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THE FIRST GLOBAL STOCKTAKE ON CLIMATE CHANGE: ISSUES AND CHALLENGES

Abstract

The Conference of Parties (COP) decided to conduct a ‘Global Stocktake (GST)’ on a regular basis to evaluate the long-term objective of the Paris Agreement (PA). The Synthesis report of the first GST, a comprehensive assessment process of the PA, gives an overview of the overall progress of the PA. The present study attempts to find out the consequences and challenges of the first GST and as per the 17 key findings of the Synthesis report, the study has found that the current level of global climate actions is insufficient and more needs to be done in all fronts to meet the long-term objectives of the PA. Being the worst victim of the negative impacts of climate change, the GST has immense significance for Bangladesh as well. The present study suggests that the national policies of the individual states need to be in line with the goals of the PA for addressing climate change and international cooperation also need to be strengthened for promoting actions based on the findings of the GST.

Keywords: Paris Agreement, Article 14, Global Stocktake, Technical Dialogue, Synthesis Report, Nationally Determined Contributions (NDCs), NDC 3.0

“We have no choice but to unite and seize the moment of this Global Stocktake to put the world on the right track to meet the goals and ambitions of the very promising Paris Agreement.” –Sultan Ahmed Al Jaber, President-Designate for COP28 UAE¹

1. Introduction

Despite being a legally binding treaty, the Kyoto Protocol² failed in its endeavour in limiting and reducing the Greenhouse Gas (GHG) emissions. One of the main reasons behind its failure was the exemption of developing countries. After the failure

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¹ COP28 UAE, “COP28 President-Designate Remarks at Petersberg Climate Dialogue,” May 03, 2023, available https://www.youtube.com/watch?v=8oGM8_--TgY.

² A legally binding treaty, adopted in 1997 (came into force in 2005) for limiting and reducing GHG emissions according to the agreed individual targets.

of the Kyoto Protocol, the Paris Agreement (PA), also a legally binding agreement on climate change, was adopted at COP21 in 2015 and became effective in 2016. Keeping the global average temperature rise well below 2°C above pre-industrial levels (1850–1900)³ while working towards a 1.5°C increase⁴ is the key goal of the PA. The year 2023 was the warmest year on record due to both natural El Niño effects and human-induced climate change⁵ while the United Nations (UN) has warned that 2024 would be a hotter year.⁶ According to the UN World Meteorological Organization (WMO), the average annual global temperature in 2023 was 1.45°C above pre-industrial levels.⁷ Scientists have warned that if the targets set forth in the PA are not met by 2030, global warming could rise by as much as 2.7°C, leading to far more unpredictable weather patterns.⁸

Article 14 of the PA has three distinct but interconnected and overlapping purposes which include assessing global response in a comprehensive and facilitative way, assessing collective progress of the long-term goals of the PA and updating the Parties about their actions and supports.⁹ It was decided that in line with Article 14 of the PA, the Conference of Parties (COP) will conduct a ‘Global Stocktake (GST)’ on a regular basis to evaluate how well the Agreement is being implemented in relation to its long-term objectives. According to Article 14, the first GST would take place between mid-2022, when the Intergovernmental Panel on Climate Change (IPCC) releases its Sixth Assessment Report, and 2023, when the United Nations Framework Convention on Climate Change (UNFCCC)’s 28th Conference of the Parties (COP28) begins.¹⁰ The PA’s overarching goals are linked to the Nationally Determined

³ In principle, ‘pre-industrial levels’ could refer to any period of time before the start of the industrial revolution. The IPCC Special Report on Global Warming of 1.5°C uses the reference period 1850–1900 to represent pre-industrial temperature. See for details, IPCC, accessed January 17, 2023, https://www.ipcc.ch/site/assets/uploads/sites/2/2018/12/SR15_FAQ_Low_Res.pdf.

⁴ Intergovernmental Panel on Climate Change (IPCC) has already warned that crossing the 1.5°C threshold will unleash far more severe climate change impacts including more frequent and severe droughts, heatwaves and extreme rainfalls.

⁵ Mark Poynting and Erwan Rivault, “2023 confirmed as world’s hottest year on record,” *BBC News*, January 09, 2023, <https://www.bbc.com/news/science-environment-67861954>.

⁶ “2024 could be hotter than record 2023,” *The Daily Star*, Dhaka, January 14, 2023.

⁷ “2024 could be hotter than,” *The Daily Star*.

⁸ Andrew King, Malte Meinshausen, “If all 2030 climate targets are met, the planet will heat by 2.7°C this century. That’s not OK,” *THE CONVERSATION*, accessed 12 August 2024, <https://theconversation.com/if-all-2030-climate-targets-are-met-the-planet-will-heat-by-2-7-this-century-thats-not-ok-170458>.

⁹ United Nations, “Article 14, Paris Agreement,” 2015, accessed January 15, 2024,

https://unfccc.int/sites/default/files/english_paris_agreement.pdf. For detail on Article 14, see Annex 1.

¹⁰ Daniel Puig, “Loss and damage in the global stocktake,” *Climate Policy* 22, no. 2 (2022): 175–183, <https://doi.org/10.1080/14693062.2021.2023452>.

Contributions (NDCs)¹¹ through the GST, which ultimately raises the Parties' ambitions with regard to climate change. In accordance with the terms of the Agreement, GST is intended to update and improve actions of and supports for the Parties and foster international cooperation on climate change. Article 14 also mentioned that starting with the first GST in 2023, such stocktaking would be done every five years until further decisions are taken by the COP.¹²

The UNFCCC released the synthesis report of the first GST on September 08, 2023. The report summarises the feedbacks from the technical dialogue meetings, gives an overview of the overall progress made towards achieving the long-term objectives and purposes of the PA, and notifies the Parties about any potential gaps and opportunities for improved action and international cooperation.¹³ This stocktake would help stakeholders and policymakers to strengthen their climate policies and commitments and pave ways for accelerated actions.

Bangladesh's vulnerability to the negative impacts of climate change is well known. In spite of having a very negligible (less than 0.47%) contribution to global warming, the country is one of the worst victims of all the adversities of climate change. The geographical location of the country has made her susceptible to various negative impacts of climate change. According to Bangladesh Disaster-related Statistics 2021, due to natural disasters, the damage and loss is BDT1,791,988 million.¹⁴ The World Bank has predicted that, climate change would cost Bangladesh US\$121 billion over the period 2005-2050, or US\$ 3 billion annually, unless measures are taken.¹⁵ GST is immensely important for tracking the progress in mitigation and adaptation on a global scale and interpreting the implications for signatory nations to the PA. The findings of the synthesis report of the GST are both stark reminder of the urgency of the global climatic situation and call for further necessary actions. As a signatory to the Paris Agreement, it is important for Bangladesh as well.

¹¹ NDC is a climate action plan to cut emissions and adapt to climate impacts. Each Party to the Paris Agreement is required to establish an NDC and update it every five years. See for details, United Nations, "All About the NDCs," Climate Action, accessed January 18, 2024, <https://www.un.org/en/climatechange/all-about-ndcs>.

¹² United Nations, "Article 14, Paris Agreement," 18-19.

¹³ UIC, "First Global Stocktake synthesis report calls for modal shift in transport," *eNews*, September 14, 2023, <https://uic.org/com/enews/article/first-global-stocktake-synthesis-report-calls-for-modal-shift-in-transport>.

¹⁴ Bangladesh Bureau of Statistics, *Report on Bangladesh Disaster-related Statistics 2021: Climate Change and Natural Disaster Perspective* (Dhaka: Statistics and Informatics Division, Ministry of Planning, 2022), XX, https://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/b343a8b4_956b_45ca_872f_4cf9b2f1a6e0/2022-06-19-13-40-ddf8d0fd849e94d733a06d2d38dcd90b.pdf.

¹⁵ Fahmida Khatun and Syed Yusuf Saadat, "Climate Change in Bangladesh: A Sustainable Development Perspective," 2021, accessed December 20, 2024, https://www.un.org/ldc5/sites/www.un.org/ldc5/files/revised_climate_change_in_bangladesh_a_sustainable_development_perspective-22_september_2021.pdf.

