



SUBMISSION TO INFORM THE ELEVENTH TECHNICAL EXPERT DIALOGUE OF THE NEW COLLECTIVE QUANTIFIED GOAL ON CLIMATE FINANCE

pican.org

lossanddamagecollaboration.org



TABLE OF CONTENTS

INTRODUCTION.....	2
THE HISTORICAL CONTEXT OF THE DEBATE ON THE QUANTUM OF CLIMATE FINANCE.....	7
NDCS AND THE CENTRALITY OF FINANCE.....	7
ARTICULATION OF NEEDS.....	8
SUBGOALS.....	10
ALLOCATIONS AND QUANTUM.....	12
MITIGATION.....	13
ADAPTATION.....	14
LOSS AND DAMAGE.....	16
THE PORTION OF GRANTS FOR MITIGATION, ADAPTATION AND LOSS AND DAMAGE.....	17
Box 1: Making Polluters Pay —Mobilising Funds for Loss and Damage and National Just Transitions.....	18
CONCESSIONAL FINANCE.....	20
BURDEN SHARING.....	22
PREDICTABILITY AND TRANSPARENCY.....	23
ACCESS ENHANCEMENT.....	24
THE WAY FORWARD.....	26

INTRODUCTION

This submission from the [Loss and Damage Collaboration](#) (L&DC) and [Pacific Islands Climate Action Network](#) (PICAN) is intended to inform the Eleventh Technical Expert Dialogue of the [New Collective Quantified Goal on Climate Finance](#) (NCQG) that will take place from the 10-13th September in Baku, Azerbaijan.

This submission covers the following key areas:

1. The NCQG in the context of the urgency of addressing the climate crisis;
2. The historical context of the debate on the quantum of climate finance;
3. NDCs and the centrality of climate finance
4. Articulation of needs;
5. Subgoals (mitigation, adaptation and Loss and Damage);;
6. Allocation and quantum for mitigation, adaptation and Loss and Damage including the proportion of grants;
7. Concessional finance;
8. Burden sharing;
9. Transparency and Accountability
10. Access enhancement; and
11. The way forward for the NCQG.

This submission has been led by Dr. Sindra Sharma who can be contacted on [sindra \[at\] lossanddamagecollaboration.org](mailto:sindra@lossanddamagecollaboration.org)

WE ARE IN CRISIS

Since July 2023, Earth's average temperatures have been at least 1.5°C (2.7° Fahrenheit) above pre-industrial level¹. On July 22nd, the hottest day ever observed was recorded, amidst a four day streak of record breaking temperatures². Only mid-way through 2024, communities have been facing record breaking extreme weather including devastating flooding in Kenya³, Afghanistan, Pakistan, Iran⁴, Nepal, and in Rio Grande do Sul, Brazil⁵, Cyclone Remal in India and Bangladesh⁶, and heatwaves across South and Southeast Asia⁷. With the floods in Brazil, Southwest Asia, and East Africa, and the extreme heat waves that hit large parts of Asia, resulting in a death toll of at least 2,539 —likely a huge underestimate⁸. These recent devastating climate-intensified events starkly highlight the global failure to ensure human rights-aligned climate action, which is exacerbating the suffering of vulnerable and marginalised communities who have contributed minimally to emissions yet bear the brunt of climate inaction.

¹Copernicus Climate Change Service, [June 2024 marks 12th month of global temperatures at 1.5°C above pre-industrial levels](#).

² NASA Goddard Digital Team, [NASA Data Shows July 22 Was Earth's Hottest Day on Record](#).

³ [Kenya: Heavy Rains and Flooding Update - Flash Update #7 \(19 June 2024\)](#), OCHA

⁴ [Climate breakdown 2024: 6 months of climate chaos since COP28](#), Christian Aid.

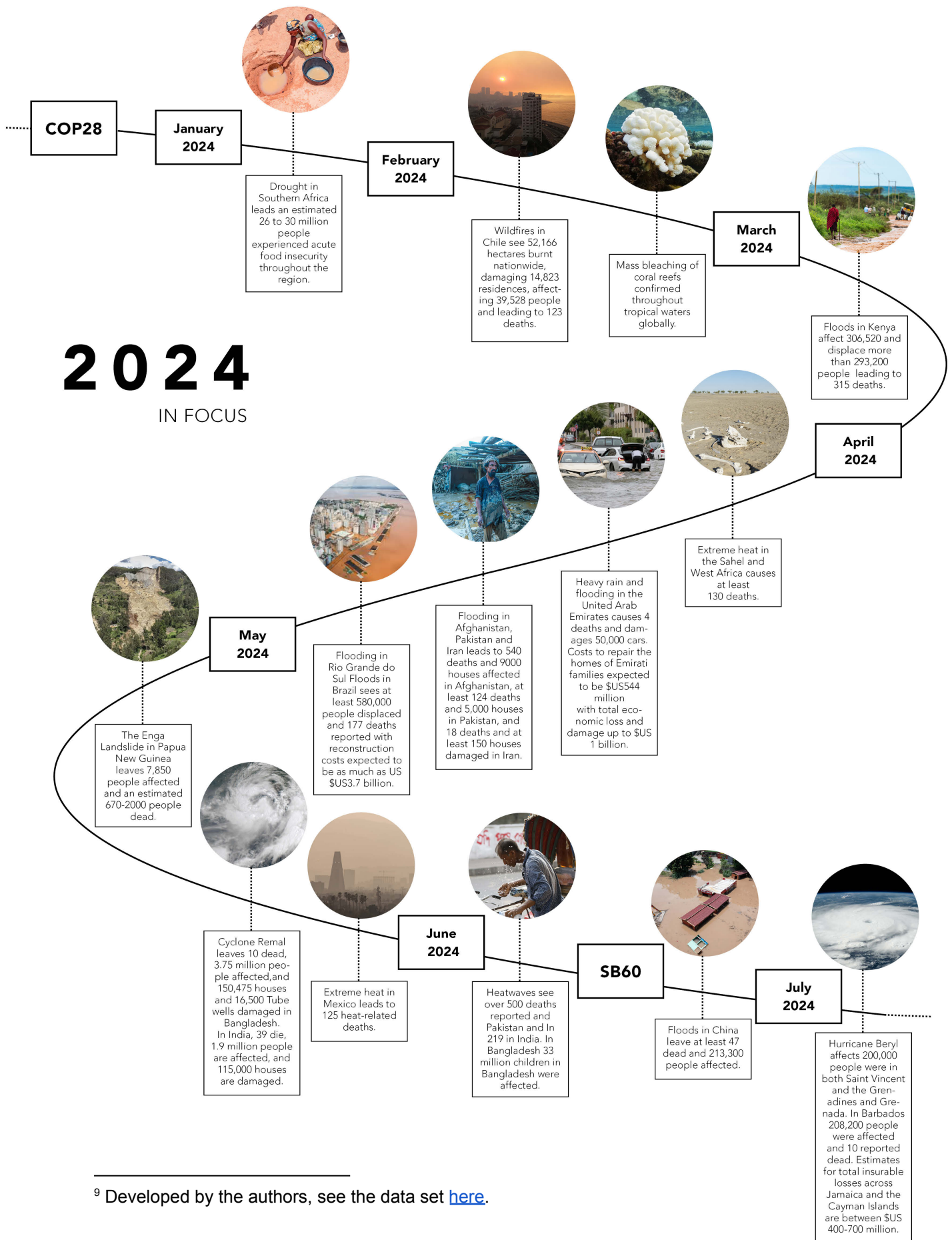
⁵ [Brazil: Floods in Rio Grande do Sul - United Nations Situation Report, as of 25 June 2024](#), OCHA

⁶ [Tropical Cyclone Remal - May 2024](#), ReliefWeb

⁷ [Climate change made the deadly heatwaves that hit millions of highly vulnerable people across Asia more frequent and extreme](#), WMO

⁸ [Climate breakdown 2024: 6 months of climate chaos since COP28](#), Christian Aid.

Figure 1: A timeline of Loss and Damage events in the first half of 2024⁹.



⁹ Developed by the authors, see the data set [here](#).

The [Planetary Boundaries Framework](#), should be a stark warning to policy makers. This science based framework shows that six of the planetary boundaries, essential for the safe operating space for humanity to continue to thrive, have been transgressed¹⁰. The compounding and complex multiple crises that we face are already proving to be more costly and less predictable.

One such example is that of Hurricane Beryl—the earliest Category 5 hurricane to ever form in the Caribbean— which caused extensive devastation across multiple Caribbean nations including the Grenadines, Grenada, Barbados and Jamaica, the Yucatán Peninsula, the US and Canada. Following the hurricane, the [Permanent Council of the Organisation of American States](#) approved by acclamation the resolution “Addressing the impact of Hurricane Beryl and strengthening climate resilience in the America’s”¹¹ wherein the resolution calls “for the immediate capitalization and operationalization of the Loss and Damage Fund”; and further calls “on all nations to take immediate and ambitious actions to curb their emissions, in line with the goals of the Paris Agreement, including its first Global Stocktake and related decisions of the UNFCCC process, particularly the target of 1.5° Celsius, and to call on developed countries to provide financial and technical support to developing states, particularly vulnerable countries, to help them build resilience and withstand existential threats posed by climate change”.

