article 9.7). Earlier decisions in the climate regime had invited developing countries to voluntarily undertake mitigation actions. However, the Paris Agreement marked the first time that there was consensus that developing countries should be encouraged to provide financial resources. Provisions to operationalise this invitation to 'other Parties' were considered throughout the process of negotiating the Paris Rulebook.

At the Katowice Conference in 2018 (COP24), the focus on climate finance moved from finalisation of the Paris Agreement rulebook to the development of the NCQG. Deliberations on the new goal began in Glasgow in 2021 (COP26) and will continue until COP29. Given the centrality of finance for climate action, there is clearly a need for constructive and evidencebased deliberations to ensure that the volume of international climate finance is increased going forward in order to accelerate the achievement of a low-emission, climate-resilient future. At the same time, it is important to remember that developed countries have not yet fulfilled their collective pledge to jointly mobilise \$100 billion a year by 2020 and now through to 2025 (OECD, 2022). The failed promise fuels distrust among countries, reactivating countries' positioning into two blocs of developed versus developing groups. Paired with the growing impacts of climate change, which are disproportionately affecting developing countries, there is therefore a tension on whether upcoming deliberations should focus on encouraging countries lagging among Annex Il to meet their responsibilities and develop mechanisms for accountability; or on encouraging other countries that are also capable to step up on climate finance. Given that insufficient finance is a key barrier to climate action and that domestic politics and international relations are increasingly toxic, perhaps both are required in a stepwise approach.

# 3 How much climate finance do countries provide?

This section looks at international public climate finance provided to developing countries by all member countries of the UN. The analysis is novel because it estimates climate finance for developing countries provided by both developed and developing countries, going beyond existing reporting that focuses on Annex II countries' contributions. This section demonstrates that many non-Annex II countries are already providing significant levels of finance for climate action, despite not being required to do so by the international climate change regime. By documenting the voluntary contributions of these countries, we hope to illuminate the underrecognised expansion of climate finance sources over recent decades and hold to account those countries that perhaps have greater responsibilities and capabilities to pay.

#### 3.1 Methodology

The paper's methodology is largely consistent with that used by the OECD DAC in its annual reports quantifying progress towards the yearly \$100 billion goal (see e.g. OECD, 2022a; 2022b), but there are a few key differences explained below that discourage direct comparisons.

This section looks at the volume of international climate finance disbursed in 2020 through four channels. First, bilateral climate finance contributions are considered. Data from Table 7(b) of the Common Tabular Format (CTF) tables that accompany Annex I Parties' Biennial Reports to the UNFCCC are sourced. Thirty-seven out of 43 Annex I countries provided bilateral climate finance information. The Biennial Reports include climate finance data in the form of Official Development Assistance (ODA - provided as grants and concessional loans) and other official flows (provided as loans and export credit). This data is populated through self-reporting. There are significant variations among countries in how they measure climate finance, as alluded to in Section 1 on the ongoing work on climate finance definitions. These discrepancies have been well documented (see OECD, 2022b; UNFCCC, 2022) and were adjusted during aggregation where possible to avoid the risk of double counting, though the majority of CTF data provided limited granularity to do so. South Korea's bilateral climate finance flows were included by proxying the climate-related ODA flows it reports to the OECD DAC Creditor Reporting System, as it does not report through its Biennial Update Report. In general, bilateral climate-related ODA data from the OECD DAC was used to proxy countries' bilateral climate finance in a few cases where data was missing, recognising that the OECD DAC system is not set up to track climate finance.

Second, the paper looked at regional climate finance contributions for European Union (EU) members through their contribution to the EU budget. The EU, as an Annex II Party, reports its climate finance provision and mobilisation to the UNFCCC. These flows were attributed back to each of the 27 EU member countries (plus the UK before it left the EU) based on their share

of contribution to the EU budget. For the years 2015–2016, the European Investment Bank's contribution was subtracted from the EU's bilateral climate finance to avoid double counting, as the EIB's climate finance has been included in the multilateral development banks' (MDBs) contribution.

Third, countries' climate finance contributions through the MDBs were looked at. Eight MDBs were considered.<sup>2</sup> The data was sourced from the 2020 Joint Report on Multilateral Development Banks' Climate Finance (AfDB et al., 2021). The paper considered MDBs' climate finance outflows from 'own resources' to developing countries – these include resources that MDBs raise in international capital markets or income earned from investments, leveraging bilateral inflows. These were attributed back to individual MDB member countries based on their shares of capital subscription in each MDB. To estimate the World Bank Group's shares of capital subscription, the capital contribution of each country into the International Bank for Reconstruction and Development, the International Development Association and the International Finance Corporation were added, and their share of the World Bank Group's overall capitalisation was calculated. MDBs' externally managed resources', such as funding from contributor-financed trust funds, were not included as these are already reported in countries' core general funding to multilateral institutions submitted to the UNFCCC.

Last, climate finance contributions via 21 multilateral climate funds were looked at.<sup>3</sup> Data provided by the Climate Funds Update was used, which tracks cumulative pledges to multilateral climate funds as well as project approvals by year. Countries' shares of cumulative pledges to multilateral climate funds were calculated and used to attribute yearly approved climate finance project amounts back to the individual country. Each country's share of cumulative pledges was applied to the total project approvals in each year between 2015 and 2020 in order to calculate the yearly amount of climate finance reaching recipients through multilateral climate funds.

Our analysis excludes cross-border private finance or publicly mobilised international private finance flows that target climate objectives. Publicly available information on international private finance mobilised by public sources is currently limited and therefore does not allow attribution

<sup>2</sup> African Development Bank (AfDB), Asian Infrastructure Investment Bank (AIIB), Asian Development Bank (ADB), European Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD), Islamic Development Bank (IsDB), the Inter-American Development Bank Group (IDBG), and the World Bank Group (WBG).

<sup>3</sup> Adaptation for Smallholder Agriculture Programme (ASAP), Adaptation Fund (AF), Amazon Fund, BioCarbon Fund Initiative for Sustainable Forest Landscapes (BioCarbon Fund ISFL), Central African Forest Initiative (CAFI), Clean Technology Fund (CTF), Congo Basin Forest Fund (CBFF), Forest Carbon Partnership Facility (FCPF), Forest Investment Program (FIP), Global Environment Facility (GEF), Global Climate Change Alliance (GCCA), Global Energy Efficiency and Renewable Energy Fund (GEEREF), Green Climate Fund (GCF), Indonesia Climate Change Trust Fund (ICCTF), Least Developed Countries Fund (LDCF), MDG Achievement Fund, Partnership for Market Readiness, Pilot Program for Climate Resilience (PPCR), Scaling Up Renewable Energy Program (SREP), Special Climate Change Fund (SCCF) and the UN-REDD Programme.

to individual contributing countries. The OECD (2022) estimates *aggregate* climate finance attributable to developed countries to be \$13.1 billion in 2020. If this figure could be rigorously disaggregated and attributed back to individual countries, their climate finance contributions in 2020 would be higher.

All data used for the analysis has been reported as commitments, except for bilateral finance flows. Most countries report commitment data to the UNFCCC, but a small number report both commitment and disbursement information (though disbursements are only recorded for grants). Non-grant instruments are also reported at their face value rather than as their grant equivalent, which means that the data does not accurately reflect countries' underlying fiscal commitments.

#### 3.2 Findings

Non-Annex I countries are contributing to climate action in developing countries through the provision of finance, technology transfer and capacity-building. In absolute terms, the top 10 sources of climate finance to developing countries out of 197 countries in the world are Annex II countries (see Table 1). This is not surprising given both the size of their economies and their responsibilities under the climate regime.

Moving down this list, it is striking to find non-Annex II countries providing considerable volumes of climate finance to developing countries. Indeed, several large, middle-income economies – China, India, Brazil and Russia – appear within the top 20 positions. These countries' contributions become even more significant when considering that they are based on estimates of their multilateral climate finance contributions alone, not any bilateral flows, and are consequently likely to be underestimates. Currently data on bilateral climate finance flows is only available from the Biennial Reports for 37 out of the 43 Annex I countries. The OECD DAC provides complementary data on climate-related ODA for a handful of other countries that have joined the OECD since 1992. The lack of data precludes a comprehensive assessment of non-Annex I countries' bilateral activities to address climate change. Any analysis of international public climate finance is therefore likely to underestimate the contribution of countries that are very active in bilateral South–South cooperation, such as China (see Box 3).

The top 30 climate finance providers listed in Table 1 contributed 92% of climate finance for the year 2020. Available data on climate finance provision for all 197 countries is presented in Appendix 2.

				\$ million (current)			
Rank	Country	UNFCCC grouping	Bilateral	MCFs	MDBs	Total	
1	Japan	Annex II	9,288	390	3,693	13,370	
2	Germany	Annex II	8,076	502	2,603	11,181	
3	France	Annex II	5,936	305	2,114	8,355	
4	United States	Annex II	1,770	472	5,443	7,685	
5	United Kingdom	Annex II	1,380	611	1,969	3,960	
6	Italy	Annex II	698	85	1,637	2,421	
7	Canada	Annex II	407	93	1,216	1,716	
8	Spain	Annex II	659	68	896	1,623	
9	Netherlands	Annex II	578	62	841	1,481	
10	Sweden	Annex II	563	176	634	1,374	
11	China	Non-Annex I		1.56	1,235	1,236	
12	Norway	Annex II	489	300	296	1,086	
13	Switzerland	Annex II	329	45	467	841	
14	Australia	Annex II	118	42	660	821	
15	Belgium	Annex II	170	51	588	809	
16	South Korea	Non-Annex I	202*	26	559	786	
17	India	Non-Annex I		1.08	764	765	
18	Austria	Annex II	245	24	376	644	
19	Brazil	Non-Annex I		1.13	528	529	
20	Russia	Annex I		1.75	505	507	
21	Saudi Arabia	Non-Annex I			496	496	
22	Denmark	Annex II	58	41	379	478	
23	Indonesia	Non-Annex I		0.48	405	405	
24	Poland	Annex I	122	5.53	260	388	
25	Argentina	Non-Annex I			380	380	
26	Finland	Annex II	93	35	229	357	
27	Mexico	Non-Annex I		1.98	337	339	
28	Nigeria	Non-Annex I		0.51	295	296	
29	Ireland	Annex II	107	11	116	234	
30	Türkiye	Annex I		0.16	214	214	
	Total for all 197 cou	Intries	31,441	3,387	35,314	70,344	

#### Table 1 The 30 largest climate finance providers in absolute terms, 2020

Note: Bilateral climate finance flows are only available for 38 Annex I countries. Bilateral figures will look different from self-reported figures for EU members, as Table 1 includes reattribution of EU climate finance contributions back to EU member states. \*South Korea bilateral climate finance is from OECD DAC climate-related ODA as South Korea does not report to the UNFCCC.

Source: Authors' calculations

Data sources: UNFCCC Biennial Reports, MDB Joint Report on Climate Finance, Climate Funds Update and OECD DAC

## Box 3 Bilateral climate finance provision by non-Annex I countries: the example of China

While China is not obliged to officially disclose its bilateral finance provision under the UNFCCC or any other global policy framework, there are several third-party initiatives tracking Chinese aid, lending and investment, including the extent to which these finance flows are climate-aligned and climate-focused.

Using these third-party sources, Tsang et al. (2023) have estimated Chinese climate-related finance to developing countries to be on average \$1.4 billion per year between 2013 and 2017. This includes both public and private bilateral investments and aid in the energy, transport, water, agriculture and disaster risk reduction sectors.

Our own estimates employing data utilised in Tsang et al. (2023),<sup>4</sup> but with a focus only on Chinese *public* bilateral climate-related finance, finds that this flow was \$1.39 billion in 2017. If we integrate this estimate into our calculations above (both sets of estimates are largely comparable), China would have ranked as the seventh largest provider of international climate finance to developing countries in 2017, after Japan, Germany, France, the US, the UK and Italy.

	Bilateral	MCFs	MDBs	Grand total
Japan	9,554	235	3,013	12,802
Germany	7,674	303	2,116	10,092
France	4,808	184	1,774	6,766
United States	1,390	285	4,941	6,617
United Kingdom	1,316	369	1,998	3,683
Italy	768	52	1,447	2,266
China	1,394	1	678	2,073

### Top providers of climate-related finance to developing countries in 2017 inclusive of China's bilateral flows (constant \$ million)

Source: Authors' calculations; China's bilateral climate-related finance data is from Tsang et al. (2023)

<sup>4</sup> We thank Byford Tsang, Belinda Schäpe, and Alexandra Hackbarth from E3G for sharing the data used in their report to carry out our own analysis, described in Box 3.

Virtually all countries contribute to the MDBs and do so for a range of reasons, which do not necessarily include aspirations to provide climate finance to developing countries. It is therefore worth focusing in particular on which non-Annex II countries contribute to multilateral climate funds, as these resources are clearly intended to be used for climate action by developing countries. We identify 33 non-Annex II countries that contributed to multilateral climate funds in 2020. These countries and their contributions are detailed in Table 2.

Annex I countries			Non-Ar	nnex I countries	
Rank	Country	Contribution (US\$ million)	Rank	Country	Contribution (US\$ million)
1	Poland	5.5	1	South Korea	26
2	Czech Republic	3.1	2	Mexico	2
3	Romania	2.1	3	China	1.6
4	Hungary	1.9	4	India	1.1
5	Russia	1.8	5	Brazil	1.1
6	Slovak Republic	1.3	6	Pakistan	0.9
7	Slovenia	1.1	7	South Africa	0.6
8	Bulgaria	0.6	8	Nigeria	0.5
9	Croatia	0.5	9	Indonesia	0.5
10	Monaco	0.5	10	Colombia	0.5
11	Lithuania	0.5	11	Peru	0.5
12	Estonia	0.5	12	Côte d'Ivoire	0.1
13	Cyprus	0.4	13	Vietnam	0.1
14	Latvia	0.3	14	Qatar	0.1
15	Malta	0.2	15	Panama	0.1
16	Türkiye	0.2	16	Chile	0.02
17	Liechtenstein	0.01			

**Table 2** Non-Annex II countries contributing to the multilateral climate funds, 2020

Data source: Climate Funds Update

Another useful way to assess climate finance provision is relative to population. Table 3 presents the 30 countries that contributed the most international climate finance per person in 2020. The list is dominated by Annex II countries, which is again unsurprising given their obligation to provide such resources under the climate regime. However, a large number of non-Annex II countries are also on the list. SIDS have an outsized representation, including Antigua and Barbuda, Dominica, the Marshall Islands, Nauru, Tonga and Tuvalu. Of these, Nauru is classified as a high-income country while the others are upper-middle income. Most of the remaining non-Annex II countries are also high-income, i.e. Antigua and Barbuda, Brunei Darussalam, Kuwait, Monaco and San Marino.

Most of these non-Annex II countries provide international climate finance exclusively via their contributions to the MDBs. The exceptions are Monaco and the Czech Republic, which also provide climate finance bilaterally and through multilateral climate funds (as detailed in Appendix 2).

Once again, it is important to remember that the figures may understate climate finance provision by countries that do not report their contributions through their Biennial Update Reports, or complementary climate-related ODA through the OECD DAC creditor reporting system. This is likely to be particularly true for economies that are active in South–South cooperation.

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
1	Monaco	Annex I	0.04	14	\$379.18
2	Nauru	Non-Annex I	0.01	3	\$219.24
3	Norway	Annex II	5.38	1,086	\$201.88
4	Tuvalu	Non-Annex I	0.01	2	\$189.72
5	Germany	Annex II	83.16	11,181	\$134.45
6	Sweden	Annex II	10.35	1,374	\$132.71
7	France	Annex II	67.57	8,355	\$123.65
8	Luxembourg	Annex II	0.63	67	\$106.28
9	Japan	Annex II	126.26	13,370	\$105.89
10	Switzerland	Annex II	8.64	841	\$97.36
11	Netherlands	Annex II	17.44	1,481	\$84.91
12	Denmark	Annex II	5.83	478	\$81.97
13	San Marino	Non-Annex I	0.03	3	\$79.40
14	Austria	Annex II	8.92	644	\$72.22
15	Belgium	Annex II	11.54	809	\$70.11
16	Finland	Annex II	5.53	357	\$64.56
17	Brunei Darussalam	Non-Annex I	0.44	28	\$63.39
18	United Kingdom	Annex II	67.08	3,960	\$59.03

Table 3 The 30 largest climate finance providers ranked by provision per capita, 2020

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
19	Marshall Islands	Non-Annex I	0.04	2	\$52.98
20	Ireland	Annex II	4.99	234	\$46.94
21	Canada	Annex II	38.04	1,716	\$45.11
22	Italy	Annex II	59.44	2,421	\$40.73
23	Dominica	Non-Annex I	0.07	3	\$38.89
24	Iceland	Annex II	0.37	14	\$38.20
25	New Zealand	Annex II	5.09	185	\$36.34
26	Spain	Annex II	47.37	1,623	\$34.27
27	Kuwait	Non-Annex I	4.36	149	\$34.17
28	Tonga	Non-Annex I	0.11	3	\$32.30
29	Australia	Annex II	25.66	821	\$32.00
30	Antigua and Barbuda	Non-Annex I	0.09	3	\$31.30

Source: Authors' calculations

Data sources: The climate finance data are from UNFCCC Biennial Reports, MDB Joint Report on Climate Finance, Climate Funds Update and OECD DAC. Population data is from World Bank (2022a). Note: For the full table of countries, see Appendix 3.