Available studies have dealt with options for the core elements of modalities of the GST¹⁶ and pointed out that the GST process needs to be carried out in accordance with the technicalities and modalities of the IPCC review process. It also needs to be an open and transparent multilateral process where developed countries must help developing countries to set up efficient monitoring and reporting systems to evaluate the support and actions taken on climate change.¹⁷ The issue of equity has been highlighted in some literature and has been identified as having important role in GST. Equity is considered in the assessment of where Parties stand collectively and the GST informs Parties how they can increase ambition and address equality in their NDCs¹⁸ Some scholars argue that the inclusion of equity in the PA is not coincidental rather a hard-won agreement and any GST which does not take equity into proper consideration would be in glaring violation of Article 14.1 and would in turn lose legitimacy and risk in failing its promise.¹⁹ Some studies have identified GST as a potential true innovation in global governance because GST is different from the other review processes that exist in global climate governance. GST is an assessment towards shared global goals which is exclusively of collective nature but at the same time aims to encourage parties to scale up their NDCs and enhance cooperation. Other review mechanisms, on the other hand, hold individual countries accountable to a set standard or consider individual country's domestic objectives as benchmarks.²⁰ The GST, therefore, is considered a key component of the climate governance framework, through which the PA has established a special clause and explicitly asked for the creation of a truly global stocktaking procedure.²¹ Some scholars have suggested that the first GST should not avoid taking into account of the loss and damage issue and ideally carrying out separate assessments for losses and damages in the GST. Some suggest that the governments of developing countries could use the GST to awareness

¹⁶ Eliza Northrop, Yamide Dagnet, Niklas Höhne, Joe Thwaites and Kathleen Mogelgaard, "Achieving the Ambition of Paris: Designing the Global Stocktake," Working Paper, Project for Advancing Climate Transparency (PACT) and World Resource Institute (WRI), accessed December 25, 2023, <https://newclimate.org/sites/default/files/2018/04/achieving-ambition-paris-designing-global-stocktake.pdf>.

¹⁷ Chandra Bhushan and Vijeta Rattani, *Global Stocktake under the Paris Agreement* (New Delhi: Centre for Science and Environment, 2017).

¹⁸ Lorenz Moosmann, Sean Healy, Christiane Beuermann, Carsten Elsner, Max Schulze-Steinen, Dr. Christiane Textor DLR, "Addressing equity in the Global Stocktake," *Discussion Paper, Climate Change 27/2023* (June 2023), https://www.umweltbundesamt.de/sites/default/files/medien/11850/publikationen/27_2023_cc_addressing_equity_in_the_global_stocktake.pdf.

¹⁹ Christian Holz, Tom Athanasiou, and Sivan Kartha, "Equity in the Global Stocktake and Independent Global Stocktake," *Climate Equity Reference Project* (December 2019), <https://doi.org/10.5281/zenodo.2595493>.

²⁰ Manjana Milkoreit and Kate Haapala, "Designing the Global Stocktake: A Global Governance Innovation," Center for Energy Solutions (C2ES), November 2017, <https://www.c2es.org/document/designing-the-global-stocktake-a-global-governance-innovation/>.

²¹ Marjan Peeters, "The global stocktake," in *The Paris Agreement on Climate Change*, eds. G. van Calster and L. Reins (Cheltenham, United Kingdom: Edward Elgar Publishing, 2021), 326-346.

of losses caused by climate change.²² Some other scholars argue that by clearly outlining the goals of the PA, the GST may offer direction and accountability, as well as promote understanding and learning about the best ways to carry out the Agreement's objectives.²³ Some literature provide suggestions for designing the stocktaking process that could provide decision-makers with guidance which could have an impact on the PA's future efficacy.²⁴ Some, furthermore, have noted several prerequisites that must be met for the GST to reach its full potential as a vehicle of transformation. They contend that an effective GST is a process rather than a singular event that must fulfil a number of requirements, such as a scheduled time, public evaluation of inputs, an accommodating format, a planned high-level political event, a benchmark for group mitigation action, open and transparent information about the status of emissions, and, finally, political significance.²⁵ To sum up, existing literature are published before the publication of the synthesis report of the first GST and hence deal with the core elements of the modalities of the GST, features of GST which have made it an effective innovation in global governance, identified a number of key considerations for the development of a robust, effective and inclusive GST.

Against the above-mentioned background, the objective of the present study is to find out the consequences and challenges of the findings of the first GST. The study seeks to find answers to the following questions: Has the GST become successful or not in its endeavour? What does the GST mean for future climate action? and Why GST is important for Bangladesh? The present study has used both primary and secondary data and it is qualitative in nature. To gather information about the GST, secondary sources such as books, journal articles, policy documents, reports, and newspapers have been consulted. Key Informant Interviews (KII) with selected stakeholders have been conducted in order to gather primary data and to corroborate the information gathered from secondary sources. The paper is divided into six sections. After the introduction in the first section, the second section focuses on the concept of the GST. The third section deals with the expectations versus reality of the GST. The fourth highlights on the challenges and opportunities of the GST and while

²² Daniel Puig, "Loss and damage in the global stocktake," 175–183.

²³ Wolfgang Obergassel, Lukas Hermwille, Anne Siemons and Hannah Förster, "Success Factors for the Global Stocktake under the Paris Agreement," Wuppertal Institute for Climate, Environment and Energy, December 2019, https://epub.wupperinst.org/frontdoor/deliver/index/docId/7429/file/7429_Global_Stocktake.pdf.

²⁴ Manjana Milkoreit and Kate Haapala, "The global stocktake: design lessons for a new review and ambition mechanism in the international climate regime," *International Environmental Agreements: Politics, Law and Economics* 19, no. 1(2019): 89-106, <https://doi.org/10.1007/s10784-018-9425-x>.

²⁵ Lukas Hermwille and Anne Siemons, *What Makes an Ideal Global Stocktake? A Functional Analysis* (Dessau-Roßlau: Umweltbundesamt, 2018).

the fifth section considers the GST from Bangladesh perspective. The sixth section concludes the paper and provides some suggestions.

2. Conceptualising the Global Stocktake

The goal of the GST is to assess climate action globally with a view to find out the gaps in achieving the PA. However, the GST is intended to be much more than just an appraisal. Parties to the PA decided that the Stocktake would provide information to the states so that they can improve and update their support and actions related to climate change, as well as foster international cooperation in these issues. The Talanoa Dialogue held in 2018 was the first opportunity since COP21 for Parties to assess their efforts against the PA temperature goal. The process was designed for helping countries to implement and enhance more ambitious NDCs by 2020.

2.1 GST and its Phases

The GST is like taking an inventory that looks at everything related to where the world stands on climate action and support, identify the gaps and possible ways for working together to plan forward accelerated climate actions. GST, a comprehensive assessment process of the PA, acts as a focal point for Parties to convene and analyse the advancements made in climate actions, as well as to review any gap and expedite the achievements of the Agreement's objectives.²⁶ The goal of the GST is to evaluate the overall strength of the global response to climate change by looking at collective progress rather than individual parties' changes in policies and actions. GST is an essential part of the 'ratchet up'²⁷ mechanism of the PA to keep the 1.5°C limit and other PA goals within reach. The Synthesis report addresses a wide range of major issues related to climate change, such as the GST procedure, climate finance, loss and damage resulting from the impacts of climate change, and adaptation and mitigation measures.²⁸

The overall responsibility of conducting the GST bestows with the 'Conference of the Parties serving as the meeting of the Parties to the PA (CMA)²⁹', while the governing body is made up of the representatives of the signatory nations that

²⁸ Vinod Kumar, "COP28: Draft of Global Stocktake under Paris Agreement unveils strategies to combat Climate Change," *DD News*, December 12, 2023,

<https://ddnews.gov.in/international/cop28-draft-global-stocktake-under-paris-agreement-unveils-strategies-combatclimate#:~:text=The%20draft%20mentions%20that%20a,the%20latest%20nationally%20determined%20contributions.>

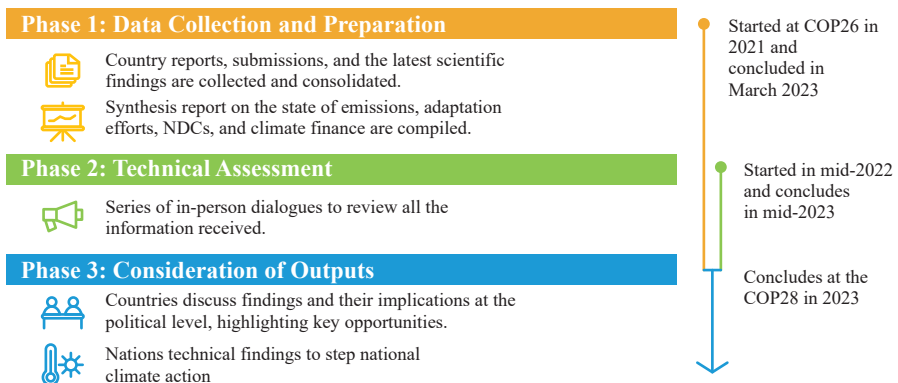
²⁹ CMA meets once a year at the sessions of the Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCC).

oversees the implementation of the PA. Two subsidiary bodies (SBs) are involved in the GST - the subsidiary body for Scientific and Technological Advice (SBSTA) is responsible for collecting data and handling technical aspects of the GST, while the subsidiary body for Implementation (SBI) helps with the final implementation phase.³⁰ There are three phases of the GST.

