



EXPERT NOTE

Elements for the first Global Stocktake outcome

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Summary

The Paris Agreement's first Global Stocktake (GST) assesses the world's progress in achieving the agreement's goals, including cutting greenhouse gas (GHG) emissions, building resilience to climate impacts, and aligning finance and support for climate action. Beyond assessing progress, the GST also offers a roadmap to combat the climate crisis, designed to guide countries in enhancing their climate actions and support, including their new nationally determined contributions (NDCs) by 2025, and enhancing international cooperation.

The GST began in 2021 with data collection and technical assessment phases. Throughout these phases, Parties and non-Party stakeholders, including experts, contributed inputs and discussed the collective progress toward the Paris Agreement's goals and ways to enhance climate action. The GST's technical phase concluded in September 2023, with the publication of the synthesis report of the GST's technical dialogues, and attention shifted toward the third and final political phase scheduled for the 28th United Nations Climate Change Conference (COP28) in December 2023, which will culminate in a negotiated decision and/or declaration.

Since the GST process began, the authors have engaged in discussions concerning the GST with negotiators, Party representatives, and non-state actors, including civil society organizations and think tanks. Additionally, we evaluated the GST technical dialogues' summary reports,¹ the Intergovernmental Panel on Climate Change's Sixth Assessment Report, the Independent Global Stocktake consortium,² and Systems Change Lab's data platform and *State of Climate Action* reports,³ among other sources.⁴

This note presents suggestions for the substantive content of the GST decision (and/or declaration). In June 2023, Parties began discussions on the GST's decision structure, leading to a preliminary draft structure.⁵ Parties have also been invited to provide input on the "elements"—specific components, provisions, or key aspects—of the GST decision, considering the draft structure, by September 15, 2023.⁶

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Expert notes provide timely, focused, and concise information for urgent challenges, based on expert perspectives.

While the structure is a work in progress, divergent views among Parties remain regarding its final form and content, which are set to be agreed to at COP28. Nevertheless, the draft structure serves as a useful framework and starting point for proposing how various substantive elements could be incorporated.

This note replicates the headings from the draft structure⁷ and suggests content that could fall under each heading.⁸ We present each suggestion in one of four forms: acknowledging gaps in progress, recognizing the importance of certain principles of ambitious and inclusive climate action, giving guidance for collective and country efforts, or providing signals for action and support to governments and broader society. These four forms allow the GST to assess progress (through acknowledgements of gaps) while serving as functions of an effective, forward-looking GST (through guidance and signals) (Jeffrey et al. 2019).

These suggestions reflect propositions that, in our judgement, have gained prominence in the technical dialogues, during experts' discussions around the GST, or in official submissions and statements by Parties and United Nations Framework Convention on Climate Change (UNFCCC) constituencies.

“Context and cross-cutting considerations”

Acknowledge current and historical gaps in collective progress by underscoring that, despite progress, current climate actions are insufficient to limit warming to 1.5 degrees Celsius (°C) and respond adequately to climate impacts (IPCC 2023). The GST's political outcome should acknowledge the gaps in historic and current responses to climate change, and emphasize the urgency of action.

Recognize the cross-cutting nature of climate action, including the interlinkages among adaptation, mitigation, loss and damage (L&D), ecosystem health, and human well-being (IPCC 2023). The GST's political outcome can underscore that accelerated and equitable climate action is imperative for sustainable development and the achievement of the Sustainable Development Goals, in line with national and regional contexts.

Recognize the urgency of transformative climate action emphasizing the need for system-wide transformations, while adhering to principles of equity, reflecting common but differentiated responsibilities and respective capabilities, and considering national circumstances and the context of sustainable development and poverty eradication. The Intergovernmental Panel on Climate Change (IPCC) stresses the urgency of transforming all sectors and systems to achieve substantial and sustained reductions in GHG emissions and create a sustainable and livable future for everyone. These transitions require scaling up both mitigation and adaptation actions, and involve leveraging synergies between them. If these changes are made with a focus on inclusivity, equity, and a just transition, they can yield social and economic benefits and advance climate-resilient development (IPCC 2023).

