Centre for Science and Environment

A CSE COP28 BRIEFING PAPER

THE FIRST GLOBAL STOCKTAKE

KEY DEBATES AND THE WAY FORWARD

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KEY DEBATES AND THE WAY FORWARD

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1. The Global Stocktake Process

Established under Article 14 of the Paris Agreement (*see Box*), the Global Stocktake (GST) aims to serve as an evaluation of countries' progress towards global climate action. In 2015, countries agreed on concluding the first GST in 2023, with the process repeating every five years. It was mandated that the Conference of Parties agree to conduct the GST "in a comprehensive and facilitative manner, considering mitigation, adaptation and means of implementation and support, and in the light of equity and the best available science".[1]

Under the Paris Agreement, 196 countries have agreed to limit global temperatures to well below 2°C compared to pre-industrial levels and preferably under 1.5°C. As of 2022, scientists have confirmed that global temperatures have crossed 1.1°C above pre-industrial numbers.[2] Reports of growing mistrust between developed and developing countries and worsening climate change impacts make the GST not just a mirror to countries' progress but a defining moment for equitable climate action over the next decade.

Article 14

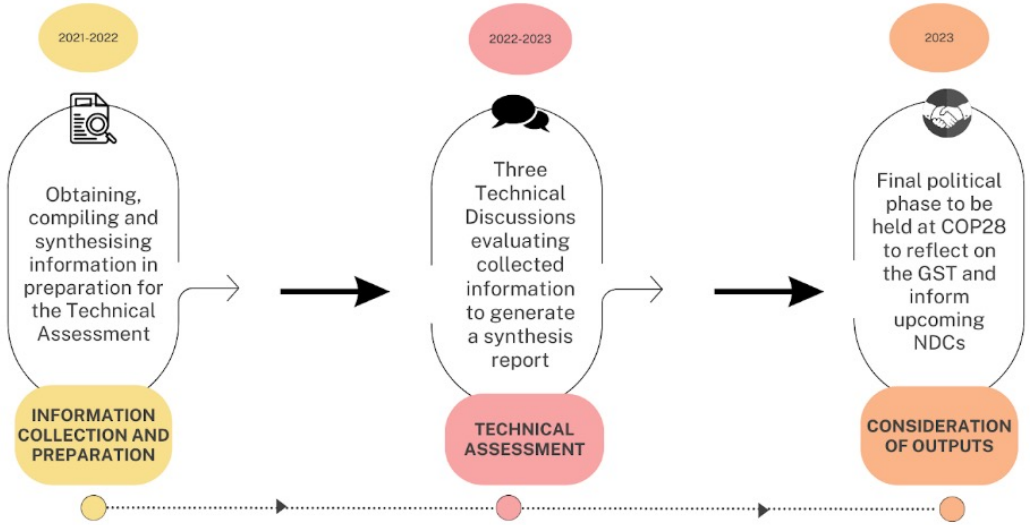
1. The Conference of the Parties serving as the meeting of the Parties to this Agreement shall periodically take stock of the implementation of this Agreement to assess the collective progress towards achieving the purpose of this Agreement and its long-term goals (referred to as the "global stocktake"). It shall do so in a comprehensive and facilitative manner, considering mitigation, adaptation and the means of implementation and support, and in the light of equity and the best available science.

2. The Conference of the Parties serving as the meeting of the Parties to this Agreement shall undertake its first global stocktake in 2023 and every five years thereafter unless otherwise decided by the Conference of the Parties serving as the meeting of the Parties to this Agreement.

3. The outcome of the global stocktake shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of this Agreement, as well as in enhancing international cooperation for climate action.

Source: UNFCCC

Figure 1: A representation of the GST process as mandated by the UNFCCC



Source: CSE, based on UNFCCC

The GST is unique, given that it is one of the rare occurrences of assessing commitments put forth under the United Nations Framework Convention on Climate Change (UNFCCC).[3] It involves discussions between countries, experts, civil society organisations (CSOs) and United Nations bodies, making it different from the Assessment Reports published by Intergovernmental Panel on Climate Change (IPCC) where scientific experts put forth their observations. In short, the GST combines scientific findings with ground observations (*see Figure 1*).

The Technical Discussions phase of the GST is segregated across three key themes of:

- Mitigation, including response measures
- Adaptation, including loss and damage
- Means of implementation including finance, technology transfer and capacity building

On September 8, 2023, the release of the Synthesis Report for the Technical Assessment of the First Global Stocktake marked the end of the second phase[4]. The report summarised over 250 hours of discussions and gave five stark but unsurprising findings:

- The world is not on track to meeting global climate targets and the window to course correct is narrowing.

- Phasing out all unabated fossil fuels and scaling up renewable energy are critical to just energy transition.
- More ambitious emission reduction targets are needed from all countries with the developed world leading the way.
- Climate change is eroding human development gains and without adaptation, such gains will be unachievable in the future.
- Financial flows from developed to developing countries need to be rapidly scaled up.

At the 28th Conference of Parties (COP28) in Dubai, United Arab Emirates, in December 2023, the final **political phase** may seek new, more informed targets under mitigation, adaptation and finance from countries. The real challenge comes after this. A negotiator instrumental in conceptualising the GST said that during formulation, there was a difference in opinion on how the GST will factor into climate targets. While some thought the GST outcomes should provide direction to new ambitions from countries, others cited the right to national sovereignty and making decisions independently. As of now, clarity on the outputs of the GST process is still being sought by negotiators. Whether or not the GST will lead to renewed targets or zeal for implementation is yet to be seen.

2. The Key Debates

Being the first ever assessment of its kind, it is difficult to establish what a positive outcome of the GST would entail. Participants of the Technical Phase have some expectations from the final round of discussions, which have been provided to the UNFCCC as submissions from February 2023 onwards. Key negotiating blocs including the Like-Minded Developing Countries (LMDCs), Least Developed Countries (LDCs), G77 and China, BASIC (Brazil, South Africa, India, China) and African Group of Negotiators (AGN), Alliance of Small Island States (AOSIS) and Argentina, Brazil, Uruguay (ABU), have made submissions along with individual countries and regions like the USA, UK, Australia and EU.

In September 2023, the UNFCCC released a synthesis report on submissions made by countries outlining broad differences on topics.[5] During our discussions with negotiators, however, we also learnt that not all countries are happy with this report – they say the assessment is imbalanced.

While the different contexts of the Global North versus the Global South issue lead to differing perspectives on climate change concerns, consensus is crucial in this decade as the window to rapidly reduce GHG emissions by 2030 is closing. The GST process revealed the many existing debates with predictable opponents on each side that are holding us back from equitably furthering climate ambition (*see Table 1*).

On Mitigation

Mitigation refers to the efforts made by countries to reduce their greenhouse gas (GHG) emissions at the source and to enhance the removal of previously emitted GHGs. In its key findings, the GST Synthesis Report has determined that current approaches to mitigation are not enough to meet the Paris Agreement goal of limiting global average temperatures to 1.5°C and countries need to have more ambitious targets to achieve it.

Mitigation targets are a central focus in each country's Nationally Determined Contributions (NDCs), where they detail the number of emissions they plan to reduce by a certain timeline — usually 2030 — against a baseline reference year. When these targets are assessed, under a comprehensive process like the GST, several differences crop up between countries. The first and most contentious is that of historical emissions and responsibility.

Table 1: An overview of Country and Negotiating Bloc positions on key discussion points in the GST

	Evaluating the Kyoto Protocol		Equity in Mitigation		Adaptation	Loss and Damage		Climate Finance			Fossil Fuels		IPCC Pathways
Negotiating Blocs/ Countries	Address Pre-2020 Gaps	Focus on post-2020	Consider Historical Emissions	Consider Current Emissions	Double Finance	Separate With Own Fund	Mention of Cross Cutting	Emphasize No Debt/ Public Finance	Emphasize Private Finance	Focus on A2.1c	Support All Fossil Fuel Phase Down	Support Unabated Phase Down	Emphasis on Inequitable Models
LMDC	■		■		■	■		■					■
USA		■		■			■		■	■		■	
G77 + China	■		■			■		■					
Australia				■			■		■	■		■	
EIG		■		■	■		■		■	■		■	
LDCs					■	■		■			■		
AOSIS	■		■		■	■		■			■		
AGN	■		■		■	■		■				■	■
China	■		■		■	■		■					■
UK		■		■	■		■		■	■		■	
Japan		■		■					■	■		■	
Russia				■					■			■	
South Africa	■					■		■					■
EU				■			■		■	■		■	
AILAC				■	■	■		■			■		
ABU	■		■										
Arab States	■		■		■	■							
BASIC	■		■										■
India	■		■		■	■		■					■
Norway					■		■		■	■		■	
Nepal					■	■							
New Zealand				■	■	■		■		■		■	
Canada		■		■					■	■		■	

