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Technical dialogue of the first global stocktake

Synthesis report by the co-facilitators on the technical dialogue

Summary

This **synthesis report on the technical dialogue of the first global stocktake** is based on inputs received throughout the process and discussions held during each of the three meetings of the technical dialogue and serves as an overarching and factual resource that provides a comprehensive overview of discussions held during the technical dialogue, identifying **key areas for further action to bridge gaps and addressing challenges and barriers in the implementation of the Paris Agreement.** It provides an **assessment of the collective progress towards achieving the purpose and long-term goals of the Paris Agreement** and informs Parties about potential areas for updating and enhancing their action and support, as well as for enhancing international cooperation for climate action.

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Abbreviations and acronyms

AFOLU	agriculture, forestry and other land use
AR	Assessment Report of the Intergovernmental Panel on Climate Change
BA	biennial assessment and overview of climate finance flows
BTR	biennial transparency report
CH ₄	methane
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
CO ₂	carbon dioxide
CO ₂ eq	carbon dioxide equivalent
COP	Conference of the Parties
GEF	Global Environment Facility
GGA	global goal on adaptation
GHG	greenhouse gas
GST	global stocktake
INDC	intended nationally determined contribution
IPCC	Intergovernmental Panel on Climate Change
LT-LEDS	long-term low-emission development strategy(ies)
NAP	national adaptation plan
NDC	nationally determined contribution
REDD+	reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks (decision 1/CP.16, para. 70)
SB	sessions of the subsidiary bodies
SCF	Standing Committee on Finance
SDG	Sustainable Development Goal
TD*	technical dialogue
Transitional Committee	transitional committee on the operationalization of the new funding arrangements for responding to loss and damage and the fund established in paragraph 3 of decisions 2/CP.27 and 2/CMA.4
TNA	technology needs assessment
UNEP	United Nations Environment Programme

* TD1.1, TD1.2 and TD1.3 refer to specific meetings of the technical dialogue of the first global stocktake.

I. Executive summary

A. Context¹

1. **Key finding 1: since its adoption, the Paris Agreement has driven near-universal climate action by setting goals and sending signals to the world regarding the urgency of responding to the climate crisis. While action is proceeding, much more is needed now on all fronts.**
2. There is broad global commitment to the Paris Agreement and its central role in catalysing the cooperative action needed to address the climate crisis, and it has inspired significant progress in global mitigation and adaptation action and support. Against forecasts made prior to its adoption, the Paris Agreement has led to contributions that significantly reduce forecasts of future warming, yet the world is not on track to meet the long-term goals of the Paris Agreement. Participants in the TD of the first GST noted challenges and barriers across all topics discussed thereunder. The discussions also highlighted existing and emerging opportunities and creative solutions for bridging gaps. Now is the time to rapidly accelerate action and support to make progress in this critical decade.
3. **Key finding 2: to strengthen the global response to the threat of climate change in the context of sustainable development and efforts to eradicate poverty, governments need to support systems transformations that mainstream climate resilience and low GHG emissions development. Credible, accountable and transparent actions by non-Party stakeholders are needed to strengthen efforts for systems transformations.**
4. Accelerating action on climate change is crucial for achieving sustainable development. Policies and measures that promote climate resilience and low GHG emission development can be made mutually supportive through whole-of-society approaches and integrated, inclusive policymaking. Progress has been made under the Paris Agreement towards preparing and communicating new and updated NDCs. Efforts to continue this progress must be sustained over decades, building on progress made in every cycle of NDCs and in the GST.
5. Climate action and support are enhanced by catalysing action by all Parties and non-Party stakeholders, including civil society, the private sector, financial institutions, cities and other subnational authorities, local communities and Indigenous Peoples. The implementation of pledges and actions by non-Party stakeholders strengthens Parties' efforts to support systems transformations. Rigorous accounting and accountability are needed to lend credence to their contributions, track progress with environmental integrity and avoid double counting. Initiatives by non-Party stakeholders should also include and support stakeholders and groups that are often marginalized, including women, youth and Indigenous Peoples, so that everyone can effectively participate in and contribute to these efforts.
6. **Key finding 3: systems transformations open up many opportunities, but rapid change can be disruptive. A focus on inclusion and equity can increase ambition in climate action and support.**
7. Reaching net zero emissions by or around mid-century and implementing concurrent transformative adaptation requires broad and rapid changes in existing practices. Carefully designed climate action can generate significant benefits and can help to minimize disruptions by taking a whole-of-society approach informed by local context. Equity should enable greater ambition and increase the likelihood of meeting the goals of the Paris Agreement. Those most affected by climate impacts should be involved in crafting solutions.
8. For more information on key findings 1–3, see chapter IV.A below.

