



Reflections on the first Global Stocktake of the Paris Agreement

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ABSTRACT

This commentary reflects on the first Global Stocktake (GST) under the Paris Agreement on climate change to offer insights for advancing climate actions and informing future GST cycles. The first GST, which concluded at COP28 in 2023, demonstrates the vital importance of a comprehensive, balanced, and inclusive approach to multilateral climate action. The GST's call to transition away from fossil fuels is an important political achievement. Yet, the GST outcome also reveals gaps, shortcomings, and potential dangers ahead. Future climate negotiations, we argue, would benefit from a more integrated, holistic perspective, and more nuanced balancing of ambition and implementation. More needs to be done to protect human rights, increase loss and damage funding, go beyond technological solutions, and address gender-differentiated consequences of climate change. Moreover, a great deal of work, including by nonstate actors, will be required to ensure the first GST translates into real action on the ground.

1. Introduction

The Global Stocktake (GST) is at the heart of the Paris Agreement's ratchet mechanism for enhancing climate ambition, action, and support over time (Srouji et al., 2023). This stocktaking exercise is undertaken every five years to assess collective efforts under the Paris Agreement with the intention of informing national climate efforts and plans, in particular the next round of nationally determined contributions (NDCs), and enhancing international cooperation to address climate change. The GST can be seen as a process for renewing and strengthening the grand bargain reached in 2015 binding countries together for climate action, and for keeping collective efforts on track to limit global temperature rise to 1.5 °C.

The first GST concluded at COP28 in December 2023, following almost two years of data collection, technical dialogues, and political negotiations. The adopted GST decision recognizes that while progress has been made, countries are not on track to meet the Paris Agreement's goals (UNFCCC, 2023a; IISD, 2023; E3G, 2023). The GST decision outlines the changes needed across different thematic areas and sets out goalposts for aligning the next round of NDCs with the 1.5 °C goal.

The GST's call to transition away from fossil fuels provides an important political signal with potential repercussions beyond the multilateral climate process; however, a lot of hard work remains in translating this and other calls in the GST decision into action on the ground. Moreover, the GST decision is scant on detail in some areas (e.g., financial support for developing countries; loss and damage); overlooks certain important issues (e.g., addressing gender-differentiated impacts and human rights in climate action) (Data2X, 2023); and opens the door to potential loopholes, untested solutions, and dangerous distractions (e.g., on transition fuels; carbon capture technologies).

Navigating these shortcomings, avoiding loopholes, and ensuring the most ambitious interpretation of the provisions in the GST decision will be critical as we shift to implementing its recommendations. The next

two years, leading to COP29 in Baku in 2024 (where countries are to agree on a new climate finance goal and a new gender action plan) and on to COP30 in Belém in 2025 (the year when countries' new NDCs are due), will provide a test of the success of the first GST process and can help inform future GST cycles.

2. Adopting a cross-cutting approach to climate action

The first GST provided an invaluable space for discussions on mitigation, adaptation, means of implementation (MOI), loss and damage (L&D), response measures, and international cooperation. But to reflect progress, the GST – especially the political process – needs to go beyond the traditional siloed approach of climate negotiations to offer a more integrated, holistic perspective. Thematic areas must be understood as interconnected, and future GSTs can benefit from expanding cross-cutting considerations.

The GST's modalities reflected separate thematic areas for mitigation, adaptation, and MOI and support. These thematic areas generally correlate to the aims of the Paris Agreement reflected in Article 2.1, but progress is better understood through a cross-cutting perspective. For example, MOI is pivotal for facilitating both mitigation and adaptation actions. Any discussion of mitigation and adaptation progress needs to be situated within the sufficient provision of MOI and support. Similarly, the need for deep and accelerated systems transformation, underpinned by equity and inclusion, was emphasized in technical discussions under the first GST (UNFCCC, 2023b). However, discussions occurred within the confines of mitigation or adaptation silos and lacked specificity on co-benefits and enabling conditions, especially finance.

Looking ahead, the GST needs to foster more nuanced discussions of mitigation and adaptation, intricately linked with the corresponding MOI and support. A reimagining could manifest through distinct themes such as energy systems, land, water, food, settlements and infrastructure, and health, allowing for in-depth exploration of the synergies

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between efforts to cut emissions, address irreversible L&D, and build resilience in different systems, simultaneously fleshing out finance and MOI needs, and highlighting co-benefits to poverty eradication, gender equality, and sustainable development. Future GSTs could also spur efforts to promote greater synergies, cooperation, and collaboration for the national implementation of the three Rio Conventions (the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity, and the Convention to Combat Desertification) to foster more coherence and effective outcomes (Qi and Terton, 2024).