## 4 Could selection thresholds encourage new sources of finance?

The Paris Agreement and subsequent COP and CMA decisions relating to climate finance reaffirm that 'developed countries' are obligated to collectively provide and take the lead on mobilising climate finance. As outlined in Section 2, the Paris Agreement does not define 'developed countries'. The transition into implementation of the Paris Agreement, in line with the rules and guidelines established through CMA decisions, should bolster the voluntary provisions aimed at self-differentiation while filling data gaps in tracking global efforts to scale up climate action. Self-differentiation may be a politically necessary instrument in line with international governance concepts of sovereignty and self-determination, but the ambiguity also allows countries to potentially avoid acting on climate change in a way that is commensurate with their differentiated responsibilities and respective capabilities.

Section 3 nevertheless shows that virtually all countries have provided international climate finance via their voluntary contributions to the MDBs. A further 33 non-Annex II countries have contributed to multilateral climate funds. Data on bilateral climate finance provision by non-Annex II countries is lacking and therefore under-recognised, but this provision is likely to be substantive given the scale of South–South cooperation. Based on voluntary reporting it could amount to \$3.2 billion in 2019 (UNFCCC, 2022d).

In this section, the paper aims to evaluate potential quantitative thresholds for considering which countries may have the differentiated responsibilities and respective capabilities to provide more climate finance, and to what degree thresholds would encourage the provision of more climate finance. Based on current country positioning, as expressed in NCQG Party submissions, this section recognises that there are opposing views in the climate regime as to who should provide support, especially in relation to whether the NCQG should include formalised additional contributions from developing countries. The evolution of the climate treaties with the Paris Agreement is intended to enable nationally led determination and self-differentiation. Therefore, in the bottom-up spirit of the Paris Agreement, these thresholds should not be used in a top-down manner unless nationally determined by all Parties in pursuit of a collective effort.

With this goal in mind, this section evaluates a limited number of quantitative indicators and thresholds that could inform discussions around further operationalising a collective effort, building on the work in Colenbrander et al. (2022). However, it should be emphasised that considerations based solely on these indicators and thresholds do not fully capture all quantitative and qualitative aspects which could represent a country's differentiated responsibility, respective capabilities or national circumstances. Other indicators could include measure of debt sustainability, inflation-adjusted GNI or trade dependencies, noting that it would be unlikely for all

countries to agree on indicators and thresholds given each will have incentives and disincentives to adopt each one. The analysis is meant to enable rough comparison points to inform the ongoing technical deliberations under the UNFCCC.

#### 4.1 Methodology

This paper considers three quantitative indicators that can act as crude proxies corresponding to CBDR-RC:

- GNI per capita in 2020 (World Bank, 2023a; 2023c) as a proxy for a country's economic resources and therefore economic capability to provide climate finance. Compared to GDP, GNI is based on net receipts from all residents and was hence chosen as more closely reflecting the taxpayer base that ultimately funds climate finance. It is noted, however, that GNI per capita has been considered as a 'misleading' representation of development progress, as it does not reflect the distribution of this national income and changes in growth rates and can overstate living standards when considered on a per capita basis where it divides national income in a country with a small population (Bishop et al., 2021).
- Cumulative territorial CO<sub>2</sub> emissions per capita from 1990 to 2019 (World Bank, 2023b; 2023c) as a proxy for a country's responsibility for our changed climate. While '1990 emissions levels' were used as a reference point in the first commitment period of the Kyoto Protocol, and 2019 is the latest year for which emissions data is available, observed climate change impacts are noted to have resulted from actions prior to the 1990s, starting around the beginning of the industrial revolution in the mid-eighteenth century (Mayer, 2018).
- Vulnerability to climate change and readiness to adapt in 2020, as calculated by the Global Adaptation Initiative of Notre Dame University (ND-GAIN, 2022). We use the non-adjusted-for-GDP version of the index.<sup>5</sup> This is one of a number of indices that have been created (or are under development) (UN OHRLLS, 2023) and it is worth noting that there is no internationally agreed definition, index or assessment of climate vulnerability.

In the absence of any quantified definition for the CBDR-RC principle, these indicators and their units are methodological choices. The indicator on cumulative emissions arguably has a basis in the preamble of the UNFCCC, which notes that 'the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs' (Paragraph 3) (UNFCCC, 1992). The paper explores the implications of different choices with a sensitivity analysis, where we respectively substitute the second and third indicators above for:

<sup>5</sup> The GDP adjusted indicator corresponds to how much better or worse a country is scoring relative to its GDP. Such a measure does not fit the purpose of our ranking, which is to capture respective capabilities in a quantified way.

- Cumulative consumption  $CO_2$  emissions per capita over 1990–2019 instead of territorial emissions (Peters et al., 2011; 2012).
- Vulnerability to climate change in 2020, a subset of the ND-GAIN index that excludes indicators relating to readiness to adapt. The vulnerability sub-index is intended to capture a country's current vulnerability to climate disruptions as a result of exposure, sensitivity and adaptive capacity. For more details, see ND GAIN (2022) and Chen et al. (2015).

The country rankings on the indicators above are combined with thresholds to benchmark at which points countries may be encouraged to voluntarily provide climate finance. A range of thresholds were evaluated, noting that the world's largest economies have a track record of adopting the least-stringent interpretations of burden-sharing (Robiou du Pont and Meinshausen, 2018). These thresholds include:

- The median of Annex II countries' performance against each of the three indicators above.
- The bottom third Annex II countries' performance against each of the three indicators above.
- The median of Annex II countries' per capita GNI in 1990 (World Bank, 2023a, 2023c) and per capita cumulative territorial emissions between 1850 and 1990 (Gütschow et al., 2021).
- The bottom third Annex II countries' performance on per capita GNI in 1990 (World Bank, 2023a; 2023c) and per capita cumulative territorial emissions between 1850 and 1990 (Gütschow et al., 2021).

This section includes the first two thresholds on the premise that countries that are richer, have emitted as much and/or are less vulnerable today than the median Annex II country (the first threshold), or even a subset of Annex II countries (the second threshold), have equivalent responsibility and capability to provide climate finance.

The section also includes the second two thresholds on the premise that otherwise the benchmarks for assuming responsibility for international climate finance provision are constantly moving, as national economies grow and countries' emissions increase. Particularly given the historical difficulties with respect to modifying the Annexes, it is feasible to argue that any country that is richer and/or more polluting than the median Annex II country in 1990 – when the Annexes were established – should take on the same responsibilities as that category of countries.

We use the median rather than the mean as the threshold throughout, so that our findings are not skewed by outliers.

Finally, this section recognises the limitations of proposed crude thresholds for providing comparison points. GNI per capita, emissions per capita, vulnerability to climate change and readiness to adapt do not robustly reflect a country's differentiated responsibility for or respective capability to respond to climate change or their national circumstances. Countries with similar income levels may have differing capabilities to provide climate finance. Some countries may have high fixed costs of basic public service provision due to difficult geographic position, or

small population size and economy (e.g. SIDS), others difficult political governance circumstances (e.g. fragile conflict-affected states), and some may have high level of indebtedness or high exposure to external macroeconomic shocks. The limitations of individual quantitative indicators explain why the paper has provided a range of criteria to support informed negotiations and advocacy.

#### 4.2 Potential quantitative thresholds

#### 4.2.1 Relative to Annex II countries today

Table 4 presents a list of countries based on the selected proxy on responsibility for climate change assessed using cumulative territorial  $CO_2$  emissions per capita, and the selected proxy for capability to provide climate finance based on their income (GNI per capita) and vulnerability (ND-Gain sub-index) relative to Annex II countries today.

Only Singapore is above the threshold of the median Annex II country across all three indicators. Qatar is above the threshold for the median Annex II country on two out of three indicators: per capita emissions and per capita GNI.

Sixteen additional countries have cumulative emissions per person that are higher than the median Annex II country over the last three decades. The striking result underscores how many countries have pursued high-carbon economic models that do not necessarily deliver higher incomes and greater adaptive capacity.

If we adopt the less stringent threshold and focus on countries that have incomes, cumulative emissions and/or resilience above at least three Annex II countries in the selected indicators, we see that several of the countries identified above solely on the basis of their cumulative emissions would now qualify against multiple criteria.

Twelve additional countries qualify on the basis that their cumulative emissions exceed those of at least three Annex II countries. The list is dominated by former Soviet states and oil-rich nations, although Malta and South Africa also appear.

**Table 4** List of non-Annex II countries that exceed a threshold based on indicators designed to assess their differentiated responsibilities and respective capabilities against Annex II countries in 2023

Annex II median At least three Annex II cou					countries	
Country	Cumulative territorial CO <sub>2</sub> per capita	GNI per capita	ND-GAIN index	Cumulative territorial CO <sub>2</sub> per capita	GNI per capita	ND-GAIN index
Countries that qualify	/ because they ex	ceed the med	ian Annex II c	ountry for at lea	ast one indic	ator
Singapore	Above	Above	Above	Above	Above	Above
Qatar	Above	Above	Below	Above	Above	Below
Bahrain	Above	Below	Below	Above	Below	Below
Brunei Darussalam	Above	Below	Below	Above	Above	Below
Czech Republic	Above	Below	Below	Above	Below	Above
Estonia	Above	Below	Below	Above	Below	Above
Israel	Above	Below	Below	Above	Above	Below
Kazakhstan	Above	Below	Below	Above	Below	Below
Kuwait	Above	Below	Below	Above	Below	Below
Libya	Above	Below	Below	Above	Below	Below
Oman	Above	Below	Below	Above	Below	Below
Poland	Above	Below	Below	Above	Below	Below
Russia	Above	Below	Below	Above	Below	Below
Saudi Arabia	Above	Below	Below	Above	Below	Below
South Korea	Above	Below	Below	Above	Above	Above
Trinidad and Tobago	Above	Below	Below	Above	Below	Below
Turkmenistan	Above	Below	Below	Above	Below	Below
United Arab Emirates	Above	Below	Below	Above	Above	Below
Countries that qualify	/ because they ex	ceed at least	3 Annex II cou	ntries for at lea	st one indic	ator
Slovenia	Below	Below	Below	Above	Below	Above
The Bahamas	Below	Below	Below	Above	Below	Below
Belarus	Below	Below	Below	Above	Below	Below
Bulgaria	Below	Below	Below	Above	Below	Below
Cyprus	Below	Below	Below	Above	Below	Below
Equatorial Guinea	Below	Below	Below	Above	Below	Below
Malaysia	Below	Below	Below	Above	Below	Below
Malta	Below	Below	Below	Above	Below	Below
Iran	Below	Below	Below	Above	Below	Below
Serbia	Below	Below	Below	Above	Below	Below
Slovak Republic	Below	Below	Below	Above	Below	Below
South Africa	Below	Below	Below	Above	Below	Below
Ukraine	Below	Below	Below	Above	Below	Below

Source: Authors' calculations.

Data sources: World Bank (2023a; 2023b) and ND GAIN (2022)

Given that many developed countries pay particular attention to China in debates about international climate finance provision, it is worth teasing out how the world's largest economy (measured in purchasing power parity) performs on the indicators above. The country has emitted less territorial cumulative  $CO_2$  per person over 1990–2019 than the Annex II country that emitted the least (Portugal), has lower GNI per capita than the poorest Annex II country (Greece) and displays greater vulnerability and less readiness to adapt than the least resilient Annex II country (Italy).

We test the sensitivity of the findings in Table 4 with two further analyses. We apply these only to the shortlist of countries that qualify based on the median thresholds.

First, we substitute consumption emissions for territorial emissions. This adjustment recognises how some countries produce goods and services to meet demand elsewhere, and have emissions attributed to them that actually benefit consumers beyond their national borders. When consumption emissions are used instead of territorial emissions, seven of the 18 countries disappear from the rankings above: the Czech Republic, Israel, Kazakhstan, Oman, Poland, Russia and South Korea's cumulative consumption emissions are lower than half of Annex II countries. (Data is not available for Libya and Turkmenistan.)

Second, we use the sub-index of ND-GAIN that focuses exclusively on vulnerability, removing those indicators relating to readiness to adapt. This adjustment recognises that countries that are more vulnerable to climate change will need more resources to adapt to its impacts. When the sub-index focused on vulnerability is used instead of the broader index, Singapore is highlighted as vulnerable and would only surpass the threshold on two metrics because it is more vulnerable than half of Annex II countries. The Czech Republic is less vulnerable and therefore surpasses the threshold on two metrics.

#### 4.2.2 Relative to Annex II countries in 1990

The previous section compares the income, emissions and vulnerability of non-Annex II countries with their Annex II counterparts today (or in the case of emissions, based on cumulative emissions over the last 30 years). However, climate negotiation historian Bodansky notes that countries were assigned to Annex categories based on their economic circumstances and emissions in 1992 (Bodansky, 1993). Rather than continually moving the benchmark for assuming responsibility, it can be instructive to assess which developing countries now have higher per capita incomes and cumulative emissions than developed countries at that point.

Table 5 therefore presents countries based on the selected proxy on responsibility for climate change (assessed using cumulative territorial  $CO_2$  emissions per capita between 1850 and 2021) and the selected proxy on capability to provide climate finance based on their income (GNI per capita in current US\$, 2021), compared to Annex II countries as of 1990. The eligibility thresholds are:

- 473tCO<sub>2</sub>-e per person, based on the median of Annex II countries in 1990, and 175tCO<sub>2</sub>-e based on the third lowest Annex II country at that time.
- \$20,630 per person, based on the median of Annex II countries in 1990, and \$12,560 based on the third lowest Annex II country at that time. Unfortunately, GNI data was not available in 1990 for two Annex II countries – Greece and Switzerland – which only started reporting in the late 1990s.

A much longer list of countries exceed these thresholds than if using thresholds relative to Annex II countries today as in sub-section 4.2.1.

Six countries currently have both per capita cumulative territorial emissions and per capita GNI higher than the Annex II median as of 1990: Brunei Darussalam, Czech Republic, Estonia, Kuwait, Qatar and the United Arab Emirates. A further 14 countries would qualify solely on the basis of their historical emissions, while eight qualify solely on the basis of their per capita GNI.

If we use the less stringent threshold of the cumulative emissions and GNI of the third lowest Annex II country as of 1990, 25 countries would surpass the threshold against both of our proposed indicators. In other words, these countries have higher per capita incomes and have produced more emissions per person than at least three Annex II countries had in 1990, when responsibility for emissions reduction and provision of financial assistance was ascribed to developed countries under the UNFCCC regime. Certain types of countries dominate the list, including countries that have joined the EU since 1990, often former economies in transition (Annex I countries); several high-income oil and gas producers; some SIDS (these can arguably be removed from the list given their specific mention as climate finance recipients in both the Convention and the Paris Agreement); and recent members of the OECD.

Again, given the particular attention paid to China in debates around international climate finance provision, it is worth noting that the country surpasses the threshold on the basis of cumulative emissions per person relative to the 1990 levels of at least three Annex II countries. However, it does not do so based on per capita income.