Phase 1 - Data Collection and Preparation

The 1st phase started at COP26 in November 2021 in which information were collected and compiled for preparing the technical component. A solid information base is required for a useful stocktake. The UN Environment Programme (UNEP) Adaptation Gap Report and the Sixth Assessment Report of the IPCC (IPCC AR6) are the primary sources of data used in this phase. Along with this, reports of individual countries, the UN and UNFCCC were also collected and used for producing at least 13 synthesis reports on the state of GHG emissions, adaptation and the overall effects of NDCs and finance flows among which 4 reports were from the UNFCCC secretariat and nine reports were from the UN, international and regional organisations and non-party stakeholders.³¹

Figure 1: Three Phases of Global Stocktake³²



³⁰ The London School of Economics and Political Science and Grantham Research Institute on Climate Change and the Environment, “What is Global Stocktake,” November 29, 2023, [https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-globalstocktake/#:~:text=The%20Global%20Stocktake%20\(GST\)%20is,rise%20to%201.5%C2%B0C.](https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-globalstocktake/#:~:text=The%20Global%20Stocktake%20(GST)%20is,rise%20to%201.5%C2%B0C.)

³¹ “The Global Stocktake at COP28,” *Nature climate change* 13 (November 2023): 1146-1147, [https://doi.org/10.1038/s41558-023-01832-z.](https://doi.org/10.1038/s41558-023-01832-z)

³² Synthesised from Jamal Srouji and Deirdre Cogan, “What is the “Global Stocktake” and How can it Accelerate Climate Action,” World Resources Institute, September 08, 2023, [https://www.wri.org/insights/explaining-global-stocktake-paris-agreement.](https://www.wri.org/insights/explaining-global-stocktake-paris-agreement)

Phase 2 - Technical Assessment

The 2nd phase contributed, discussed and added new sources and information that the GST should take into consideration. In addition to an overall synthesis report, the technical assessment considered the information acquired in the first phase and used it to produce summary reports on mitigation, adaptation, and finance. A scientific report was published in September 2023 after the technical assessment, which was supervised by two co-facilitators—one from a developed country and the other from a developing country.³³ The second phase consisted three technical dialogues which took place during COP27 in Sharm el-Sheikh and two climate talks in Bonn, Germany in June 2022 and June 2023.

Phase 3 - Consideration of Outputs

The 3rd phase of the GST involved countries discussing findings and their implications at the political level while highlighting the important opportunities. This phase took place at COP28 in Dubai, United Arab Emirates.

2.2 What to be Measured in Global Stocktake

The purpose of the GST is to assess the status of the three long-term objectives of the PA, as stated in Article 2³⁴ which includes:

- Maintaining the rise in global temperatures under 2°C with efforts to keep it under 1.5°C.
- Increase resilience and low GHG developments.
- Ensure consistent finance flows for development which is climate resilient and with low GHG emissions.

Additionally, GST evaluates collective progress on other cross-cutting issues of the PA, such as loss and damage that require further financial arrangements and the effects of climate change that are unavoidable through adaptation or mitigation measures.

2.3 Key Insights of the Synthesis Report of the First Global Stocktake

The PA has prompted global climate action by setting up targets and making the urgency of addressing the climate crisis evident. It has inspired tremendous advancements in global mitigation and adaptation action and support, and generated

³³ During the first GST, the two co-facilitators were Harald Winkler from South Africa and Farhan Akhtar from the United States (US).

widespread global commitment and also played a pivotal role in generating the cooperative action necessary to address the climate crisis. In order to achieve sustainable development, climate change action must be accelerated. It is possible to make policies and actions supporting low GHG emission development and climate resilience mutually beneficial by using integrated, inclusive policymaking and whole-of-society approaches. With a whole-of-society approach informed by local context and well-designed climate actions can minimise disruptions and produce significant benefits.³⁵ Encouraging action by all Parties and non-Party stakeholders, such as local communities, indigenous peoples, cities and other subnational authorities, the private sector, financial institutions, and civil society, will strengthen climate action and support. Achieving net zero emissions by the middle of the century and setting transformative adaptation into action at the same time call for significant and quick adjustments to current procedures. Greater ambition and an increased probability of achieving the objectives of the PA should be made possible by equity.

The 17 key findings³⁶ of the synthesis report show that more work is needed in all fronts in order to meet the three long-term goals of the PA. Key findings of the synthesis report can be summed up as follows.

2.3.1 *Mitigation Including Response Measures*

The synthesis report has found that global emissions are not aligned with the temperature goal of the PA, and opportunities are gradually being limited for increasing ambitions as well as implementing current commitment of limiting temperature rise to 1.5°C above pre-industrial levels.

For achieving net zero CO₂ emissions globally by 2050, global GHG emissions must be reduced by 43 per cent by 2030 and 60 per cent by 2035 relative to 2019 levels which on one hand requires more determination in action and support to implement domestic mitigation measures and on the other hand calls for setting more ambitious NDC targets. In order to achieve net zero CO₂ and GHG emissions, all sectors and contexts must undergo systems transformations which include increasing the use of renewable energy while gradually phasing out fossil fuels, putting an end to deforestation, lowering non-CO₂ emissions, and putting supply and demand side measures in place. Just transitions along with customised strategies considering different contexts can be helpful in achieving more substantial and equitable

³⁵ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake: Synthesis report by the co-facilitators on the technical dialogue,” September 08, 2023, https://unfccc.int/sites/default/files/resource/sb2023_09_adv.pdf.

³⁶ See for details, Annex 3.

mitigation outcomes. For addressing the impacts of response measures, economic diversification is an important strategy.

As evidenced by science, it is urgently necessary to set the world on the right track to achieve the significant, quick, and long-lasting reductions in GHG emissions. Fast-tracking, fair, and just transitions should be implemented, among other things by employing all available technologies to decarbonise industry and transportation, and stopping deforestation. Moreover, the second round of NDCs needs to be more ambitious, economy-wide, and cover all GHGs and sectors in order to keep the 1.5°C target within reach.³⁷

2.3.2 *Adaptation including loss and damage*

Globally climate change induced negative impacts are increasing. To reduce and respond to these negative impacts, it is urgently necessary to have increased adaptation measures and efforts for averting, minimising and addressing loss and damage particularly to the states which are less prepared and less able to overcome the devastating climate change induced negative impacts.

Although there are increased number of ambitious plans and commitments for adaptation efforts, most are fragmented, incremental, sector-specific and distributed unevenly across regions. The adequacy and effectiveness of adaptation efforts are increased when they have local contexts, and are priority. In order to manage risks holistically and assist affected communities, rapid action is needed in development and climate policies to avert, minimise, and address loss and damage. Funding and assistance for adaptation for meeting urgent and growing needs, plans for averting, minimising, and addressing loss and damage must be scaled up from expanded and innovative sources, and it is necessary to make the financial flows consistent with climate-resilient development.

It is imperative that the Global Goal on Adaptation framework, including themes and indicators, to be adopted as soon as possible for helping to bridge implementation gaps across all nations. Efforts must be intensified globally to avert, minimise and address loss and damage at the local, national, regional, and global levels. The financing gap for adaptation must be addressed urgently. The total amount of finance allocated to adaptation needs to be expanded, and this includes giving all developing nations better access to grants and favourable adaptation financing.³⁸

³⁷ COP28 UAE, "First Global Stocktake High-level Committee Summary of High-level events," accessed January 14, 2024, https://unfccc.int/sites/default/files/resource/GST_HLE%20branded%20V2.pdf.

³⁸ COP28 UAE, "First Global Stocktake High-level Committee."

2.3.3 *Means of Implementation and Financial Flows*

For effectively mobilising support for climate action in developing states, it is necessary to deploy international public finance strategically, which remains to be an important driver of action, and to optimise effectiveness in regards to ownership, access, and impacts. It is essential to create options to mobilise trillions of dollars and shift investments to climate action across scales for making financial flows both domestic and international, public and private, in accordance with an approach towards climate-resilient development and low GHG emissions. To address the requirements of developing states, existing cleaner technologies must be quickly implemented as well as new technologies must be developed and transferred. Initially for accomplishing comprehensive and long-term climate action, capacity-building is essential which also requires effective country-led and needs based collaboration for ensuring improved capacities and maintain it over time and at all levels.

The synthesis report observes that in spite of increase in climate finance, there are still shortfalls in mobilisation and provision of such finance. It highlights the necessity of simplified access to international climate funds and accelerated technology transfer for implementation.³⁹ After the GST, the parties will have two years for submitting their updated NDCs to the UNFCCC. The updated NDC, termed as NDC 3.0 is due at the beginning of 2025 targeting for 2035 and is expected to delineate how the parties plan to take stronger actions.⁴⁰ The NDC 3.0 will serve as the foundation for future national climate pledges and are significant documents for this “critical decade” and beyond. Beside facilitating the large-scale unlocking of financing, NDC 3.0 is expected to expedite the implementation of plans, programmes, policies and strategies. To facilitate access to private sector financing, NDC 3.0 would delineate sector-specific implementation plans with outline of specific investment requirements. To make the NDC 3.0 an integrated component of national development and planning activities, NDC 1.0 and 2.0 as well as the broader policy environment and national priorities would be taken into consideration.