Recognize the importance of means of implementation and support, highlighting that finance, technology development and transfer, and capacity building are critical enablers for advancing climate action, especially in developing countries (IPCC 2023), and support needs to be increased at speed, quality, and scale across adaptation, mitigation, L&D, and just transition.

“Collective progress towards achieving the purpose and long-term goals of the Paris Agreement, including under Article 2, paragraph 1 (a-c), in the light of equity and the best available science, and informing Parties in updating and enhancing, in a nationally determined manner, action and support”

“Mitigation”

Acknowledge gaps in GHG emissions reductions and carbon removal, noting the substantial gap between projected global emissions under current NDC targets for 2030 and the emissions projected in modelled mitigation pathways required to limit warming to 1.5°C (UNFCCC 2022; UNEP 2022b). Moreover, current policies are projected to result in higher GHG emissions than those implied by NDCs, indicating a significant implementation gap (IPCC 2022; UNEP 2022b).

Provide guidance for GHG emissions reduction targets by urging Parties to submit enhanced emissions reduction targets for 2030 and 2035. These targets should align with longer-term strategies toward a just transition to net-zero emissions, and collectively reflect the ambition required to limit warming to 1.5°C. In mitigation pathways to limit warming to 1.5°C, GHG emissions peak before 2025 and decline rapidly thereafter, reaching a 43 percent reduction by 2030 and 60 percent by 2035 below 2019 levels (IPCC 2022), recognizing that peaking may take longer for developing countries. Additionally, the GST should urge all Parties to establish economy-wide emissions reduction targets, covering all sectors and GHGs, in line with Article 4.4 of the Paris Agreement,⁹ and incorporate new or strengthened sectoral and non-carbon dioxide targets and measures, while ensuring equity, the right to sustainable development, poverty eradication, and enhanced support for developing countries to achieve their emissions reduction targets.

Provide signals to transform energy systems by signaling the need to rapidly and equitably shift away from fossil fuels and scale up renewables in the energy supply. Countries should agree to collective targets to at least triple annual renewable energy capacity additions from 440 gigawatts (GW) in 2023 to 1,500 GW by 2030 (IRENA 2023; Climate Analytics 2023), increase the share of renewables in global electricity generation from 30 percent in 2022 to 70–90 percent by 2030 (Climate Analytics 2023), and double energy efficiency over the same period (IEA 2023), while ensuring universal access to electricity and substantial support to developing countries to achieve these targets.

Provide signals to transform transport and industrial systems by setting collective targets to double the share of fossil fuel-free transport to at least two-thirds of all passenger kilometers traveled by 2030 (ITF 2023). Achieving this goal will require substantial shifts to more sustainable modes of transport and a rapid increase in the share of electric vehicle sales to 75–95 percent of global car sales and 30 percent of zero-carbon truck sales by 2030 (Boehm et al. 2022). Countries can also commit to improving energy and material efficiency and accelerating fuel switches in industrial processes (Boehm et al. 2022). Parties should be urged to advance policies, in a nationally determined manner, to make progress toward these collective targets.

Provide signals to transform food systems, agriculture, forestry, and land use to bolster food security, enhance resilience, and equitably reduce emissions. This includes scaling up sustainable agricultural practices that improve yields while reducing emissions; enabling a collective reduction in GHG emissions from agricultural production of roughly 25 percent by 2030 from 2020 levels (Boehm et al. 2022); cutting food waste in half by 2030; and shifting to healthier, more sustainable diets (Boehm et al. 2022). Collective targets should also include virtually halting deforestation and degradation—particularly across forests, peatlands, coastal wetlands, and grasslands—by 2030 (Boehm et al. 2022), and scaling up efforts to sustainably manage and restore millions of hectares of these same ecosystems this decade. The GST should recognize that these transformations must be pursued in ways that bolster food security and ensure land tenure rights for communities.