Although devastating, the destruction wrought in the first half of 2024 is but the tip of the iceberg of the economic loss and damage suffered to date by developing countries as a result of the climate crisis and that which is to come, even if warming is kept within the 1.5°C temperature goal of the Paris Agreement. In 2022 alone developing countries faced US\$ 109 billion of economic loss and damage¹², whilst a recent paper on the economic quantification of Loss and Damage funding needs, highlights that the midpoint average for developing countries Loss and Damage funding needs will be US\$ 395 [128–937] billion in 2025¹³. Yet as of July 2024, pledges to the Fund for responding to Loss and Damage¹⁴ total just US\$ 661.39 million¹⁵ which equates to less than 0.2% of the estimated US\$ 400 billion needed

¹⁰ Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., ... & Rockström, J., (2023). [Earth beyond six of nine planetary boundaries](#). Science advances, 9(37), eadh2458.

¹¹ [OAS: CP/RES. 1259 \(2504/24\)](#)

¹² Julie-anne Richards et al. (2023), [The Loss and Damage Finance Landscape](#), Loss and Damage Collaboration / Heinrich-Böll-Stiftung Washington, DC.

¹³ Massimo Tavoni et al, (2024), [Economic quantification of Loss and Damage funding needs](#), nature reviews earth & environment.

¹⁴ [Status of resources](#) [of the Fund for Responding to Loss and Damage], UNFCCC.

¹⁵ Not including the recent pledge made by the Republic of Korea at the third meeting of the Board of the Fun.

each year in the 2020s to meet the needs of developing countries¹⁶ A paper by the International Monetary Fund (IMF)¹⁷ puts the inadequate scale of the pledges to the Fund into context by illustrating how finance is being channelled in the wrong direction. The paper shows that in 2022 fossil fuel subsidies amounted to US\$7 trillion — equivalent to 7.1% of global gross domestic product. This represented a growth of US\$2 trillion from 2020 to 2022. Whilst the adaptation finance gap in 2023 was estimated at US\$194-366 billion per year by UNEP¹⁸. As with loss and damage, this adaptation shortfall is considered an under-estimate as illustrated by different assessment models¹⁹.

To take us further down the road towards climate justice, averting, minimising and addressing loss and damage must be at the heart of discussion to establish the [New Collective Quantified Goal on Climate Finance](#) (NCQG) set to be agreed at COP29 in Baku Azerbaijan.

Grounding the qualitative elements of the NCQG in a human rights and people-centred approach is essential for ensuring the efficacy and fairness of climate finance, and to advance justice for communities who are living with the consequences of climate inaction. A gender-responsive and multi-stakeholder framework, interlinked with enhanced and simplified access to climate finance is critical. Climate finance should be directed towards supporting sectors and communities at risk and impacted by climate change, strengthening social protection, providing for sectoral finance platforms, prioritising decent work and safe conditions, and ensuring inclusive and effective climate resilience and response to loss and damage whilst upholding the rights of Indigenous people and local communities, youth, women and girls, LGBTQIA+ communities, the elderly and people with disabilities.²⁰

¹⁶ Julie-anne Richards et al. (2023), [Standing In Solidarity With Those On The Frontlines Of The Climate Crisis: A Loss And Damage Package For COP 28](#), Loss and Damage Collaboration.

¹⁷ Black, S., et al. (2023). IMF Fossil Fuel Subsidies Data: 2023 Update. Working paper, IMF, Washington, DC.

¹⁸ UNEP. (2023). Underfinanced. Underprepared — Inadequate investment and planning on climate adaptation leaves world exposed.

¹⁹ Carleton, T., Jina, A., Delgado, M., Greenstone, M., Houser, T., Hsiang, S., ... & Zhang, A. T. (2022). Valuing the global mortality consequences of climate change accounting for adaptation costs and benefits. *The Quarterly Journal of Economics*, 137(4), 2037-2105.

²⁰ 2nd Meeting of the Ad Hoc Work Programme (AHWP2) on the New Collective Quantified Goal (NCQG) (June, 2024). [Observer Cross Constituency Joint Statement](#).

THE HISTORICAL CONTEXT OF THE DEBATE ON THE QUANTUM OF CLIMATE FINANCE

The evolution of climate finance discussions highlights progress and persistent challenges. In 2009, driven by influential reports like the Stern Review²¹ and advocacy from [Small Island Developing States](#) (SIDS), the US \$100 billion annual goal was established at COP15 in Copenhagen. The vision of public finance and equitable governance by then UK Prime Minister Gordon Brown was diluted by the [Copenhagen Accord's](#) focus on "multiple sources" of funding, which introduced institutions like the [World Bank](#) and marginalised developing countries' influence. Subsequent negotiations aimed to rebalance this, but commitment to adaptation finance has fluctuated. The Paris Agreement reaffirmed the US \$100 billion goal with provisions for a New Collective Quantified Goal by 2025, yet contention remains over modalities and coverage —especially for Loss and Damage finance. Developed countries' tendency to mainstream climate considerations into existing funding like ODA, contradicts the UNFCCC's call for "new and additional" finance. This history underscores the struggle for a fair climate finance framework, demanding increased ambition, transparency, and accountability.

To summarise: The Copenhagen Accord²² provides key lessons on what not to repeat. The commitment focused on mobilizing funds rather than directly providing them, allowing developed countries to avoid financial responsibility. The mobilized amount falls short of actual needs, highlighting its inadequacy in being 'needs-based'. Additionally, the absence of a requirement for new funding enables developed countries to repurpose existing commitments, further diluting their responsibilities.

Since the Copenhagen Accord, emissions have risen, ecosystems have degraded, and impacts have worsened. The [Climate Policy Initiative](#)²³ estimates that annual climate finance needs to reach US \$8.1 to \$9 trillion by 2030, growing to US \$10 trillion from 2031 to 2050. Whilst Bilal and Känzig²⁴ find a significant underestimation of macroeconomic damages from a 1°C temperature increase, estimating a 12% loss in global GDP — six times larger than previously modelled.

²¹ Stern, N. (2007). [The economics of climate change: the Stern review](#). Cambridge University press.

²² See [2/CP.15 para 8](#)

²³ Buchner, B., et al. (2023). [Global Landscape of Climate Finance 2023](#). Climate Policy Initiative.

²⁴ Bilal, A., & Känzig, D. R. (2024). [The Macroeconomic Impact of Climate Change: Global vs. Local Temperature](#) (No. w32450). National Bureau of Economic Research.

NDCS AND THE CENTRALITY OF FINANCE

The US \$100 billion goal was always insufficient for developing countries' needs and to achieve the 1.5°C temperature goal. The Paris Agreement—which all countries have signed—mandates regular updates on [Nationally Determined Contributions](#) (NDC) and domestic mitigation efforts but lacks binding targets for outcomes. Developing countries often differentiate between conditional and unconditional NDC elements, reliant on international cooperation to achieve their most ambitious targets. Finance is crucial for enabling ambition in NDCs. Applying prospect theory²⁵ to the Paris Agreement, can offer insight to derived utility from gains and losses in State decision-making depending on their reference point²⁶. Some States may view ambitious climate commitments as economic losses, leading to risk-averse behaviour, where they prefer smaller, certain gains, over larger, uncertain benefits. The certainty effect further lowers ambition by causing states to focus on the certain costs of climate actions over probable outcomes.

Financial support can change these risk perceptions. Availability of adequate and predictable finance, through mechanisms like the [Green Climate Fund](#) (GCF) and the [Fund for Responding to Loss and Damage](#) (FLD), mitigates perceived economic risks, encouraging states to undertake higher-risk actions. Thus, financial support significantly influences NDC ambitions by providing economic assurance and making ambitious climate actions more appealing. This behavioural approach to decision making under risk can also offer novel insight on incentive structures.

ARTICULATION OF NEEDS

Parties agreed that the NCQG would take into account the needs and priorities of developing countries²⁷. The importance of the quantum of climate finance is crucial for several reasons. Firstly, it directly impacts the level of ambition that developing countries can achieve in implementing their NDCs. The amount of climate finance available determines how effectively these countries can pursue their climate goals while also striving for sustainable

²⁵ Kahneman, D., & Tversky, A. (2013). [Prospect theory: An analysis of decision under risk](#). In Handbook of the fundamentals of financial decision making: Part I (pp. 99-127).

²⁶ Osberghaus, D. (2017). [Prospect theory, mitigation and adaptation to climate change](#). Journal of Risk Research, 20(7), 909-930.