3. The Global Stocktake: Expectations vs. Reality

The GST focuses on three areas - mitigation, adaptation and finance with its goal to assist nations in monitoring and assessing their climate action progress and increasing climate ambition over time.

³⁹ COP28 UAE, “First Global Stocktake High-level Committee.”

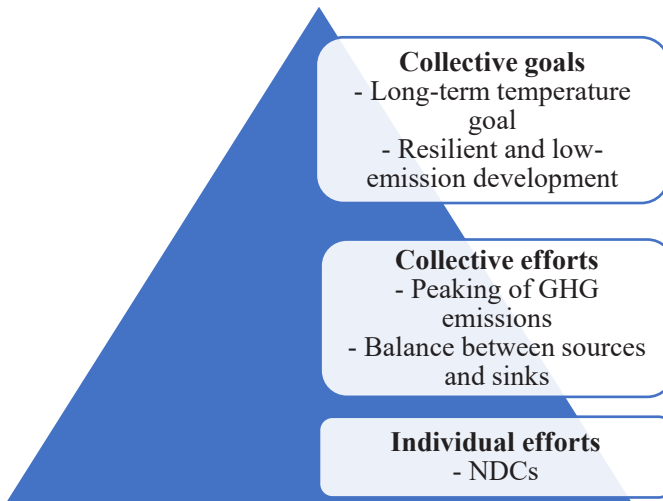
⁴⁰ United Nations Climate Change, “NDC 3.0,” accessed May 15, 2024, <https://unfccc.int/ndc-3.0>.

3.1 *Expected Outcome of the Global Stocktake*

The decision of GST was taken with a broad scope in which Parties agreed for the evaluation of progress on mitigation i.e. cutting emissions as well as adaptation to climate induced hazards and ways of implementation and support which refers to the raised financial status for supporting developing states. Numerous sources of input such as greenhouse gas inventories, assessments of national climate plans and adaptation projects were specified by the Parties. The climate change induced loss and damage, and response measures, including social and economic consequences of climate actions, were also agreed by the Parties to be considered in the GST.

The Paris Agreement sets long-term collective goals and combine individual and collective efforts for guiding all the states in limiting global warming, strengthening resilience, enhancing abilities to adapt to climate impacts and directing investments to low emission and climate resilient development.

Figure 2: Ambitions of the Paris Agreement⁴¹

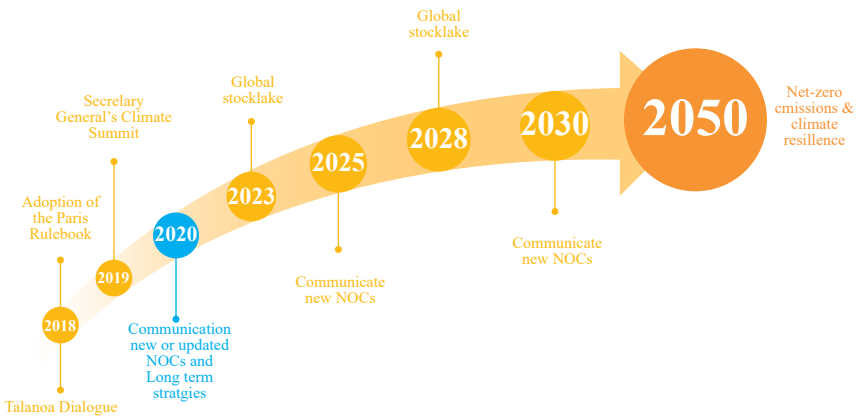


To meet these goals, a timetable has been set in which countries are expected to submit updated NDCs for limiting emissions every five years.

⁴¹ Adopted from Jakub Gibek, “Global stocktake (and ambition cycle) under Paris Agreement,” COP24, Katowice 2018, <https://www.energy-community.org/dam/jcr:916bb69e-e81f-40ae9ce38afcaaf65778/Ministry%20of%20Environment%20of%20Poland,%20Global%20Stocktake%20under%20Paris%20Agreement.pdf>.

A new international framework for accelerating efforts for cutting GHG emissions was established by the PA. COP24 in Katowice did one of the most critical tasks for the Parties by agreeing on the Paris Rulebook which is the implementation guidelines for the PA on climate change. The Paris Rulebook, also known as the Katowice Climate Package, was mostly agreed by governments in 2018 after three years of negotiations between the Parties, though some issues are still unresolved. The PA took extensive efforts for addressing climate change and it was expected that ambition and implementation would also be accelerated. As the GST was designed for assessing the global response to climate crisis with a view to plan a better way forward, it was expected that many creative and actionable solutions would be prepared to overcome the climate change induced challenges.

Figure 3: Major Milestones from the Adoption of the Paris Rulebook Until 2050⁴²



3.2 The Global Stocktake: Realities

The GST process was initiated in 2021 after the COP21 with data collection as the first phase which continued till March 2023 within which the scientific study reports, country reports and other documents were submitted for consideration. Technical assessment, consisted of three dialogues took place in UN intersessional talks in 2022 and 2023 in Bonn and at COP27, was the second phase which began in June 2022 gave the country representatives, non-state actors and climate experts an opportunity to discuss and finally the summary reports recorded the outcomes of the technical dialogues. The co-facilitators of the GST prepared a 46-page synthesis

⁴² World Resources Institute, “Navigating the Paris Rulebook,” accessed March 06, 2024, <https://www.wri.org/paris-rulebook>.

report which served as the comprehensive overview of all the discussions and inputs and basis of the political part at COP28.⁴³

The fundamental element of the PA includes a thorough assessment of global progress towards combating climate change while identifying the shortcomings as well. Governments, scientists, and civil society organisations were involved in the process who submitted thousands of documents and debated over their contents for a long time. The information and submissions were categorised into three main areas of climate action.⁴⁴ The primary technical findings of the GST are not new as it has revealed that countries are not reducing their emissions as per the PA, they are not adequately prepared for climate change induced risks, and developing states are still deprived of getting enough support from the developed states. Scholars are of the opinion that the GST has both successes and failures. It has successes in the sense that it has become a vital element of the COP process and will help to determine the direction of negotiations and eventual actions necessary to take in the coming years and decades, whereas the major lacking of the GST lies with its voluntary nature like much of the COP system which does not compel action. In the final synthesis report, loss and damage is covered in the adaptation section and mitigation is included the response measures. Prior to COP28, issues like loss and damage and mitigation were separated under different sub-categories. Civil society groups and non-state actors emphasised on the importance and inclusion of loss and damage particularly. To mobilise the mitigation potential of transnational climate action and assist in closing the global emission gap, the PA has referred to the Non-State Actor Zone for Climate Action (NAZCA)⁴⁵. Though the PA basically focused on climate plans of the individual state parties, the COPs recognised the role of the non-party stakeholders in fulfilling the goals of the PA.

The technical dialogues were based on the best available sciences and latest findings of the IPCC and other sources of information and had a broad scope which included adaptation, mitigation and support as well as response measures and loss and damage. The synthesis report identified 17 key findings which suggested that though there were progresses, much need to be done. The synthesis report also provided a strong technical and scientific basis for the GST. The technical assessments

⁴³ Aruna Chandrasekhar and Josh Gabbatiss, “Q&A: What is the ‘global stocktake’ and could it accelerate climate action?” CarbonBrief, November 17, 2023, <https://www.carbonbrief.org/qa-what-is-the-global-stocktake-and-could-it-accelerate-climate-action/>.

⁴⁴ The information feeding into the GST comprised more than 170,000 pages of documents from governments, business and civil society groups, supported by over 252 hours of meetings and discussions.

⁴⁵ A platform established and hosted by the UNFCCC that to date has registered more than 12,000 individual or cooperative climate commitments by companies, investors, civil society and cities.

highlighted the evolving scopes, existing gaps and their solutions. Moreover, the report provided a strong technical and scientific foundation for the GST. The technical findings of the report demonstrate that for fulfilling the long-term goals of the PA, it is necessary for all the actors to work on all fronts and provide direction of the ways and means of taking decisive actions. COP28 President-Designate Dr. Sultan Al Jaber mentioned that it is necessary to act with ‘ambition and urgency’ to reduce emissions by 43 per cent by 2030 for keeping the 1.5°C target within reach.⁴⁶ Executive Secretary of the UN Climate Change, Simon Stiell also urged the governments to study the findings carefully and consider the actions they need to take as the PA has vital role in the coming years.⁴⁷ The technical dialogue has provided scientific input for determining the effectiveness of the global response to achieve the PA goals as well as for identifying the gaps and informing future pathways, . The report has utilised the aggregated information collected from individual state NDCs and additionally from parties, international organisations and non-party stakeholders since 2021.⁴⁸ Technical dialogues were held to facilitate a global understanding of the main thematic areas of adaptation, mitigation and means of support, implementation and finance flows all of which should take concerns of equity and the goals of the plan into account. The most significant outcome of the GST is providing pertinent data for the policymakers and stakeholders for crafting more effective climate policies and targets for the upcoming NDC round scheduled for 2025. More ambitious targets and stronger policies should go a long way towards identifying the steps needed to achieve the main objective of the PA.