“Adaptation”

Acknowledge gaps in adaptation progress by noting the persistently inadequate funding for adaptation action alongside slow and fragmented implementation. Adaptation finance for developing countries is 5–10 times below estimated needs, which are projected to reach \$140 billion to \$300 billion annually by 2030 (UNEP 2022a). Additionally, allocation between adaptation and mitigation remains unbalanced (Naran et al. 2022), while poor-quality finance, in terms of its flexibility, predictability, speed, accessibility, and transparency, has hindered adaptation action (Tye et al. 2022).

Provide guidance for increased finance and support for adaptation, while simplifying access to funds and channeling resources to the local level by prioritizing locally led adaptation in funding and decision-making, promoting community-led solutions, and integrating Indigenous knowledge into adaptation policies. Developed countries should be encouraged to put forward action plans to achieve the collective doubling of adaptation finance by 2025, as agreed in Glasgow, including achieving a balance of funding with mitigation, enhancing access and quality, including through grants, particularly for those most vulnerable to intensifying climate impacts. Countries should also commit to a collective target to ensure universal coverage of early warning systems by 2027.¹⁰

Provide guidance for enhancing the national adaptation policy cycle by recommending that Parties prioritize finance and technical resources to prepare, implement, and track National Adaptation Plans (NAPs). Countries should commit to ensuring that all developing countries receive support to prepare and submit NAPs as soon as possible, and providing dedicated support for monitoring, evaluation, and learning systems. The GST may recommend that countries adopt flexible, multi-sectoral, inclusive, long-term planning and implementation of adaptation actions, pursue cross-government approaches to adaptation, and mainstream climate risks into economic and development policies.

Provide linkage to the Global Goal on Adaptation (GGA) by noting the GGA outcomes and calling for their urgent operationalization as a way of responding to the gaps in adaptation.

Provide signals to build resilience of agriculture, and terrestrial, freshwater, and marine ecosystems, by agreeing to collectively scale up climate-smart agricultural practices and technologies and ecosystem-based adaptation efforts. Parties may also collectively agree to protect water systems by improving governance, investing in healthy watersheds, and enhancing water infrastructure and monitoring systems. Failure to accelerate this system-wide transformation would undermine efforts to eliminate food insecurity, hunger, and poverty.

Provide signals to transform infrastructure, cities, and health by collectively agreeing to make all critical and new infrastructure climate-resilient, fostering resilient and equitable cities, and establishing universal climate-resilient health systems, while prioritizing vulnerable communities and increasing awareness of climate-induced illnesses.

“Finance flows, means of implementation and support”¹¹

Acknowledge gaps in finance and investment. Despite sufficient global capital, barriers persist in channeling the trillions of dollars required for effective climate action (IPCC 2023). Current global climate finance accounts for only 31–32 percent of what’s needed to align with the well below 2°C or 1.5°C trajectories (UNFCCC SCF 2022). Flows from developed to developing countries have not met the goal of mobilizing \$100 billion annually by 2020, with approximately \$83.3 billion mobilized in 2020 (OECD 2022). Additionally, finance for adaptation and L&D are far below current needs.

Provide guidance for increased finance and means of implementation to developing countries, including through the new finance goal. At COP28, developed countries should demonstrate the achievement of the \$100 billion annual climate finance goal. Countries should also use the GST to pledge increased commitments to address shortfalls since 2020 and enhance the accessibility and quality of funding. Importantly, the GST should signal that the new climate finance goal, to be agreed at COP29, should reflect the spirit embodied in the Paris Agreement on mobilizing efforts that far exceed previous actions, significantly surpass the \$100 billion target, and maintain an appropriate balance between mitigation and adaptation, according to developing country needs.

Provide signals for a rapid shift of all finance flows to enable net-zero emissions and climate-resilient development by collectively agreeing to scale up climate finance to reach \$5.2 trillion per year by 2030 (Boehm et al. 2022); achieve a global investment ratio of 7:1 in clean energy sources compared with fossil fuels by 2030 (Lubis et al. 2022); end public financing of fossil fuels by 2030 (Boehm et al. 2022); pursue new and innovative taxation to generate resources for climate finance; and pursue reforms across the global financial system, including reforms at the national and international levels (including multilateral development banks). The GST should signal that the reform of the finance agenda should also lead to solutions for countries facing debt distress compounded by climate change, e.g., through debt restructuring, cancellation, and concessional finance.