²⁷ 14/CMA.1: Para 1. Decides to initiate at its third session (November 2020), in accordance with Article 9, paragraph 3, of the Paris Agreement, deliberations on setting a new collective quantified goal from a floor of USD 100 billion per year in the context of meaningful mitigation actions and transparency of implementation and taking into account the needs and priorities of developing countries;

development. Whilst the first [Needs Determination Report](#)²⁸ (NDR) of the [Standing Committee on Finance](#) (SCF) has provided a basis to assess needs in national communications, it lacks disaggregation for Loss and Damage, posing a risk for reliance on the second NDR which is due in October. It is with these concerns in mind that this paper²⁹ proposes a quantum across the three pillars of climate action — mitigation, adaptation and Loss and Damage.

Many developing countries lack capacity in developing comprehensive NDCs or National Adaptation Plans (NAPs). This challenge is compounded for Loss and Damage, which remains far from establishing globally agreed frameworks. Countries have articulated what the new climate finance goal should look like and importantly the quantum of needs:

Developing countries have presented a wide range of estimates for the new climate finance quantum, reflecting diverse needs and priorities:

- Developing countries and groups have variously noted the \$US5.8-5.9 trillion as indicated in the first NDR —AILAC, SUR, LMDC, ABU, and AGN
- \$US1 trillion annually — India³⁰
- \$US1.1 trillion annually — Arab Group³¹
- \$US1.3 trillion annually —AGN³² and LMDC³³
- \$US1.9 trillion annually to 2030; \$US2.3 trillion annually by 2040; \$US3.2 trillion annually by 2050 —AILAC³⁴
- AOSIS emphasises a quantum based on distinct needs across mitigation, adaptation, and Loss and Damage which would be in the high trillions (xxx trillions)³⁵.
- Notably, Kenya highlights Africa's specific needs exceeding \$US3 trillion by 2030.
- The LDC Group focuses on grant-based finance, particularly for Least Developed Countries (LDCs).

²⁸ UNFCCC Standing Committee on Finance. (2021). First report on the determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement

²⁹ The full discussion paper can be found here and remains open to inputs and discussion.

³⁰ [India Submission](#)

³¹ [MAHWP2 Written inputs: Arab Group](#)

³² Submission by the Republic of Zambia on behalf of the African Group of Negotiators:

[Views on the new collective mobilization goal on climate finance](#)

³³ [Submission by Bolivia on behalf of the Like-Minded Developing Countries on the establishment of a New Collective Quantified Goal on Climate Finance](#)

³⁴ [Submission By Colombia On Behalf Of The AILAC Group](#)

³⁵ AOSIS Submission (June 2024)

Developed countries' submissions on the new climate finance quantum present a stark contrast to the needs expressed by developing nations. While many developing countries reference the \$US5.8-5.9 trillion figure from the first NDR, developed countries generally specify a floor of \$US100 billion annually³⁶, emphasising scaling up mobilisation efforts rather than a concrete target.

This disparity underscores a fundamental disconnect between the scale of financial needs articulated by developing countries and the limited commitments offered by developed nations. While developing countries emphasise the urgency and magnitude of climate impacts, particularly in vulnerable regions, developed countries prioritise expanding the contributor base, reducing the recipient pool, and leveraging private finance, potentially shifting the burden away from their public commitments.

SUBGOALS

The legal arguments for including Loss and Damage as a sub-goal within the NCQG can be emphasised via the articles of the Convention and Paris Agreement as well as previous COP/CMA decisions and do not preclude Loss and Damage from the NCQG's scope³⁷. These agreements make clear that Loss and Damage is a need and priority of developing country Parties with a clear foundation in both the Convention and Paris Agreement, that requires new, additional, predictable and adequate financial support to be provided and mobilised. In the absence of loss and damage being explicitly excluded from deliberations on climate finance, it must be included in ongoing work for the effective implementation of both the Convention and the Paris Agreement.

Convention and Paris Agreement: Articles and Decisions

- **Article 11** of the Convention establishes the Financial Mechanism of the Convention for the provision of financial resources on a grant or concessional basis. Its operation is to be entrusted to one or more international entities.
- **Article 4** of the Convention requires full consideration to be given to actions necessary to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change. Part of this is a requirement for

³⁶ Please refer to our live NCQG tracker [here](#)

³⁷ Legal Response International. (2024). [Including a sub-goal on loss and damage within the New Collective Quantified Goal](#)

developed country Parties to meet the costs of adaptation to the adverse effects of climate change.

- **Article 1** of the Convention defines the adverse effects of climate change as changes resulting from climate change which have significant deleterious effects. This can be interpreted as requiring policies for avoiding (mitigation) and reducing (adaptation) but also for addressing the effects when they materialise (loss and damage).
- **Article 2** of the Convention sets out the ultimate objective of the Convention and any related legal instruments (i.e. the Paris Agreement) as stabilisation of greenhouse gas concentrations within a time frame sufficient to allow ecosystems to adapt naturally. However, the failure to avoid and reduce the adverse effects of climate change resulted in a need to create policy space for the evolving needs, concerns and priorities of developing countries.
- **Decision 2/CP.19 (2013)** established the Warsaw International Mechanism for Loss and Damage under the Cancun Adaptation Framework to address the gap in policy space to meet the needs and concerns of developing countries arising from the adverse effects of climate change. It was agreed that Loss and Damage associated with the adverse effects of climate change would include, and in some cases involve, more than that which can be reduced by adaptation. Parties also foresaw the need for financial support, as they requested developed country Parties to provide developing country Parties with finance (Paragraph 14).
- **Decision 1/CP.21 (2015)** established the Paris Agreement and set the stage for financial mechanisms, linking them to climate resilience and low greenhouse gas emission development. It decided a new collective quantified goal would be set, taking into account the needs and priorities of developing countries (Paragraphs 53-55).
- **Article 2 and Article 9** of the Paris Agreement outline objectives and financial commitments, which are in continuation of existing obligations under the Convention and to enhance the implementation of the Convention. Article 9 confirms the Financial Mechanism of the Convention, including its operating entities, shall serve as the financial mechanism of the Paris Agreement.

- **Article 8** of the Paris Agreement establishes Loss and Damage as part of the Paris Agreement, recognising the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change.
- **Decision 14/CMA.1 (2018) and Decision 5/CMA.4 (2023)** continued to build on the Paris Agreement commitments, confirming the new collective quantified goal would take into account the needs and priorities of developing countries, acknowledging the urgency of scaling up climate action, and reinforcing the need for financial flows towards climate resilience.

Recognition of Loss and Damage in Financial Mechanisms:

- **Decision 2/CP.27 and 2/CMA.4 (2022)** establish new funding arrangements, including a fund for responding to loss and damage and explicitly acknowledge the “urgent and immediate need for new, additional, predictable, and adequate financial resources to assist developing countries that are particularly vulnerable to the adverse effects of climate change in responding to economic and non-economic Loss and Damage associated with the adverse effects of climate change” (Paragraphs 1-3).
- **Decision 1/CP.28 and 5/CMA.5 (2023):** designated “the Fund as an entity entrusted with the operation of the Financial Mechanism of the Convention, also serving the Paris Agreement, which will be accountable to and function under the guidance of the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

Evolving Definition of Climate Finance:

- The **Standing Committee on Finance (SCF)**, although not officially adopted, defines climate finance as aiming to reduce emissions and vulnerability, which includes enhancing resilience to climate impacts. This implicitly covers Loss and Damage (Report of the Standing Committee on Finance, Addendum 2, 2023, Paragraphs 44(a), 9).
- The establishment of funding arrangements and a specific fund to address Loss and Damage is a clear recognition of the necessity to finance these areas (2023 SCF Report, Paragraph 7).

In terms of quantification, this necessitates tailored approaches for mitigation, adaptation, and Loss and Damage due to their distinct characteristics. Mitigation, with quantifiable costs

and returns, lends itself to economic modelling. Adaptation, with diverse actions and context-specific impacts, requires broader financial modelling that considers both direct and indirect effects. Importantly, a just transition is embedded within all mitigation, adaptation and Loss and Damage efforts, although lacking a dedicated funding stream.

Loss and Damage finance presents unique challenges, encompassing economic and non-economic loss and damage from climate impacts exceeding adaptive capacity. Non-economic Loss and Damage, linked to human and ecological values, defy traditional quantification. A participatory and values based approach³⁸, involving directly impacted communities, is essential for capturing the intangible aspects of Loss and Damage, ensuring that quantification reflects their priorities. This fosters a holistic understanding, integrating tangible and intangible factors into financial planning, noting however that the lived experience of Loss and Damage will have deeply incommensurable and unquantifiable losses which would be crude to assign a value to.

A 'global' quantum, expressed through distinct sub-goals, enables clearer monitoring and evaluation in comparison to complex multi-layered approaches. A dedicated Loss and Damage sub-goal is crucial to secure new, additional, predictable, and adequate resources for its specific challenges. This quantum, derived from assessed needs across all three areas, demands careful consideration of overlaps through categorization, weighted calculations, and transparent reporting.