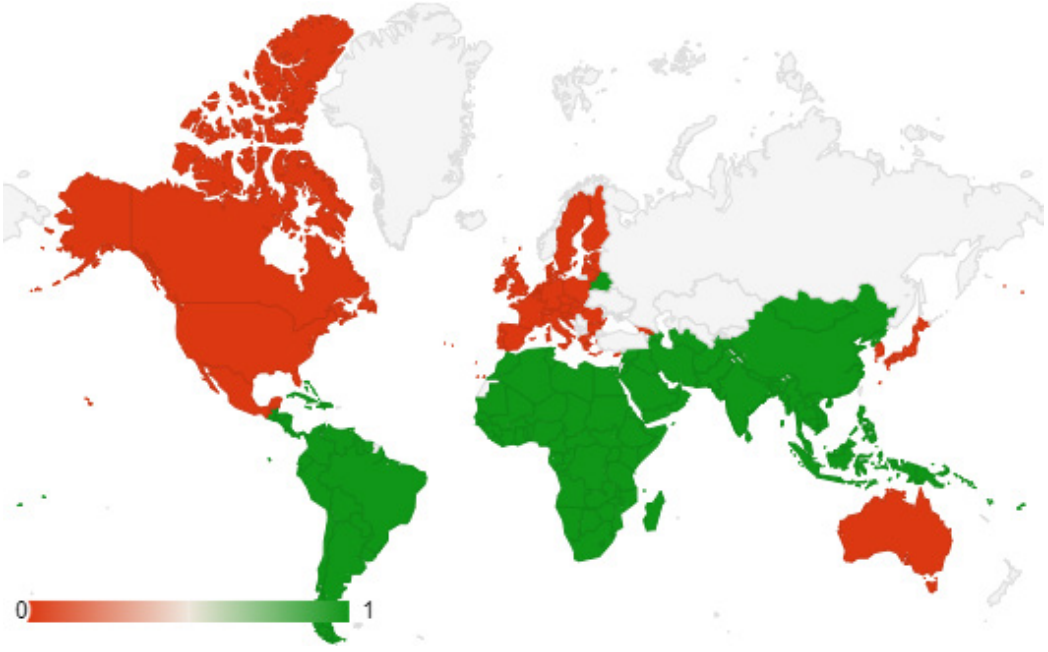
Note: ■Green denotes support for the issue. ■ Red denotes Russia which is vocally against talking about fossil fuel phaseout; ■ Orange denotes AGN which is of the view that developed countries should lead with fossil fuel phaseout while the developing should be able to expand fossil fuel explorations. Source: CSE, based on UNFCCC submissions in February and September 2023 for GST outcomes

Pre-2020 gaps from the Kyoto Protocol

- Top supporters for addressing pre-2020 gaps: LMDC, BASIC, AGN, G77 and China, LDC
- Top supporters for focusing on post-2020 action: USA, Australia, Environmental Integrity Group (EIG), Japan

Map 1: A geographical representation of country positions

Green denotes those regions emphasising pre-2020 gaps in GST, while red denotes those focusing on post-2020 action. Uncolored regions had no specific mention



Source: CSE, based on UNFCCC submissions in February and September 2023 for GST outcomes

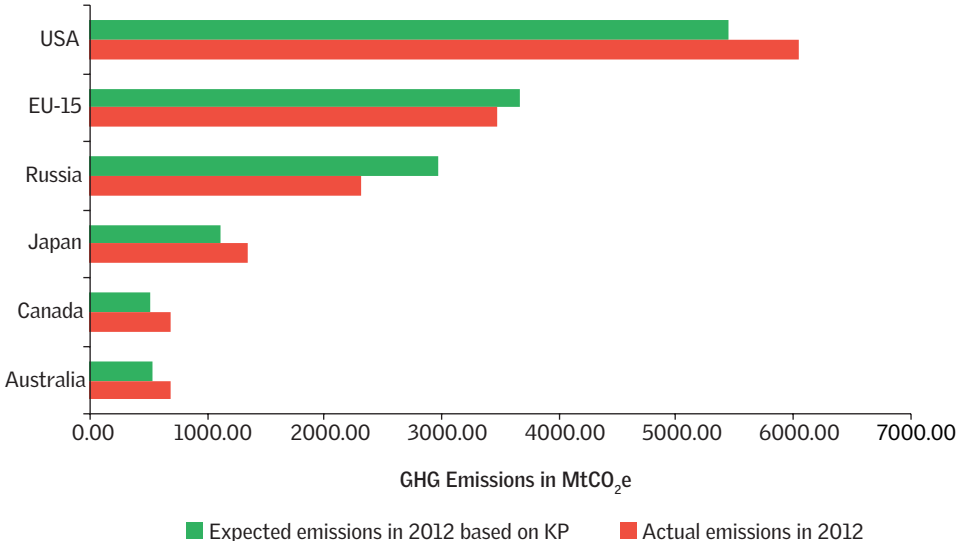
The principle of 'Common but Differentiated Responsibility' (CBDR), established under the UNFCCC, recognises that while all countries are responsible for acting on climate change, their historical obligations are different.[6] The Kyoto Protocol and its Doha Amendment attempted to formalise stricter targets on the biggest emitters – listed in Annex I of the Protocol — based on this principle.[7]

However, disagreements over the listing of Annex I countries led to key players like USA, Canada, Japan and Russia not complying, and today, two years since the 2020 timeline, the Kyoto targets remain unfulfilled (*see Graph 1*). This has set the stage for debates about whether this failure from developed countries should be specifically addressed in the GST.

In recent GST submissions most developing countries, including India and South Africa, demand that the GST assesses pre-2020 failures by developed countries.

Graph 1: Assessing the progress of historical emitters on the first timeline of Kyoto Protocol

The UK was still a part of EU-15 when the Protocol was introduced. Emissions data excludes LULUCF



Source: Climate Watch, UNFCCC, CSE Analysis

Developed countries like USA, Japan and UK on the other hand, stress that the rise of emissions since 2019 has seen emerging economies significantly contributing and therefore, the GST should focus on the future, instead of looking towards the past.

In recent times, there have also been growing questions around the principles of CBDR and historical responsibility themselves from countries like Germany, which argue that the world needs to move past the bifurcation of "developed" and "developing" set in 1992. Some Global South groups such as AILAC (Independent Association of Latin America and the Caribbean) have stated that the focus on pre-2020 is only stalling discussions and delaying the GST outcomes.

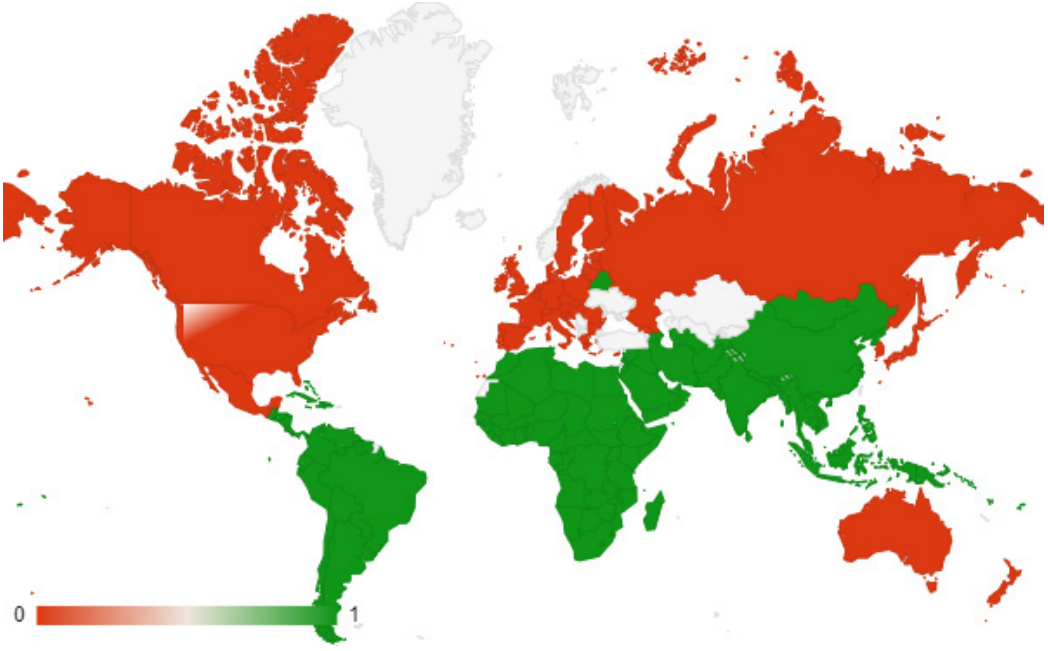
Herein lies a fundamental concern of rich countries pushing the burden to act on to emerging economies, the very thing CBDR sought to protect against. Had the developed countries with the economic capacity to do so achieved the targets meted out to them under the Kyoto Protocol, the developing countries would have had the time to take up their fair share of the global carbon budget while planning just transitions away from fossil fuels. Instead, emissions of Annex I countries have continued to rise as have global temperatures and the blame on those just beginning to reach emissions levels that the Global North reached in the 20th century.