**Table 5** List of non-Annex II countries that exceed a threshold based on indicators designed to assess their differentiated responsibilities and respective capabilities against Annex II countries in 1990

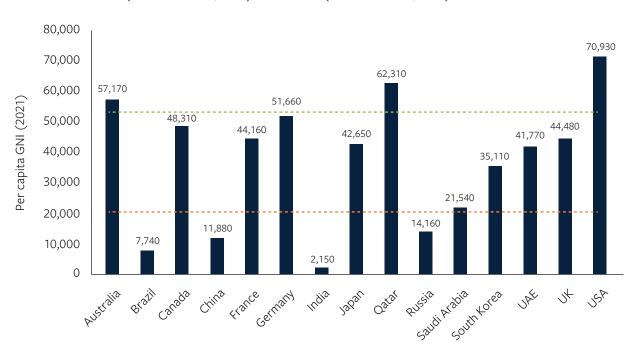
	The Annex	II median	At least three Annex II countries		
Country	Cumulative territorial CO <sub>2</sub> per capita	GNI per capita	Cumulative territorial CO <sub>2</sub> per capita	GNI per capita	
Countries that qualify beca	use they exceed the m	edian Annex II c	ountry for at least o	ne indicator	
Brunei Darussalam	Above	Above	Above	Above	
Czechia	Above	Above	Above	Above	
Estonia	Above	Above	Above	Above	
Kuwait	Above	Above	Above	Above	
Qatar	Above	Above	Above	Above	
United Arab Emirates	Above	Above	Above	Above	
Bahrain	Above	Below	Above	Above	
Hungary	Above	Below	Above	Above	
Lithuania	Above	Below	Above	Above	
Palau	Above	Below	Above	Above	
Poland	Above	Below	Above	Above	
Slovakia	Above	Below	Above	Above	
Trinidad and Tobago	Above	Below	Above	Above	
Belarus	Above	Below	Above	Below	
Bulgaria	Above	Below	Above	Below	
Kazakhstan	Above	Below	Above	Below	
Moldova	Above	Below	Above	Below	
Russia	Above	Below	Above	Below	
Saint Lucia	Above	Below	Above	Below	
Ukraine	Above	Below	Above	Below	
The Bahamas	Below	Above	Above	Above	
Israel	Below	Above	Above	Above	
Malta	Below	Above	Above	Above	
Singapore	Below	Above	Above	Above	
Slovenia	Below	Above	Above	Above	
South Korea	Below	Above	Above	Above	

	The Annex II med		At least three A	e Annex II countries			
Country	Cumulative territorial CO <sub>2</sub> per capita	GNI per capita	Cumulative territorial CO <sub>2</sub> per capita	GNI per capita			
Countries that qualify because they exceed at least 3 Annex II countries for at least one indicator							
Antigua and Barbuda	Below	Below	Above	Above			
Barbados	Below	Below	Above	Above			
Croatia	Below	Below	Above	Above			
Cyprus	Below	Below	Above	Above			
Oman	Below	Below	Above	Above			
Saudi Arabia	Below	Below	Above	Above			
Argentina	Below	Below	Above	Below			
Armenia	Below	Below	Above	Below			
Azerbaijan	Below	Below	Above	Below			
Bosnia and Herzegovina	Below	Below	Above	Below			
China	Below	Below	Above	Below			
Georgia	Below	Below	Above	Below			
Iran	Below	Below	Above	Below			
Latvia	Below	Below	Above	Below			
Libya	Below	Below	Above	Below			
Malaysia	Below	Below	Above	Below			
Montenegro	Below	Below	Above	Below			
North Macedonia	Below	Below	Above	Below			
Romania	Below	Below	Above	Below			
Serbia	Below	Below	Above	Below			
Suriname	Below	Below	Above	Below			
Turkmenistan	Below	Below	Above	Below			
North Korea	Below	Below	Above	Data not available			
Andorra	Below	Below	Above	Data not available			
Liechtenstein	Below	Below	Above	Data not available			
Monaco	Below	Below	Above	Data not available			
San Marino	Below	Below	Above	Data not available			
Nauru	Below	Below	Below	Above			
Saint Kitts and Nevis	Below	Below	Below	Above			
Uruguay	Below	Below	Below	Above			

Source: Authors' calculations

Figures 1 and 2 offer a visual comparison of the per capita GNI (2021) and per capita cumulative territorial emissions (1850–2019) of a selection of the world's largest and/or wealthiest economies, benchmarked against the median of Annex II countries in 1990 and for the latest year for which data is available. To view these statistics relative to a country's share of GNI, refer to Appendix 3.

**Figure 1** A comparison of per capita GNI (USD, 2021) of select countries, benchmarked against the median of Annex II countries in 1990 and 2021

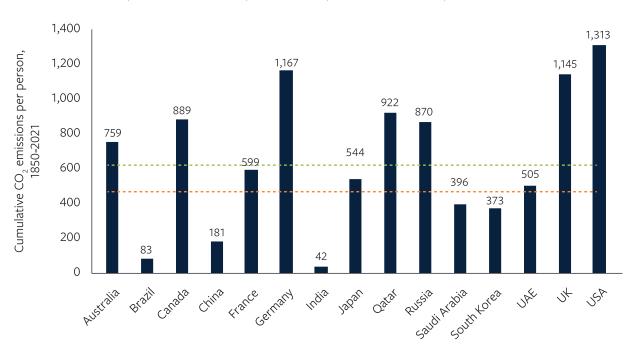


2021 ---- Linear (Annex II median, 1990) ---- Linear (Annex II median, 2021)

The consideration of status in 1990 as in Figure 2 should be understood in the context of our planet's fixed carbon budget. Some countries have considerably overshot their fair share of the remaining carbon budget and can be considered in carbon debt to those countries that have to undershoot to limit global warming to 1.5°C (Fanning and Hickel, 2023).

Data source: World Bank (2023a)

**Figure 2** A comparison of per capita cumulative, territorial emissions ( $CO_2$ , 1850–2019) of select countries, benchmarked against the median of Annex II countries in 1990 and 2019



■ 2021 ---- Linear (Annex II median, 1990) ---- Linear (Annex II median, 2021)

Source: authors' calculations.

Data sources:  $CO_2$  data from Gütschow et al., (2021); GNI from World Bank (2022b); climate finance data from UNFCCC Biennial Reports, MDB Joint Report on Climate Finance, Climate Funds Update and OECD DAC.

In sum, it is unlikely that there would be any quantitative threshold that could be used to encourage countries to contribute more climate finance. This is particularly true given the Paris Agreement's legal structure that seeks self-differentiation, which challenges any application of such thresholds if not universally agreed to by all Parties. Also, the absence of an internationally agreed understanding of the quantitative indicators that embody the principle of CBDR-RC makes any proposed threshold subject to political challenges based on constructively ambiguous interpretations. Which leads to the earlier question of whether such a threshold could encourage more contributions from countries as sources. Given the above, the answer would be more than likely not. Thresholds take away agency from countries to self-differentiate. And the success of such an approach 'depend[s] on the ability of socio-political processes to incentivise bona fide cooperation' (Mayer, 2018). Section 5 seeks to understand why countries provide climate finance to discern where there might be opportunities to encourage such cooperation.

# 5 Why do countries provide climate finance?

The UNFCCC Standing Committee on Finance in its most recent Biennial Assessment of Climate Finance Flows highlights mechanisms that have helped scale up climate finance flows. For instance, the assessment discusses multi-annual national bilateral commitments as an approach to enhance international climate finance to developing countries (UNFCCC 5<sup>th</sup> BA, 2022: 142–143). However, at the heart of climate finance provision resides the question of why a country would use public funds to provide climate finance to developing countries. This is a political decision to use domestic fiscal space raised through national taxation at individual and firm level and from other public revenue streams to fund climate action in developing countries, on top of ODA commitments. This provision may also be in direct trade-off with other national priorities. As a result, there are political sensitivities when taxpayers' funds are used for the implementation of other countries' national climate agendas.

Countries have a number of reasons (publicised or not) for providing such climate finance. Section 2 outlined the legal basis for the provision of climate finance by developed countries under both the Convention and the Paris Agreement, as well as their collective commitments (i.e. the fast-start finance commitment of 2009, and the current \$100 billion annual mobilisation goal). There are other reasons too, and these are explored below.

Understanding perceptions as to why a country decides to fund climate action is a key step in building solutions aimed at encouraging other countries to provide and mobilise finance and incentivising the scaling up of flows. It is also worth noting that all countries in some way fund climate action through their MDB subscriptions or South–South cooperation flows as outlined in Section 3.

#### 5.1 Methodology

The research builds on the field of strategic narrative analysis to explore the social construction of climate finance provision. Climate governance and its diplomacy relies on the performative power of language, hence the use of discourse analysis for this research (Bernstein, 2001; Pettenger, 2007). Narratives – discursive frames – can produce or undermine soft power in climate diplomacy, which in turn can impact the effectiveness of the climate regime (Aykut et al., 2021; Roselle et al., 2014).

Six semi-structured interviews were conducted to collect views, opinions and perceptions regarding drivers of climate finance provision. Key stakeholders, including climate finance negotiators and experts from a range of Annex II and non-Annex II countries, were interviewed. While non-exhaustive, the list of interviewees reflects the variety of views held currently. The interview questions were provided in advance and are available in Appendix 5.

#### 5.2 Perceived drivers justifying climate finance contributions

Annex II interviewees mentioned obligations under the Convention and the Paris Agreement, but this was not the sole reason or sometimes not the first reason volunteered. Annex II countries may provide finance for several different reasons that are articulated in a narrative that does not solely centre around the obligation to provide. In fact, this obligation is considered an obvious reason that was quickly stated and then put aside. By contrast, non-Annex II country representatives anchor their justification narratives by frontloading that 'the provision of climate finance as an obligation solely falls on developed countries', and regarded their provision of climate finance as a demonstration of collective ambition under the umbrella of South–South cooperation. In this context, this South-South cooperation acts as the demonstration of collective ambition as created by the Paris Agreement that generated an obligation of conduct and expectations (Bodansky, 2016; Oberthür and Bodle, 2016).

Other justifications go beyond the Paris Agreement or the Convention, including a desire to foster a spirit of solidarity and uphold the principle of climate justice – which is mentioned as a notion separate from the CBDR-RC principle. Connected to the idea of cooperation and solidarity, countries justified the provision of climate finance as a currency in the multilateral and diplomatic sphere: a show of belonging and presence in the international governance space that resonates outside the climate regime. The provision of climate finance is also seen as a way to potentially support the commercial interests of a country's firms; to maintain national and economic security; to cater to perceived domestic support for political gain at the national level; or to gain greater influence in multilateral decision-making processes.

These justifications are not mutually exclusive. Different views and reasons coexist within the same discourse justifying the provision of climate finance. For example, fostering solidarity, promoting collective ambition for effective climate action or upholding the principle of climate justice were cited at the same time as supporting commercial interests of a country's firms. Regardless of the reasons put forward, provision is tactical, but catering to different discursive frames that this section characterise as broad archetypes: tactical provision anchored in a sense of duty and in national interest.

#### Tactical provision anchored in a sense of duty

A sense of responsibility for climate change is brought up in connection to the concept of climate justice and is highlighted as an influential narrative point raised by one of the experts from an Annex II country. The respondent also tied climate justice and responsibility to colonial history and race relations. The moral obligation regarding climate responsibility is directly linked to historical injustices during and post colonisation. For example, infrastructure decisions made during the colonial period (e.g. oil and gas exploitation) can still have repercussions for climate action today (Acemoglu and Robinson, 2017; Michalopoulos and Papaioannou, 2017; 2020).

Solidarity and collective ambition were highlighted by interviewees from both Annex II and non-Annex II countries. For example, one Annex II interviewee said that supporting developing countries (in this case, in responding to climate change) was key to building prosperity for all, and likened it to support to South Africa during the apartheid struggle. Another Annex II interviewee said that providing climate finance is connected to how their country perceives itself in the global community and in keeping with 'how we are as a country', implicitly referring to a certain idea of role, identity and global standing.

Moreover, the international climate change regime moved from one focused on categories of Parties to one of collective ambition applicable to all, primarily for key areas like mitigation and transparency. Consequently, there was a clear understanding in the Paris Agreement that enhanced support to developing countries would be needed for effective implementation and higher ambition (Paris Agreement, 2015, art 3 and 4(5); Rajamani, 2016a, 513). These interviewees stated sharing a spirit of solidarity for tackling this common concern of humankind and the call for enhanced support. An expert from a non-Annex II country outlined that their country's contribution to the Green Climate Fund (GCF)'s Initial Resource Mobilisation was designed to send a message of ambition and collective commitment despite their country's own developmental challenges and vulnerability to climate change. However, the extent of this contribution was based on their respective capabilities at the time in light of their national circumstances. And in that vein, additional contributions to the GCF by this country were affected by budgetary constraints related to changes in national circumstances. Provision is here used as a way of signalling participation in the collective ambition narrative, despite country's developmental issues. Other example of this rationale underpinning provision was seen in 2014 by the Pacific Alliance (i.e. Chile, Colombia, Mexico and Peru) that pledged voluntary contributions to the GCF in the context of supporting the priorities of Peru as COP20 President and at a crucial juncture of the negotiations leading to the adoption of the Paris Agreement in 2015. countries that want to signal buy-in to a collective ambition, despite their own vulnerabilities and development challenges, may find themselves in an 'uncomfortable middle', where providing on a voluntary basis risks assumptions that they should no longer be considered as a developing country. Such an assumption would be unnuanced as it does not take into consideration that the country remains highly vulnerable to climate change and/or faces unsustainable levels of debt in pursuit of their development. This is seen in this paper's evaluation of potential selection thresholds in Section 4. The sense that provision means a country is no longer considered as developing may disincentivise developing countries with aspirations to grow and become developed from joining the collective effort to support other developing countries with their climate ambitions with whatever they have, out of fear of no longer being able to receive support. Many countries providing climate finance on a voluntary basis do so without formally reporting, so as not to be tied with Annex II countries' obligations. Some voluntary contributing countries, while not formally reporting, do choose to publicise their contributions, while others do not.

Whether they publicise their contributions or not, and whether they are Annex II countries or not, all interviewees voiced the expectation that the provision of climate finance would enhance their

country's soft power. All Annex II interviewees mentioned that the provision of climate finance was part of a broader effort to enhance diplomatic ties with recipient developing countries. One interviewee put forward the view that funding climate action would help in achieving their country's diplomatic objectives and that the prosperity of partners normally produces tangible benefits for their country.

Another factor related to diplomacy is that climate finance provision would maintain and possibly enhance confidence in the climate regime in the context of developed countries' inability to collectively achieve the \$100 billion goal. This has become a mainstream message from developing countries and civil society, among others. For example, the UN Secretary-General routinely calls on 'the developed world to accelerate delivery on the \$100 billion dollars to rebuild trust' (United Nations, 2021). This illustrates an important consideration for the NCQG process: climate finance provision mechanisms designed with limited accountability have turned the trust-building exercise of climate finance into a periodic distrust generator.

#### Tactical provision anchored in the pursuit of national interest

A number of responses from both Annexes were framed as answering a country's own national interest. Countries are quick to justify pursuing their own national agendas, noting that climate finance is public funding that implies a fiscal commitment to the detriment of other public spending internationally or domestically.

Such tension is apparent in the domestic processes Annex II interviewees follow for budget allocation approval, where budget lines for climate finance are in direct competition for approval with other domestic and international budgets. In the process for providing climate finance, all interviewees emphasised the need for a 'business case' to present to the executive, treasury and/ or legislature in charge of approval. Notably, 'business case' language comes from the managerial lexicon, and coexists with the solidarity and climate justice narrative. Domestic politics (whatever form it takes) is another crucial consideration in rationalising the provision of international climate finance, and making the case for doing so involves addressing the concerns of politicians and officials. Elected representatives and their technical staff weigh up whether funding should be provided, and if so the details connected to that funding.

What decision-makers consider to be appropriate reasons for funding provision varies. One interviewee from an Annex II country stated that the adverse effects of climate change are a driver of social unrest in developing countries, and that social unrest in the world is not good for business in their own country. One interviewee cited the links between climate change and security, where the problem of climate change is framed as a national security problem linked to issues such as forced migration, extremism and terrorism. Another Annex II interviewee stated frankly that their ministers are concerned about public perceptions around the use of climate finance and favours provisions where the funds can potentially involve their country's private sector and commercial interests which would in turn benefit their own country. Even the choice

of words within the case made to decision-makers is critical. For example, an interviewee from an Annex II country commented that labelling proposed budget lines to resonate better with audiences – for example by using 'clean energy' instead of 'climate change mitigation' – helps to get an approval for climate finance. But for another country, the decision was driven by executive leadership and ultimately branded as a high-level decision to position the country as a leader for collective ambition, and implicitly linked to expectations of gaining greater soft power.

Influencing multilateral processes was also cited as a reason for providing climate finance. In the setting of the Global Environment Facility, an Annex II interviewee remarked that, in order to influence the fund's governance and strategic direction as well as see through reforms, the country had to become a contributor to have an effective say in the process. An interviewee from a non-Annex II country expressed a similar idea, that climate finance provision to a multilateral fund was a way to – literally – get a seat at the table. This situation brings into focus the multilateral replenishment system that reproduces imbalances of power in a multilateral climate setting where countries are supposed to be equal.<sup>6</sup>

Unpacking the drivers and discourses justifying climate finance provision can help in understanding the conditions and constraints that could be replicated or modified to support scaled-up international public climate finance. Binding obligations and commitments, and participation in the collective ambition created by the Paris Agreement, are shared discourses across countries. But, for voluntary sources, officially reporting carries perceived risks of diminished support in other governance fora and misconceptions regarding voluntary contributors' own climate finance needs. There is a case for voluntary sources to create momentum via coalition-building to publicise their current contributions and then formulate new approaches to reporting that would cancel the negative risk they incur.

Last, the aid sphere has long been acquainted with a similar situation with the rise in the 1950s of South–South cooperation, later formulated in the UN regime with the Buenos Aires Plan of Action for Promoting and Implementing Technical Cooperation among Developing Countries, adopted by UN Member States in 1978. Attempts to establish a common reporting framework since have shown limited progress and reporting has been fragmented across different international and national platforms, similarly to voluntary climate finance contributions (Di Commo, 2017). Hence, options need to be explored that would not result in a burdensome reporting system with possible risky side effects but that would rather incentivise, celebrate and support voluntary sources in gaining greater soft power in the climate regime. The Paris Agreement's Enhanced Transparency Framework under the UNFCCC regime and its corresponding support system for implementation provides an opportunity to address these issues. This and other options will be explored in Section 6.

<sup>6</sup> Multilateral banks and funds each rely on cyclical replenishment for their operations.