ALLOCATIONS AND QUANTUM

We propose a quantum, primarily derived from the sum of assessed needs from various sources —detailed in the respective subsequent sections of [this discussion paper](#)— across mitigation, adaptation, and Loss and Damage, with careful consideration given to potential overlaps to ensure accuracy and equity. We also note the existence of a readiness gap and the importance of readiness support as allocated in the Arab Group³⁹ and AOSIS submissions⁴⁰ and the joint statement delivered by the LDC and AOSIS groups at the [fourth](#)

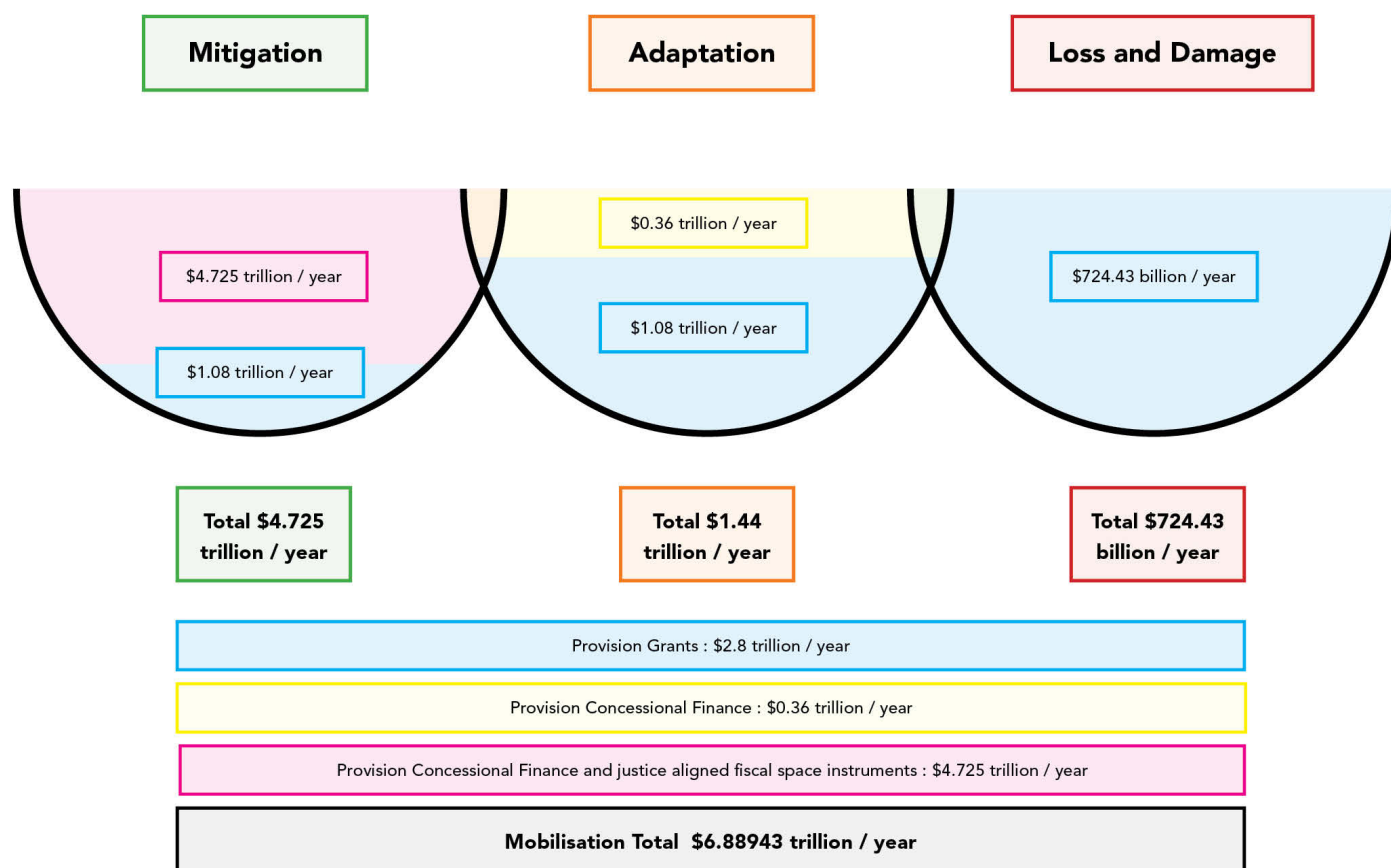
³⁸ van Schie, Douwe, Karen E. McNamara, Merewalesi Yee, Afsara Binte Mirza, Ross Westoby, Moleen Monita Nand, Rawnak Jahan Khan Ranon, Rachel Clissold, Simon Anderson, and Saleemul Huq. (2023). [Valuing a values-based approach for assessing loss and damage](#). Climate and Development

³⁹ [MAHWP2 Written inputs: Arab Group](#)

⁴⁰ [AOSIS Submission \(June 2024\)](#)

[session](#) of the Second meeting of the Ad Hoc Work Programme of the NCQG ⁴¹ .

Figure 2: Allocation and total quantum via sub goals under the NCQG.



- **Mitigation:**
 - **Total:** \$US 4.725 trillion/year
 - **Grants:** \$US 1.08 trillion/year
 - **Concessional finance and justice aligned fiscal space instruments:** \$3.645 trillion/year
 - **Instruments:** Grants, concessional finance and justice aligned fiscal space instruments

- **Adaptation:**
 - **Total:** \$US 1.44 trillion / year
 - **Grants:** \$US 1.08 trillion/year

⁴¹ [Joint Statement & Submission By The Least Developed Countries and Alliance Of Small Island Developing States Groups On The New Collective Quantified Goal On Climate Finance \(NCQG\) \(June, 2024\).](#)

- **Concessional finance:** \$0.36 trillion/year
- **Instruments:** Grants and concessional finance

- **Loss and Damage:**
 - **Total:** \$US 724.43 billion / year
 - **Grants:** \$US 724.43 billion/year
 - **Instruments:** Grants

Total: \$US 6.88943 trillion / year

Grants: \$US 2.8 trillion / year

Concessional Finance: \$0.36 trillion / year

Concessional finance and justice aligned fiscal space instruments: \$4.725 trillion / year

MITIGATION

Based on McKinsey's report on the net-zero transition⁴², we estimated the annual transition cost for developing countries as a percentage of the share of the \$US9.2 trillion annual global transition cost they estimate. We incorporated McKinsey's finding that developing countries, particularly sub-Saharan Africa and India, need to invest 1.5 times more than advanced economies as a share of GDP to build low-carbon infrastructure. Assuming advanced economies invest 7% of their GDP annually, developing countries would need to invest 10.5% of their GDP. Given a global GDP of \$US 100 trillion, with \$US 45 trillion⁴³ from developing countries, this translates to an annual spending of \$US 4.725 trillion for developing countries, or 51.36% of the total annual transition cost.

- Global GDP ≈ \$US 100 trillion; Developing Countries' GDP ≈ \$US 45 trillion
- Investment Multiplier for Developing Countries: 1.5 times the share of GDP invested by advanced economies.

We can calculate the annual spending for developing countries as follows:

- Let's assume advanced economies invest a certain percentage of their GDP in the transition. For example, if advanced economies invest 7% of their GDP:

⁴² McKinsey & Co. (2022). [The net-zero transition: What it would cost, what it could bring.](#)

⁴³ [IMF Data](#)

- Annual Spending in Advanced Economies = $0.07 \times \text{\$US } 55 \text{ trillion} = \text{\$US } 3.85 \text{ trillion/year}$

To calculate the corresponding investment for developing countries given that developing countries need to invest 1.5 times this share:

- Investment Share for Developing Countries = $1.5 \times 7\% = 10.5\%$

Therefore:

- Annual Spending in Developing Countries = $0.105 \times \text{\$US } 45 \text{ trillion} = \text{\$US } 4.725 \text{ trillion/year}$
- Total Annual Global Transition Cost: $\text{\$US } 9.2 \text{ trillion}$

Where:

- Percentage for Developing Countries = $\left(\frac{9.2 \text{ trillion}}{4.725 \text{ trillion}}\right) \times 100 = 51.36\%$

The grant portion, which we explain at the end of the Loss and Damage section, to be in parity with Adaptation will be $\text{\$US } 1.08 \text{ trillion/year}$.

ADAPTATION

We assess adaptation needs based on the analysis by Impacts Labs⁴⁴ which incorporates the rate of mortality from rising temperatures. This extensive model offers two scenarios

- Under the moderate emissions scenario (RCP4.5): 14.2 deaths per 100,000, 0.6% of global GDP.
- Under the high emissions scenario (RCP8.5): 84.8 deaths per 100,000, 3.2% of global GDP.

Assuming an average global GDP of $\text{\$US } 100 \text{ trillion}$ and a 45% contribution by developing countries we can assume:

Adaptation cost is 3.2% of the projected GDP of the Global South:

⁴⁴ Carleton, T., Jina, A., Delgado, M., Greenstone, M., Houser, T., Hsiang, S., ... & Zhang, A. T. (2022). [Valuing the global mortality consequences of climate change accounting for adaptation costs and benefits](#). *The Quarterly Journal of Economics*, 137(4), 2037-2105.