Equity in the global carbon budget

- Top supporters for focus on historical emissions: LMDC, BASIC, AGN, G77 and China, LDC
- Top supporters for focus on emerging emissions: USA, UK, Russia, Australia, EU, Japan

Map 2: Geographical representation of country positions

Green denotes those regions which are for sticking to historical emissions as a basis for equity in the GST; red denotes those which are for focusing on current emitters. Uncolored regions had no specific mention

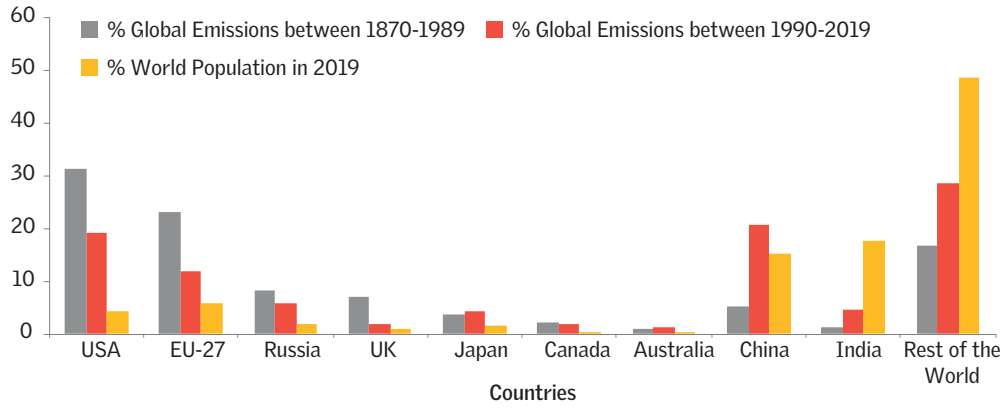


Source: CSE, based on UNFCCC submissions in February and September 2023 for GST outcomes

Then emerges a bone of contention over another principle under the UNFCCC, that of "equity". It acknowledges that historical emitters have used up a majority share of the Global Carbon Budget (GCB)[8], and developing countries must be allowed to use the remaining budget. This remains the overarching perspective of the developing nations including emerging economies like India and newly developed economies like China.

We were also told by negotiators from the Global South that many countries were still under colonial rule until this century and it is unfair to pin national responsibility of their emissions on the independent governments today. However, historical emitters like the USA have begun to refer to the emissions boom from emerging economies in recent years and how they are not taking advantage of

Graph 2: A comparison of pre-1990 and post-1990 emissions from top contributors alongside their global population shares



Source: CSE Analysis and Climate Watch

the low-carbon alternatives available today. Essentially, historical emitters are putting forth the argument that they were developing at a time when low-emission pathways were not a known option, therefore, "equity" means they still have a share in the GCB.

When the numbers of historical and recent emissions are visualised, it becomes evident that while developed countries may not have had access to low emission alternatives, they had the leeway to develop without scrutiny. They are now scrutinising developing countries which are just beginning to accelerate emissions compared to pre-1990 levels (*see Graph 2*).[9] Factor in the current state of global population shares and it becomes even more evident that the entire principle of 'equity' can be skewed when it overlooks the fact that a minority of the population are responsible for more than half of global emissions even today.

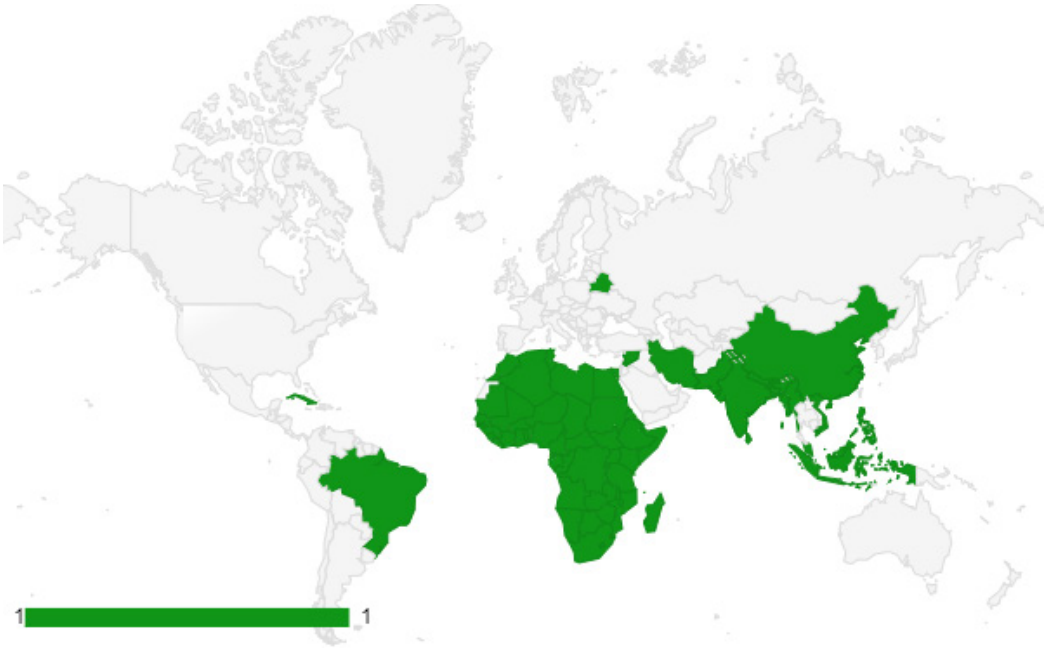
An inequitable burden on developing countries can therefore not only mean injustice in terms of their right to development but can also pose threats to the overall well-being of a massive population.

The IPCC pathways

- Supporters for acknowledging inequity in IPCC models: LMDC, BASIC, AGN

Map 3: Geographical representation of countries pointing to the inequity of IPCC models

Green denotes those showing acknowledgement. Uncolored denotes no position taken



Source: CSE, based on UNFCCC submissions in February and September 2023 for GST outcomes

The GST process is mandated to take place with considerations of equity and the "best available science"[1], referring to the scientific observations put forth by the IPCC. A key element of the IPCC's reports is that of suggested pathways, offering insight into the routes that can be taken for rapid decarbonisation to meet the Paris Agreement Goal.[10]

These insights are based on expected scenarios or 'what the world could look like' at different levels of global temperatures, generated by Integrated Assessment Models (IAMs). The IAMs are based on scientific factors combined with human and economic levers that interact together.[11]

These interactions, however, can be flawed, as some scientists have pointed out.[12] Insights show the projection-based approach of the IPCC pathways assumes that

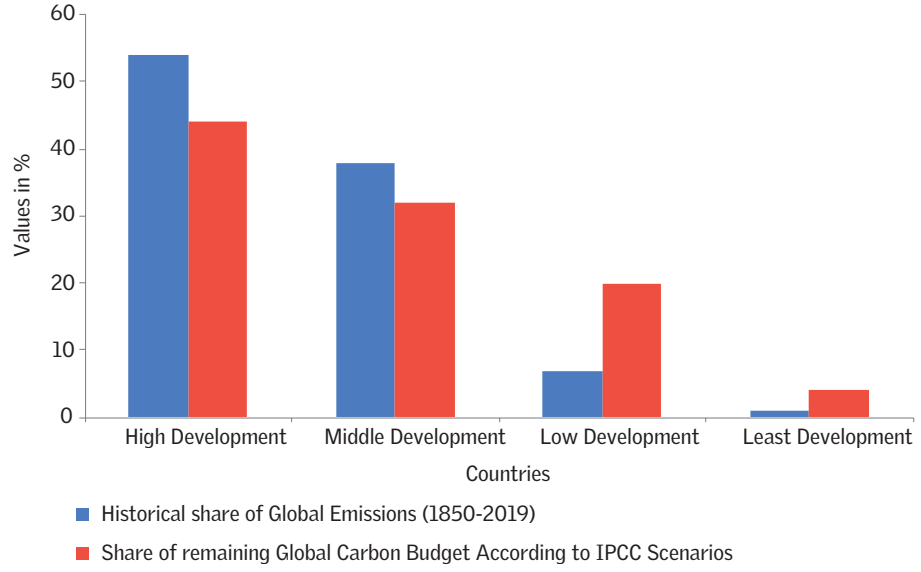
the Global North will continue growth and consumption all the way till 2100, while the developing and emerging economies will virtually remain where they are today[13]. Despite the core principles of CBDR and equity, the IPCC models suggest that the most developed countries retain 44 per cent of the remaining GCB, while the least developed get only 4 per cent (*see Graph 3*)!

Since the IAMs are based on geographic distributions, it is also possible that a diverse region like South Asia is projected at a higher level of ideal climate ambition than is fair due to the overshadowing of a large country like India. Similar discrepancies may be present in East Asia due to the presence of China and in Africa due to the presence of South Africa and Egypt.