4. Challenges and Opportunities Depicted in the Synthesis Report of the Global Stocktake

For addressing climate change, the GST has been a critical turning point as it entails a moment for taking an accountability as well as suggests better ways for future. Executive Secretary of the UN Climate Change Simon Stiell identified the

⁴⁶ United Nations Climate Change, “Implementation must accelerate to increase ambition across all fronts, taking an all-of-society approach to make progress towards the Paris Agreement goals and respond to the climate crisis, finds technical report on first global stocktake,” UN Climate Press Release, 08 September 2023, <https://unfccc.int/news/implementation-must-accelerate-to-increase-ambition-across-all-fronts-taking-an-all-of-society>.

⁴⁷ United Nations Climate Change, “Implementation must accelerate to increase.”

⁴⁸ Andrew Rowan and Kathleen Rowan, “COP28, Climate Change, and Global Stocktake,” WellBeing International, December 05, 2023,

https://wellbeingintl.org/cop28-climate-change-and-global-stocktake/?gad_source=1&gclid=CjwKCAjwr7ayBhAPEiwA6EIGxHc0vfvRIUuHjpsstwmUP3aa69XT1Z884k5nOkqgrH7QjMLFr9hCihOC1PoQAvD_BwE.

GST as a ‘moment for course correction’, an opportunity to ‘bend the curve decisively on emissions’ and as an ‘ambition, accountability and acceleration exercise’.⁴⁹

4.1 Challenges Identified in the Synthesis Report

The challenges that have been identified in the synthesis report of the Technical Dialogue of the first GST include the following:

Adaptation

The report states that though the states are making progresses on adaptation, these are not fast enough. The report highlights the gap between the necessity and provided support especially from the developed countries to the developing vulnerable countries for adaptation. The report also considers the role of governments, central and commercial banks and institutional investors and highlights the necessity of reforming the multilateral development banks for accelerating climate actions. The report underscores the poor implementation, uneven distribution and incremental progress in adaptation action and support. The UN has estimated that for adaptation, vulnerable developing countries will require US\$ 300 billion per year till 2030, then US\$ 500 billion per year till 2050.⁵⁰

A UNEP report has warned about the inadequacy of current climate actions for meeting the temperature and adaptation goals of the PA. According to the Adaptation Gap Report 2023, adaptation costs for developing countries have seen significant rise than previous estimates and the report modelled the cost approximately at US\$ 215 - 387 billion per year this decade⁵¹. The report further finds that in 2021, adaptation financial flows from public multilateral and bilateral funds to the developing countries declined by 15 per cent to US\$ 21 billion.⁵² While the climate change induced negative impacts and risks are accelerating globally, the adaptation-financing gap is also increasing and stands between US\$ 194 – 366 billion per year.⁵³ Studies have found that since 2020, the adaptation finance flows to the climate vulnerable developing countries have declined.

⁴⁹ Chandrasekhar and Gabbatiss, “Q&A: What is the ‘global stocktake’”.

⁵⁰ CPRam, “The big challenges of COP 28,” December 08, 2023, <https://cpram.com/lux/en/individual/publications/experts/article/the-big-challenges-of-cop-28>.

⁵¹ UN Environment Programme, *Adaptation Gap Report 2023: Underfinanced. Underprepared. Inadequate investment and planning on climate adaptation leaves world exposed* (Nairobi: United Nations Environment Programme, 2023), XIV, <https://doi.org/10.59117/20.500.11822/43796>.

⁵² UN Environment Programme, *Adaptation Gap Report 2023*, XIV.

⁵³ UN Environment Programme, *Adaptation Gap Report 2023*, XII.

Mitigation

The GST reports a wide gap in mitigation policies and mentions that progress has not been enough for keeping temperature rise below 1.5°C. Achieving carbon neutrality targets are still far away and countries' commitments in the NDCs are quite far off target.⁵⁴ The synthesis report of the technical phase of the GST emphasises on a persistent 'emission gap' which denotes that the present climate commitments are not in align with the ways necessary to limit global warming to 1.5° C.

The UNEP has called for accelerated economy-wide, low-carbon development for bringing down GHG emissions to levels consistent with 1.5-2°C pathways. Countries have also made new or updated pledges or announcements for cutting emissions. The United States (US) has set an ambitious new target of reducing emissions by 50-52 per cent below 2005 levels by 2030. Likewise, the European Union (EU) has also updated their carbon emissions reduction to at least 55 per cent by 2030 compared with the levels of 1990.⁵⁵ But according to the UNEP report, all these pledges and announcements fall short and it is necessary to take an extra 28 million tonnes of CO₂ equivalent off annual emissions by 2030 over the promised amount. For keeping the possibility of 1.5°C target alive, it is necessary to cut emissions by 45 per cent below 2010 levels by 2030.⁵⁶ The targets that have been set for 2030 are inadequate and the current targets for 2030 has put the world on track for a temperature increase of 2.4°C by the end of the century.⁵⁷ According to the Emissions Gap Report 2023, global GHG emissions has scaled up by 1.2 per cent between 2021 and 2022, setting a new high of 57.4 gigatonnes of CO₂ equivalent (GTCO_{2e}).⁵⁸ About two thirds of current GHG emissions are attributed to industrial activities and the burning of fossil fuels. Besides, one quarter of the present GHG emissions are made up of methane (CH₄), nitrous oxide (N₂O), and fluorinated gases (F-gases), which have a greater potential to cause global warming.⁵⁹ Almost 80 per cent of the emissions around the world come from G20 countries, among which largest contributions are from China, the US and the EU while the Least Developed

⁵⁴ CPRam, "The big challenges of COP 28".

⁵⁵ King and Meinshausen, "If all 2030 climate targets are met".

⁵⁶ Climate Action Tracker, "Warming Projections Global Update," November 2021, accessed 12 August 2024, https://climateactiontracker.org/documents/997/CAT_2021-11-09_Briefing_Global-Update_Glasgow2030CredibilityGap.pdf.

⁵⁷ Climate Action Tracker, "Warming Projections Global Update."

⁵⁸ UN Environment Programme, *Emissions Gap Report 2023: Broken Record – Temperatures hit new highs, yet world fails to cut emissions (again)* (Nairobi: United Nations Environment Programme, 2023), XVI, <https://doi.org/10.59117/20.500.11822/43922>.

⁵⁹ These emissions are increasing rapidly, in 2022, F-gas emissions grew by 5.5 per cent, followed by CH₄ at 1.8 per cent and N₂O at 0.9 per cent. UN Environment Programme, *Emissions Gap Report 2023*, XVI-XVII.

Countries (LDCs) contribute 4 per cent.⁶⁰ Emissions Gap Report 2023 has predicted that to achieve 2°C target of the PA, the world needs to reduce GHG emissions by 28 per cent while 42 per cent reduction is needed to achieve the target of 1.5°C.⁶¹

Financial Flows

The synthesis report emphasises on the pressing demand of scaling up financial resources, technology and capacity building from developed countries through expanded and innovative sources including the private sectors. It highlights the requirement of scaled up climate finance from different sources. The report calls for global investments for meeting the goals of the PA and mentions that it is vital to unlock and redistribute trillions of dollars for meeting global investment needs required for lowering GHG emissions and climate-resilient development.⁶² However, the report acknowledges that the collective goal of the developed countries for jointly mobilising US\$100 billion per year for the climate vulnerable developing countries for mitigation actions was not met entirely in 2020.⁶³

Studies have found that most developed countries have failed to contribute a fair share in the committed US\$100 billion. Climate finance was one of the conflicting issues of COP28 and in the conference the rifts between developed and developing countries came forefront once again on the issue of finance. The rift was mainly around the question—who should provide fund to the developing countries for decarbonising and protecting them from climate hazards. According to UNFCCC of 1992, high income countries are pledged to provide funds to the developing countries for tackling climate change induced impacts. One of the main reasons of the failure of climate fund collection is the ineffectiveness of the agreements although being legally binding as non-compliance is not penalised in any way. Additionally, there is still disagreements within the UNFCCC over the principle of Common but Differentiated Responsibility and Respective Capability (CBDR-RC)⁶⁴. This disagreement can be seen when some parties like the US and the EU advocate that

⁶⁰ UN Environment Programme, *Emissions Gap Report 2023*, XVIII.

⁶¹ UN Environment Programme, *Emissions Gap Report 2023*, 28.

⁶² United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 36.

⁶³ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 33.

⁶⁴ Common but differentiated responsibilities (CBDR) principle of international environmental law establishes that all states are responsible for addressing global environmental destruction yet they are not equally responsible. For further details, Charlotte Epstein, “Common but differentiated responsibilities,” Britannica, accessed 14 August 2024, <https://www.britannica.com/topic/common-but-differentiated-responsibilities>; Ellen Hey, “The Principle of Common but Differentiated Responsibilities,” accessed 14 August 2024, https://legal.un.org/avl/pdf/ls/Hey_outline%20EL.pdf.

this list should be expanded to include reasonably wealthy emerging economies like China and the Gulf states.