## 6 How can more sources be encouraged to contribute to the NCQG?

Before exploring options for encouraging more sources to contribute, it is worth acknowledging once more that, based on the analysis in Section 3, developing countries, also referred as non-Annex II countries, are all contributing finance for climate action in other developing countries, to some degree. Whether it is called 'climate finance' proper or South–South cooperation for climate action is of little material value once the climate action is implemented and the intended impact is achieved. The discussions in the NCQG should embrace this hopefully undisputed fact.

Additionally, the methodological approach used in Section 4 may prove to be limited in providing a formula that could incentivise an adequate increase in public funding sources for achieving the NCQG's aim. If the NCQG is intended to contribute to accelerated implementation of the Paris Agreement by developing countries, the additional countries identified in Section 4 would not be able to begin to fulfil the minimum quantified needs for their climate action of approximately \$5.8–5.9 trillion despite thresholds that identify them as potential new sources. Moreover, the interaction between economic factors and the vulnerability of countries to both climate- and non-climate-related shocks is a significant but complex relationship. This speaks to how difficult it is to build consensus on any given methodological approach to categorise countries. This is especially the case for the provision of climate finance, despite efforts in this regard since the first quantitative collective targets were established in 2009.

This frustration is not a problem unique to the international climate change regime. It also affects the broader multilateral system. And even if a formulaic threshold were found, the political willingness to use and adopt it in the context of the discussion on NCQG sources is currently low. The history of Annex amendments as outlined in Section 2 attests to this. Consequently, the question of how the UNFCCC could contribute to the change of paradigm continues to be relevant in the context of the NCQG deliberations.

On the other hand, it could be argued that the constructive ambiguity around developed and developing countries (i.e. the lack of explicit references to the Convention Annexes in the Paris Agreement) has not resulted in new instances of countries' self-differentiation. This self-differentiation could enable countries to move from developing to developed and vice versa, theoretically though probably not politically. The inclusion of encouragements for 'other Parties' in Article 9 of the Paris Agreement, however, provides a unique place for the 'uncomfortable middle' of developing countries to operate in a contiguous manner when providing finance to other developing countries while respecting their individual capabilities and national circumstances.

Given this context, it is advisable that the discussion on sources of funding for the NCQG remains agnostic on the question of which non-Annex II country is developed or developing in order to encourage these 'other Parties' to continue to provide and enhance their support and report on it under the climate change regime. As long as the two issues continue to be conflated, the politics of country categorisation will discourage the provision and reporting of voluntary support. The international climate change regime needs to create a safe space and incentives for 'other Parties' to provide financial resources under Article 9(2) without fear of being perceived as 'developed'. The NCQG could offer a place for these deliberations with 'other Parties' looking for leadership, reassurance and support from developed countries, in pursuit of the global effort.

The NCQG discussions must also unpack the trade-offs to be experienced by 'other Parties' if they are to voluntarily provide climate finance. While appreciating the need for a global effort for climate finance mobilisation, such provision from 'other Parties' could divert funding from their national sustainable development priorities and envisioned domestic climate action to funding for other developing countries.

Lastly, the global effort of climate finance mobilisation must go beyond State Parties to the Paris Agreement. Noting the Paris Agreement is legally binding only on its Parties, non-state actors' contributions should be considered since public resources are limited and they could provide climate finance to developing countries for the effective implementation of their responses. This is especially the case for private corporations and financial institutions involved in highemitting industries that have and continue to profit from the destabilisation of the climate system. Additionally, the mobilisation of finance from these private sources should take into account developing countries' needs and priorities, and be guided by other climate finance provision and mobilisation principles. A reckoning must nevertheless occur between these needs and priorities and private sector norms like 'shareholder wealth maximisation' (Benjamin, 2016). One clear instance is the tension between the need for high levels of concessionality for climate finance (linked to the principle of equity) and the private sector's sometimes legal duty to maximise shareholder wealth. While not the subject of this paper, further work is required in this area, in line with deliberations on the provisions of Article 2 of the Paris Agreement, to inform if and how nonstate actors could be included in the sources for the NCQG alongside public finance.

The following options could encourage more sources to contribute to the NCQG. These options are not mutually exclusive. Ideally, they would be more effective if they were implemented as a package and in synergy with other governance processes outside of the UNFCCC regime, such as reform of international financial institutions and the multilateral development banks.

### • Urgent fulfilment of existing commitments under the Convention and the Paris Agreement in order to comply with Article 9(1) and follow through on political commitments

There is a clear expectation among developing countries that developed countries must fulfil existing obligations including the current mobilisation goal outlined in the 2015 Paris Decision (1/CP.21) and the commitment to double adaptation finance from the 2021 Glasgow Climate Pact. This will provide a much-needed political reset on the matter of climate finance. It also enables 'other Parties' to show their administrations that developed countries that have committed to take the lead have done so, and that all Parties are in this together. Setting a conducive geopolitical environment for deliberations is an obvious option. It is nonetheless important for the de-escalation and coalition-building needed to encourage the technical deliberations on the NCQG that will inform the ultimately political negotiation at COP29, including on what 'other Parties' might be able to contribute.

# • Reassurances under the NCQG that the obligations on existing sources (i.e. Annex II countries/developed countries) for climate finance provision will continue and their leadership will be demonstrated in the global effort to mobilise climate finance

Article 9(1) of the Paris Agreement establishes an explicit link to the Convention and its existing obligations on Annex II countries to provide financial resources for climate action. For climate finance mobilisation under Article 9(3), there is a call for developed countries to take the lead as part of a global effort. With regard to the NCQG, in whatever structure is decided, developing countries need reassurance that there will be this basis delineation of roles for obligated provision, and that developed countries will lead on mobilisation. There needs to be reassurance of a substantive commitment under the Paris Agreement and the required leadership to chart a course through this critical decade. This high-level concept of leadership and the need for its operationalisation requires further political discussion and then urgent commitment.

The element of the NCQG deliberation process that bridges the technical and political spheres would be the High-Level Ministerial Dialogue at the next COP. However, the current format of a three-hour discussion during the heat of negotiations with all interested ministers at the COP to answer four broad questions may not be the most conducive setting for this task (UNFCCC, 2022b). Supplementary high-level diplomatic discussions are needed to collectively develop and propose leadership options for developed countries on both Article 9(1) on finance provision obligations and Article 9(3) on finance mobilisation leadership. These discussions should be frank and unpack what is needed for developed countries to make the case domestically to provide and mobilise more financial resources. Pragmatically, the NCQG should be designed in a way that allows the case to be made by developed countries at home to raise finance, subject to it aligning with key principles, as well as concurrently meeting the relevant obligations they have and provisions that exist under the Paris Agreement. This is critical given the diverse justifications beyond 'fulfilment of international obligations' for providing climate finance that interviewees mentioned in Section 5.

Ultimately, there should be a sub-goal or goal aspect focused only on developed countries' provision of public climate finance that is a progression beyond previous efforts (i.e. the current goal of \$100 billion per year).

### • Establishment of an appropriate burden-sharing modality or agreement for Annex II countries as well as any other self-differentiated developed countries under the NCQG

One of the main climate finance Articles of the Convention outlines that the implementation of the finance obligations must take into account 'the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties' (United Nations, 1992, art 4[3]). Some accounts of the Convention's negotiation history recall that this was a compromise which stemmed from developing countries calling for first a minimum percentage of GNP and then 'assessed contributions' (Bodansky, 1993). The importance of burden sharing among developed countries, the need for the climate finance to be adequate in its scale, and predictable in relation to its timing were eventually included. In 2001 the COP decided that modalities should be developed on burden-sharing for climate finance provided by Annex II countries (UNFCCC, 2001b). This decision was open-ended with no timelines or deadline for completion. There is also little evidence in any of the other climate finance decisions and work programmes under the regime of any progress towards developing these climate finance burden-sharing modalities.

Burden-sharing is a complex area for governments to engage in given the diversity of budgetary approval systems (as discussed in Section 5). Nonetheless, burden-sharing can be used as a tool to ensure fairness and provides greater predictability, including for recipient countries. For example, in its replenishment process the GEF uses a burden-sharing approach that provides an indicative basic share of the total replenishment amount for each contributor. The approach allows them to contribute beyond that figure, but respects their budgetary circumstances and priorities (GEF, 2021).

A burden sharing mechanism seems critical, in light of the failed \$100 billion promise. As discussed previously in relation to the evaluation threshold, these methodologies are difficult to pin down. The predictability and goodwill that using such approach could bring to the deliberations under the NCQG may, however, make this a worthwhile consideration. More analysis and technical attention should be given to burden-sharing among developed countries under the NCQG.

#### • Equitable enabling of 'other Parties' sources as encouraged in Article 9(2) of the Paris Agreement

Enabling 'other Parties' to provide or continue to provide support voluntarily is crucial to the fulfilment of the common but differentiated responsibilities and respective capabilities that essentially all the states of the world have signed up to. The key concepts from Article 9(2) of the Paris Agreement are that provision is voluntary, and is already ongoing.

For the NCQG, it must be acknowledged and respected that, for developing countries, national circumstances are a real issue and not an excuse. Beyond climate vulnerabilities, external shocks such as the Covid-19 pandemic and economic crises will affect developing countries more than developed ones, and their ability to contribute voluntarily. With the voluntary nature of this provision in mind, recognition of existing South–South cooperation for climate action should also be brought into the NCQG discussion. This could include both direct financial resources and non-financial contributions such as technology transfer, capacity-building and preferential trade arrangements. In this same vein, there should be recognition of the cofinancing developing countries have to raise to programme climate finance as a valued contribution to combating climate change. This cofinancing should not be used as a barrier to or conditionality for accessing climate finance.

The NCQG deliberations should consider the creation of a voluntary sub-goal or a goal aspect that may encourage in a qualitative manner the increase in these provisions. This would be heavily caveated to illustrate that it is on the basis of solidarity and cannot be perceived as an obligation or as a country assuming an obligation. This qualitative, voluntary sub-goal can also be conditional on the leadership of developed countries in achieving and maintaining their obligations, subgoals and/or broader commitments, including the current mobilisation goal (with arrears provided), IFI reforms and debt reform.

### • Facilitate reporting of support provided on a voluntary basis from 'other Parties' in their BTRs under the Paris Agreement

Section 3 confirms that 'climate finance'-like flows emanate from non-Annex II countries. However, voluntary reporting of these voluntary flows as climate finance provision under Article 9(2) of the Paris Agreement has yet to happen. The Enhanced Transparency Framework of the Paris Agreement has been held up as the backbone and centrepiece of the treaty (Winkler et al., 2017). It is widely understood that enhanced and additional capacity and resources are needed to set up and implement national systems, and surmount any challenges. It is also worth noting that, after five cycles of Biennial Reports under the Convention, Annex I countries still register 'several reporting challenges' related to the section on support provision (UNFCCC, 2022c). It is apparent that adequate and predictable resources are essential for 'other Parties' to not only report on their implemented action and the support they needed and received, but also if they decide to provide or mobilise any support themselves. While noting that the first BTRs are due in December 2024, the likelihood of 'other Parties' reporting appears low for both political and technical reasons.

Political reasons include the optics and the unintended consequences of being a developing country that provides voluntary support despite its own vulnerabilities and circumstances. The country is then positioned in an 'uncomfortable middle', as articulated by an interviewee in Section 5, where their commitment to collective ambition and solidarity (through the provision of this support) can be misinterpreted as them being 'developed' as opposed to

working towards being 'developed'. This may have repercussions in other governance areas, such as financing for development or trade. Moreover, there is no distinction between being a developed country for the provision of support versus being one for the purpose of leadership on economy-wide mitigation, provision of enhanced capacity building support, and mandatory reporting of support provided and mobilised under Articles 4(4), 11(3) and 13(9) of the Paris Agreement respectively. In turn, these considerations raise concerns among 'other Parties'. This includes the perception that any voluntary provision may lead to geopolitical expectations and pressure due to such provision being interpreted as their voluntary assumption of developed country responsibilities or obligations. Safeguards against these concerns and reassurances should therefore be provided to protect the self-differentiation aspect of the Paris Agreement and encourage provision under Article 9(2).

On the technical side, it should be noted that submission of the initial BTRs will be the first time developing countries would be required to report biennially on both action and support. More specifically, these countries can also choose to report on any support provided under Article 9(2). Support is consequently needed to enhance their technical capabilities to engage in such reporting. Since 2018, there were a number of matters on transparency-related support and capacity building for developing countries under the Paris Agreement that were identified and required resolution (UNFCCC, 2018, Paras 9-11). This has included enhanced operation and adequate replenishment of the Capacity Building Initiative for Transparency (CBIT) in order to build and maintain national systems for ETF reporting; ensuring efficient access to support for BTRs through the GEF; and provision of funding for one or more BTRs, i.e. use of a programmatic approach. There was a noted increase in the GEF climate change enabling activity set-aside for both CBIT and BTR preparation, from \$165 million in GEF-7 (2018-2022) to \$220 million in GEF-8 (2022–2026). However, this translates into only a maximum of \$633,000 for both a combined BTR and National Communication from the GEF, and the ability to get only two BTRs approved at a time through GEF 'expedited approval authority procedures' (GEF, 2023). The 58<sup>th</sup> UNFCCC Subsidiary Bodies session in June 2023 highlighted that, despite the GEF's efforts, developing countries still face a number of challenges including the adequacy of the support provided by the GEF for transparency and its access modalities. A number of these challenges were listed in an informal note developed during the session (UNFCCC, 2023).

At COP28 in Dubai, the Subsidiary Body for Implementation and the CMA will decide on ways to address these challenges and facilitate institutional and technical capacity enhancement in developing countries to prepare and report BTRs. This item and the item on the guidance to the GEF provide a good starting point for addressing these issues. However, real, substantial changes would have to happen at the level of the GEF Council and, more specifically, at the GEF contributors level. This option therefore does not have a central aim of encouraging additional financial resources from sources, but rather speaks to the enabling of voluntary reporting of other Parties under any NCQG transparency arrangements. This option has the potential to assist the climate regime in attaining a better understanding of what climate finance is there, as well as its quality and effectiveness.

#### • Encourage a wider set of sources under the NCQG to the climate funds

Since the adoption of the Paris Agreement, there has been growing attention and deliberation on how non-state actors could contribute to implementation. While many sub-national actors, corporates and financial institutions have made voluntary commitments, for example to reach net zero by 2050, there is a persistent gap in reporting their contributions to the mobilisation of climate finance and seeking options to standardised commitments from these voluntary initiatives.

The NCQG has a mandate to invite non-Party stakeholders to the technical deliberations and should further explore ways of making the financial architecture more effective in incentivising new sources of climate finance. It should be acknowledged that these potential sources are not homogeneous and the approach should be tailored to each stakeholder group to the greatest extent possible, while respecting the underpinning principles of climate finance.

Based on the recommendations of the High-level Expert Group on the net zero emissions commitments by non-state entities, the UNFCCC has proposed a new accountability mechanism anchored in the work being done by the Marrakesh Partnership, Global Climate Action and the High-level Champions designated by the COP Presidents. Deliberations are aimed at addressing data gaps in the current transparency system as well as further acknowledging the contributions made by non-state actors, including in light of the long-term goals of the Paris Agreement.

This is not about transferring responsibility from those currently obligated under the UNFCCC. It is about a more systemic approach to stakeholders that have a role to play in the achievement of the goals of the Paris Agreement and the objective of the Convention. Ultimately, the NCQG process is one piece of the puzzle and, if successful, will contribute to creating a system of support that delivers for developing countries.