- Moderate Emissions Scenario: Adaptation Cost = $0.006 \times \text{\$US } 45 \text{ trillion} = \text{\$US } 270 \text{ billion}$
- High Emissions Scenario: Adaptation Cost = $0.032 \times \text{\$US } 45 \text{ trillion} = \text{\$US } 1.44 \text{ trillion}$
- The grant portion, which we describe at the end of the Loss and Damage section, will be $\text{\$US } 1.08 \text{ trillion/year}$

There have been criticisms of the scenarios⁴⁵ used by the [Intergovernmental Panel on Climate Change](#) (IPCC). The high emissions scenario arguably does not include significant climate policies and omits equity considerations. However, as we see the world shift to different energy sources as transition fuels we note that these come with clear risks which, as yet, have not been captured within models. The scenarios also do not adequately consider socio-economic factors in impacts and risk modelling⁴⁶. In addition—as cited in the IPCC’s AR6 WG II report⁴⁷— ill conceived adaptation measures can also lead to maladaptation further increasing the burden on communities.

For illustrative purposes—noting that such scenarios are not able to adequately capture costs—, which likely will be higher⁴⁸, especially when considering the continued expansion of fossil fuels by global north countries in 2024⁴⁹, we table the high estimate of $\text{\$US } 1.44 \text{ trillion}$ as our baseline for adaptation needs.

This is further supported by research from McKinsey⁵⁰ where they state: “close to $\text{\$US } 30 \text{ trillion}$ would cumulatively be spent on expanding agricultural production to feed a growing population, shifting some investment towards lower-emissions proteins, implementing lower-emissions farming practices such as more efficient use of fertilisers and irrigation, avoiding deforestation, and increasing forest cover in other areas (afforestation). More than 70 percent of this would be spent in developing regions.” Whilst the report notes that it does not include adaptation cost estimates, there are clear adaptation co-benefits for reducing agricultural emissions. Small holders in developing countries produce more than a third—around 35%— of the world’s food⁵¹ and provide up to 80% of the food supply in

⁴⁵ Jayaraman, T., Kanitkar, T., & Mythri, A. (2023). [Equity Assessment of Global Mitigation Pathways in the IPCC Sixth Assessment Report](#). TWN.

⁴⁶ Hausfather, Z. (August, 2019). [Explainer: The high-emissions ‘RCP8.5’ global warming scenario](#)

⁴⁷ IPCC. (2022). [AR6 Summary for Policy Makers](#).

⁴⁸ Hart, R. (April, 2024) [Climate Change Will Cost Global Economy \$\text{\\$38 Trillion}\$ Every Year Within 25 Years, Scientists Warn](#)

⁴⁹ Rodel, N. (2023)/ [Report confirms governments’ fossil fuel expansion plans would blow \$1.5^\circ\text{C}\$ limit](#). Oil Change International.

⁵⁰ McKinsey & Co. (2022). [The net-zero transition What it would cost, what it could bring](#).

⁵¹ [Small family farmers produce a third of the world’s food](#), Family Farming Knowledge Platform, FAO

sub-Saharan Africa and Asia⁵². The expected spending on the expansion of agriculture to feed a growing population with 70% concentrated in the developing world suggests that this would need to be at the small-holder level where adaptation is of paramount importance for food security.

LOSS AND DAMAGE

A recent estimate of the moral obligation of the Global North to the South for Loss and Damage finance was provided by the prominent economist Esther Duflo at the G20. Her model is based on the same mortality estimates as with the Adaptation estimate. From this she derives a \$US 500 billion moral debt from developed to developing countries for their consumption choices⁵³.

Whilst prior to COP26 a third of NDCs⁵⁴ included some mention of Loss and Damage the most comprehensive of these in terms of providing costed needs has been that of Vanuatu⁵⁵. Vanuatu estimates its Loss and Damage cost of \$US 170 million for the period 2021-2030.

For the upward adjustment we extrapolate the cost of implementing Loss and Damage response measures from Vanuatu's data to all developing countries. The focus will be on the estimated cost as a percentage of GDP to provide a clear understanding of the financial burden. In this manner—using Vanuatu's data as a reference—the cost of implementing Loss and Damage response measures for developing countries is projected to be approximately \$US 724.43 billion per year. This projection is based on scaling the annual cost of \$US 17 million for Vanuatu by the ratio of the GDP of developing countries to Vanuatu's GDP. Again this will be considered an underestimate, not including the intangible losses and the scale and vectors of complexity that different regions face which is so context dependent.

Estimation:

- **Vanuatu Size:** Vanuatu is a small island nation with a population of around 300,000 and a GDP of about \$US 1 billion. The cost of implementing Loss and Damage

⁵² [Smallholders and Family Farmers Fact Sheet](#), FAO

⁵³ Mundy, S. (April, 2024). [Esther Duflo: Rich world owes \\$500bn in 'moral debt' to poor countries](#). Financial Times.

⁵⁴ Ryder, B., & Calliari, E. (2021). [How does Loss and Damage feature in Nationally Determined Contributions](#). CCLAD, UCL.

⁵⁵ [Vanuatu NDC Revised and Enhanced](#), The Government of Vanuatu.

response as expressed in their NDC for 2021-20230 is \$US 170 million. We also know that the GDP of developing countries is \$US 45 trillion.

- **Annual cost for Vanuatu Loss and Damage Contributions:**

$$\frac{\$US\ 170\ million}{10\ years} = \$US\ 17\ million / year$$

- **Scaling Factor:**

$$\frac{Global\ GDP\ (\$US\ 45\ trillion)}{Vanuatu's\ GDP\ (\$US\ 1.056\ billion)} \approx \$US\ 42,613.64.$$

- **Estimated Cost in all Developing Countries:**

GDP-Based Estimate: \$US 17 million / year x \$US 42,613.64 ≈ \$US 724.43 billion /year (i.e. cost of implementing Loss and Damage response in all developing countries amounts to \$US 724.43 billion a year to 2030.)

THE PORTION OF GRANTS FOR MITIGATION, ADAPTATION AND LOSS AND DAMAGE

The grant portions for Loss and Damage, Adaptation and Mitigation will be different. For Loss and Damage, we take the moral stance — all Loss and Damage finance should be provided as grants. This is essential to avoid further exaggerating the indebtedness of developing countries, something which is already detracting from national budgets for health, education and other critical infrastructure in developing countries, and in light of the immorality of the expectation that loans to address loss and damage would generate interest that benefit creditors and institutions in developed countries⁵⁶ that are most responsible for the climate crisis. For the arguments variously expressed through out this paper in regards to adaptation and to an extent mitigation, high grant portions will be needed to enable developing countries to secure a climate safe future in light of the fiscal constraints they face. Noting further that developing countries are expected to absorb 75-80%⁵⁷ of the costs of climate change, we propose that 75% of adaptation finance should be in the form of

⁵⁶ Sanchez, I. C., & Botts, J. (May 2024). [A program meant to help developing nations fight climate change is funneling billions of dollars back to rich countries](#). Reuters.

⁵⁷ CARE (2021). Climate Adaptation Finance: Fact or Fiction?

grants to alleviate the significant financial burden and ensure these countries can implement necessary adaptation measures effectively.

As such the required grant amounts can be expressed as follows:

- Loss and Damage: \$US 724.43 billion / year (100% grant)
- Adaptation: Total \$US 1.44 trillion / year (75% as grants = \$US 1.08 trillion)
- Mitigation: Total \$US 4.725 trillion/year (matching adaptation grants = \$US 1.08 trillion / year)

Total Grant Amount = \$US 2,884.43 billion / year

$$\text{Total ODA \%}^{58} = \frac{\text{Total Grant Amount (\$US 2,884.43 billion)}}{\text{OECD - non-Annex 1 (\$US 59,678 billion)}} \approx 4.8\%$$

In 2018, the [Pacific Island Forum](#) leaders articulated in the Boe Declaration: "We reaffirm that climate change remains the single greatest threat to the livelihoods, security, and wellbeing of the peoples of the Pacific and our commitment to progress the implementation of the Paris Agreement.⁵⁹". Indeed, climate change is a threat multiplier and is the single greatest security threat to the world. When we consider that Europe and North America spend 3%⁶⁰ of GDP on fossil fuel subsidies and the US allocates 3.4%⁶¹ of its GDP to military expenditure, dedicating 4.8% to address the world's single greatest security threat seems quite manageable.

⁵⁸ We use the OECD as a proxy subtracting non-Annex 1. Source: [World Bank Data](#) GNI Atlas Method (current \$US in 2023) for OECD Total (63,808,835.26) - Mexico (1,554,336.08) , Costa Rica (72,206.99) , Colombia (357,640.31), Chile (310,627.61), and the Republic of Korea (1,835,475.72) = 59,678,548.55.