4.2 Opportunities Delineated in the Synthesis Report

Despite having a not so positive outcome of the GST process, the process has some achievements. One of the most significant achievements of the GST process is that it has been able to keep the 1.5°C target in the centre stage for the next round of NDCs. This is significant since it sets the stage and at the same time heightens the expectations to strengthen NDCs due in early 2025.

The Technical Synthesis Report of the GST has identified the necessary corrections for bringing the climate actions on track. The GST is a process for the countries and stakeholders to evaluate the progress they have made collectively to meet the objectives of the PA. At the same time the GST has identified the areas of failure and has suggested new areas for further consideration as well. It has provided benchmarks and guidance for the parties for the next round of climate action plans to be done in 2025.

A respondent of the KII mentioned GST as being critical to the global effort underway to mobilise climate financing and embolden industrialised countries to pursue more green strategies. It is also mentioned that the wider GST process has the potential to spur on greater regional cooperation on the matter of climate change in vulnerable areas.⁶⁵

Transition Away from Fossil fuels

COP28 noticed a historic step as the GST included statements on fossil fuels. The GST includes a demand for ‘transition away from fossil fuels in energy systems’ which initiated debate about the phrasing whether it was an important accomplishment or a decision which gave the impression that necessary things were not done. The GST emphasises on phasing out all unabated fossil fuels mentioning that to achieve GHG emissions and net zero CO₂, transformations of systems is required across all sectors.⁶⁶ It has pointed out that phasing down demand and supply of all fossil fuels is inevitable and essential which needs strengthened policies.⁶⁷ The term fossil fuel use has not been mentioned in any COP decision text earlier.

⁶⁵ Information collected from KIIs - Junior Research Fellow, Planetary Security Initiative, Clingendael Institute; Assistant Professor, Department of Geopolitics & International Relations and Coordinator of Centre for Climate Studies, Manipal Academy of Higher Education (MAHE), Karnataka, India.

⁶⁶ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 6.

⁶⁷ COP28 UAE, “Letter to Parties,” accessed May 25, 2024, <https://www.cop28.com/en/letter-to-parties>.

Therefore, despite the argument over the language ‘transitioning away’ or ‘phasing out’, citing about fossil fuel in a COP document for the first time can be considered as an advancement.

Necessity of Scaling Up of Financial Flows

Failure of the developed countries in delivering US\$ 100 billion for adaptation and mitigation in the developing climate vulnerable countries have become an issue of debate and discussion in all climate negotiations. The GST has highlighted on rapid scaling up for supporting adaptation and financial arrangements for preventing, minimising and addressing loss and damage from various innovative sources.⁶⁸ For meeting pressing and increasing necessities, it is necessary for the financial flows to be consistent with climate resilient development.

Other Significant Takeaways

Discussions on Fossil fuel use and energy system were not the only most important takeaways from the GST, the GST also included some other significant wins as well. The other important takeaways from the GST which are crucial but overlooked are as follows.

Priority on Equity

From the time of initiation of the GST process in 2023, the discussions and dialogues intended to accelerate progress in adaptation, mitigation and means of support and implementation considering equity, inclusion and best available science.⁶⁹ Equity plays a crucial role in the GST as it is considered as the standpoint in which the Parties have a collective stand and the GST apprises the Parties about the ways to increase ambition and address the equity question in their updated NDCs.⁷⁰

Protection of Forests

According to the Global Forest Watch, in 2022 the tropics have lost additional 10 per cent primary rainforest compared to 2021.⁷¹ The GST recognises the necessity of

⁶⁸ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 8.

⁶⁹ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 4.

⁷⁰ Moosmann, Healy, Beuermann, Elsner, Schulze-Steinen, Textor DLR, “Addressing equity in the Global Stocktake.”

⁷¹ Casey Cronin and Josefina Cobián, “The COP28 Global Stocktake outcomes you didn’t hear about,” climateworks Foundation, February 22, 2024, <https://www.climateworks.org/blog/the-cop28-global-stocktake->

conservation, protection and restoration of nature and ecosystems and highlights on the importance of heightened efforts for halting and reversing deforestation and forest degradation by 2030. It also emphasises promoting conservation and sustainable forest management by policy incentive supported financial investments.⁷²

Boosting Zero-emission Transportation

Since 1990, CO₂ emissions from the transportation industry has increased by more than 70 per cent and now it accounts for more than 20 per cent fossil fuel related CO₂ emissions around the globe.⁷³ Transportation industry including land transports, maritime shipping and aviation still depends mainly on fossil fuels. The GST emphasises on decarbonisation of the transportation industry through transition to electric vehicles and investment in clean fuels and energy efficiency for transportation sectors.

Addressing Methane (CH₄) Emission

In 2019, concentrations of CH₄ were 1,860 ppb which were higher than any time in the last 8,00,000 years.⁷⁴ Global CH₄ emissions went up 1.8 per cent in 2022 to reach to a record high of 11.3 billion metric tons of CO₂ equivalent, resulting in a rise of more than 30 per cent compared to the 1990 level.⁷⁵ Though CH₄ pollution is a critical concern and the scientists had repeatedly called for radical reduction of CH₄ emissions, the issue has so far been overlooked. International Energy Agency has mentioned agriculture as the largest anthropogenic source of CH₄ emissions.⁷⁶ To address CH₄ emissions, the GST advocates for sustainable agriculture without further land expansion.⁷⁷

Multi-sectoral Approach to Accelerate Climate Action

The GST calls for public-private cooperation in investing in clean technology, protecting natural resources and eliminating dependence on fossil fuels. Both public

outcomes-you-didnt-hear-

about/#:~:text=The%20Global%20Stocktake%20is%20a,agreement%20would%20address%20fossil%20fuels.

⁷² United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 6.

⁷³ Cronin and Cobián, “The COP28 Global Stocktake outcomes.”

⁷⁴ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 16.

⁷⁵ Statista, “Methane emissions worldwide – statistics & facts,” accessed May 30, 2024, <https://www.statista.com/topics/10289/methane-emissions-worldwide/#topicOverview>.

⁷⁶ Cronin and Cobián, “The COP28 Global Stocktake outcomes.”

⁷⁷ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 16.

and private sectors need to be aligned with climate resilient development priorities and necessities. The GST emphasises that all finance flows be it domestic or international, public or private, should be consistent with low GHG emissions and climate resilient development pathways.⁷⁸ Finance could be scaled up if public finance plays a critical role with the deployment of public involvements to private sector finance.

Domestic Mitigation Measures

The GST emphasises on domestic mitigation measures mentioning that urgent action and support are necessary for implementation of domestic mitigation measures.⁷⁹ Domestic mitigation measures, on the other hand, requires creativity and innovation in policymaking as well as international cooperation.

Inclusion of the Ocean

The ocean is currently the warmest since it has ever been recorded, impacting marine life as well as the lives and communities of people who depend on it. Furthermore, the Small Island Developing States (SIDS) are at risk due to sea level rise. The ocean should be a crucial component of the GST since it serves as more than just a sink. Dr Nilüfer Oral stressed on the maintenance, conservation and enhancement of the ocean.⁸⁰ The GST outcome highlights on the crucial role of the ocean in the global response necessary to the right course for achieving the long-term goals of the PA with the inclusion of the discussion on ocean in the Guidance and ways forward.⁸¹

⁷⁸ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 35.

⁷⁹ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 5.

⁸⁰ Nilüfer Oral, “What does the Global Stocktake Mean for 70 Percent of the Planet – the Ocean,” paper presented in the Conference ‘the Global Stocktake and International Law: Paradigm, Process and Ambition’, Centre for Sustainable Development Law and Policy, Durham University, June 22-23, 2023.

[https://www.durham.ac.uk/media/durham-university/research-/research-centres/centre-for-sustainable-development-law-and-policy/pdfx27s/Final-Conference-Report-101023-\(1\).pdf](https://www.durham.ac.uk/media/durham-university/research-/research-centres/centre-for-sustainable-development-law-and-policy/pdfx27s/Final-Conference-Report-101023-(1).pdf).

⁸¹ Ocean & Climate Platform, “COP28: Despite mixed feelings on mitigation and adaptation outcomes, the ocean found its rightful place in the Global Stocktake conclusions,” December 15, 2023, <https://ocean-climate.org/en/cop28-despite-mixed-feelings-on-mitigation-and-adaptation-outcomes-the-ocean-found-its-rightful-place-in-the-global-stocktake-conclusions/>.

5. Global Stocktake and Bangladesh

GST was one of the five priority issues on the agenda of Bangladesh for COP28.⁸² Bangladesh expected specific actions, such as an assessment of the state of efforts towards the 1.5°C target, future goals, and tangible benchmarks from the GST. According to the UN, “It is intended to inform the next round of climate action plans under the PA to be put forward by 2025.”⁸³ Government policy action to formulate a blueprint for preventing the negative impacts of climate change is expected to be modelled after the GST process. For this, the GST has immense importance for Bangladesh and other climate vulnerable countries around the globe.