Provide guidance for enhancing sustainable and long-term capacity building by agreeing to significantly expand support for capacity building, especially in developing countries, to enhance and retain capacities and address locally determined needs, and provide support to conduct capacity gaps and needs assessments.

Provide signals for reducing technology costs and enabling technology transfer by agreeing to strengthen international cooperation for technology development and transfer; accelerate research, innovation & knowledge-sharing; and prioritize support to address vulnerable countries' tailored needs.

“Efforts related to loss and damage”

Acknowledge vast inadequacies in responding to L&D by recognizing that both “soft and hard limits” to adaptation, resulting in losses and damages, and underscoring the current inadequacy of support to address L&D, reinforcing the imperative for increased and accessible finance and support, especially for local and vulnerable communities.

Provide guidance for enhanced support and cooperation for addressing L&D by urging new and additional grant-based finance for L&D, particularly the L&D fund; encouraging support for addressing non-economic losses and damages such as loss of culture and heritage; ensuring that the broader funding arrangements complement the L&D fund; and emphasizing the urgent need for further research in this area, including inviting the IPCC to produce a special report on L&D.

“Efforts related to response measures”

Provide guidance for addressing the impacts of “response measures” by recognizing the positive and negative consequences of implementing them, encouraging Parties to prepare just transition frameworks (and urging the provision of applicable financial and technical support for doing so); integrating economic diversification, just transition, human rights, and gender-responsive approaches in climate policies, including NDC design, planning, and implementation; and enabling local and affected communities to drive decision-making processes, including through social dialogues and inclusive stakeholder processes.

“Enhancing international cooperation for climate action”

Provide signals for strengthening international cooperation by committing to enhanced cooperation to address climate action gaps, drive system transformations in adaptation and mitigation, mobilize finance, expedite clean technology adoption, bolster capacities, and foster trust and solidarity, within and outside the framework of the Paris Agreement.

Provide guidance for enhancing research and data by inviting the research community to fill knowledge and data gaps, especially on L&D financing, adaptation measurement frameworks, improved needs assessments, and tracking of climate finance flows.

Provide guidance for mainstreaming climate action across international fora by urging a joint dialogue between the two UNFCCC subsidiary bodies (the Subsidiary Body for Implementation and the Subsidiary Body for Scientific and Technological Advice) on enhancing coordination and cooperation within the UNFCCC and among United Nations (UN) entities and other international organizations.

“Guidance and way forward”

Provide guidance for enhancing future NDCs, per the mandate of the GST, while respecting the NDCs’ nationally determined nature. For example, countries can be urged to align their 2030 and 2035 targets with longer-term strategies toward a just transition to net zero. The guidance can also include encouragements to address adaptation, L&D, and just transition; highlight sectoral targets and transformational action; specify support gaps and needs; and incorporate non-state actors’ actions.

Provide guidance for strengthening accountability for the robust implementation of NDCs, including through reporting under the Enhanced Transparency Framework in 2024. The GST can encourage reporting on progress from intergovernmental cooperative initiatives, and calling for expanded accountability programs and disclosure requirements for the private sector, to adopt meaningful near-term climate targets with transparent data and reporting of shifts in capital expenditures.

Invite Parties and non-state actors to organize national, regional, and thematic events and “stocktakes” in 2024 to translate GST findings to national levels to support the development of new NDCs.

Invite a high-level event in early 2025, convened by the UN secretary general, providing an opportunity for countries to present new NDCs and finance commitments to build momentum leading to COP30.

Provide guidance for leveraging UNFCCC processes by identifying intersections among the GST’s outcomes and other UNFCCC processes (e.g., the Global Goal on Adaptation, just transition work program, L&D funding arrangements, mitigation work program, and the new finance goal) to ensure cohesive implementation.