This erases many national contexts and nuances important to understand the need for just transition and equitable share to the global carbon budget. As we heard from a scientist – for equity-based science — North America should no longer have the right to use more oil and gas, but emerging countries must have the right to use coal during transitions. In contrast, the IPCC suggestion for 1.5°C puts coal reduction at 87 per cent, gas at 14 per cent and oil at just 10 per cent by 2030.[14]

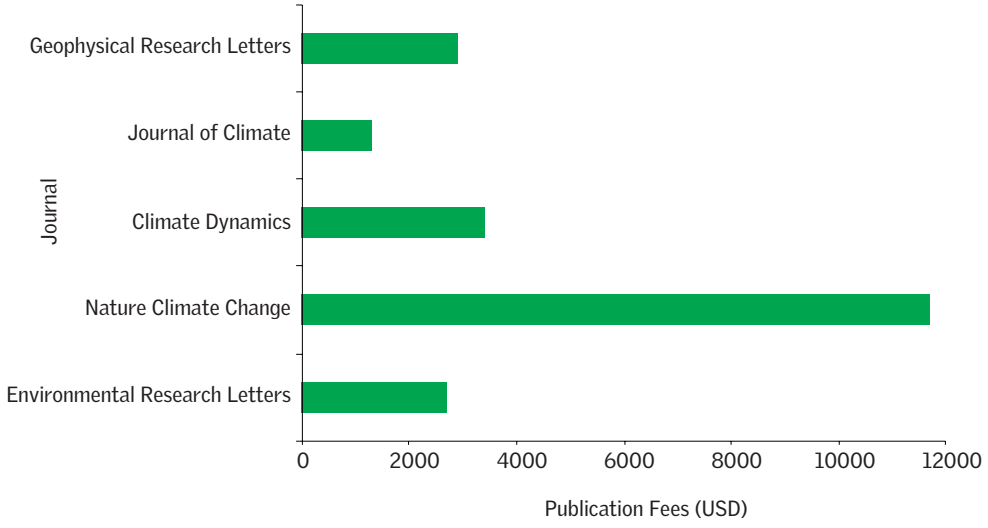
Graph 3: Comparison of historical emissions burden of countries and the share of the remaining GCB implied under current IPCC models

Countries are grouped according to socio-economic indicators of development



Source: A New Scenario Framework for Equitable and Climate-Compatible Futures, 2023

Graph 4: Publication costs of the five journals most frequently cited in IPCC AR6 WG I



Source: Compiled by CSE

Furthermore, the IPCC only accepts peer reviewed papers, primarily governed by journals that have astronomical charges that scientists from the Global South struggle to afford (*see Graph 4*). The IAMs themselves are an expensive affair and as a result it is the rich regions and institutes that can host them.[15] In fact, although the Global South hosts 84 per cent of the world's population, only 31 per cent of IPCC contributions have come from the region.[16] Hence, what little perspective could have come from Global South researchers, is also missing.

In essence, this means that the evaluations and recommendations made on the basis of the IPCC findings could be unfairly estimating the actions needed by developed and developing countries to meet global targets. India has been the champion advocate for addressing these inequities in the IPCC models, along with the LMDC group it is part of. In discussions and submissions during the GST process, the African Group of Negotiators and BASIC have also brought this as an important element for further climate negotiations.

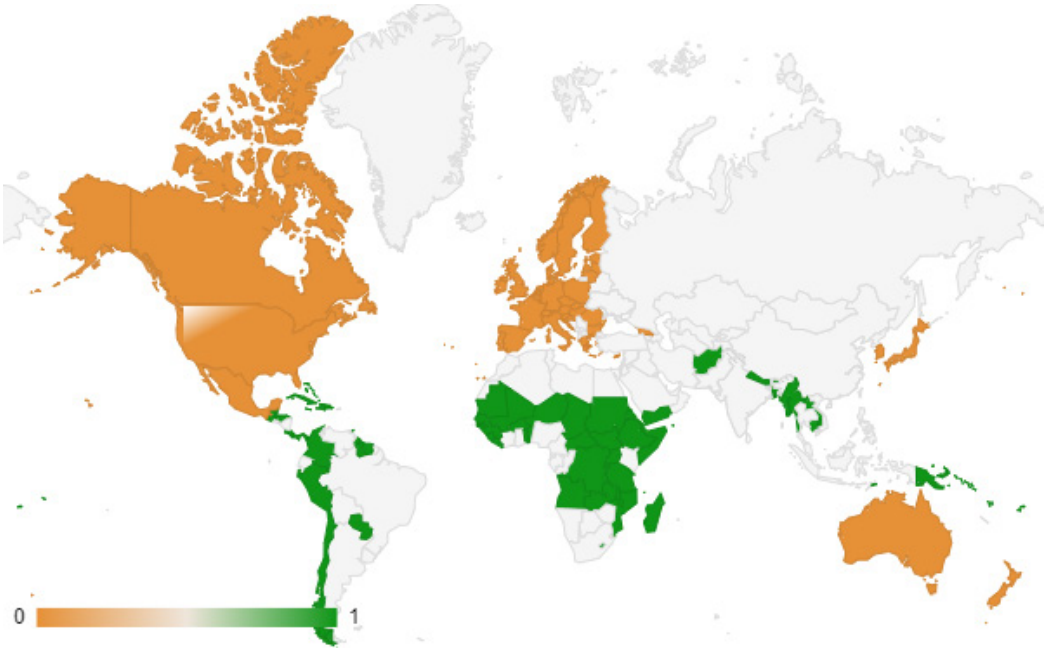
While there has been no direct opposition from developed countries, they have also not acknowledged the concern and have continued to refer to the targets recommended by the IPCC as the "best available science" and the "North Star" for climate ambition. At the recent Intersessional Workshop on the GST, negotiators from the Global North expressed concern over the questioning of the accuracy of the IPCC findings.

Fossil fuel phase-out

- Top supporters for a phase-out of fossil fuels: LDC, AOSIS, AILAC
- Top supporters for phase-down of "unabated" fossil fuels: USA, UK, EU, Australia

Map 4: Geographical representation of country positions

Green denotes those regions that are vocally for all fossil fuel phase-out; orange denotes those which support "unabated" fossil fuel phase-down. Uncolored regions had no specific mention



Source: CSE, based on UNFCCC submissions in February and September 2023 for GST outcomes

At COP26 held in Glasgow, history was made as the cover decision mentioned "fossil fuels" for the first time ever, officially acknowledging the root of human-led climate change.[17] Stopping the burning of fossil fuels is much like turning off the tap to clean a leak – essential to do a good job. Coal, oil and gas remain the most popular fossil fuels, each of them releasing a substantial amount of long-lasting greenhouse gases into the atmosphere.[18] When it comes to ending fossil fuel use, therefore, each type counts (*see Table 2*).

So far, no developed country has managed to run completely without fossil fuels. In developing countries, many people are still dependent on fossil fuels for energy access and employment. In India alone, coal is estimated to provide 7,25,000 direct jobs[19] today and China is expected to lose one million coal mining jobs[20]

Table 2: Comparing CO_2 emissions from coal, oil and gas in 1990 vs 2021

Jump in coal use can primarily point to emerging economies like India, and newly developed economies like China. A prominent jump in gas can primarily be attributed to developed economies

Type of Fuel	Coal	Oil	Gas
CO2 Emissions in 1990 (billion tonnes)	8.65	9.25	3.83
CO2 Emissions in 2021 (billion tonnes)	14.98	11.84	7.92

Source: Our World in Data

to power transformation. A sudden halt would be detrimental to overall social wellbeing. Hence, recent climate talks have begun to term it as the "phase-out" of fossil fuels, symbolising a transition.

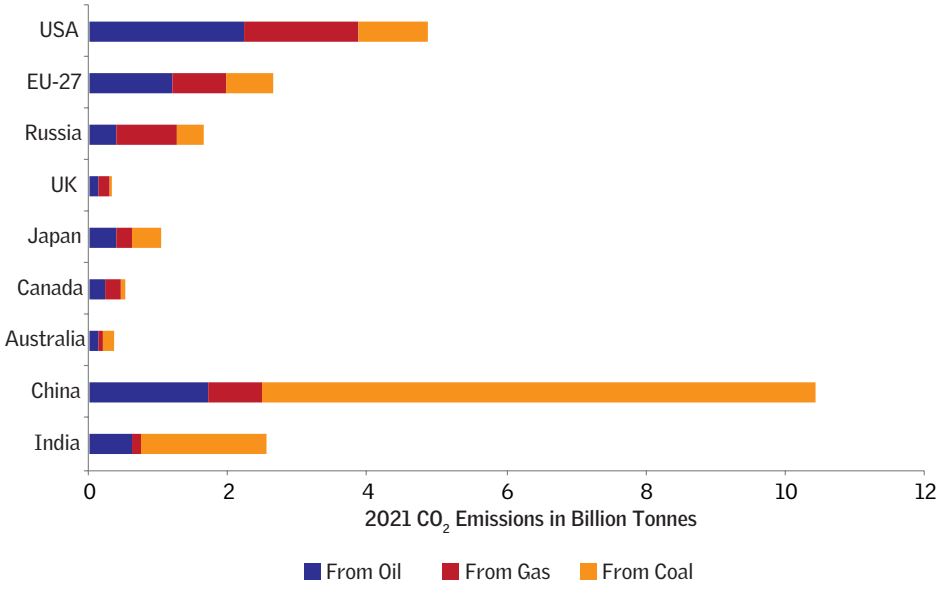
While some countries, especially from the LDC and AOSIS groups, strongly advocate a "phase-out of all fossil fuels", others have found a semantic loophole. The historic COP26 decision included a nuance led by Global North – the "phase-down of inefficient fossil fuel *subsidies*" and of "*unabated* coal". The former skirted accountability for fossil fuel use and the latter more concerningly pushed burden on countries heavily dependent on coal. These are mostly developing countries with some emerging economies such as India and countries in Africa.