In addition, the first GST had limited engagement with gender issues (Data2X, 2023), and there is a crucial gap on gender-responsiveness in the final decision. Addressing gender equality is not only the right thing to do – it also leads to more effective processes and more sustainable outcomes of climate action, because it demands a focus on systemic change rather than short-term fixes. Future GSTs could also help deepen the global understanding of the critical role of women and girls as powerful agents of change driving climate action at all levels (Dazé and Hunter, 2022). This underscores the importance of both countries and civil society of continuing to promote rights-based, gender-responsive approaches in the follow up to the first GST to spur holistic and transformative actions and support, while championing social equity issues in subsequent GSTs.

3. The imperative of balance

The GST is a reminder that balanced action and support across all areas form the foundation of the Paris Agreement and will be crucial for its just and equitable implementation. Balance was a key ingredient for reaching an acceptable outcome for all countries in the first GST process at COP28. Ramping up ambition on mitigation cannot be at the cost of diminishing support for adaptation, finance, and L&D (IISD, 2023; Watson and Gonzalez, 2023). Calls for a more balanced focus on mitigation and adaptation are longstanding under the United Nations Framework Convention on Climate Change (UNFCCC) and are rooted in discussions on justice and equity (Allan and Bhandary, 2024). Similarly, ensuring adequate and accessible MOI and support are crucial enablers to enhance climate ambition and action in developing countries, and help to transition their national adaptation plan (NAP) processes from planning to implementation.

Discussions on balance in the first GST took different angles, for example: ensuring balance between ambition and implementation; mitigation versus adaptation versus loss and damage; and balancing ambition and equity considerations. The first GST sought to achieve a balance between these different elements; however, external factors such as information asymmetry between mitigation, adaptation and L&D led to different levels of discussions on these issues. Addressing knowledge gaps and incorporating Indigenous and local knowledge will be key for future GSTs.

Timelines of other processes and discussions under the UNFCCC, for example on the global goal on adaptation (GGA), the new collective quantified goal (NCQG) on climate finance, and the assessment of progress in the NAP process, were not aligned to inform substantive discussions under the GST. Planned developments – including operationalization of the GGA, the NCQG, and the Just Transition Work Programme – could help address this issue of misalignment between the GST thematic areas and better inform the second GST.

Another central question of balance for the GST, and the UNFCCC more broadly, is between ambition and implementation. The GST can bridge this gap by ensuring that its signals for greater ambition are shaped by equity and support for implementation through national policymaking in order to realize a zero-carbon and climate-resilient future. These considerations can be integrated into follow-up processes established at COP28, such as GST implementation dialogues, contributing to continual improvements in NDC formulation and future GST cycles.

4. An inclusive approach enriches the GST process and can facilitate follow-up

The first GST highlighted the value of the active engagement of nonstate actors (NSAs). The role of NSAs will be increasingly important in the implementation of the Paris Agreement. A bottom-up approach of feeding various information sources and diverse perspectives from NSAs on progress and gaps helped anchor the first GST to realities on the ground. It also helped capture valuable information on challenges and persisting inequalities, as well as opportunities, best practices, and lessons learned. Strengthening this inclusive modality and mobilizing more NSAs, particularly from developing countries and frontline communities, will be crucial for a step change in the development and implementation of NDCs and for subsequent stocktakes (Kuyper and Tørstad, 2023).

Increasing participation at the subnational levels, as well as engaging regional platforms such as the Regional Climate Weeks, the independent GST (iGST) Regional Hubs (ClimateWorks Foundation, 2023) and the Gender Just Climate Solutions (WECF, 2023), could support a bottom-up, gender-responsive approach to GST information collection and help to close some information gaps. Furthermore, effective and meaningful engagement of NSAs in the GST process could facilitate subsequent follow-up, for example through activities to support governments in implementing GST outcomes and strengthen international cooperation.

5. From Dubai to Belém: the hard work lies ahead

With the conclusion of COP28 in Dubai, attention now turns to how countries intend to ratchet up their climate ambition, action and support in response to the GST outcome, including through improved NDCs and other climate policy instruments by 2025. Ongoing discussions on the new climate finance goal and broader discussions on the reform of international financial architecture, will be key in this regard. The extent to which the outcomes of the first GST, and good practices identified during the GST's technical dialogues, are reflected in the new NDCs will also be the litmus test for the effectiveness of the Paris Agreement's ratchet mechanism.