Bangladesh has become proactive in climate change adaptation and it has been mandated by the 15th amendment of the Constitution in Article 18A⁸⁴ which deliberates on the improvement and protection of environment and biodiversity. Gradually Bangladesh has gained substantial expertise in adaptive capacity building and resilience by formulating and implementing required policies and frameworks. The policies and frameworks which have made Bangladesh a pioneer around the globe for effective climate change adaptation include National Adaptation Programme of Action (NAPA), Bangladesh Climate Change Strategy and Action Plan (BCCSAP), Bangladesh Delta Plan (BDP) 2100, Perspective Plan 2041, Mujib Climate Prosperity Plan (MCP), Climate inclusive updated National Environment Policy, updated Standing Order on Disaster, etc.⁸⁵

On September 25, 2015, Bangladesh submitted its Intended Nationally Determined Contributions (INDCs)⁸⁶ to the UNFCCC for the three sectors of transportation, industry, and power. The proposal called for a reduction of 12 million

⁸² The other issues include – loss and damage fund, global goal on adaptation, US\$100 billion in climate financing and doubling Adaptation Fund. See for details, “COP28: Bangladesh to work together with other countries to resolve five important issues,” *The Financial Express*, November 30, 2023.

⁸³ Akriti Anand, “COP28: What is global stocktake, why it is important and India’s position,” Livemint, December 08, 2023, <https://www.livemint.com/news/cop28-what-is-global-stocktake-why-is-it-important-and-whats-indias-position-11701970599088.html#:~:text=Why%20is%20global%20stocktake%20important,2025%2C%22%20the%20UN%20says>.

⁸⁴ The Constitution of the People’s Republic of Bangladesh, “Article 18A: The State shall endeavour to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens,” Article 18A was inserted by the Constitution (Fifteenth Amendment) Act, 2011 (Act XIV of 2011), section 12, accessed June 29, 2024, <http://bdlaws.minlaw.gov.bd/act-367/section-41505.html#:~:text=%5B18A.,the%20present%20and%20future%20citizens.%5D>.

⁸⁵ Ministry of Environment, Forest and Climate Change, *National Adaptation Plan of Bangladesh (2023-2050)* (Dhaka: Ministry of Environment, Forest and Climate Change, Government of the People’s Republic of Bangladesh, 2022).

⁸⁶ Nationally Determined Contributions (NDCs) previously referred to as Intended Nationally Determined Contributions (INDCs) before the ratification of the Paris Agreement.

tons in GHG emissions from the Business as Usual (BAU) scenario⁸⁷ by 2030, as well as a further 24 million tons of emissions from a conditional reduction with support from the international community, with 2011 as the base year.⁸⁸ The country submitted the updated NDC in 2021 which covered energy, industrial processes and product use, agriculture, forestry and other land use and waste sectors as well as adaptation targets which will be developed in the National Adaptation Plan (NAP) further. The updated NDC included a more ambitious unconditional emission reduction target of 27.56 metric tons of carbon dioxide-equivalent (MTCO₂e) and conditional emissions reduction target of 89.47 MTCO₂e by 2030, both as compared to the BAU scenario.⁸⁹

Countries submitted their NDCs to the UNFCCC in 2021 and the Synthesis Report of the Technical Dialogue of the first GST depicted the progress to be not satisfactory. To reduce the GHG emissions by 43 per cent by 2030 and 60 per cent by 2035 comparing with the level of 2019 and to reach net zero CO₂ emission by 2050 around the globe⁹⁰, the NDC 3.0 need to be more progressive and ambitious as it may be the last opportunity for putting the world on track in line with achieving the 1.5°C goal of the PA.⁹¹ For meeting the deadline of NDC 3.0, Bangladesh needs to start the updating immediately and while doing the revision, the new development philosophy of the country “from resilience to prosperity” should be kept in cognizance.⁹² The Department of Environment (DoE) of the Ministry of Environment, Forest and Climate Change (MoEFCC) has prepared the primary concept note of NDC 3.0 and while formulating the concept note, the country faced challenges in balancing between adaptation and mitigation priorities due to resources scarcity. There is also lack of national experts for developing future scenario considering the impact on the

⁸⁷ The Business-As-Usual (BAU) scenario describes the development of the concentration of greenhouse gas emissions in the atmosphere under the assumption that no further efforts to reduce emissions will be made. For details, “Business-As-Usual Scenario,” Glossary/Climate Foreign Policy, German Council on Foreign Relations, accessed May 20, 2024, [https://dgap.org/en/research/glossary/climate-foreign-policy/business-usual-scenario#:~:text=The%20Business-As-Usual%20\(reduce%20emissions%20will%20be%20made.](https://dgap.org/en/research/glossary/climate-foreign-policy/business-usual-scenario#:~:text=The%20Business-As-Usual%20(reduce%20emissions%20will%20be%20made.)

⁸⁸ Ministry of Environment, Forest and Climate Change, *Nationally Determined Contributions (NDCs) 2021 Bangladesh (Updated)* (Dhaka: Ministry of Environment, Forest and Climate Change, 2021), 1.

⁸⁹ NDC Partnership, “Bangladesh,” accessed April 19, 2024,

<https://ndcpartnership.org/country/bgd#:~:text=Bangladesh%20submitted%20the%20updated%20first,busines-s-as-usual%20scenario.>

⁹⁰ United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake,” 5.

⁹¹ United Nations Climate Change, “NDC 3.0”.

⁹² Haseeb Md Irfanullah, “Before COP29, let’s get our priorities in line,” *The Daily Star*, April 25, 2024; Interview with a environment and climate change expert of Bangladesh.

economy and society as a whole and finally confirming the required finance for preparing the NDC 3.0 on time.⁹³

The 8th Five Year Plan (FYP) (2021-2025) of Bangladesh prioritised the implementation of the Bangladesh Delta Plan (BDP) 2100 and provided necessary guidance to initiate the implementation from 2021 onwards which reflects the vision of government to build a climate resilient delta. The country is in the process of developing the 9th FYP (2026-2030) and MoEFCC is soliciting with other ministries for having a green strategy in the 9th FYP which included providing guidance for the upcoming infrastructural development activities.⁹⁴

For addressing the climate change related issues, Bangladesh government has prepared a good number of policies, frameworks and strategies. The government has also established Bangladesh Climate Change Trust Fund (BCCTF) which is funded by domestic resources and Bangladesh Climate Change Resilience Fund (BCCRF)⁹⁵ supported by donor funding. The government has allocated BDT 1 billion of special fund for climate change and environmental protection in the national budget for fiscal year 2024-25. In addition, Bangladesh Climate and Development Platform (BCDP) has been established recently for enhancing coordination among various projects dealing with climate change impacts.⁹⁶

Bangladesh is known for pioneering in climate change adaptation. Its recent policies have given recognition to the importance of community-based and locally led adaptation (LLA) and paved the way for scaling up such adaptation.⁹⁷ Although Bangladesh has a long history of the implementation of Nature-based Solutions (NbS), the nation is facing challenges related to project design, consistent funding flows, monitoring and assessment, institutional structure, and evidence of effectiveness.⁹⁸ Bangladesh's vulnerability to climate change has pushed the

⁹³ UN Office for Sustainable Development, "Bangladesh's Progress in NDC 3.0 and BTR1 Preparation," May 28, 2024, accessed August 14, 2024, https://unosd.un.org/sites/unosd.un.org/files/session_2_bangladesh.pdf.

⁹⁴ Interview with a environment and climate change expert of Bangladesh; "A green strategy for 9th Five Year Plan under consideration," *The Business Standard*, July 19, 2022.

⁹⁵ The BCCRF has not functioned since 2016 because of disagreements over its joint management by the MoEFCC and the World Bank. Saleemul Huq and Mizan Khan, "Just and Green Transition in Bangladesh," in *KEYS TO CLIMATE ACTION: How Developing Countries Could Drive Global Success and Local Prosperity*, eds. Amar Bhattacharya, Homi Kharas and John W. McArthur (Washington, D.C.: The Brookings Institute, 2023), 41-56.

⁹⁶ "Tk 100cr allocation proposed for tackling climate crisis," *The Daily Star*, June 06, 2024

⁹⁷ Afsara Binte Mirza, Savio Rousseau Rozario and Chowdhury Abrar Zahin, "Scaling up locally led adaptation in Bangladesh: three action areas," *Briefing*, iied and ICCCAD, May 2023, <https://www.iied.org/sites/default/files/pdfs/2023-05/21456iied.pdf>.

⁹⁸ Tasfia Tasnim, Farah Anzum, Haseeb Md. Irfanullah, Nathalie Seddon, Saleemul Huq, "A Roadmap for Nature-based Solutions in Bangladesh: Promises and Challenges," *Policy Brief*, ICCCAD, August 2020

country to be one of the frontliners in global fight against climate change and the country has achieved global recognition for its role.