In the GST submissions, developed countries focus on all "unabated" fossil fuels. Essentially, they advocate for a phaseout of all fossil fuels that cannot be equipped with carbon dioxide removal (CDR) technologies such as direct air capture and storage, or carbon capture and storage from specific points source. The problem is CDR technology has not been vetted as a reliable method for large scale mitigation[21]. Moreover, existing CDR plants in USA, Canada and Australia are underperforming by up to 50 per cent.[22] Therefore, to base future progress on a solution that is yet to be proven effective and may be expensive for most is not only risky but also unjust.

We have seen how issues around equity have cropped up across each mitigation sub-theme. When it comes to phasing out fossil fuels, a focus on coal over oil and gas ignores the sustained use of polluting fuels by developed countries.

Coal plays a crucial role in powering domestic and industrial energy in emerging economies. As a result, the share of emissions from coal are decidedly higher in these countries (*see Graph 5*). On the other hand, while countries like USA and EU show less emissions from coal, they are still majorly dependent on oil and gas for energy.[23] What this means is when these countries push the spotlight onto

Graph 5: 2021 CO_2 emissions of seven historical emitters and emerging economies like India, and newly developed economies like China, by fossil fuel type



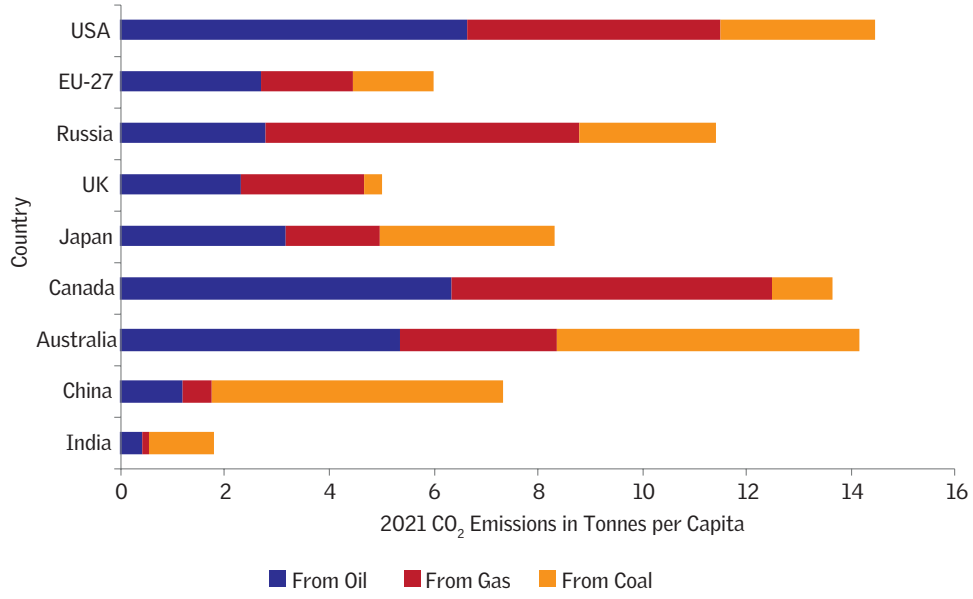
Source: CSE Analysis, Our World in Data

coal, they are placing the development of emerging economies under scrutiny and avoiding the same pressure on their own economies to speed phase-out.

Looking deeper into per capita emissions by fossil fuel source, we see that the historical polluters are still far ahead of India and China (*see Graph 6*). Per capita emissions are typically a reflection of social and economic development and as a result higher in richer countries with a lower population. High per capita emissions also generally point towards high-emissions lifestyles such as transport and home emissions, as is the case in USA and Australia.[24] It is important to note that the top emerging global emitters have distinctly low per capita emissions. The current fossil fuel use in these economies can therefore point towards essential needs of the large population as opposed to high carbon lifestyles.

Beyond consumption, selective fossil fuel terminology also has an impact on holding producers accountable. The USA, Russia, Canada and Saudi Arabia are among countries that are the top producers of oil and gas. A recent analysis found that based on planned oil and gas extractions, the USA, Canada, Australia and UK are projected to be responsible for more than half of emissions through 2050.[25]

Graph 6: 2021 per capita CO_2 emissions of seven historical emitters and emerging economies like India, and newly developed economies like China, by fossil fuel type



Source: Our World in Data

Carefully selected language and omission of fossil fuels beneficial to the Global North fail to hold historical polluters accountable to lead all fossil fuel phaseouts.

On adaptation

While mitigation pathways attempt to reduce the emissions driving climate change, temperature anomalies and resulting changes in weather patterns are already causing devastating impacts across the world. Some climate change impacts may also be irreversible, according to experts.[26] It is, therefore, imperative to adjust to a changing climate, in order to prepare for and avoid severe losses. The process of doing so is termed adaptation.

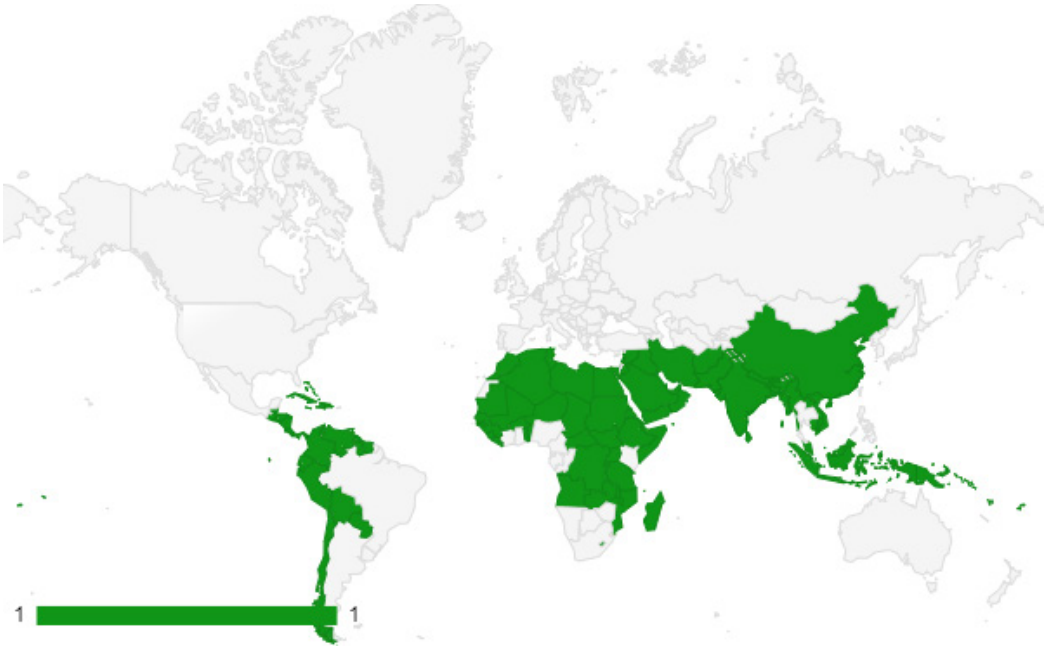
In its key findings, the Global Stocktake synthesis report stressed that climate change has begun to erode human development gains and a lack of adaptation will make it difficult to regain such development in the future. As climate change impacts worsen, the developing countries who are more vulnerable, are also experiencing increased needs for rebuilding and rehabilitation. And to keep up with the rapid pace of extreme events, these nations require a reliable flow of finance — which has proven to be a struggle.

Double adaptation finance and the Global Goal on Adaptation

- Supporters for 2x Adaptation Finance: LMDCs, LDCs, AILAC

Map 5: Geographical representation of country positions on the demand for double adaptation finance

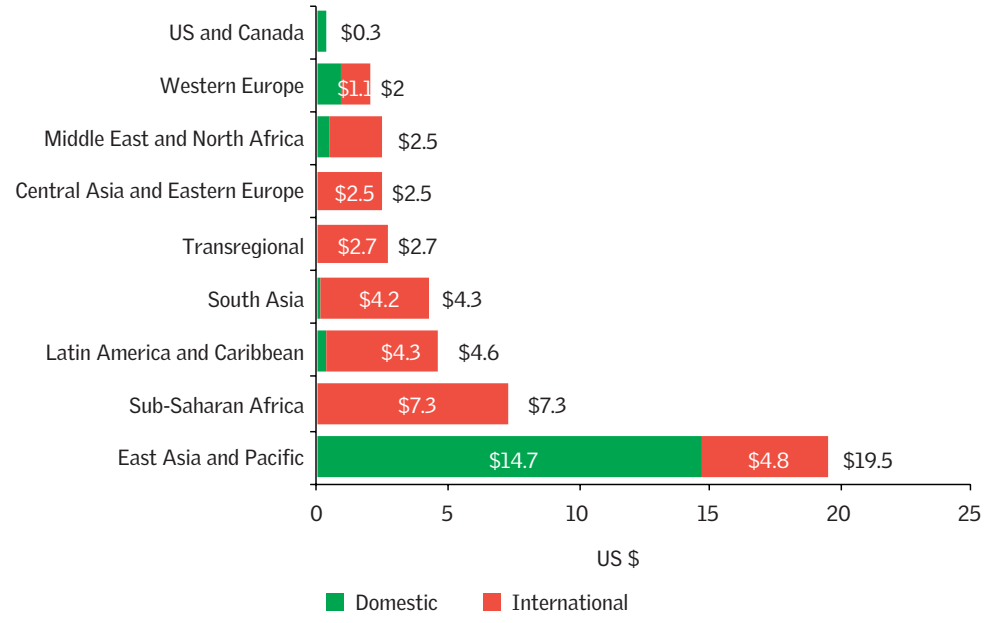
Green denotes those regions with explicit demands. Uncolored regions had no specific demand in their submissions