⁵⁹ Pacific Island Forum Leaders Declaration (2018). [Boe Declaration on Regional Security](#)

⁶⁰ Black, S., et al. (2023). IMF Fossil Fuel Subsidies Data: 2023 Update. Working paper, IMF, Washington, DC.

⁶¹ Tian, N., et al (2023). [Trends In World Military Expenditure, 2023](#). SIPRI.

Box 1: Making Polluters Pay —Mobilising Funds for Loss and Damage and National Just Transitions

In 2024 the discussion on reform of the international tax system is taking on steam. We live in a deeply divided and unequal world that is being exacerbated by the triple planetary crisis we find ourselves in. There are various methods —some tried and tested such as a levy on aviation⁶²— that can be implemented.

The Climate Damages Tax (CDT) is proposed —in a basket of measures— to help in addressing the significant financial needs associated with climate-induced loss and damage. By levying a tax on the extraction of fossil fuels, the CDT seeks to generate substantial additional revenue by developed countries to be directed into the Fund for responding to Loss and Damage (FLD). The CDT is designed to start at a rate of \$US 5 per tonne of CO₂e, increasing annually, and has the potential to raise \$US 44.6 billion for the FLD in its first year from OECD countries alone. By the end of the decade, this could accumulate to \$US 900 billion, with a significant portion allocated to the FLD and the remainder used for domestic climate action. This approach ensures that those who profit from fossil fuel extraction bear a significant portion of the costs related to climate impacts.

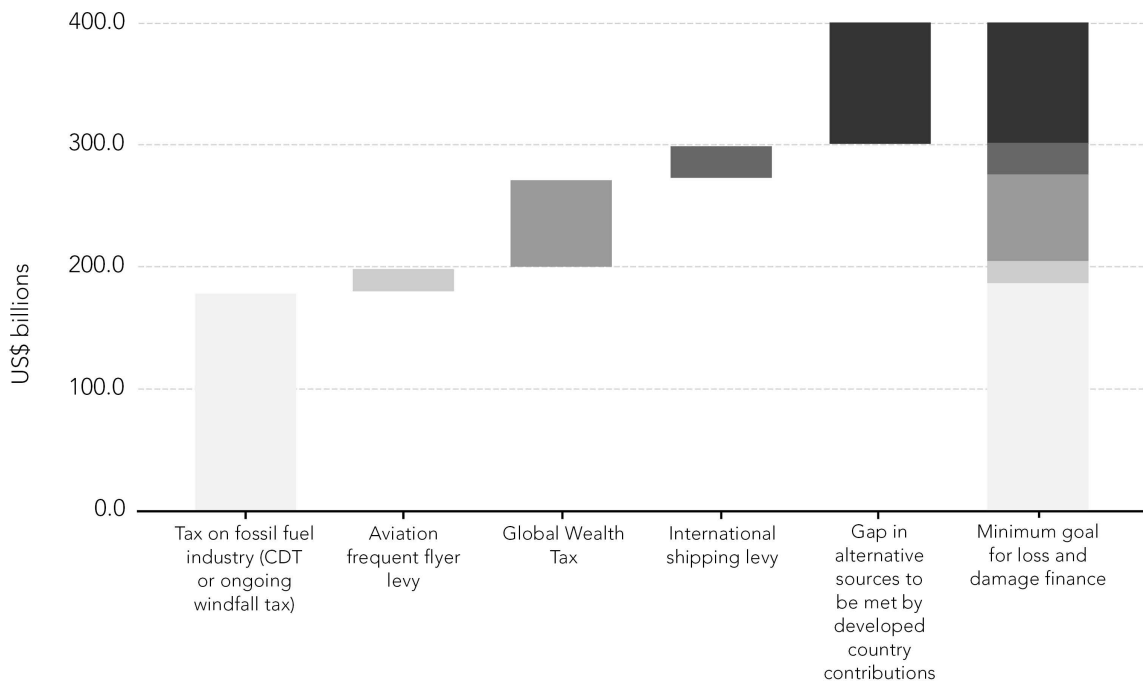
The FLD aims to provide financial resources to developing countries for climate-induced loss and damage. The CDT offers a practical and equitable solution to mobilize these funds, addressing the immense global scale of loss and damage, projected to cost between \$US 290 billion and \$US 580 billion by 2030. By taxing the fossil fuel industry, the CDT not only helps to fund urgent climate action but also incentivizes the transition to renewable energy sources. This ensures that the financial burden of climate impacts is shared more fairly, supporting a more resilient and equitable global response to climate change.

The implementation of the CDT —as part of a broader basket of measures— could significantly strengthen the financial architecture needed to support vulnerable communities.

⁶² Lockley, P., & Chambwera, M. (2011). [Solidarity Levies on Air Travel](#). Oxford Energy and Environment Brief.

The figure below from the Loss and Damage Collaboration and Heinrich Böll Stiftung Washington, DC's "Loss and Damage Finance Landscape" paper⁶³ lays out where the additional money can come from.

Figure 3: Potential sources of finance for the Loss and Damage sub-goal under the NCQG.



CONCESSIONAL FINANCE

Given the increasing frequency and intensity of loss and damage events and the associated escalating costs of addressing its economic and non-economic fallout, it is crucial that finance to address Loss and Damage —whether via the Fund for responding to Loss and Damage, bilateral or other multilateral funds— is equitable. One of the most consistent demands from developing countries is to have access to equitable climate finance that meets their evolving needs and priorities and is of a high-quality.

A crucial piece of the high-quality and equitable climate finance puzzle are the types of financial instruments used to provide and disburse finance e.g. grants, loans, results-based

⁶³Julie-Anne Richards, J. A.,Schalatek, L., Achampong, L and White, H. (2023). [The Loss and Damage Finance Landscape](#). HBS & The Loss and Damage Collaboration.

finance etc. Particularly as developing countries' increasing climate vulnerability, exposure to climate impacts and the escalating nature of loss and damage has resulted in higher borrowing costs and interest rates^{64,65}, which in turn reduces their long-term fiscal stability and capacity to invest in climate-resilient public services. Indeed, research for the IMF has highlighted that for Small Developing States (SDS) with Climate Vulnerabilities “following frequent climate-related disasters, the debt levels quickly increased through the impact of these events on SDS economies and [new] debt contracted to finance reconstruction efforts”⁶⁶. Despite these conclusions, climate finance is overwhelmingly provided as loans that increase their debt burdens. According to OECD data⁶⁷, in 2022 “developed countries’ public climate finance provided bilaterally and through multilateral channels mainly took the form of loans (69% or \$US 63.6 billion) and, to a lesser extent, grants (28% or \$US 25.6 billion)”. An analysis by Reuters⁶⁸ further shows that developed countries have loaned at least \$18 billion at market rates. Additionally, \$11 billion in loans required recipients to hire or purchase from the lending countries, and \$10.6 billion in grants had similar conditions. This practice funnels significant funds back to the lenders’ economies, undermining the goal of aiding developing nations.

It is crucial that all finance providers assess the suitability of finance instruments before choosing to use that instrument. A consistent demand has been for the NCQG to prioritise grants and highly-concessional loans, in the same way that the Fund for responding to Loss and Damage does⁶⁹. This is a demand for equity, because the Global South has contributed the least to causing climate change, yet are disproportionately affected by it and often have the least financial means to address it. Equitable climate finance is about addressing the climate-debt left to the Global South by the Global North, without increasing their national debt or destabilising their fiscal stability or capacity to invest in climate-resilient public services.

⁶⁴ Donovan, C., (2018). [Developing Countries Are Paying Twice for Climate Change](#). Imperial College Business School, London

⁶⁵ Ramos, L. et al., (2022) [V20 Debt Review: An account of debt in the Vulnerable Group of Twenty](#). Boston University - Global Policy Development Center

⁶⁶ Tiedemann, J. et al. (2021). [Meeting the Sustainable Development Goals in small developing states with climate vulnerabilities: Cost and financing](#). IMF Working Paper, No. 2021/062, International Monetary Fund, Washington, DC

⁶⁷ OECD, (2024). [Climate Finance Provided and Mobilised by Developed Countries in 2013-2022, Climate Finance and the 100 Billion Goal](#). OECD Publishing, Paris

⁶⁸ Sanchez, I. C., & Botts, J. (May 2024). [A program meant to help developing nations fight climate change is funneling billions of dollars back to rich countries](#). Reuters.

⁶⁹ Paragraph 57 of the Governing Instrument provides guidance on financial instruments as follows: “The Fund will provide financing in the form of grants and highly concessional loans on the basis of the Board’s policy for the provision of grants, concessional resources and other financial instruments, modalities and facilities...”