Endnotes

1. The co-facilitators of the technical dialogues, Harald Winkler (South Africa) and Farhan Akhtar (United States), wrote the summary report of the technical dialogues of the first global stocktake under the Paris Agreement. The three summary reports, on each of the three technical dialogues, are available at <https://unfccc.int/documents/615116>; <https://unfccc.int/documents/627583>; and <https://unfccc.int/documents/631052>.
2. The Independent Global Stocktake (iGST) is a consortium of civil society actors working together to support the GST, the formal process established under the Paris Agreement to periodically take stock of collective progress toward its long-term goals. To learn more, visit <https://www.climateworks.org/programs/governance-diplomacy/independent-global-stocktake/>.

3. The Systems Change Lab is an initiative tracking global progress for more than 70 transformational shifts across nearly every system, enabling users to compare current action against targets to reach by 2030 and 2050 to protect people and the planet. The Systems Change Lab is convened by World Resources Institute and Bezos Earth Fund. Systems Change Lab supports the UN Climate Change High-Level Champions and works with key partners and funders including Climate Action Tracker (a project of NewClimate Institute and Climate Analytics), ClimateWorks Foundation, Global Environment Facility, Just Climate, Mission Possible Partnership, Systemiq, the University of Exeter, and the University of Tokyo's Center for Global Commons, among others. Systems Change Lab is a component of the Global Commons Alliance. To learn more, visit <https://systemschangelab.org/>. The *State of Climate Action* annual report series provides a comprehensive assessment of the gaps in climate action by highlighting where recent progress must accelerate over the next decade across power, buildings, industry, transport, forests and land, food and agriculture, technological carbon removal, and finance (see Boehm et al. 2022).
4. This includes work conducted by the research community on the first global stocktake, including the Council on Energy, Environment and Water (CEEW); Center for Climate and Energy Solutions (C2ES); Environmental Defense Fund (EDF); Organisation for Economic Co-operation and Development (OECD); International Institute for Sustainable Development (IISD); Institut du Développement Durable et des Relations Internationales (IDDRI); Transforma; and the Wuppertal Institute for Climate, Environment and Energy; among others.
5. The draft structure contains five first-level headings (preamble, context and cross-cutting considerations, collective progress, enhancing international cooperation, and guidance and way forward). The section on collective progress further contains five subheadings (mitigation; adaptation; finance, means of implementation, and support; loss and damage; and response measures). The indicative draft structure of the GST decision provides four alternative headings for the section on topics related to finance, means of implementation, and support. In reproducing the draft structure's headings for this note, we used the first alternative listed in the indicative structure simply because it is listed as the alternative number one. Use of this heading in this note should not be interpreted as an indication of a preferred heading or an attempt to prejudge negotiations among Parties. We believe the content included beneath this section of the note remains relevant regardless of the heading. The informal note containing the indicative draft structure for the GST1 fifth Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA5) decision is available at <https://unfccc.int/documents/630104>.
6. The conclusions from SBI 58 (the 58th session of the Subsidiary Body for Implementation) and SBSTA 58 (the 58th session of the Subsidiary Body for Scientific and Technological Advice) are contained in UNFCCC document FCCC/SB/2023/L.3 available at <https://unfccc.int/documents/629615>. These conclusions invited "Parties and non-Party stakeholders to submit their views on the elements for the consideration of outputs component by 15 September 2023 via the submission portal, taking into consideration the informal note referred to in paragraph 7 above."
7. Our reproduction of the draft structure should not be seen as prejudging the final structure or expressing a preference for those headings with multiple alternatives. Instead, we reproduced the structure to illustrate how various substantive suggestions for the GST outcome could fit within it.
8. For the purpose of this expert note, we exclude suggestions for the "Preamble" heading of the GST draft structure, which would typically include introductory sections on the GST, its context, and relevant agreed provisions, and acknowledge prior work completed as part of the process.
9. Article 4.4 of the Paris Agreement reads "Developed country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances."
10. In line with the UN Early Warnings for All Initiative. To learn more, visit <https://www.un.org/en/climatechange/page/early-warnings-all-initiative>.
11. The indicative draft structure of the GST decision provides four alternative headings for this section. We use this heading solely because it is the first alternative listed in the indicative structure and its use is not intended to prejudge negotiations or indicate a preferred heading. We believe the content included within this section of the note remains relevant regardless of the heading.

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