Source: CSE, based on UNFCCC submissions in February and September 2023 for GST outcomes

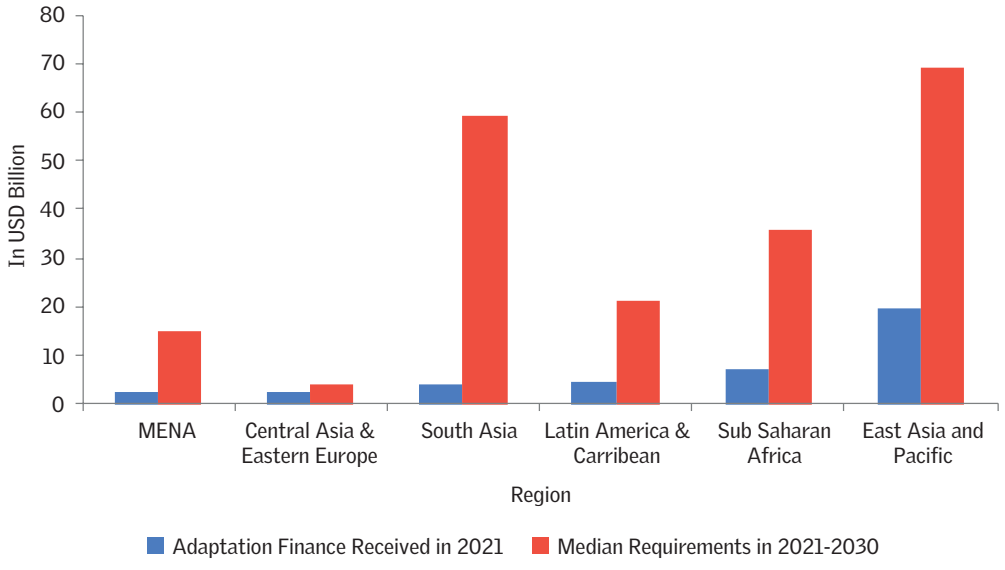
According to the United Nations Environment Programme (UNEP), adaptation needs will skyrocket to US $340 billion per year by 2030, but international flows are five to 10 times below the estimated needs even today.[27] Money that comes in is mostly earmarked for mitigation like renewable energy projects instead of adaptation projects such as early warning systems and sea walls. This is thought to be because of the greater risks involved in adaptation projects, given their unpredictability and complexity. In 2019-20, adaptation received US $46 billion while mitigation received US $571 billion according to a report by Climate Policy Initiative.[28] At COP26, developed countries agreed to a call to double adaptation finance by 2025, in an effort to match mitigation numbers. The progress is however woefully slow, as seen in the 2022 Adaptation Gap Report (*see Graphs 7* and *8*).[29]

Graph 7: Adaptation finance provision by region



Source: Climate Policy Initiative

Graph 8: Comparison of adaptation finance recorded in 2021 and the projected requirements of regions in the next decade



Source: Climate Policy Initiative and UNEP Adaptation Gap Report (2022)

Unsurprisingly, adaptation finance remains a contentious topic at international climate negotiations, as developing countries are increasingly frustrated with the lack of adaptation funds. Although some developed countries like the EU and UK agree with the doubling adaptation finance goal, differences persist. Even at the Bonn Climate Change Conference in 2023, a stand-off ensued between developed and developing countries, with the former refusing to discuss finance under the theme of adaptation.[30]

A common agreement across all Party submissions was on the finalization of the Global Goal on Adaptation framework. Discussions on the GGA framework themselves, however, continue to spar debates. The GGA under the Paris Agreement aims to "enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change."[31]

For the developing country blocs, adaptation finance is a critical element for the GGA. In contrast, the developed country blocs argue that adaptation finance would fall under the mandate of the New Collective Quantified Goal on Finance, not under GGA. Some Global North countries even cite a lack of clear, robust National Adaptation Plans from the Global South as the reason for lack of trust in financing them. It is to be noted that the development of NAPs is a resource-heavy activity in itself, which many developing countries struggle to afford.

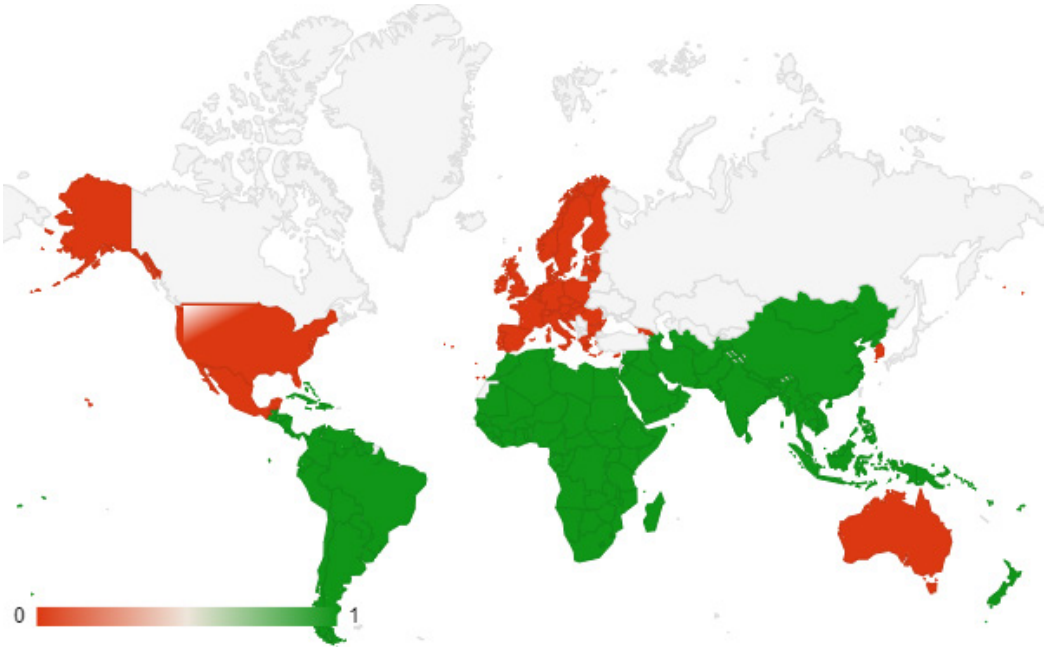
While finance is crucial for developing nations to act on their climate plans and there exists a considerable gap, observers have also pointed out that such sustained focus on finance often stalls the progress of important discussions.[32]

Loss and damage

- Top supporters for a distinct focus on L&D: AGN, G77 and China, LDC, AOSIS
- Top supporters emphasising L&D as cross-cutting: USA, UK, Australia, EU, Korea

Map 7: Geographical representation of country positions

Green denotes those regions that are explicitly supporting the recognition of L&D as a separate issue under the GST; red denotes those mentioning it as a cross-cutting issue. Uncolored regions had no specific mention in their submissions



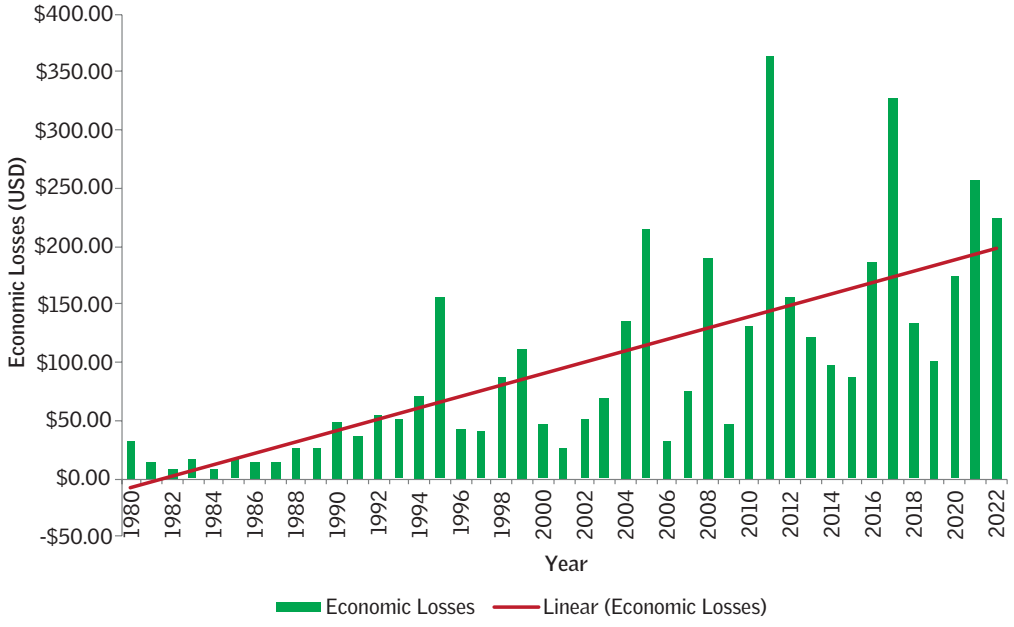
Source: CSE, based on UNFCCC submissions in February and September 2023 for GST outcomes

While adaptation aims to preempt disasters and strengthen resilience, climate change impacts are rising rapidly and many regions lack the ability to recover in time. As a result, certain losses and damages are devastating and can be irreversible, such as loss of lives, damage to agricultural land and infrastructure and biodiversity extinction among others. The term "loss and damage" was first presented by the island country of Vanuatu in 1991, questioning who should be held responsible for the damages caused to the country by rising sea levels.