The AOSIS submission⁷⁰ lays out what concessionality should involve and should guide deliberations:

- Transactions must be in forms such as grants, concessional loans, or instruments creating fiscal space [*from the perspective of the Loss and Damage Collaboration and PICAN these should only be justice-aligned instruments that do not further debt burdens of developing countries*].
- Minimum concessional financial terms:
 - Interest rate: 1% or below (fixed).
 - Grace period: 5 years or above.
 - Maturity period: 20 years or above.
 - Charges or fees: 1.5% or below.
 - Mandatory inclusion of climate resilience debt clauses.
- Concessionality levels must consider the debt servicing capacity of developing countries, especially LDCs and SIDS.
- Adaptation and Loss and Damage finance should be primarily public and grant-based with the highest level of concessionality for LDCs and SIDS.

BURDEN SHARING

Developed countries disproportionate contribution to emissions —having emitted 92% of excess emissions⁷¹— coupled with the spatial distribution of committed damages⁷² reveals significant injustice, with countries having smaller historical emissions and lower current income per capita suffering the most, despite being least responsible for climate change and having the fewest resources to adapt and respond to growing impacts.

The Polluter Pays Principle (PPP) —a cornerstone of environmental law emphasised under Article 3.1 of the UNFCCC— dictates that those who cause pollution should bear the costs

⁷⁰ [New Collective Quantified Goal on Climate Finance – Draft Elements](#), AOSIS. Also refer to: [Joint Statement & Submission By The Least Developed Countries and Alliance Of Small Island Developing States Groups On The New Collective Quantified Goal On Climate Finance \(NCQG\) \(June, 2024\)](#).

⁷¹ Hickel, J. (2020). [Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary](#). *The Lancet Planetary Health*, 4(9), e399-e404.

⁷² Kotz, M., Leverman, A., & Wenzel, L. (2024). [The Economic Commitment of Climate Change](#). *Nature*.

of its remediation. In the context of climate change, this principle places the primary responsibility for climate finance on developed countries due to their historical and ongoing disproportionate contribution to greenhouse gas emissions. As Lindhout and Van den Broek⁷³ articulate, "the polluter pays principle is a manifestation of the principle of equity or 'fairness' principle... as it holds the polluter accountable for the pollution he has created in order to avoid passing on costs to third parties who did not contribute to the creation of the pollution."

This historical responsibility is not merely an ethical consideration but is deeply embedded in international environmental law. The UNFCCC, Kyoto Protocol, and the Paris Agreement all acknowledge the historical emissions of developed countries and their obligation to provide financial resources to developing nations to address climate change. Ringius et al.⁷⁴ further emphasise that "the norms of responsibility and capacity imply that developed countries should bear the brunt of the burden of climate control."

TRANSPARENCY AND ACCOUNTABILITY

Transparency and accountability are foundational to the NCQG and are essential for ensuring that climate finance commitments are met and utilised effectively. These principles help maintain trust among parties by providing a clear mechanism for tracking financial flows, assessing progress, and identifying areas for improvement. Without transparency and accountability the integrity of climate finance is compromised, potentially leading to misallocation of funds and unmet climate goals and to the further erosion of trust that the non-delivery of the US\$100 billion has set in motion.

There are many lessons learnt that can be applied to enhance transparency. Firstly, annual progress reports should be mandatory for all parties, detailing financial contributions and fund utilisation. Standardised reporting is necessary for comparability and comprehensive assessment of progress across different countries and regions. Secondly, financial reports must include disaggregated, mandatory information, clearly distinguishing between grants, loans, and other financial instruments. We go further to add that data granularity ought to be reflected including gender-disaggregated, intersectional data which would also contribute to

⁷³ Lindhout, P. E., & Van den Broek, B. (2014). [The polluter pays principle: Guidelines for cost recovery and burden sharing in the case law of the European court of justice](#). *Utrecht Law Review*, 46-59.

⁷⁴ Ringius, L., Frederiksen, P., & Birr Pedersen, K. (2002). [Burden sharing in the context of global climate change. A North-South perspective](#). National Environmental Research Institute - Denmark.

the meaningful implementation of the [Gender Action Plan](#)⁷⁵. This level of detail prevents the overstatement of contributions and provides clarity on the types of financial support provided as well as the equitable distribution of financial resources at the local level. Additionally, regular independent audits are essential to verify the accuracy of reported data and assess the effectiveness of fund allocation.

To ensure accountability, the NCQG should implement several mechanisms. A clear, universally accepted definition of climate finance is crucial to prevent the overstatement of financial contributions and ensure clarity about what qualifies as climate finance. Implementing a robust system for tracking financial flows and reporting is also necessary. This system should leverage existing frameworks, such as the UNFCCC's Biennial Transparency Reports, but with enhanced granularity and frequency to improve monitoring and evaluation. Furthermore, midterm and end-of-goal reviews should be conducted to assess progress and make necessary adjustments. These reviews should be based on comprehensive data and involve consultations with all stakeholders, including civil society organisations and vulnerable communities, to ensure inclusivity and broad-based support.

Ensuring that the financial burden is shared equitably among developed country parties is a critical aspect of accountability. Contributions should align with countries' historical emissions and capabilities as per the Convention and Paris Agreement.

ACCESS ENHANCEMENT

Another significant issue is that of access. There are many dimensions to this with traditional financial mechanisms as well as existing climate finance mechanisms often creating barriers to accessing funds, impeding equitable resource distribution. This applied to private entities as well. For example, in a recent article It was shown that climate vulnerability increases firms' cost of capital and financial exclusion, highlighting an under-appreciated economic cost for developing economies. This higher financing cost restrains economic growth, reduces tax revenue, and limits government investments in infrastructure and adaptation, creating a vicious circle that exacerbates vulnerability and economic disadvantages without international support to break the cycle. At COP26 the [Taskforce on Access to Climate Finance](#) was launched to try and respond to the issues of access that developing countries were facing namely: slow, complex, resource intensive and highly projectized. The Taskforce

⁷⁵ UNFCCC.[CP.23 Gender Action Plan](#)

identified 5 core principles⁷⁶ for access which are as follows: Country Ownership; Harmonisation of Processes and Alignment of Finance; Responsiveness to Country Needs and Climate Vulnerability; Flexibility and Innovation; and Transparency and Accountability.

The issue of access can be bolstered through novel solutions, one of which is the evolution of the internet to its next generation —Web3⁷⁷— and the technologies it offers, namely blockchain. While blockchain and Web3 technologies offer potential solutions to these challenges, through a prioritisation of decentralisation, transparency and accountability⁷⁸, a critical lens rooted in climate justice is essential to avoid replicating existing power imbalances and ensure these technologies genuinely enhance access to climate finance⁷⁹.

Blockchain's immutable ledger and smart contracts hold promise for transparent and auditable financial transactions, potentially increasing trust and integrity. However, transparency alone does not guarantee equitable access. Power asymmetries in data ownership and access could further marginalise vulnerable communities. Through frameworks of Decentralised Science⁸⁰ (DeSci) and Regenerative Finance⁸¹ (ReFi) community-led data governance and bottom-up led finance coordination models that prioritise local knowledge and decision-making, ensuring that transparency mechanisms actually benefit those most in need.

Developing countries are at the seat of innovation around Web3 and blockchain. Decentralised ledgers and finance (DeFi) platforms⁸² enabled by Web3, have the potential to democratise access to data and capital, theoretically bypassing traditional gatekeepers of climate finance. Decentralised Autonomous Organisations (DAOs) offer a potential model for inclusive governance that could democratise decision-making processes in climate finance. This could address historical power imbalances and ensure that the voices of those most impacted by climate change are heard. However, the success of DAOs in achieving

⁷⁶ FCDO. (2021). [The Taskforce on Access to Climate Finance](#)

⁷⁷ Web3 is a term used to describe the next iteration of the internet, which incorporates concepts such as decentralization and blockchain technologies.

⁷⁸ Ray, P. P. (2023). Web3: [A comprehensive review on background, technologies, applications, zero-trust architectures, challenges and future directions](#). Internet of Things and Cyber-Physical Systems, 3, 213-248.

⁷⁹ In its nascent state, grounding Web3 and AI in justice is critical. Actors are applying the technology to climate action, but this cannot be rudderless from rights and justice. The Loss and Damage Collaboration is unpacking this emergent technologies application to Loss and Damage through ideas labs bringing together Web3 and Climate Change experts to ideate around issues and potential solutions. Please contact sindra@lossanddamagecollaboration.org to join the discussion

⁸⁰ [DeSciWorld](#)

⁸¹ [ReFiDAO](#)

⁸² Schulz, K., & Feist, M. (2021). [Leveraging blockchain technology for innovative climate finance under the Green Climate Fund](#). Earth System Governance, 7, 100084.

equitable access hinges on equitable participation and power-sharing. A critical lens demands robust mechanisms to ensure diverse representation, prevent elite capture, and prioritise the needs of marginalised communities in accessing climate finance.

We note that without intentional design, these platforms risk reinforcing existing inequalities. High barriers to entry, such as technological literacy and financial resources, could exclude those most in need of climate finance. A just transition requires capacity building and accessible interfaces that empower marginalised communities to participate meaningfully in these new financial ecosystems. There is a clear opportunity space here with the digitalisation aspirations articulated in the Antigua and Barbuda Agenda for SIDS: A Renewed Declaration for Resilient Prosperity⁸³, which lays out the next decade of action for SIDS as well as by the African Union in their Digital Transformation Strategy for Africa (2020-2030)⁸⁴.