6. Conclusion and Way Forward

The GST is an UN-led global process for providing a clear assessment of climate actions which have been taken so far. The synthesis report of the technical dialogue of the first GST has depicted a dire scenario of the climate change situation and urged for immediate, bold climate action which include changing global systems and enacting ambitious national targets and policies for achieving the goals of the PA. The GST has reiterated the necessity for more robust national commitments to reduce emissions, execute adaptation strategies and enable people to improve their lives in the changing climate. The technical findings of the GST have provided a road map for the Parties for formulating their direction for achieving zero-carbon and climate resilient future. Now, the GST seeks bolder climate action. The first GST has brought opportunities for nations for making significant commitments through ambitious NDCs and NAPs by 2025 and above all, they have to carry forward their promises and expedite the global decarbonisation process. Serving as a status update and roadmap for the parties of the PA, the report has emphasised on the critical role of technology for preparing the next NDCs. State parties are obliged to submit new national NDCs to the UN in 2025. The GST will guide the countries for setting new, more ambitious climate goals, policies and funding for getting closer to the 1.5°C target as well as countries also record their GHG gas inventories aligning with the PA. The first GST has paved the way of opportunity for the states for making important commitments which needs to be implemented for setting the world on an accelerated step towards minimising the negative impacts of climate change. Despite Bangladesh's minimal contribution to global warming, it is usually regarded as one of the major victims of the negative effects of climate change. The country is in dire efforts in shifting its vulnerability to resilience, which requires significant financial assistance. Being a developing country, it needs support for coping with the climate change induced impacts.

Although the synthesis report of the first GST has painted a blunt image of the results of the decisions taken in the PA, it has offered a technological roadmap for a more sustainable future. The present paper would like to provide following suggestions for overcoming the challenges which have been identified in the synthesis report:

- COP29 is dubbed as ‘Finance COP’ as there will be dominance of climate finance issue in the COP agenda. The vulnerable developing countries, therefore, need to focus on securing resources as well as commitments which are vital for transitioning economies in terms of emissions and building resilience against the negative impacts of climate change. Developing countries should establish new financial goal based on the necessity of developing countries, address the shortcomings of the previous goals and at the same time, focus on penalties for non-compliance for any COP decisions.
- International cooperations need to be strengthened for promoting actions based on the findings of the GST. As the Parties must submit new NDCs in 2025 which will map out emissions reduction plans through 2035, the Parties must make robust NAPs in order to go forward with implementation by 2030.
- It is necessary to have more ambitious mitigation and effective adaption measures for bridging the financial gap. Apart from increased international public adaptation finance, new and innovative sources have given priority in the synthesis report. These new and innovative sources include domestic and international financial institutions and multilateral development banks. Private organisations could supplement the funds provided from the mentioned sources and fill up the financial gaps.
- Mitigation generally gets priority over adaptation. Although in COP28 parties agreed for new framework for global climate resilience for supporting Global Goal on Adaptation (GGA), the issue of necessary financial support was not addressed. It is necessary to focus on accelerated planning and implementation for achieving GGA.
- Non-party stakeholders also have immense importance in successfully executing climate plans, improving climate related actions and seeking the accountability of the leaders for the shortcomings. So, non-state actors could play distinct prescriptive roles in relation to individual state NDCs for significantly enhancing the overall stocktake process.

Bangladesh also needs to focus on the ways and means for overcoming the climate change induced obstacles. The country should focus on the following issues:

- NDC should be an inclusive process and updating NDC 3.0 should involve concerned stakeholders which would be a step forward for effective and inclusive implementation of the revised NDCs. At the same time, for meeting the 1.5°C target of the PA, NDC 3.0 needs to be more ambitious in mitigation planning.

- Adaptation cannot be compromised, and Bangladesh does not have any alternative to adaptation to fight climate change. As the country faces a US\$ 7.3 billion climate adaptation funding gap⁹⁹, collection of funds for facing the climate change induced damages need to be continued as well.
- Bangladesh must explore for new and alternative foreign financing options for the fight against climate change, such as Multilateral Development Banks (MDB), bilateral sources as well as private sector investment.
- Despite Bangladesh governments' initiative of policies, the emission reduction targets are not very ambitious and not yet fulfilled, hence the Bangladeshi policymakers need to think of a green economy which includes both brown and green issues¹⁰⁰ and a socially just transition.¹⁰¹
- Bangladesh must have accurate, up-to-date scientific information about the climate change induced disasters and their effects. The country needs information on the distinct effects of different disasters since the nation is susceptible to a variety of calamities. Scientific evidences and statistics will be helpful for acquiring climate funds.
- There is lack of national experts who can develop future scenario considering the impacts of climate change on the economy and society as a whole and this vacuum needs to be filled up.
- Bangladesh must focus on climate diplomacy, which will ultimately put pressure on the developed nations to provide adequate fund for adaptation and resilience mechanisms, as well as to make up for climate change induced losses and damages.

⁹⁹ Md Jahidul Islam, "Climate funding sees gap between promises and reality," *The Business Standard*, June 25, 2024.

¹⁰⁰ The 'Green/Brown Debate' became prominent in the early to mid-1990s. 'Green' means a more wildlife focus while 'Brown' refers to a more people's approach. For further details, Danie Van der Walt, "The Green/Brown Debate," *Enviropaedia*, accessed June 01, 2024,

http://www.enviropaedia.com/topic/default.php?topic_id=126#:~:text=%27Green%27%20means%20a%20more%20wildlife,a%20clean%20and%20healthy%20environment.

¹⁰¹ Huq and Khan, "Just and Green Transition in Bangladesh," 41-56.

Annex 1**Article 14¹⁰²**

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.

Annex 2**Article 2¹⁰³**

1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:
 - a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
 - b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; and
 - c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

¹⁰² United Nations, “Article 14, Paris Agreement,” 18-19.

¹⁰³ United Nations, “Paris Agreement, Article 2,” 3.

Annex 3

Table 1: Key Findings of the Technical dialogue of the first Global Stocktake¹⁰⁴

Key Findings	Proposition
1	Although PA has set up goals for responding to climate crisis, much more is needed to do in all fronts.
2	For strengthening global response against climate change induced threats, it is necessary for the governments to support systems transformations which will mainstream climate resilience and low GHG emissions development where non-party stake holders need to strengthen efforts for systems transformations.
3	Although systems transformations open lots of opportunities, rapid change could be disruptive. For this, it is imperative to focus on inclusion and equity which could enhance ambition for climate action and support.
4	Global emissions are not according to the mitigation pathways in consistence with the temperature goal of the PA and the window of opportunity for increasing ambition and carry out current commitments to keep warming to 1.5 °C is also rapidly narrowing.
5	For taking advantage of both existing and new opportunities, more ambition in support and action are required for the implementation of domestic mitigation measures and setting of more ambitious targets in NDCs.
6	Systems transformations, such as increasing the use of renewable energy while gradually eliminating all unabated fossil fuels, eliminating deforestation and lowering non-CO2 emissions, in all sectors and contexts is necessary to achieve net zero CO2 and GHG emissions.
7	With customised strategies taking into account of various circumstances, just transitions can help to achieve more substantial and equitable mitigation outcomes.
8	Economic diversification could be a key strategy for addressing the impacts of response measures.
9	Increased adaptation action and enhanced efforts for averting, minimising and addressing loss and damage are needed urgently for reducing and responding to increased impacts particularly for those

¹⁰⁴ Synthesised from United Nations Framework Convention on Climate Change, “Technical dialogue of the first global stocktake”.

	nations less prepared for changes and less capable of recovering from disasters.
10	Although there are ambitious plans and commitments for adaptation and support. Most of the observed adaptation efforts are fragmented, incremental, sector specific and unequally distributed across the regions.
11	The effectiveness of adaptation actions and supports are enhanced if they are driven by local contexts, populations and priorities which could also promote transformational adaptation.
12	Urgent actions are needed across climate and development policies for preventing, minimising and addressing loss and damage for managing risks and providing supports to the impacted communities comprehensively.
13	Expanded and innovative sources are needed to be scaled up rapidly for supporting adaptation and funding arrangements to prevent, minimise and address loss and damage and at the same time, it is important to make the financial flows consistent with climate resilient development for meeting urgent and increasing needs.
14	It is important to scale up the mobilisation of support for climate actions in developing countries which involves strategic deployment of international public finance and continue to enhance effectiveness that includes access, ownership and impacts.
15	Financial flows, both domestic and international as well as public and private, need to be made consistent with a path towards low GHG emissions and climate resilient development that involves opening opportunities for unlocking trillions of dollars and directing investments toward climate action across scales.
16	For supporting the necessities of developing countries, new innovative technologies must be developed and transferred with existing cleaner technologies which must be implemented quickly.
17	For achieving broad ranged and sustained climate actions, capacity building is the basis which requires effective country led and needs based cooperation for ensuring enhanced and retained capacities over time at all levels.