Years later at COP27 in Egypt, a landmark decision approving a separate Loss and Damage Fund (LDF) acknowledged L&D as a distinct issue. Countries that are

Graph 9: Economic losses from natural disasters over three decades

Trend line shows a rise in average costs over the years



Source: Our World in Data

most impacted by climate change with the least historical contributions, including African countries, LDCs and Island States have since pushed for L&D to get exclusive recognition throughout UNFCCC processes. However, the GST saw it included as a subtheme under adaptation.

Most Global South countries acknowledge the need for L&D to be a separate section altogether with the LDF at its center. However, Global North countries in general still hold the view that L&D should be addressed in conjunction with mitigation and adaptation. Developing blocs worry that a cross cutting focus will lead to L&D matters or the LDF to be watered down and made part of other discussions. This is also in a sense a question of Global North responsibility to act on past damages instead of just focusing on forward facing adaptation measures.[33]

L&D is assessed primarily through economic losses and non-economic losses. Economic losses are the easiest to estimate and calculate, comprising incidents such as loss of agriculture production, infrastructure damage, property loss, etc. Data shows a clear rise in economic damages arising from natural disasters in recent decades, aligning with a rise in disaster events and global temperatures (*see Graph 9*). According to a recent analysis, the damage caused by climate change-

induced extreme weather is US $16 million per hour over the past 20 years.[34] Even so, it is of note that most recorded data on economic loss comes from those that are insured and the actual scale of costs could be much higher.

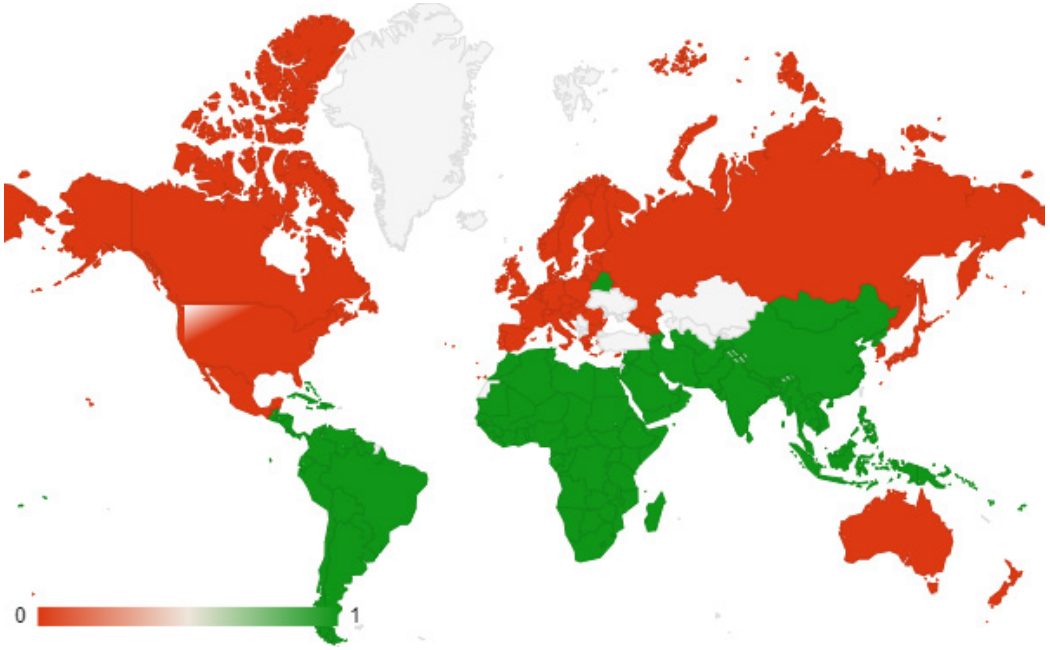
Non-economic losses are more complex. They are largely intangible losses – deaths, culture loss, knowledge loss or biodiversity loss. In Global South countries, it is these intangible losses that are more prominent. The absence of a system to account for them means the due importance that should be given to L&D in the Global South is missing. These existing questions around assessing L&D has an impact on debates around how much money the LDF should have, where the money should go and who should provide the corpus.

On means of implementation

- Top supporters for more public grant-based finance: AGN, G77 and China, LDC, AOSIS
- Top supporters for more private finance inclusion: USA, UK, Australia, EU, EIG

Map 8: Geographical representation of country positions

Green denotes those for public grants as the key source of climate finance under the GST while red denotes those focusing on private funds. Uncolored regions had no specific mention



Source: CSE, based on UNFCCC submissions in February and September 2023 for GST outcomes

Rooted in the principle of CBDR and equity, the Paris Agreement mandated that developed countries would assist developing countries to achieve their climate ambitions through provision of finance and others who are able to will voluntarily contribute. Apart from finance, it was also acknowledged that developed countries would ensure technological transfer and capacity building support. In the GST process, all three elements are combined under Means of Implementation (MoI), as elements necessary to implement NDCs.

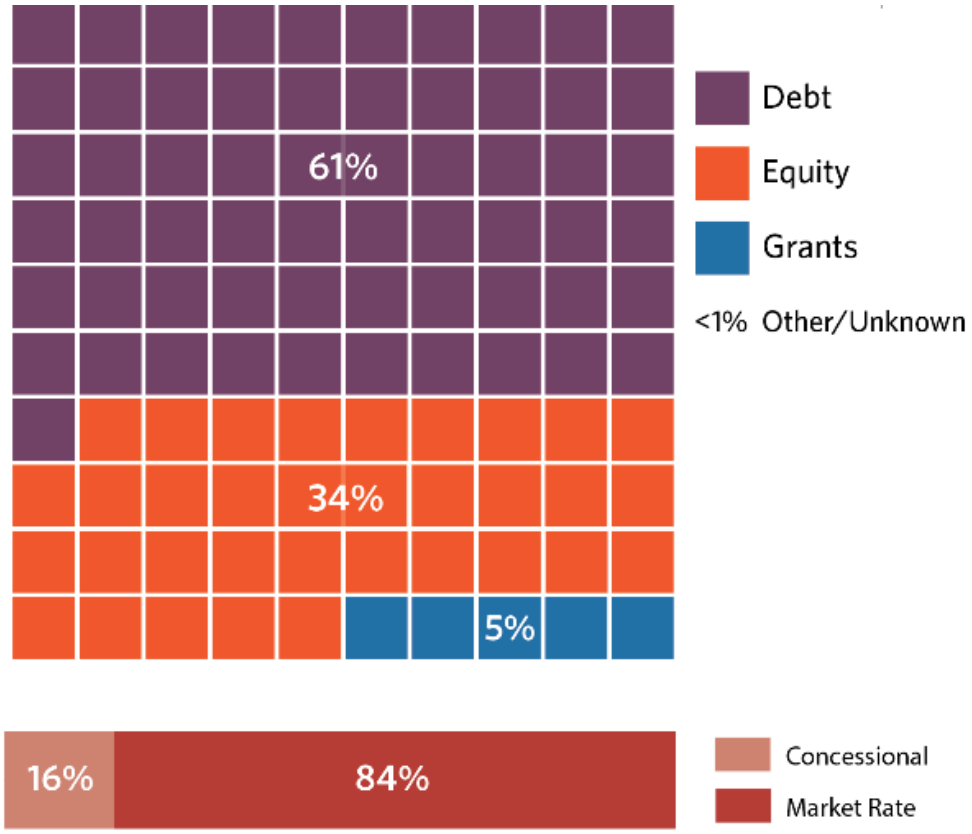
While discussions around technology transfer and capacity building have largely remained agreeable, finance has been contentious. The focus of finance as a sub-theme of MoI has been cited by developed countries in other negotiations as reason to omit cross cutting finance discussions. In negotiations such as those at SB58, the reluctance of developed countries and insistence of the developing to include finance in adaptation and L&D discussions led to a standoff delaying discussion.[35]

Finance is broadly considered as a key contributor to the growing mistrust between countries under the UNFCCC. It is finally in 2023 that developed countries expect to meet the US $100 billion a year promise that had an original deadline of 2020[36]. In these years, emissions have risen as have global economic and geopolitical conflicts. Despite repeated calls from the Global South, a majority of climate finance still comes as high-cost loans (*see Graph 10*).[37] Grants are negligible and even the process of receiving funds is so long drawn that calls for a reform of the international finance structure are growing.