The nascent Web3 ecosystem presents a unique opportunity to shape technology with equitable access as a core principle. A climate justice-oriented Web3 would prioritise open-source solutions, community ownership, and regenerative economic models that expand access to climate finance for developing countries, also allowing for transparency and traceability in a manner that has been lacking with current processes.

THE WAY FORWARD

The alignment across the submission on Draft Elements made by AOSIS and the elements featured in the closing statement of the G77 and China at the close of SB60 provides clear guidance for the way forward on the text for the NCQG. We note that there are many areas of convergence in developing country submissions, most recently including that of the Arab Group at SB60⁸⁵. Key elements where there is convergence—as highlighted in the table⁸⁶ below—include:

- Support for all developing countries;

⁸³ [Antigua and Barbuda Agenda for SIDS: A Renewed Declaration for Resilient Prosperity](#), Fourth International Conference on Small Island Developing States

⁸⁴ [The Digital Transformation Strategy for Africa \(2020-2030\)](#), African Union.

⁸⁵ [MAHWP2 Written inputs: Arab Group](#)

⁸⁶ Please refer to our live NCQG tracker [here](#) where we capture all submissions

- An NCQG in accordance with the principles and provisions of the Convention and the Paris Agreement, delivered by developed countries to developing countries based on the principles of equity and common but differentiated responsibilities;
- An NCQG focused on Developing Countries' Needs;
- Allocations/subgoals for Mitigation, Adaptation and Loss and Damage;
- Finance provided in the form of grants and concessional loans; and;
- Developing countries have made meaningful proposals on the quantum for the NCQG.

AOSIS SUBMISSION KEY ELEMENTS⁸⁷	ELEMENTS FEATURED IN THE SB60 G77 CLOSING STATEMENT
<p>The submission covers ALL developing countries and also articulates specific provisions for the most vulnerable. It specifies that the 'NCQG must aim to support all developing country Parties in effectively implementing the Paris Agreement'. Furthermore, 'Climate finance provided and mobilised must be 'new and additional' to any finance classified as official development assistance (ODA) and other official flows (OOF)'.</p>	<p>The 'NCQG must aim to support all developing country Parties in effectively implementing the Paris Agreement'.</p>
<p>Reaffirming of the commitments by all Parties to accelerate climate action within this decade, based on the best available science, equity and CBDR RC-NC including transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner, as well as undertaking rapid reductions in accordance with the best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases well before 2050. Also, an affirmation that collective quantified goal aims to support developing country Parties in effectively implementing the Paris Agreement within the context of these commitments.</p>	<p>The NCQG must be in accordance with the principles and provisions of the Convention and the Paris Agreement, meaning that the goal must be delivered by developed countries to developing countries based on the principles of equity and common but differentiated responsibilities.</p>

⁸⁷ [New Collective Quantified Goal on Climate Finance – Draft Elements](#), AOSIS. Also refer to: [Joint Statement & Submission By The Least Developed Countries and Alliance Of Small Island Developing States Groups On The New Collective Quantified Goal On Climate Finance \(NCQG\) \(June, 2024\)](#).

<p>Support for Developing Countries' Needs:</p> <ul style="list-style-type: none"> ● Quantum of Finance: <ul style="list-style-type: none"> ○ At least \$US [XXX] trillion per year in grant-equivalent terms of new, additional, predictable, and adequate climate finance. ○ At least \$US [XXX] trillion per year through public interventions. 	<p>Developing Countries' Needs</p>
<p>Allocations:</p> <ul style="list-style-type: none"> ● Mitigation: [XX]% of the goal. ● Adaptation: [XX]% of the goal, with significant proportions flowing through the Financial Mechanism, Adaptation Fund, LDC Fund, and Special Climate Change Fund. ● Loss and Damage: [XX]% of the goal, with significant proportions flowing through the Fund for responding to Loss and Damage. ● Readiness Support: [X]% of the goal. ● Transparency Provisions: [X]% of the goal. 	<ul style="list-style-type: none"> ● Mitigation ● Adaptation ● Loss and Damage
<p>Concessional Finance:</p> <ul style="list-style-type: none"> ● Transactions must be in forms such as grants, concessional loans, or instruments creating fiscal space <i>[from the perspective of the Loss and Damage Collaboration and PICAN these should only be justice-aligned instruments that do not further debt burdens of developing countries]</i>. ● Minimum concessional financial terms: <ul style="list-style-type: none"> ○ Interest rate: 1% or below (fixed). ○ Grace period: 5 years or above. ○ Maturity period: 20 years or above. ○ Charges or fees: 1.5% or below. ○ Mandatory inclusion of climate resilience debt clauses. <p><i>[From the perspective of the Loss and Damage Collaboration and PICAN, maturity periods can be extended further for LDCs and as accelerated, compounding impacts evolve for SIDS and highly vulnerable developing country regions.]</i></p> <ul style="list-style-type: none"> ● Adaptation and Loss and Damage finance should be primarily public and grant-based with the highest level of concessionality for LDCs and SIDS. 	<ul style="list-style-type: none"> ● Transactions must be in forms such as grants, concessional loans

<p>Predictability and Transparency:</p> <ul style="list-style-type: none"> • Annual progress reports and transparency arrangements to ensure disaggregated information on finance. • Fair, just, and equitable burden sharing based on historical emissions. 	
<p>Access Enhancement:</p> <ul style="list-style-type: none"> • Simplification and harmonisation of approval procedures. • Standardisation and prioritisation of direct access modality for all channels, including local NGOs and community-based organisations. • Enhanced direct access support, especially for LDCs and SIDS. <i>[noting that this simply operationalises the provision in Articles 9.4 and 9.9 of the Paris agreement. The continued delay in the operationalisation of these Articles are a critical failure in the delivery of climate finance to the most vulnerable.]</i> 	
<p>International Financial Architecture Reform:</p> <ul style="list-style-type: none"> • Urgent reform to ensure debt sustainability and address high capital and transaction costs. • Expand debt suspension to include debt forgiveness and servicing assistance. 	
<p>Review Mechanisms:</p> <ul style="list-style-type: none"> • Midterm review in 2030 and end-of-goal review in 2034 to adjust the quantum of finance based on evolving needs. <i>[From the perspective of the Loss and Damage Collaboration and PICAN, the review mechanism for the NCQG should be aligned with the Global Stocktake (GST). Therefore, the GST can serve as an effective review mechanism for the NCQG.]</i> 	

Furthermore, developing countries have made meaningful proposals on the quantum for the NCQG, in order for discussion to progress, we expect developed countries to arrive at TED 11 with concrete proposals for the quantum.

Failure to take into proper consideration the needs and priorities of developing countries, a objective clearly mandated under the NCQG, will not only disregard the needs of [over 130](#) developing countries⁸⁸ under the G77 and China which make up two thirds of the world's population, but also perpetuate, through the denial of climate finance, the same climate inaction that has lead to countless and unnecessary suffering as a result of loss and damage.

Ultimately, there can be no climate action without climate finance. Without an NCQG that mobilises the trillions of dollars needed by developing countries to ensure that they can avert loss and damage through mitigation, minimise loss and damage through adaptation, and address the residual loss and damage that could not be avoided, loss and damage presents an existential threat to all developing countries, particularly LDCs and SIDS, and the 1.5C temperature goal of the Paris Agreement will not be met.

A truly sustainable future requires a generational project focused on investing in state capacity and localised action. This entails a more holistic approach that goes beyond financial commitments and addresses the underlying systemic issues that perpetuate vulnerability to climate change. The choices we make now have an impact on the generations to come. There is a duty of care, enshrined in international law, that States must uphold for these future generations. Climate finance must uphold this concept which asserts that present actions should not compromise the ability of future generations to meet their needs. The 1987 Brundtland Commission defines sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs."⁸⁹ This necessitates a robust justice aligned financial commitment now across the three pillars of climate action. We can learn a lot from indigenous knowledge holders. There is a Native American proverb: We do not inherit the Earth from our ancestors; we borrow it from our children.

⁸⁸ [Member States of the Group of 77](#), The G77 and China.

⁸⁹ CIEL. (2017). [Submission to the UN Special Rapporteur on Human Rights and the Environment](#)

Professor Asesela Ravuvu once said: “The size and value of a vale [house] is determined by social usage and the effort and support received during its construction.”⁹⁰ The NCQG is necessary for all the reasons mentioned in the paper. A sustainable NCQG should not just consider who benefits from it at the end, but also who is supporting it at its inception.

⁹⁰ Lee, S., Nabobo-Baba, U., Kinikini-Kauvaka, L. L., & Rehuher-Marugg, F. K. (2014). [Traditional knowledge and wisdom: themes from the Pacific Island](#). ICHCAP.