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## Appendix 1 Timeline of selected finance-related provisions within the international climate change regime

Year	Finance-related provisions under the UNFCCC, the Kyoto Protocol and Paris Agreement
1992	The UN Framework Convention on Climate Change sets Annex II identifying 'the developed country Parties and other developed Parties' that will provide new and additional financial resources to developing countries (Art.4.3 and 4.4). Article 4 refers to specifics such as agreed full cost, agreed full incremental cost, meeting costs of adaptation, adequacy, predictability in the flow of funding and 'the importance of appropriate burden sharing among the developed country Parties' (Art.4.3)
	UNFCCC acknowledges that developing countries climate actions will 'depend' on the effective provision of support by developed countries (Art.4.7)
1997	The Kyoto Protocol reiterates the financial provisions as established in the UNFCCC and decides 'to seek to mobilize additional financial resources' (Art.13, g)
	The KP decides that a share of proceeds from the Clean Development Mechanism is used to assist developing countries to meet the costs of adaptation (Art.12.8)
2007	The Bali Action Plan (decision 1/CP.13) establishes a finance 'negotiating track' seeking 'enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation'
	There are no specific references to the financial obligations of developed countries in paragraph 1.e of decision 1/CP.13, which sets the foundation for the next five years on finance matters. Instead, decision language shifts focus to developing countries in terms of improved access, positive incentives, innovative means of funding and capacity-building to assess the costs of adaptation, among others
2009	The Copenhagen Accords establish quantified targets for developed countries. Decision 2/CP.15 states that, in the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilising jointly \$100 billion a year by 2020 to address the needs of developing countries
	Collectively, developed countries also commit to provide new and additional resources approaching \$30 billion for the period 2010–2012, with balanced allocation for adaptation and mitigation
	Funding for adaptation will be prioritised for the most vulnerable developing countries, such as the least developed countries, Small Island Developing States and Africa

Year	Finance-related provisions under the UNFCCC, the Kyoto Protocol and Paris Agreement
2010	The Cancun Agreements (decision 1/CP.16) decide that in accordance with the relevant provisions of the Convention, scaled-up, new and additional, predictable and adequate funding shall be provided to developing country Parties, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change
	Recognises the commitments made in Copenhagen by developed countries to:
	1. Provide new and additional resources, including forestry and investments through international institutions, approaching USD 30 billion for the period 2010-2012
	2. mobilising jointly USD 100 billion per year by 2020 and agrees that funds provided to developing countries may come from a variety of sources
	Invites developed country Parties to submit to the secretariat information, starting in 2011 and through 2013 on the resources provided to fulfil the commitment on the USD 30 billion
	Decides to establish the Green Climate Fund as an operating entity of the Financial Mechanism and establishes the Standing Committee on Finance to assists the Conference of the Parties
2011	In Durban, Parties decided (decision 2/CP.17) to undertake a work programme on long-term finance in 2012 to contribute to the on-going efforts to scale up the mobilisation of climate change finance after 2012; the work programme will analyse options for the mobilisation of resources from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources and relevant analytical work on the climate-related financing needs of developing countries. The work programme will be extended through 2013
	COP 17 also adopted the biennial reporting guidelines for developed country Parties which establishes that Annex II Parties should report, to the extent possible, on private financial flows leveraged by bilateral climate finance towards mitigation and adaptation activities in non- Annex I Parties
2013	In Warsaw (Decision 3/CP.19), Parties request developed country Parties to prepare biennial submissions on their Strategies and Approaches for scaling-up climate finance from 2014 to 2020. This formalises the periodic reporting of ex-ante information by developed countries
	Calls for ambitious and timely contributions by developed countries to the initial resource mobilization of the Green Climate Fund (GCF)
2014	In Lima, Parties welcome the successful initial resource mobilisation process of the GCF by 'contributing Parties' (decision 7/CP.20). These included voluntary contributions by developing countries such as Colombia, Indonesia, Mexico, Mongolia, Panama and Peru

Year	Finance-related provisions under the UNFCCC, the Kyoto Protocol and Paris Agreement
2015	The Paris Agreement in Art.2, paragraph 1.c sets the aim of making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.
	Article 9 of the PA establishes that:
	1. Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention;
	2. Other Parties are encouraged to provide or continue to provide such support voluntarily;
	3. As part of a global effort, developed country Parties should continue to take the lead in mobilising climate finance from a wide variety of sources, instruments and channels, noting the significant role of public funds, through a variety of actions, including supporting country- driven strategies, and taking into account the needs and priorities of developing country Parties. Such mobilisation of climate finance should represent a progression beyond previous efforts
	The PA, in Articles 9 and 13, sets biennial reporting obligations for developed countries (ex-ante and ex-post) and encourages other Parties to do so on a voluntary basis
	Article 9 acknowledges the least developed countries and Small Island Developing States as particularly vulnerable
	In Paris, Parties decide (decision 1/CP.21) that developed countries intend to continue their existing collective mobilisation goal through 2025 in the context of meaningful mitigation actions and transparency on implementation and that prior to 2025 a new collective quantified goal will be set from a floor of \$100 billion per year. The decision does not specify which countries will contribute to the new goal

# Appendix 2 Climate finance provision by country in absolute terms, 2020

			\$ million (current)				
Rank	Country	UNFCCC grouping	Bilateral	MCFs	MDBs	Total	
1	Japan	Annex II	9287.6	389.7	3692.7	13369.9	
2	Germany	Annex II	8076.2	501.6	2602.9	11180.6	
3	France	Annex II	5936.2	305.1	2113.5	8354.9	
4	United States	Annex II	1770.3	472.4	5442.6	7685.2	
5	United Kingdom	Annex II	1379.9	611.1	1969.0	3959.9	
6	Italy	Annex II	698.2	85.4	1637.1	2420.7	
7	Canada	Annex II	407.1	93.3	1215.7	1716.2	
8	Spain	Annex II	659.3	67.8	896.1	1623.1	
9	Netherlands	Annex II	578.2	61.8	841.2	1481.1	
10	Sweden	Annex II	563.2	176.3	634.2	1373.7	
11	China	Non-Annex I		1.6	1234.8	1236.4	
12	Norway	Annex II	489.4	299.7	296.4	1085.5	
13	Switzerland	Annex II	329.0	45.0	467.3	841.2	
14	Australia	Annex II	118.3	42.5	660.2	821.0	
15	Belgium	Annex II	169.8	50.9	587.8	808.6	
16	South Korea	Non-Annex I	202.0	25.7	558.8	786.5	
17	India	Non-Annex I		1.1	764.3	765.3	
18	Austria	Annex II	244.9	24.1	375.5	644.5	
19	Brazil	Non-Annex I		1.1	528.4	529.5	
20	Russia	Annex I		1.8	505.0	506.8	
21	Saudi Arabia	Non-Annex I			496.0	496.0	
22	Denmark	Annex II	57.7	41.5	378.5	477.7	
23	Indonesia	Non-Annex I		0.5	404.6	405.0	
24	Poland	Annex I	122.0	5.5	260.3	387.8	
25	Argentina	Non-Annex I			380.4	380.4	
26	Finland	Annex II	93.4	35.0	228.6	357.0	
27	Mexico	Non-Annex I		2.0	336.6	338.6	
28	Nigeria	Non-Annex I		0.5	295.2	295.7	
29	Ireland	Annex II	106.6	11.1	116.1	233.7	

	\$ million (current)					
Rank	Country	UNFCCC grouping	Bilateral	MCFs	MDBs	Total
30	Türkiye	Annex I		0.2	213.5	213.7
31	Iran	Non-Annex I			192.4	192.4
32	New Zealand	Annex II	50.3	2.3	132.0	184.6
33	Pakistan	Non-Annex I		0.9	176.5	177.4
34	Malaysia	Non-Annex I			174.6	174.6
35	Venezuela	Non-Annex I			170.1	170.1
36	Philippines	Non-Annex I			167.3	167.3
37	Portugal	Annex II	42.9	3.1	103.3	149.3
38	Kuwait	Non-Annex I			148.8	148.8
39	South Africa	Non-Annex I		0.6	141.4	142.0
40	Czech Republic	Annex I	49.3	3.1	88.7	141.0
41	Egypt	Non-Annex I			136.0	136.0
42	Thailand	Non-Annex I			130.2	130.2
43	Hungary	Annex I	27.4	1.9	99.1	128.4
44	Greece	Annex II	37.1	2.5	81.2	120.8
45	Libya	Non-Annex I			119.3	119.3
46	Chile	Non-Annex I		0.0	116.4	116.5
47	Morocco	Non-Annex I			116.3	116.3
48	Colombia	Non-Annex I		0.5	114.9	115.3
49	Algeria	Non-Annex I			112.0	112.0
50	Romania	Annex I	42.1	2.1	63.2	107.4
51	Bangladesh	Non-Annex I		0.0	88.6	88.6
52	Ukraine	Annex I			80.7	80.7
53	Peru	Non-Annex I		0.5	74.3	74.8
54	Kazakhstan	Non-Annex I			71.7	71.7
55	Luxembourg	Annex II	8.5	9.3	49.3	67.1
56	Bulgaria	Annex I	12.1	0.6	53.3	66.0
57	Slovak Republic	Annex I	19.9	1.3	39.7	60.9
58	United Arab Emirates	Non-Annex I			58.1	58.1
59	Israel	Non-Annex I			57.2	57.2
60	Côte d'Ivoire	Non-Annex I		0.1	54.9	55.0

			\$ million (current)				
Rank	Country	UNFCCC grouping	Bilateral	MCFs	MDBs	Total	
61	Sri Lanka	Non-Annex I			54.0	54.0	
62	Singapore	Non-Annex I			53.9	53.9	
63	Uzbekistan	Non-Annex I			52.6	52.6	
64	Taipei	#N/A			49.5	49.5	
65	Kenya	Non-Annex I			47.6	47.6	
66	Croatia	Annex I	10.9	0.5	36.0	47.4	
67	Uruguay	Non-Annex I			43.1	43.1	
68	Myanmar	Non-Annex I			42.9	42.9	
69	Vietnam	Non-Annex I		0.1	41.5	41.5	
70	Senegal	Non-Annex I			37.4	37.4	
71	Azerbaijan	Non-Annex I			36.5	36.5	
72	Mauritius	Non-Annex I			35.7	35.7	
73	Slovenia	Annex I	9.7	1.1	23.8	34.6	
74	Zimbabwe	Non-Annex I			33.7	33.7	
75	Hong Kong	#N/A			33.5	33.5	
76	Ghana	Non-Annex I			32.8	32.8	
77	Qatar	Non-Annex I		0.1	32.0	32.0	
78	Bolivia	Non-Annex I			31.6	31.6	
79	Ecuador	Non-Annex I			30.5	30.5	
80	Angola	Non-Annex I			30.2	30.2	
81	Nepal	Non-Annex I			29.4	29.4	
82	Zambia	Non-Annex I			29.2	29.2	
83	Georgia	Non-Annex I			28.6	28.6	
84	Jamaica	Non-Annex I			28.3	28.3	
85	Congo, Democratic Republic of	Non-Annex I			28.0	28.0	
86	Lithuania	Annex I	10.4	0.5	16.9	27.8	
87	Brunei Darussalam	Non-Annex I			27.5	27.5	
88	Serbia	Non-Annex I			26.5	26.5	
89	Belarus	Annex I	0.0		25.5	25.5	
90	Trinidad and Tobago	Non-Annex I			25.3	25.3	
91	Dominican Republic	Non-Annex I			25.1	25.1	

			\$ million (current)				
Rank	Country	UNFCCC grouping	Bilateral	MCFs	MDBs	Total	
92	Tunisia	Non-Annex I			23.7	23.7	
93	Ethiopia	Non-Annex I			22.9	22.9	
94	Armenia	Non-Annex I			22.1	22.1	
95	Guatemala	Non-Annex I			21.6	21.6	
96	Cameroon	Non-Annex I			21.5	21.5	
97	Botswana	Non-Annex I			21.3	21.3	
98	Kyrgyz Republic	Non-Annex I			20.8	20.8	
99	Latvia	Annex I	6.3	0.3	14.2	20.8	
100	Cyprus	Annex I	4.4	0.4	15.8	20.6	
101	Tajikistan	Non-Annex I			20.6	20.6	
102	Iraq	Non-Annex I			17.9	17.9	
103	Paraguay	Non-Annex I			17.7	17.7	
104	Estonia	Annex I	6.0	0.5	10.8	17.2	
105	Malawi	Non-Annex I			17.2	17.2	
106	Haiti	Non-Annex I			16.9	16.9	
107	Madagascar	Non-Annex I			16.6	16.6	
108	Niger	Non-Annex I			16.3	16.3	
109	Costa Rica	Non-Annex I			15.3	15.3	
110	Gabon	Non-Annex I			15.1	15.1	
111	Burkina Faso	Non-Annex I			15.1	15.1	
112	Turkmenistan	Non-Annex I			14.6	14.6	
113	Monaco	Annex I	13.7	0.5		14.3	
114	Panama	Non-Annex I		0.1	14.1	14.2	
115	Nicaragua	Non-Annex I			13.8	13.8	
116	Iceland	Annex II	0.0	0.3	13.5	13.8	
117	Tanzania	Non-Annex I			13.7	13.7	
118	Sudan	Non-Annex I			13.1	13.1	
119	Honduras	Non-Annex I			12.9	12.9	
120	Papua New Guinea	Non-Annex I			12.7	12.7	
121	Guinea	Non-Annex I			12.7	12.7	
122	Oman	Non-Annex I			12.7	12.7	
123	Mali	Non-Annex I			12.4	12.4	

			\$ million (current)				
Rank	Country	UNFCCC grouping	Bilateral	MCFs	MDBs	Total	
124	Jordan	Non-Annex I			12.2	12.2	
125	Mozambique	Non-Annex I			12.2	12.2	
126	Namibia	Non-Annex I			12.1	12.1	
127	El Salvador	Non-Annex I			11.4	11.4	
128	Yemen	Non-Annex I			11.2	11.2	
129	Bahamas	Non-Annex I			10.8	10.8	
130	Syrian Arab Republic	Non-Annex I			10.8	10.8	
131	Moldova	Non-Annex I			10.8	10.8	
132	Malta	Annex I	2.6	0.2	7.9	10.7	
133	Guyana	Non-Annex I			10.6	10.6	
134	Benin	Non-Annex I			10.4	10.4	
135	Rwanda	Non-Annex I			9.8	9.8	
136	South Sudan	Non-Annex I			9.7	9.7	
137	Тодо	Non-Annex I			9.0	9.0	
138	Fiji	Non-Annex I			8.8	8.8	
139	Congo, Republic of	Non-Annex I			8.8	8.8	
140	Uganda	Non-Annex I			8.7	8.7	
141	Bahrain	Non-Annex I			8.4	8.4	
142	Albania	Non-Annex I			7.7	7.7	
143	Bosnia and Herzegovina	Non-Annex I			7.5	7.5	
144	Sierra Leone	Non-Annex I			7.3	7.3	
145	Barbados	Non-Annex I			7.3	7.3	
146	Montenegro	Non-Annex I			7.1	7.1	
147	Mauritania	Non-Annex I			7.0	7.0	
148	Burundi	Non-Annex I			6.9	6.9	
149	Kosovo	#N/A			6.3	6.3	
150	Lesotho	Non-Annex I			6.2	6.2	
151	Lebanon	Non-Annex I			5.6	5.6	
152	Chad	Non-Annex I			5.4	5.4	
153	Cambodia	Non-Annex I			5.2	5.2	
154	Belize	Non-Annex I			5.1	5.1	