¹ The headings in this report are solely intended to assist in navigating the document.

B. Mitigation, including response measures

9. **Key finding 4: global emissions are not in line with modelled global mitigation pathways consistent with the temperature goal of the Paris Agreement, and there is a rapidly narrowing window to raise ambition and implement existing commitments in order to limit warming to 1.5 °C above pre-industrial levels.**

10. All Parties to the Paris Agreement have communicated NDCs that include mitigation targets and/or measures. A growing number of Parties have also communicated LT-LEDS. Emissions gaps are the difference between the emission levels implied by the NDCs and the average emission levels of global modelled mitigation pathways consistent with limiting warming to 1.5 °C or 2 °C. Implementation gaps refer to how far currently enacted policies and actions fall short of reaching stated targets. Based on current NDCs, the gap to emissions consistent with limiting warming to 1.5 °C in 2030 is estimated to be 20.3–23.9 Gt CO₂ eq.²

11. Action is needed to increase both the mitigation ambition of NDCs and the implementation of measures to achieve their targets. Trends in historical and ongoing GHG emissions provide important information to understand the current situation, how it came to be, and how it can inform future action.

12. At COP 21 in Paris, Parties agreed to aim to reach global peaking of GHG emissions as soon as possible, recognizing that peaking will take longer for developing country Parties. According to the IPCC AR6, global GHG emissions need to peak between 2020 and 2025 to limit warming to the Paris Agreement temperature goal. Emissions have peaked in developed and some developing countries, but global emissions have not yet peaked. All Parties need to undertake rapid and deep reductions in GHG emissions in the decades after peaking.³

13. **Key finding 5: much more ambition in action and support is needed in implementing domestic mitigation measures and setting more ambitious targets in NDCs to realize existing and emerging opportunities across contexts, in order to reduce global GHG emissions by 43 per cent by 2030 and further by 60 per cent by 2035 compared with 2019 levels and reach net zero CO₂ emissions by 2050 globally.**

14. **Urgent action and support are needed to ramp up implementation of domestic mitigation measures by realizing opportunities across all sectors and systems.** There are now sufficient cost-effective opportunities to address the 2030 emissions gap, yet significant challenges, including access to and availability of support, remain in harnessing these opportunities at the required pace and scale. If fully implemented and supported, realizing such opportunities can raise ambition to substantially reduce net GHG emissions by 2030. Creativity and innovation in policymaking and international cooperation is essential.

15. **More ambitious mitigation targets in NDCs are needed to reduce emissions more rapidly, and to align with each country's LT-LEDS towards just transitions to net zero emissions by or around 2050, while enhanced transparency can help track progress.** The Paris Agreement provides for the progression, including by stating the expectation that each Party's successive NDCs will represent its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances, and will be informed by the outcomes of the GST. Progression may involve, among other options, more rapid reductions through adopting more stringent targets and more comprehensive forms of targets. The Paris Agreement stipulates that developed country Parties should continue taking the lead by undertaking absolute economy-wide emission reduction targets and that 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. As Parties formulate and communicate their LT-LEDS that chart just transitions towards net zero emissions by or around mid-century, tailored to different national circumstances, they should begin to implement concrete measures to shift to such pathways.

16. **Mitigation measures that successfully deliver on other sustainable development goals can be scaled up and replicated across different contexts.** The sustainable

² FCCC/PA/CMA/2022/4.

³ See paras. 97–98 below.