The GST decision outlines processes to support follow-up, including an annual dialogue on implementation of the GST. NSAs have a vital role to play in the follow-up process, not only through enhancing their own climate efforts but also in maintaining pressure to avoid loopholes and supporting governments in designing their NDCs in line with the goalposts set in the GST decision. The proposed "Road Map to Mission 1.5" to enhance international cooperation and solidarity ahead of COP30 is of particular importance. A troika of COP28-29-30 Presidencies (Jeudy--Hugo and Charles, 2023) could build political momentum and a supportive international enabling environment to help implement the GST outcome over the next two years. Strong political leadership from these Presidencies to spur action by all countries will be a critical factor to breathe life into the outcomes of the first GST.

Note on author views

The opinions expressed and arguments employed herein are those of the authors and do not necessarily reflect the official views of their affiliated organizations or their organizations' member countries, member organizations, partners, and funders.

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Declaration of competing interest

The authors declare no competing interests.

Data availability

No data was used for the research described in the article.

References

- Allan, J.I., Bhandary, R.R., 2024. What's on the agenda? UN climate change negotiation agendas since 1995. *Clim. Pol.* 24 (2), 153–163. <https://doi.org/10.1080/14693062.2022>.
- ClimateWorks Foundation, 2023. About the Independent Global Stocktake. <https://www.climateworks.org/programs/governance-diplomacy/independent-global-stocktake/>.
- Data2X, 2023. Gender data for climate action: COP28 and beyond. https://data2x.org/wp-content/uploads/2023/11/Designed-Gender-Data-COP28-Brief_11.21.23.pdf.
- Dazé, A., Hunter, C., 2022. Gender-responsive national adaptation plan (NAP) processes: progress and promising examples (NAP global network). In: <https://napglobalnetwork.org/resource/gender-responsive-nap-processes-progress-promising-examples/>.
- E3G, 2023. "The fossil fuel era is ending" – E3G's reacts to COP28 outcome. <https://www.e3g.org/news/the-fossil-fuel-era-is-ending-e3g-s-reacts-to-cop28-outcome/>.
- IISD (International Institute for Sustainable Development), 2023. "The most significant decisions since the Paris agreement" – IISD's experts on COP 28 outcome. <https://www.iisd.org/articles/news/most-significant-decisions-paris-agreement-iisds-experts-cop-28-outcome>.
- Jeudy-Hugo, S., Charles, L., 2023. Towards a Successful Outcome of the First Global Stocktake of the Paris Agreement. Organisation for Economic Co-operation and Development/International Energy Agency Climate Change Expert Group Papers, No. 2023/01. OECD Publishing, Paris. <https://doi.org/10.1787/beb9c43f-en>.
- Kuyper, J.W., Tørstad, V., 2023. Mobilizing non-state actors for climate action through the global stocktake. *Nat. Clim. Change* 13, 1000–1001. <https://doi.org/10.1038/s41558-023-01811-4>.
- Qi, J., Terton, A., 2024. What's next after UNEA-6: why "synergies" is more than a buzzword for countries tackling the triple planetary crisis. IISD. <https://www.iisd.org/articles/policy-analysis/synergies-after-unea-6>.
- Srouji, J., Cogswell, N., Borja Díaz, F., 2023. Elements for the First Global Stocktake Outcome. World Resources Institute. <https://doi.org/10.46830/wrien.23.00114>.
- UNFCCC (United Nations Framework Convention on Climate Change), 2023a. Decision 1/CMA.5: Outcome of the First Global Stocktake. CMA5_AUV_4_GST. https://unfccc.int/sites/default/files/resource/cma5_auv_4_gst.pdf.
- UNFCCC, 2023b. Technical dialogue of the first global stocktake: synthesis report by the Co-facilitators on the technical dialogue. <https://go.nature.com/3LkZgCX>.
- Watson, C., Gonzalez, L., 2023. Accelerating finance for addressing loss and damage through the global stocktake. *Nat. Clim. Change* 13, 1005–1006. <https://doi.org/10.1038/s41558-023-01814-1>.
- WECF (Women Engage for a Common Future), 2023. Gender Just Climate Solutions 2023. <https://www.wecf.org/gender-just-climate-solutions-2023-8th-edition/>.

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