grouping           155         Gambia         Non-Annex I         5.0         5.0           156         Afghanistan         Non-Annex I         4.9         4.9           157         Central African Republic         Non-Annex I         4.8         4.8           158         Equatorial Guinea         Non-Annex I         4.7         4.7           159         Liberia         Non-Annex I         0.0         4.6         4.6           161         Timor-Leste         Non-Annex I         0.0         4.6         4.0           161         Timor-Leste         Non-Annex I         0.0         4.6         4.0           162         Sao Tome and Principe         Non-Annex I         3.9         3.9         3.9           163         Suriname         Non-Annex I         3.9         3.9         3.9           164         Cabo Verde         Non-Annex I         3.8         3.8         3.8           165         North Macedonia         Non-Annex I         3.6         3.6           165         North Macedonia         Non-Annex I         3.6         3.6           166         Djibouti         Non-Annex I         3.6         3.6         3.6			\$ million (current)						
156       Afghanistan       Non-Annex I       4.9       4.9         157       Central African       Non-Annex I       4.8       4.8         Republic       Non-Annex I       4.7       4.7         158       Equatorial Guinea       Non-Annex I       4.7       4.7         159       Liberia       Non-Annex I       0.0       4.6       4.6         161       Timor-Leste       Non-Annex I       0.0       4.6       4.0         161       Timor-Leste       Non-Annex I       3.9       3.9         163       Suriname       Non-Annex I       3.9       3.9         164       Cabo Verde       Non-Annex I       3.9       3.9         165       North Macedonia       Non-Annex I       3.9       3.9         166       Djibouti       Non-Annex I       3.8       3.8         167       Vanuatu       Non-Annex I       3.6       3.6         166       Djibouti       Non-Annex I       3.6       3.6         167       Vanuatu       Non-Annex I       3.6       3.6         168       Eritrea       Non-Annex I       3.6       3.6         170       Eswatini       Non-Annex I	Rank	Country		Bilateral	MCFs	MDBs	Total		
Tope       Non-Annex I       4.8       4.8         158       Equatorial Guinea       Non-Annex I       4.7       4.7         159       Liberia       Non-Annex I       0.0       4.6       4.6         159       Liberia       Non-Annex I       0.0       4.6       4.6         160       Mongolia       Non-Annex I       0.0       4.6       4.6         161       Timor-Leste       Non-Annex I       0.0       4.6       4.0         162       Sao Tome and Principe       Non-Annex I       3.9       3.9       3.9         163       Suriname       Non-Annex I       3.9       3.9       3.9         164       Cabo Verde       Non-Annex I       3.9       3.9       3.9         165       North Macedonia       Non-Annex I       3.7       3.7       3.7         165       North Macedonia       Non-Annex I       3.6       3.6       3.6         166       Djibouti       Non-Annex I       3.7       3.7       3.7         168       Eritrea       Non-Annex I       3.6       3.6       3.6         170       Eswatini       Non-Annex I       3.5       3.5       3.5	155	Gambia	Non-Annex I			5.0	5.0		
Republic         4.7         4.7           158         Equatorial Guinea         Non-Annex I         4.7         4.7           159         Liberia         Non-Annex I         0.0         4.6         4.6           160         Mongolia         Non-Annex I         0.0         4.6         4.6           161         Timor-Leste         Non-Annex I         4.1         4.1           162         Sao Tome and Principe         Non-Annex I         3.9         3.9           164         Cabo Verde         Non-Annex I         3.9         3.9           165         North Macedonia         Non-Annex I         3.9         3.9           166         Djibouti         Non-Annex I         3.8         3.8           167         Vanuatu         Non-Annex I         3.6         3.6           168         Eritrea         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.4         3.4           172         Bhutan         Non-Annex I         3.1         3.1           173         Tonga         Non-Annex I         3.1<	156	Afghanistan	Non-Annex I			4.9	4.9		
159       Liberia       Non-Annex I       4.7       4.7         160       Mongolia       Non-Annex I       0.0       4.6       4.6         161       Timor-Leste       Non-Annex I       4.1       4.1         162       Sao Tome and Principe       Non-Annex I       3.9       3.9         163       Suriname       Non-Annex I       3.9       3.9         164       Cabo Verde       Non-Annex I       3.9       3.9         165       North Macedonia       Non-Annex I       3.9       3.9         166       Djibouti       Non-Annex I       3.8       3.8         167       Vanuatu       Non-Annex I       3.7       3.7         168       Eritrea       Non-Annex I       3.6       3.6         169       Samoa       Non-Annex I       3.6       3.6         170       Eswatini       Non-Annex I       3.6       3.6         171       Solomon Islands       Non-Annex I       3.4       3.4         173       Tonga       Non-Annex I       3.1       3.1         174       Somalia       Non-Annex I       3.2       3.2         175       Kiribati       Non-Annex I <td< td=""><td>157</td><td></td><td>Non-Annex I</td><td></td><td></td><td>4.8</td><td>4.8</td></td<>	157		Non-Annex I			4.8	4.8		
160         Mongolia         Non-Annex I         0.0         4.6         4.6           161         Timor-Leste         Non-Annex I         4.1         4.1           162         Sao Tome and Principe         Non-Annex I         3.9         3.9           163         Suriname         Non-Annex I         3.9         3.9           164         Cabo Verde         Non-Annex I         3.9         3.9           165         North Macedonia         Non-Annex I         3.9         3.9           166         Djibouti         Non-Annex I         3.8         3.8           167         Vanuatu         Non-Annex I         3.6         3.6           166         Djibouti         Non-Annex I         3.6         3.6           167         Vanuatu         Non-Annex I         3.6         3.6           168         Eritrea         Non-Annex I         3.6         3.6           169         Samoa         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.1         3.1           172         Bhutan         Non-Annex I </td <td>158</td> <td>Equatorial Guinea</td> <td>Non-Annex I</td> <td></td> <td></td> <td>4.7</td> <td>4.7</td>	158	Equatorial Guinea	Non-Annex I			4.7	4.7		
161       Timor-Leste       Non-Annex I       4.1       4.1         162       Sao Tome and Principe       Non-Annex I       3.9       3.9         163       Suriname       Non-Annex I       3.9       3.9         164       Cabo Verde       Non-Annex I       3.9       3.9         165       North Macedonia       Non-Annex I       3.9       3.9         166       Djibouti       Non-Annex I       3.8       3.8         167       Vanuatu       Non-Annex I       3.7       3.7         168       Eritrea       Non-Annex I       3.6       3.6         169       Samoa       Non-Annex I       3.6       3.6         170       Eswatini       Non-Annex I       3.6       3.6         171       Solomon Islands       Non-Annex I       3.4       3.4         173       Tonga       Non-Annex I       3.2       3.2         175       Kiribati       Non-Annex I       3.1       3.1         176       St. Lucia       Non-Annex I       3.2       3.2         175       Kiribati       Non-Annex I       3.1       3.1         176       St. Lucia       Non-Annex I       3.0	159	Liberia	Non-Annex I			4.7	4.7		
162       Sao Tome and Principe       Non-Annex I       4.0       4.0         163       Suriname       Non-Annex I       3.9       3.9         164       Cabo Verde       Non-Annex I       3.9       3.9         165       North Macedonia       Non-Annex I       3.9       3.9         166       Djibouti       Non-Annex I       3.9       3.9         166       Djibouti       Non-Annex I       3.8       3.8         167       Vanuatu       Non-Annex I       3.7       3.7         168       Eritrea       Non-Annex I       3.6       3.6         169       Samoa       Non-Annex I       3.6       3.6         170       Eswatini       Non-Annex I       3.6       3.6         171       Solomon Islands       Non-Annex I       3.4       3.4         173       Tonga       Non-Annex I       3.2       3.2         174       Somalia       Non-Annex I       3.1       3.1         175       Kiribati       Non-Annex I       3.1       3.1         176       St. Lucia       Non-Annex I       3.0       3.0         177       Guinea-Bissau       Non-Annex I       3.0	160	Mongolia	Non-Annex I		0.0	4.6	4.6		
Principe           163         Suriname         Non-Annex I         3.9         3.9           164         Cabo Verde         Non-Annex I         3.9         3.9           165         North Macedonia         Non-Annex I         3.9         3.9           166         Djibouti         Non-Annex I         3.9         3.9           166         Djibouti         Non-Annex I         3.8         3.8           167         Vanuatu         Non-Annex I         3.6         3.6           168         Eritrea         Non-Annex I         3.6         3.6           169         Samoa         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.6         3.6           172         Bhutan         Non-Annex I         3.4         3.4           173         Tonga         Non-Annex I         3.1         3.1           174         Somalia         Non-Annex I         3.1         3.1           175         Kiribati         Non-Annex I         3.0         3.0           176         St. Lucia         Non-Ann	161	Timor-Leste	Non-Annex I			4.1	4.1		
164         Cabo Verde         Non-Annex I         3.9         3.9           165         North Macedonia         Non-Annex I         3.9         3.9           166         Djibouti         Non-Annex I         3.8         3.8           167         Vanuatu         Non-Annex I         3.7         3.7           168         Eritrea         Non-Annex I         3.6         3.6           169         Samoa         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.4         3.4           173         Tonga         Non-Annex I         3.2         3.2           174         Somalia         Non-Annex I         3.1         3.1           175         Kiribati         Non-Annex I         3.1         3.1           176         St. Lucia         Non-Annex I         3.0         3.0           177         Guinea-Bissau         Non-Annex I         2.9         2.9           178         Grenada         Non-Annex I         2.8	162		Non-Annex I			4.0	4.0		
165         North Macedonia         Non-Annex I         3.9         3.9           166         Djibouti         Non-Annex I         3.8         3.8           167         Vanuatu         Non-Annex I         3.7         3.7           168         Eritrea         Non-Annex I         3.6         3.6           169         Samoa         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.4         3.4           173         Tonga         Non-Annex I         3.4         3.4           174         Somalia         Non-Annex I         3.2         3.2           175         Kiribati         Non-Annex I         3.1         3.1           176         St. Lucia         Non-Annex I         3.0         3.0           177         Guinea-Bissau         Non-Annex I         3.0         3.0           178         Grenada         Non-Annex I         2.9         2.9           179         Antigua and Barbuda         Non-Annex I         2	163	Suriname	Non-Annex I			3.9	3.9		
166         Djibouti         Non-Annex I         3.8         3.8           167         Vanuatu         Non-Annex I         3.7         3.7           168         Eritrea         Non-Annex I         3.6         3.6           169         Samoa         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.4         3.4           173         Tonga         Non-Annex I         3.4         3.4           174         Somalia         Non-Annex I         3.1         3.1           175         Kiribati         Non-Annex I         3.0         3.0           176         St. Lucia         Non-Annex I         3.0         3.0           177         Guinea-Bissau         Non-Annex I         2.9         2.9           178         Grenada         Non-Annex I         2.9         2.9           179         Antigua and Barbuda         Non-Annex I         2	164	Cabo Verde	Non-Annex I			3.9	3.9		
Jack         Non-Annex I         3.7         3.7           167         Vanuatu         Non-Annex I         3.6         3.6           168         Eritrea         Non-Annex I         3.6         3.6           169         Samoa         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.5         3.5           172         Bhutan         Non-Annex I         3.4         3.4           173         Tonga         Non-Annex I         3.4         3.4           173         Tonga         Non-Annex I         3.2         3.2           174         Somalia         Non-Annex I         3.1         3.1           175         Kiribati         Non-Annex I         3.0         3.0           176         St. Lucia         Non-Annex I         3.0         3.0           177         Guinea-Bissau         Non-Annex I         2.9         2.9           179         Antigua and Barbuda         Non-Annex I         2.9         2.9           179         Antigua and Barbuda         Non-Annex I         2.7         2.7	165	North Macedonia	Non-Annex I			3.9	3.9		
Integration         Non-Annex I         3.6         3.1         3.1         3.1         3.1         3.1         3.1         3.1         3.1	166	Djibouti	Non-Annex I			3.8	3.8		
169         Samoa         Non-Annex I         3.6         3.6           170         Eswatini         Non-Annex I         3.6         3.6           171         Solomon Islands         Non-Annex I         3.5         3.5           172         Bhutan         Non-Annex I         3.4         3.4           173         Tonga         Non-Annex I         3.4         3.4           174         Somalia         Non-Annex I         3.2         3.2           175         Kiribati         Non-Annex I         3.1         3.1           176         St. Lucia         Non-Annex I         3.1         3.1           177         Guinea-Bissau         Non-Annex I         3.0         3.0           177         Guinea-Bissau         Non-Annex I         2.9         2.9           179         Antigua and Barbuda         Non-Annex I         2.9         2.9           180         Dominica         Non-Annex I         2.7         2.7           181         San Marino         Non-Annex I         2.7         2.7           182         Nauru         Non-Annex I         2.6         2.6           183         Micronesia, Federated States of         Non-Annex I	167	Vanuatu	Non-Annex I			3.7	3.7		
170       Eswatini       Non-Annex I       3.6       3.6         171       Solomon Islands       Non-Annex I       3.5       3.5         172       Bhutan       Non-Annex I       3.4       3.4         173       Tonga       Non-Annex I       3.4       3.4         174       Somalia       Non-Annex I       3.2       3.2         175       Kiribati       Non-Annex I       3.1       3.1         176       St. Lucia       Non-Annex I       3.0       3.0         177       Guinea-Bissau       Non-Annex I       3.0       3.0         178       Grenada       Non-Annex I       2.9       2.9         179       Antigua and Barbuda       Non-Annex I       2.9       2.9         180       Dominica       Non-Annex I       2.7       2.7         182       Nauru       Non-Annex I       2.7       2.7         183       Micronesia, Federated States of       Non-Annex I       2.6       2.6	168	Eritrea	Non-Annex I			3.6	3.6		
171       Solomon Islands       Non-Annex I       3.5       3.5         172       Bhutan       Non-Annex I       3.4       3.4         173       Tonga       Non-Annex I       3.4       3.4         174       Somalia       Non-Annex I       3.2       3.2         175       Kiribati       Non-Annex I       3.1       3.1         176       St. Lucia       Non-Annex I       3.1       3.1         177       Guinea-Bissau       Non-Annex I       3.0       3.0         178       Grenada       Non-Annex I       2.9       2.9         179       Antigua and Barbuda       Non-Annex I       2.8       2.8         180       Dominica       Non-Annex I       2.7       2.7         182       Nauru       Non-Annex I       2.7       2.7         183       Micronesia, Federated States of       Non-Annex I       2.6       2.6	169	Samoa	Non-Annex I			3.6	3.6		
172BhutanNon-Annex I3.43.4173TongaNon-Annex I3.43.4174SomaliaNon-Annex I3.23.2175KiribatiNon-Annex I3.13.1176St. LuciaNon-Annex I3.13.1177Guinea-BissauNon-Annex I3.03.0178GrenadaNon-Annex I2.92.9179Antigua and BarbudaNon-Annex I2.92.9180DominicaNon-Annex I2.72.7182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.62.6	170	Eswatini	Non-Annex I			3.6	3.6		
173       Tonga       Non-Annex I       3.4       3.4         174       Somalia       Non-Annex I       3.2       3.2         175       Kiribati       Non-Annex I       3.1       3.1         176       St. Lucia       Non-Annex I       3.1       3.1         177       Guinea-Bissau       Non-Annex I       3.0       3.0         178       Grenada       Non-Annex I       2.9       2.9         179       Antigua and Barbuda       Non-Annex I       2.9       2.9         180       Dominica       Non-Annex I       2.8       2.8         181       San Marino       Non-Annex I       2.7       2.7         182       Nauru       Non-Annex I       2.6       2.6         183       Micronesia, Federated States of       Non-Annex I       2.6       2.6	171	Solomon Islands	Non-Annex I			3.5	3.5		
174       Somalia       Non-Annex I       3.2       3.2         175       Kiribati       Non-Annex I       3.1       3.1         176       St. Lucia       Non-Annex I       3.1       3.1         177       Guinea-Bissau       Non-Annex I       3.0       3.0         178       Grenada       Non-Annex I       2.9       2.9         179       Antigua and Barbuda       Non-Annex I       2.9       2.9         180       Dominica       Non-Annex I       2.8       2.8         181       San Marino       Non-Annex I       2.7       2.7         182       Nauru       Non-Annex I       2.6       2.6         183       Micronesia, Federated States of       Non-Annex I       2.6       2.6	172	Bhutan	Non-Annex I			3.4	3.4		
175KiribatiNon-Annex I3.13.1176St. LuciaNon-Annex I3.13.1177Guinea-BissauNon-Annex I3.03.0178GrenadaNon-Annex I2.92.9179Antigua and BarbudaNon-Annex I2.92.9180DominicaNon-Annex I2.82.8181San MarinoNon-Annex I2.72.7182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.62.6	173	Tonga	Non-Annex I			3.4	3.4		
176St. LuciaNon-Annex I3.13.1177Guinea-BissauNon-Annex I3.03.0178GrenadaNon-Annex I2.92.9179Antigua and BarbudaNon-Annex I2.92.9180DominicaNon-Annex I2.82.8181San MarinoNon-Annex I2.72.7182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.62.6	174	Somalia	Non-Annex I			3.2	3.2		
177Guinea-BissauNon-Annex I3.03.0178GrenadaNon-Annex I2.92.9179Antigua and BarbudaNon-Annex I2.92.9180DominicaNon-Annex I2.82.8181San MarinoNon-Annex I2.72.7182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.62.6	175	Kiribati	Non-Annex I			3.1	3.1		
178GrenadaNon-Annex I2.92.9179Antigua and BarbudaNon-Annex I2.92.9180DominicaNon-Annex I2.82.8181San MarinoNon-Annex I2.72.7182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.62.6	176	St. Lucia	Non-Annex I			3.1	3.1		
179Antigua and BarbudaNon-Annex I2.92.9180DominicaNon-Annex I2.82.8181San MarinoNon-Annex I2.72.7182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.62.6	177	Guinea-Bissau	Non-Annex I			3.0	3.0		
180DominicaNon-Annex I2.82.8181San MarinoNon-Annex I2.72.7182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.6	178	Grenada	Non-Annex I			2.9	2.9		
181San MarinoNon-Annex I2.72.7182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.62.6	179	Antigua and Barbuda	Non-Annex I			2.9	2.9		
182NauruNon-Annex I2.72.7183Micronesia, Federated States ofNon-Annex I2.62.6	180	Dominica	Non-Annex I			2.8	2.8		
183 Micronesia, Non-Annex I 2.6 2.6 Federated States of	181	San Marino	Non-Annex I			2.7	2.7		
Federated States of	182	Nauru	Non-Annex I			2.7	2.7		
184 Maldives Non-Annex I 2.6 2.6	183		Non-Annex I			2.6	2.6		
	184	Maldives	Non-Annex I			2.6	2.6		

			\$ million (current)				
Rank	Country	UNFCCC grouping	Bilateral	MCFs	MDBs	Total	
185	Lao People's Democratic Republic	Non-Annex I			2.4	2.4	
186	Marshall Islands	Non-Annex I			2.3	2.3	
187	Tuvalu	Non-Annex I			2.1	2.1	
188	Comoros	Non-Annex I			1.9	1.9	
189	St. Vincent and the Grenadines	Non-Annex I			1.7	1.7	
190	Seychelles	Non-Annex I			1.5	1.5	
191	St. Kitts and Nevis	Non-Annex I			1.4	1.4	
192	Liechtenstein	Annex I	0.0	0.0	0.4	0.4	
193	Palau	Non-Annex I			0.2	0.2	
194	Cook Islands	Non-Annex I			0.1	0.1	
195	Palestine	Non-Annex I			0.1	0.1	
196	Niue	Non-Annex I			0.0	0.0	
	Total		31,643	3,387	35,314	70,344	

Note: Bilateral climate finance flows are only available for 37 Annex II and I countries. Source: Authors' calculations

Data source: UNFCCC Biennial Reports, MDB Joint Report on Climate Finance, Climate Funds Update and OECD DAC