Providing climate finance as debt locks developing countries into debt traps. The uncertainty in their regions terms them as "high risk", leading to higher interest rates.[38] Of the finance that does go out as grants, they are concentrated around SIDS or LDCs, leaving out a large number of vulnerable countries like Pakistan and Philippines. The developed countries meanwhile continue to push for the inclusion of private finance in order to improve access. While this may increase financial flows, historically private funders have either not mobilized grant based or concessional finance or have shown preference for mitigation and a lack of understanding of adaptation or Loss and Damage. Moreover, analysis has shown that a lack of affordable funds can hamper achievement of NDCs (*see Table 3*). Developing countries therefore want a commitment for public grant-based finance instead.

Given the scale of climate finance required, mobilising private finance is no doubt necessary. However, it should not be given the priority and private sources should not have the authority to determine where finance flows and how it is used.

Graph 10: Overview of finance provision type across 10 years (2011-20)



Source: Climate Policy Initiative

Moreover, reports have shown most developed countries still providing fossil fuel subsidies and spending money on fossil fuel expansion.[39] Similarly, we heard from a negotiator that there are other low-hanging fruits such as recovering tax from evading companies that can be explored. The GST Synthesis report suggests rerouting this finance as public funded grants to developing nations as a critical step.

Additionally, the preference for some developing countries to receive funds over others is a divide and conquer tactic being deployed by the developed.[40] In recent years, extreme weather events have wreaked havoc and caused long lasting damage in Pakistan, Libya and Philippines, all of which do not come under LDCs or SIDS and continue to accumulate debt. A lack of timely funds prevents developing countries from investing in climate ambition, perpetuating a feedback loop of loss, damage and climate negotiation debates.

Table 3: Annual debt payments of 16 developing countries

The amounts exceed the annual cost of achieving their NDCs

Sl. No.	Countries	Income classification, World Bank	Risk of debt distress, UNCTAD August 2022	ND-GAIN Vulnerability Score*, 2020	Total Debt Service (TDS) on External Debt in 2021 (in USD billion)	Annualised NDC Cost (USD billion)
1	Burkina Faso	Low-income	Moderate	0.55	0.50	0.41
2	Cambodia	Lower-middle-income	Low	0.51	2.19	0.40
3	Gambia	Low-income	High	0.55	0.04	0.02
4	Ghana	Lower-middle-income	High	0.47	3.23	0.93
5	Laos	Lower-middle-income	High	0.53	0.72	0.43
6	Lesotho	Lower-middle-income	Moderate	0.48	0.34	0.02
7	Liberia	Low-income	Moderate	0.60	0.06	0.05
8	Mozambique	Low-income	In debt distress	0.52	7.24	1.27
9	Myanmar	Lower-middle-income	Low	0.53	2.31	0.12
10	Nicaragua	Lower-middle-income	Moderate	0.45	1.37	0.17
11	Papua New Guinea	Lower-middle-income	High	0.54	4.05	0.20
12	Saint Lucia	Upper-middle-income	Moderate	0.36	0.05	0.04
13	Senegal	Lower-middle-income	Moderate	0.53	1.75	1.30
14	Sudan	Low-income	In debt distress	0.62	3.00	0.82
15	Tanzania	Lower-middle-income	Moderate	0.52	1.96	1.92
16	Zimbabwe	Lower-middle-income	In debt distress	0.55	0.58	0.48

Source: Beyond Climate Finance, CSE, 2023

Developed countries tend to emphasise mitigation over other elements of the Paris Agreement, stating that it is the first step to controlling emissions. However, for developing countries, as a negotiator told us, mitigation targets can only be achieved with adequate and timely financial support. Hence, a focus on mitigation without equal focus on Means of Implementation is ineffective.

Additionally, Means of Implementation also includes technology transfer and capacity building, which the Global South has deemed inadequate. During our conversation, a negotiator raised questions around the lack of co-development of technology and prevalence of patents. How will developing countries achieve mitigation targets without affordable and easy access to the solutions, they wonder.

3 The Way Ahead

Negotiating an ambitious and equitable new global deal based on GST

It is clear that the Global Stocktake is an opportunity for the world to put its best foot forward to resolve the outstanding issues between the Global North and the Global South and to come towards an agreement that is rule-based for future action to combat climate change. We know this is an existential threat. We also know that current negotiations are acrimonious and contentious, mainly because the world has refused to recognise the need for global rules which are essential for an agreement that requires global cooperation.

So, as we move ahead, we must acknowledge the imperative of climate justice. This is not a moral issue but one that will speed up practice. The reasons are inconvenient and yet simple: carbon dioxide (CO_2) has a long residence time in the atmosphere; what is emitted in the past has accumulated and will 'force' temperatures to rise.

CO_2 is also linked to the way the world runs its economy – fossil fuels (coal, oil or gas) are still the determinants of growth, whatever the rhetoric. Most importantly, it is a fact that millions of people are still waiting to get the advantages of economic progress, which means access to affordable energy. This, at a time when the world has literally run out of carbon space to accommodate its need for development. The question is, what will this part of the emerging world do? The growth of countries in this part – using fossil fuels – will necessarily add to the jeopardy that awaits us. How can this 'growth' be reinvented so that it is low-carbon and yet affordable? This needs supportive policies and real transfer of global finance to enable the transformation. This is what the Global Stocktake must put forward.

It is also why the world needs to return to a rule-based system of climate governance. The fact is, we know that there is a link between the growing intensity and frequency of weather disasters and climate change – this, in turn, is linked to the stock of greenhouse gases (GHGs) in the atmosphere. Therefore, it is a simple proposition — well established in law — that the country responsible for the pollution must pay. This is why the loss and damage discussions are about liability and compensation. In this rule-based scenario, it would be established that a country like India would also contribute to the fund, once it has crossed a certain agreed threshold of GHG emissions.

This rule-based governance existed before, but it was not convenient for the big polluters. So, it was taken apart in the 2015 Paris Agreement, erasing the very concept of historical emissions and consigning climate justice to a postscript. As a result, it set up a weak and meaningless framework of climate change action that would depend on what a country could do; not what it was expected to do based on its contribution to the stock of emissions or fair share. It should not surprise us then that the sum of the current Nationally Determined Contributions (NDC) — UN jargon for national reduction targets – takes the world towards a minimum of 3°C temperature rise or more.

But worse, without a global rule-based system, new entrant polluters like China get a free pass. There is no global agreement to decide on what level of GHG emissions would lead to a country to move from one category of countries to another. There is an original list of such countries, called Annex 1, in the 1992 Framework Convention on Climate Change. These were the historical polluters. But since then, more have joined and this group should have seen an expansion based on the Agreement and an equitable share of the global carbon budget. Today, China is yesterday's USA; its per capita emissions will be equal to the USA in 2030. It will appropriate a share of the carbon budget equal to the USA in 2030. It should have been moved to the category of polluters. But now there is no way to do this. The zero-sum game continues. At our cost.

This is what the Global Stocktake should work to correct so that it builds the framework of action for the future.

Mitigation and response measures

- The GST should be based on equity and ambition, so that countries are held responsible to set targets based on their historical contributions to global emission levels. To that end, the GST must reflect the importance of equitable burden sharing and hold countries accountable in terms of the emissions reduction they have achieved so far versus the amount ideally required.

- While acknowledging historical burden is important, the pre-2020 gaps should not become a bottleneck to discussing enhanced commitments required to achieve 2030 climate goals. The GST must provide a direction for 2030 ambition and beyond.

- All fossil fuels (not just coal) need to be phased out immediately and this must be accounted for as a part of commitments from all countries. For countries of the South to achieve these commitments, they must be aided through finance

and technology transfer from developed countries. This is why the means of implementation – concessional and grant-based finance – are critical for energy transition.

Adaptation including loss and damage

- The GST should acknowledge the difficulties faced by developing countries to achieve their commitments in the absence of effective adaptation finance and solutions. Adaptation requires international cooperation and cannot be treated only as a national responsibility.

- Loss and damage has to be acknowledged in a distinct section with references to impacts across developing countries, including those that do not qualify as LDCs, SIDS or "particularly vulnerable". The GST must direct the Loss and Damage Fund to make all developing countries eligible to access public grant-based finance.

Means of implementation including finance, technology transfer and capacity building

- Countries in developing regions will have to be given the space to increase their emissions and will require international cooperation to transition towards low-carbon economies. The GST is a powerful enabler to enhance and enable "means of implementation" to facilitate this.

Overall, the GST should become the basis for setting a rule-based framework for global climate action moving forward. Combining historical emission burdens, per capita emissions and the right to equitable shares of the remaining global carbon budget, the GST should become the new framework guiding country ambitions.

The GST presents a critical moment for the upcoming decade. If done right, it will provide countries with a much-needed reality check on past and current gaps and the scale and urgency of actions needed to keep the Paris Agreement goal in sight. Existing debates are many, with a distinct divide between developed and developing countries. While global tides are slowly changing, the Global North cannot deny its role in unbounded fossil fuel-driven growth contributing to global emissions rise. The Global South must hold the developed world accountable while taking care to not stall essential discussions.

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Established under Article 14 of the Paris Agreement, the Global Stocktake (GST) aims to serve as an evaluation of countries' progress towards global climate action. The first GST is being completed in 2023. This COP28 briefing paper is an introduction to the process, the key debates around it, and where this process should lead.

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