## Appendix 3 Climate finance provision by country compared to share of global GNI, 2020

			\$ million (current)	%	\$ million (current)	%	Percentage point
Rank	Country	UNFCCC grouping	GNI, 2020	% global GNI, 2020 (a)	Country climate finance, 2020	% International public climate finance, 2020 (b)	Difference (b)-(a)
1	Japan	Annex II	5,152,435	6.05%	13,370	19.01%	12.95%
2	Germany	Annex II	3,996,146	4.70%	11,181	15.89%	11.20%
3	France	Annex II	2,664,857	3.13%	8,355	11.88%	8.75%
4	United Kingdom	Annex II	2,588,602	3.04%	3,960	5.63%	2.59%
5	Sweden	Annex II	566,756	0.67%	1,374	1.95%	1.29%
6	Italy	Annex II	1,926,386	2.26%	2,421	3.44%	1.18%
7	Netherlands	Annex II	875,071	1.03%	1,481	2.11%	1.08%
8	Norway	Annex II	418,963	0.49%	1,086	1.54%	1.05%
9	Spain	Annex II	1,285,208	1.51%	1,623	2.31%	0.80%
10	Belgium	Annex II	531,163	0.62%	809	1.15%	0.53%
11	Canada	Annex II	1,656,240	1.95%	1,716	2.44%	0.49%
12	Austria	Annex II	436,872	0.51%	644	0.92%	0.40%
13	Switzerland	Annex II	714,736	0.84%	841	1.20%	0.36%
14	Denmark	Annex II	365,663	0.43%	478	0.68%	0.25%
15	Finland	Annex II	277,022	0.33%	357	0.51%	0.18%
16	Venezuela	Non-Annex I	96,242	0.11%	170	0.24%	0.13%
17	Libya	Non-Annex I	52,490	0.06%	119	0.17%	0.11%
18	Kuwait	Non-Annex I	119,723	0.14%	149	0.21%	0.07%
19	Argentina	Non-Annex I	408,849	0.48%	380	0.54%	0.06%
20	Luxembourg	Annex II	50,171	0.06%	67	0.10%	0.04%
21	Mauritius	Non-Annex I	12,579	0.01%	36	0.05%	0.04%
22	Senegal	Non-Annex I	23,945	0.03%	37	0.05%	0.03%
23	Jamaica	Non-Annex I	13,819	0.02%	28	0.04%	0.02%
24	Brunei Darussalam	Non-Annex I	13,785	0.02%	28	0.04%	0.02%
25	Morocco	Non-Annex I	121,231	0.14%	116	0.17%	0.02%
26	Georgia	Non-Annex I	15,860	0.02%	29	0.04%	0.02%
27	Zimbabwe	Non-Annex I	22,808	0.03%	34	0.05%	0.02%
28	Kyrgyz Republic	Non-Annex I	7,777	0.01%	21	0.03%	0.02%

			\$ million (current)	%	\$ million (current)	%	Percentage point
Rank	Country	UNFCCC grouping	GNI, 2020	% global GNI, 2020 (a)	Country climate finance, 2020	% International public climate finance, 2020 (b)	Difference (b)-(a)
29	Tajikistan	Non-Annex I	10,061	0.01%	21	0.03%	0.02%
30	Armenia	Non-Annex I	12,536	0.01%	22	0.03%	0.02%
31	Zambia	Non-Annex I	21,382	0.03%	29	0.04%	0.02%
32	Bulgaria	Annex I	66,032	0.08%	66	0.09%	0.02%
33	New Zealand	Annex II	211,117	0.25%	185	0.26%	0.01%
34	South Sudan	Non-Annex I	-	-	10	0.01%	0.01%
35	Monaco	Annex I	6,740	0.01%	14	0.02%	0.01%
36	Botswana	Non-Annex I	15,314	0.02%	21	0.03%	0.01%
37	Trinidad and Tobago	Non-Annex I	21,000	0.02%	25	0.04%	0.01%
38	Malawi	Non-Annex I	11,205	0.01%	17	0.02%	0.01%
39	Madagascar	Non-Annex I	12,936	0.02%	17	0.02%	0.01%
40	Niger	Non-Annex I	13,297	0.02%	16	0.02%	0.01%
41	Côte d'Ivoire	Non-Annex I	60,177	0.07%	55	0.08%	0.01%
42	Fiji	Non-Annex I	4,312	0.01%	9	0.01%	0.01%
43	Guyana	Non-Annex I	6,528	0.01%	11	0.02%	0.01%
44	Burundi	Non-Annex I	2,698	0.00%	7	0.01%	0.01%
45	Haiti	Non-Annex I	15,002	0.02%	17	0.02%	0.01%
46	Nicaragua	Non-Annex I	11,755	0.01%	14	0.02%	0.01%
47	Lesotho	Non-Annex I	2,596	0.00%	6	0.01%	0.01%
48	Sierra Leone	Non-Annex I	4,061	0.00%	7	0.01%	0.01%
49	Sao Tome and Principe	Non-Annex I	459	0.00%	4	0.01%	0.01%
50	Barbados	Non-Annex I	4,556	0.01%	7	0.01%	0.01%
51	Gambia	Non-Annex I	1,803	0.00%	5	0.01%	0.00%
52	Belize	Non-Annex I	2,056	0.00%	5	0.01%	0.00%
53	Yemen	Non-Annex I	9,436	0.01%	11	0.02%	0.00%
54	Uzbekistan	Non-Annex I	59,724	0.07%	53	0.07%	0.00%
55	Montenegro	Non-Annex I	4,909	0.01%	7	0.01%	0.00%
56	Tonga	Non-Annex I	547	0.00%	3	0.00%	0.00%
57	Bahamas	Non-Annex I	9,553	0.01%	11	0.02%	0.00%
58	Samoa	Non-Annex I	861	0.00%	4	0.01%	0.00%
59	Kiribati	Non-Annex I	347	0.00%	3	0.00%	0.00%
60	Vanuatu	Non-Annex I	992	0.00%	4	0.01%	0.00%
61	Central African Republic	Non-Annex I	2,451	0.00%	5	0.01%	0.00%

			\$ million (current)	%	\$ million (current)	%	Percentage point
Rank	Country	UNFCCC grouping	GNI, 2020	% global GNI, 2020 (a)	Country climate finance, 2020	% International public climate finance, 2020 (b)	Difference (b)-(a)
62	Тодо	Non-Annex I	7,628	0.01%	9	0.01%	0.00%
63	Namibia	Non-Annex I	11,569	0.01%	12	0.02%	0.00%
64	Nauru	Non-Annex I	188	0.00%	3	0.00%	0.00%
65	Cabo Verde	Non-Annex I	1,700	0.00%	4	0.01%	0.00%
66	Dominica	Non-Annex I	514	0.00%	3	0.00%	0.00%
67	Micronesia, Federated States of	Non-Annex I	456	0.00%	3	0.00%	0.00%
68	Guinea	Non-Annex I	12,674	0.01%	13	0.02%	0.00%
69	Liberia	Non-Annex I	3,043	0.00%	5	0.01%	0.00%
70	Solomon Islands	Non-Annex I	1,619	0.00%	3	0.00%	0.00%
71	Grenada	Non-Annex I	975	0.00%	3	0.00%	0.00%
72	Gabon	Non-Annex I	15,648	0.02%	15	0.02%	0.00%
73	Marshall Islands	Non-Annex I	291	0.00%	2	0.00%	0.00%
74	Tuvalu	Non-Annex I	75	0.00%	2	0.00%	0.00%
75	Eritrea	Non-Annex I	2,060	0.00%	4	0.01%	0.00%
76	Timor-Leste	Non-Annex I	2,731	0.00%	4	0.01%	0.00%
77	St. Lucia	Non-Annex I	1,540	0.00%	3	0.00%	0.00%
78	Antigua and Barbuda	Non-Annex I	1,346	0.00%	3	0.00%	0.00%
79	Guinea-Bissau	Non-Annex I	1,498	0.00%	3	0.00%	0.00%
80	Burkina Faso	Non-Annex I	16,153	0.02%	15	0.02%	0.00%
81	Suriname	Non-Annex I	2,730	0.00%	4	0.01%	0.00%
82	Bhutan	Non-Annex I	2,197	0.00%	3	0.00%	0.00%
83	San Marino	Non-Annex I	1,410	0.00%	3	0.00%	0.00%
84	Rwanda	Non-Annex I	10,021	0.01%	10	0.01%	0.00%
85	Djibouti	Non-Annex I	3,081	0.00%	4	0.01%	0.00%
86	Moldova	Non-Annex I	11,832	0.01%	11	0.02%	0.00%
87	Cyprus	Annex I	23,732	0.03%	21	0.03%	0.00%
88	St. Vincent and the Grenadines	Non-Annex I	864	0.00%	2	0.00%	0.00%
89	Bolivia	Non-Annex I	37,214	0.04%	32	0.04%	0.00%
90	Comoros	Non-Annex I	1,228	0.00%	2	0.00%	0.00%
91	Nepal	Non-Annex I	34,586	0.04%	29	0.04%	0.00%
92	St. Kitts and Nevis	Non-Annex I	925	0.00%	1	0.00%	0.00%

			\$ million (current)	%	\$ million (current)	%	Percentage point
Rank	Country	UNFCCC grouping	GNI, 2020	% global GNI, 2020 (a)	Country climate finance, 2020	% International public climate finance, 2020 (b)	Difference (b)-(a)
93	Congo, Republic of	Non-Annex I	10,036	0.01%	9	0.01%	0.00%
94	Seychelles	Non-Annex I	1,382	0.00%	2	0.00%	0.00%
95	Mauritania	Non-Annex I	8,058	0.01%	7	0.01%	0.00%
96	Eswatini	Non-Annex I	3,972	0.00%	4	0.01%	0.00%
97	Mozambique	Non-Annex I	14,604	0.02%	12	0.02%	0.00%
98	Palau	Non-Annex I	263	0.00%	0	0.00%	-0.00%
99	Kosovo	#N/A	7,952	0.01%	6	0.01%	-0.00%
100	Maldives	Non-Annex I	3,488	0.00%	3	0.00%	-0.00%
101	Malta	Annex I	13,624	0.02%	11	0.02%	-0.00%
102	Azerbaijan	Non-Annex I	45,211	0.05%	37	0.05%	-0.00%
103	Hungary	Annex I	156,322	0.18%	128	0.18%	-0.00%
104	Mali	Non-Annex I	16,870	0.02%	12	0.02%	-0.00%
105	Equatorial Guinea	Non-Annex I	8,141	0.01%	5	0.01%	-0.00%
106	Uruguay	Non-Annex I	54,680	0.06%	43	0.06%	-0.00%
107	Syrian Arab Republic	Non-Annex I	15,714	0.02%	11	0.02%	-0.00%
108	Croatia	Annex I	59,969	0.07%	47	0.07%	-0.00%
109	Somalia	Non-Annex I	6,704	0.01%	3	0.00%	-0.00%
110	Benin	Non-Annex I	15,499	0.02%	10	0.01%	-0.00%
111	Chad	Non-Annex I	10,416	0.01%	5	0.01%	-0.00%
112	Albania	Non-Annex I	14,917	0.02%	8	0.01%	-0.01%
113	Honduras	Non-Annex I	21,715	0.03%	13	0.02%	-0.01%
114	Iceland	Annex II	22,822	0.03%	14	0.02%	-0.01%
115	Liechtenstein	Annex I	7,152	0.01%	0	0.00%	-0.01%
116	Mongolia	Non-Annex I	12,271	0.01%	5	0.01%	-0.01%
117	North Macedonia	Non-Annex I	11,873	0.01%	4	0.01%	-0.01%
118	Papua New Guinea	Non-Annex I	24,095	0.03%	13	0.02%	-0.01%
119	Latvia	Annex I	34,663	0.04%	21	0.03%	-0.01%
120	El Salvador	Non-Annex I	23,554	0.03%	11	0.02%	-0.01%
121	Estonia	Annex I	31,332	0.04%	17	0.02%	-0.01%
122	Tunisia	Non-Annex I	39,254	0.05%	24	0.03%	-0.01%
123	Bosnia and Herzegovina	Non-Annex I	20,013	0.02%	7	0.01%	-0.01%

			\$ million (current)	%	\$ million (current)	%	Percentage point
Rank	Country	UNFCCC grouping	GNI, 2020	% global GNI, 2020 (a)	Country climate finance, 2020	% International public climate finance, 2020 (b)	Difference (b)-(a)
124	Slovenia	Annex I	53,409	0.06%	35	0.05%	-0.01%
125	Sudan	Non-Annex I	28,180	0.03%	13	0.02%	-0.01%
126	Afghanistan	Non-Annex I	19,499	0.02%	5	0.01%	-0.02%
127	Cameroon	Non-Annex I	40,282	0.05%	21	0.03%	-0.02%
128	Lao People's Democratic Republic	Non-Annex I	18,110	0.02%	2	0.00%	-0.02%
129	Paraguay	Non-Annex I	36,730	0.04%	18	0.03%	-0.02%
130	Congo, Democratic Republic of	Non-Annex I	49,882	0.06%	28	0.04%	-0.02%
131	Cambodia	Non-Annex I	25,139	0.03%	5	0.01%	-0.02%
132	Serbia	Non-Annex I	51,296	0.06%	27	0.04%	-0.02%
133	Sri Lanka	Non-Annex I	86,082	0.10%	54	0.08%	-0.02%
134	Myanmar	Non-Annex I	72,998	0.09%	43	0.06%	-0.02%
135	Algeria	Non-Annex I	156,597	0.18%	112	0.16%	-0.02%
136	Lithuania	Annex I	55,009	0.06%	28	0.04%	-0.03%
137	Angola	Non-Annex I	58,321	0.07%	30	0.04%	-0.03%
138	Uganda	Non-Annex I	32,997	0.04%	9	0.01%	-0.03%
139	Bahrain	Non-Annex I	33,908	0.04%	8	0.01%	-0.03%
140	Turkmenistan	Non-Annex I	42,917	0.05%	15	0.02%	-0.03%
141	Belarus	Annex I	60,026	0.07%	25	0.04%	-0.03%
142	Lebanon	Non-Annex I	36,243	0.04%	6	0.01%	-0.03%
143	Jordan	Non-Annex I	44,429	0.05%	12	0.02%	-0.03%
144	Slovak Republic	Annex I	104,682	0.12%	61	0.09%	-0.04%
145	Ghana	Non-Annex I	71,863	0.08%	33	0.05%	-0.04%
146	Panama	Non-Annex I	53,536	0.06%	14	0.02%	-0.04%
147	Costa Rica	Non-Annex I	59,033	0.07%	15	0.02%	-0.05%
148	Kenya	Non-Annex I	98,674	0.12%	48	0.07%	-0.05%
149	Ireland	Annex II	325,688	0.38%	234	0.33%	-0.05%
150	Portugal	Annex II	225,000	0.26%	149	0.21%	-0.05%
151	Greece	Annex II	192,127	0.23%	121	0.17%	-0.05%
152	Tanzania	Non-Annex I	62,822	0.07%	14	0.02%	-0.05%
153	Dominican Republic	Non-Annex I	78,824	0.09%	25	0.04%	-0.06%
154	Guatemala	Non-Annex I	75,684	0.09%	22	0.03%	-0.06%

			\$ million (current)	%	\$ million (current)	%	Percentage point
Rank	Country	UNFCCC grouping	GNI, 2020	% global GNI, 2020 (a)	Country climate finance, 2020	% International public climate finance, 2020 (b)	Difference (b)-(a)
155	Ukraine	Annex I	149,174	0.18%	81	0.11%	-0.06%
156	Iran	Non-Annex I	287,579	0.34%	192	0.27%	-0.06%
157	Ecuador	Non-Annex I	97,754	0.11%	31	0.04%	-0.07%
158	Oman	Non-Annex I	77,738	0.09%	13	0.02%	-0.07%
159	Czech Republic	Annex I	233,177	0.27%	141	0.20%	-0.07%
160	Nigeria	Non-Annex I	421,339	0.50%	296	0.42%	-0.07%
161	Ethiopia	Non-Annex I	102,644	0.12%	23	0.03%	-0.09%
162	Kazakhstan	Non-Annex I	163,277	0.19%	72	0.10%	-0.09%
163	Pakistan	Non-Annex I	321,896	0.38%	177	0.25%	-0.13%
164	Peru	Non-Annex I	199,685	0.23%	75	0.11%	-0.13%
165	Chile	Non-Annex I	250,793	0.29%	116	0.17%	-0.13%
166	Poland	Annex I	579,899	0.68%	388	0.55%	-0.13%
167	Romania	Annex I	244,757	0.29%	107	0.15%	-0.13%
168	Qatar	Non-Annex I	161,110	0.19%	32	0.05%	-0.14%
169	Malaysia	Non-Annex I	342,560	0.40%	175	0.25%	-0.15%
170	Egypt	Non-Annex I	307,450	0.36%	136	0.19%	-0.17%
171	Colombia	Non-Annex I	296,424	0.35%	115	0.16%	-0.18%
172	Philippines	Non-Annex I	375,815	0.44%	167	0.24%	-0.20%
173	Saudi Arabia	Non-Annex I	775,463	0.91%	496	0.71%	-0.21%
174	Iraq	Non-Annex I	200,660	0.24%	18	0.03%	-0.21%
175	South Africa	Non-Annex I	357,871	0.42%	142	0.20%	-0.22%
176	Singapore	Non-Annex I	312,755	0.37%	54	0.08%	-0.29%
177	Bangladesh	Non-Annex I	385,221	0.45%	89	0.13%	-0.33%
178	Vietnam	Non-Annex I	333,829	0.39%	42	0.06%	-0.33%
179	United Arab Emirates	Non-Annex I	387,961	0.46%	58	0.08%	-0.37%
180	Hong Kong	#N/A	363,176	0.43%	34	0.05%	-0.38%
181	Israel	Non-Annex I	399,060	0.47%	57	0.08%	-0.39%
182	Thailand	Non-Annex I	493,157	0.58%	130	0.19%	-0.39%
183	Australia	Annex II	1,375,743	1.62%	821	1.17%	-0.45%
184	Türkiye	Annex I	762,752	0.90%	214	0.30%	-0.59%
185	Indonesia	Non-Annex I	1,059,880	1.25%	405	0.58%	-0.67%
186	Mexico	Non-Annex I	1,102,887	1.30%	339	0.48%	-0.81%
187	South Korea	Non-Annex I	1,712,532	2.01%	786	1.12%	-0.89%
			. ,				

			\$ million (current)	%	\$ million (current)	%	Percentage point
Rank	Country	UNFCCC grouping	GNI, 2020	% global GNI, 2020 (a)	Country climate finance, 2020	% International public climate finance, 2020 (b)	Difference (b)-(a)
189	Brazil	Non-Annex I	1,666,971	1.96%	529	0.75%	-1.21%
190	India	Non-Annex I	2,641,485	3.10%	765	1.09%	-2.02%
191	United States	Annex II	21,432,323	25.19%	7,685	10.93%	-14.26%
192	China	Non-Annex I	14,843,811	17.44%	1,236	1.76%	-15.69%
	Taipei	#N/A		-	50	-	_
	Cook Islands	Non-Annex I		-	0	_	_
	Palestine	Non-Annex I		-	0	-	_
	Niue	Non-Annex I		_	0	-	-

Source: Authors' calculations

Data source: Climate finance data are from UNFCCC Biennial Reports, MDB Joint Report on Climate Finance, Climate Funds Update and OECD DAC. GNI data are from the World Bank and UN

# Appendix 4 Climate finance provision per person, 2020

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
1	Monaco	Annex I	0.04	14	\$379.18
2	Nauru	Non-Annex I	0.01	3	\$219.24
3	Norway	Annex II	5.38	1,086	\$201.88
4	Tuvalu	Non-Annex I	0.01	2	\$189.72
5	Germany	Annex II	83.16	11,181	\$134.45
6	Sweden	Annex II	10.35	1,374	\$132.71
7	France	Annex II	67.57	8,355	\$123.65
8	Luxembourg	Annex II	0.63	67	\$106.28
9	Japan	Annex II	126.26	13,370	\$105.89
10	Switzerland	Annex II	8.64	841	\$97.36
11	Netherlands	Annex II	17.44	1,481	\$84.91
12	Denmark	Annex II	5.83	478	\$81.97
13	San Marino	Non-Annex I	0.03	3	\$79.40
14	Austria	Annex II	8.92	644	\$72.22
15	Belgium	Annex II	11.54	809	\$70.11
16	Finland	Annex II	5.53	357	\$64.56
17	Brunei Darussalam	Non-Annex I	0.44	28	\$63.39
18	United Kingdom	Annex II	67.08	3,960	\$59.03
19	Marshall Islands	Non-Annex I	0.04	2	\$52.98
20	Ireland	Annex II	4.99	234	\$46.94
21	Canada	Annex II	38.04	1,716	\$45.11
22	Italy	Annex II	59.44	2,421	\$40.73
23	Dominica	Non-Annex I	0.07	3	\$38.89
24	Iceland	Annex II	0.37	14	\$38.20
25	New Zealand	Annex II	5.09	185	\$36.34
26	Spain	Annex II	47.37	1,623	\$34.27
27	Kuwait	Non-Annex I	4.36	149	\$34.17
28	Tonga	Non-Annex I	0.11	3	\$32.30
29	Australia	Annex II	25.66	821	\$32.00

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
30	Antigua and Barbuda	Non-Annex I	0.09	3	\$31.30
31	St. Kitts and Nevis	Non-Annex I	0.05	1	\$29.39
32	Mauritius	Non-Annex I	1.27	36	\$28.44
33	Bahamas	Non-Annex I	0.41	11	\$27.06
34	Barbados	Non-Annex I	0.28	7	\$26.01
35	Kiribati	Non-Annex I	0.13	3	\$24.51
36	Grenada	Non-Annex I	0.12	3	\$23.45
37	Micronesia	Non-Annex I	0.11	3	\$23.19
38	United States	Annex II	331.50	7,685	\$23.18
39	Malta	Annex I	0.52	11	\$21.35
40	Sao Tome and Principe	Non-Annex I	0.22	4	\$18.29
41	Libya	Non-Annex I	6.65	119	\$17.88
42	St. Lucia	Non-Annex I	0.18	3	\$17.30
43	Cyprus	Annex I	1.24	21	\$16.97
44	Samoa	Non-Annex I	0.21	4	\$16.75
45	Slovenia	Annex I	2.10	35	\$16.65
46	Trinidad and Tobago	Non-Annex I	1.52	25	\$16.47
47	St. Vincent and the Grenadines	Non-Annex I	0.10	2	\$16.25
48	Seychelles	Non-Annex I	0.10	2	\$15.23
49	South Korea	Non-Annex I	51.84	786	\$15.16
50	Portugal	Annex II	10.30	149	\$14.47
51	Guyana	Non-Annex I	0.80	11	\$13.80
52	Saudi Arabia	Non-Annex I	36.00	496	\$13.78
53	Czech Republic	Annex I	10.70	141	\$13.18
54	Hungary	Annex I	9.75	128	\$13.13
55	Belize	Non-Annex I	0.39	5	\$12.91
56	Estonia	Annex I	1.33	17	\$12.79
57	Uruguay	Non-Annex I	3.43	43	\$12.54
58	Vanuatu	Non-Annex I	0.31	4	\$11.87
59	Palau	Non-Annex I	0.02	0	\$11.68
60	Croatia	Annex I	4.05	47	\$11.61

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
61	Qatar	Non-Annex I	2.76	32	\$11.59
62	Montenegro	Non-Annex I	0.62	7	\$11.43
63	Liechtenstein	Annex I	0.04	0	\$11.35
64	Greece	Annex II	10.70	121	\$11.31
65	Slovak Republic	Annex I	5.46	61	\$11.17
66	Latvia	Annex I	1.90	21	\$11.05
67	Poland	Annex I	37.90	388	\$10.24
68	Lithuania	Annex I	2.79	28	\$10.02
69	Jamaica	Non-Annex I	2.82	28	\$9.93
70	Fiji	Non-Annex I	0.92	9	\$9.56
71	Bulgaria	Annex I	6.93	66	\$9.52
72	Singapore	Non-Annex I	5.69	54	\$9.50
73	Argentina	Non-Annex I	45.38	380	\$8.37
74	Botswana	Non-Annex I	2.55	21	\$8.25
75	Armenia	Non-Annex I	2.81	22	\$7.84
76	Georgia	Non-Annex I	3.72	29	\$7.79
77	Cabo Verde	Non-Annex I	0.58	4	\$6.69
78	Gabon	Non-Annex I	2.29	15	\$6.54
79	Suriname	Non-Annex I	0.61	4	\$6.42
80	United Arab Emirates	Non-Annex I	9.29	58	\$6.25
81	Israel	Non-Annex I	9.22	57	\$6.19
82	Chile	Non-Annex I	19.30	116	\$6.01
83	Venezuela	Non-Annex I	28.49	170	\$5.97
84	Bahrain	Non-Annex I	1.48	8	\$5.69
85	Romania	Annex I	19.27	107	\$5.55
86	Malaysia	Non-Annex I	33.20	175	\$5.27
87	Solomon Islands	Non-Annex I	0.69	4	\$5.06
88	Maldives	Non-Annex I	0.51	3	\$5.05
89	Namibia	Non-Annex I	2.49	12	\$4.82
90	Hong Kong	#N/A	7.48	34	\$4.54
91	Bhutan	Non-Annex I	0.77	3	\$4.40

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
92	Moldova	Non-Annex I	2.64	11	\$4.17
93	Serbia	Non-Annex I	6.90	27	\$3.91
94	Kazakhstan	Non-Annex I	18.76	72	\$3.84
95	Azerbaijan	Non-Annex I	10.09	37	\$3.67
96	Kosovo	#N/A	1.79	6	\$3.52
97	Russia	Annex I	144.07	507	\$3.52
98	Djibouti	Non-Annex I	1.09	4	\$3.49
99	Panama	Non-Annex I	4.29	14	\$3.26
100	Kyrgyz Republic	Non-Annex I	6.58	21	\$3.19
101	Morocco	Non-Annex I	36.69	116	\$3.16
102	Timor-Leste	Non-Annex I	1.30	4	\$3.15
103	Eswatini	Non-Annex I	1.18	4	\$3.05
104	Equatorial Guinea	Non-Annex I	1.60	5	\$2.94
105	Costa Rica	Non-Annex I	5.12	15	\$2.93
106	Oman	Non-Annex I	4.54	13	\$2.86
107	Lesotho	Non-Annex I	2.25	6	\$2.75
108	Paraguay	Non-Annex I	6.62	18	\$2.72
109	Albania	Non-Annex I	2.84	8	\$2.71
110	Mexico	Non-Annex I	126.00	339	\$2.69
111	Bolivia	Non-Annex I	11.94	32	\$2.68
112	Belarus	Annex I	9.38	25	\$2.67
113	Algeria	Non-Annex I	43.45	112	\$2.58
114	Türkiye	Annex I	84.14	214	\$2.54
115	Brazil	Non-Annex I	213.20	529	\$2.48
116	Sri Lanka	Non-Annex I	21.92	54	\$2.46
117	South Africa	Non-Annex I	58.80	142	\$2.41
118	Turkmenistan	Non-Annex I	6.25	15	\$2.40
119	Comoros	Non-Annex I	0.81	2	\$2.36
120	Dominican Republic	Non-Annex I	11.00	25	\$2.27
121	Bosnia and Herzegovina	Non-Annex I	3.32	8	\$2.26
122	Colombia	Non-Annex I	50.93	115	\$2.26

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
123	Peru	Non-Annex I	33.30	75	\$2.25
124	Senegal	Non-Annex I	16.44	37	\$2.25
125	Tajikistan	Non-Annex I	9.54	21	\$2.20
126	Iran	Non-Annex I	87.29	192	\$2.20
127	Zimbabwe	Non-Annex I	15.67	34	\$2.17
128	Nicaragua	Non-Annex I	6.76	14	\$2.07
129	Côte d'Ivoire	Non-Annex I	26.81	55	\$2.05
130	Tunisia	Non-Annex I	12.16	24	\$1.97
131	Gambia	Non-Annex I	2.57	5	\$1.94
132	North Macedonia	Non-Annex I	2.07	4	\$1.88
133	Ukraine	Annex I	44.13	81	\$1.84
134	Thailand	Non-Annex I	71.48	130	\$1.82
135	Ecuador	Non-Annex I	17.59	31	\$1.76
136	El Salvador	Non-Annex I	6.29	11	\$1.75
137	Mauritania	Non-Annex I	4.50	7	\$1.56
138	Uzbekistan	Non-Annex I	34.23	53	\$1.55
139	Congo, Republic of	Non-Annex I	5.70	9	\$1.54
140	Zambia	Non-Annex I	18.93	29	\$1.53
141	Haiti	Non-Annex I	11.31	17	\$1.50
142	Indonesia	Non-Annex I	271.86	405	\$1.49
143	Philippines	Non-Annex I	112.19	167	\$1.49
144	Guinea-Bissau	Non-Annex I	2.02	3	\$1.49
145	Nigeria	Non-Annex I	208.33	296	\$1.42
146	Mongolia	Non-Annex I	3.29	5	\$1.40
147	Papua New Guinea	Non-Annex I	9.75	13	\$1.33
148	Guatemala	Non-Annex I	16.86	22	\$1.30
149	Honduras	Non-Annex I	10.12	13	\$1.28
150	Egypt	Non-Annex I	107.47	136	\$1.27
151	Jordan	Non-Annex I	10.93	12	\$1.10
152	Тодо	Non-Annex I	8.44	9	\$1.07
153	Ghana	Non-Annex I	32.18	33	\$1.03

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
154	Eritrea	Non-Annex I	3.56	4	\$1.01
155	Lebanon	Non-Annex I	5.66	6	\$0.99
156	Nepal	Non-Annex I	29.35	29	\$0.99
157	Guinea	Non-Annex I	13.21	13	\$0.98
158	South Sudan	Non-Annex I	10.61	10	\$0.94
159	Liberia	Non-Annex I	5.09	5	\$0.92
160	Kenya	Non-Annex I	51.99	48	\$0.92
161	Central African Republic	Non-Annex I	5.34	5	\$0.90
162	Angola	Non-Annex I	33.43	30	\$0.90
163	Sierra Leone	Non-Annex I	8.23	7	\$0.89
164	Malawi	Non-Annex I	19.38	17	\$0.88
165	China	Non-Annex I	1,411.10	1,236	\$0.88
166	Myanmar	Non-Annex I	53.42	43	\$0.80
167	Cameroon	Non-Annex I	26.49	21	\$0.79
168	Benin	Non-Annex I	12.64	10	\$0.79
169	Pakistan	Non-Annex I	227.20	177	\$0.78
170	Rwanda	Non-Annex I	13.15	10	\$0.76
171	Burkina Faso	Non-Annex I	21.52	15	\$0.70
172	Niger	Non-Annex I	24.33	16	\$0.66
173	Madagascar	Non-Annex I	28.23	17	\$0.60
174	Mali	Non-Annex I	21.22	12	\$0.57
175	Burundi	Non-Annex I	12.22	7	\$0.56
176	India	Non-Annex I	1,396.39	765	\$0.55
177	Bangladesh	Non-Annex I	167.42	89	\$0.53
178	Syrian Arab Republic	Non-Annex I	20.77	11	\$0.53
179	Vietnam	Non-Annex I	96.65	42	\$0.43
180	Iraq	Non-Annex I	42.56	18	\$0.42
181	Mozambique	Non-Annex I	31.18	12	\$0.38
182	å	Non-Annex I	32.28	11	\$0.34
183	Lao People's Democratic Republic	Non-Annex I	7.32	2	\$0.33

			Millions	USD millions	USD
Rank	Country	UNFCCC grouping	Population, 2020	Climate finance provision	Climate finance provision per person
184	Chad	Non-Annex I	16.64	5	\$0.32
185	Cambodia	Non-Annex I	16.40	5	\$0.32
186	Congo, Democratic Republic of	Non-Annex I	92.85	28	\$0.30
187	Sudan	Non-Annex I	44.44	13	\$0.29
188	Tanzania	Non-Annex I	61.70	14	\$0.23
189	Ethiopia	Non-Annex I	117.19	23	\$0.20
190	Uganda	Non-Annex I	44.40	9	\$0.20
191	Somalia	Non-Annex I	16.54	3	\$0.19
192	Afghanistan	Non-Annex I	38.97	5	\$0.13
	Cook Islands	Non-Annex I	#N/A	0.14	#N/A
	Niue	Non-Annex I	#N/A	0.05	#N/A
	Taipei	#N/A	#N/A	50	#N/A
	Palestine	Non-Annex I	#N/A	0.1	#N/A

Source: Authors' calculations

Data sources: The climate finance data are from UNFCCC Biennial Reports, MDB Joint Report on Climate Finance, Climate Funds Update and OECD DAC. Population data is from the World Bank

# Appendix 5 Interview questions

- 1. Please provide us with your job title and department/ministry affiliation
- 2. [Annex II] Can you tell us the official reason(s) why your government provides climate finance to developing countries? Can you also share with us your personal reflections on some of the other reasons that your government has chosen to provide climate finance?

**[Non-Annex II]** Can you tell us the official reason(s) why your government provided finance for climate action to developing countries? Can you also share with us your personal reflections on some of the other reasons that your government chose to provide such finance?

- 3. Looking forward, which countries do you personally think should be providing climate finance under the New Collective Quantified Goal on Climate Finance ('NCQG') from 2025?
- 4. How does that compare with your government's position on which countries should be providing climate finance under the NCQG?
- 5. Which actors in your country need to be involved in the process before providing climate finance to developing countries? And in what way:
  - a. Are they consulted with?; and/or
  - b. Is approval sought from them?
- 6. How do you convince these different actors on the need to provide climate finance to developing countries? If so, how? And what ends up resonating/getting traction? Has this changed over the years? If so, after what event/development?
- 7. Do these national actors have strong positions on the climate finance contributor base? Do they have a common position or different ones? Is it on their radar? What is the dialogue process on this issue, who is involved, and who is not but perhaps should?