

Information note on the second meeting of the technical dialogue of the first global stocktake under the Paris Agreement

Note by the co-facilitators

07 October 2022

I. Introduction

1. At the Conference of the Parties, at its twenty-sixth session (COP26) in Glasgow, the first global stocktake¹ (GST1) was launched with the goal of taking stock of implementation of the Paris Agreement and assessing the collective progress towards achieving the purpose and long-term goals of the Agreement. The GST is undertaken 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. The outcome of GST1 in 2023 will inform Parties when updating and upscaling their actions and support, as well as in enhancing international cooperation on climate action.

2. The world is presently far off course in its efforts to drastically curb emissions and adapt to increasing impacts. The first GST1 is unfolding in a critical decade for climate action. Global emissions need to be halved by 2030 for the world to stand a chance of achieving the 1.5 degrees Celsius goal. Global financial flows need to be realigned and support to developing countries enhanced to support achieving the goals of the Paris Agreement. The impacts of climate change are becoming more frequent and intense, with growing economic and non-economic implications and residual loss and damage. The implications of response measures need to be considered. Ambition and equity are considered across all topics in the Technical Dialogue (TD) of the first GST, informed by the best available science.

3. We have prepared this note under our own responsibility. As we had done prior to the first meeting of the Technical Dialogue (TD1.1) at SB56, we provide information to Parties, observer organizations and other non-Party stakeholders (NPS) on how we intend to conduct the second meeting of the first Technical Dialogue (TD1.2) at COP27. To this end, we outline activities that will be carried out, as well as the preparations we have undertaken consistent with the modalities of the GST outlined in decision 19/CMA.1. In preparing this information note, we took into account the views expressed by participants at TD1.1,² and our informal consultations with Parties, observer organizations and other NPS, and we hope this note will be useful for Parties, observer organizations and other NPS to prepare for the upcoming Technical Dialogue.

II. Approach to the second Technical Dialogue

4. Building on the work of TD1.1 at the 56th sessions of the subsidiary bodies (SB56),³ TD1.2 will take place during the first week of COP27 in Sharm el Sheikh, from 6 to 12 November 2022. It will be a space for open and direct conversations. Our aim is to develop a deeper and more comprehensive understanding of collective progress made since the adoption of the Paris Agreement. Based on this understanding, we hope to provide forward looking signals that can inform ambitious action, as well as enhanced support and international cooperation. In part, this could be enabled through our discussions at the Technical Dialogue to identify good practice and opportunities for enhanced actions and support, and find creative ways to overcome barriers and challenges to climate action, in the light of equity and ambition, and informed by the best available science. We heard many calls at TD1.1 to move from the conceptual to concrete. We outline in the following, a process that responds to these calls to move from “what” to “how”, as well as the desire expressed by many participants to consider intersections, that will assist in framing integrated and holistic findings.

¹ <https://unfccc.int/topics/global-stocktake>

² FCCC/SBI/2022/10, paragraph 41

³ https://unfccc.int/sites/default/files/resource/GST%20TD1_1_sreport_26_09_2022_Final.pdf.

5. Ultimately, we aim to translate discussions into implementable outcomes, that will make a difference to the lives of people in a crisis. All participants collectively in this Technical Dialogue, which is a Party-driven process with the participation of observer organizations and other NPS, can contribute to this desired outcome of the GST as a whole. While differences in perspectives will be unavoidable, in this Technical Dialogue, we aim to build more shared understanding on those actions and support available to us that will best address and bridge the gaps.

6. Furthermore, our aim is to continue with concrete discussions on specific topics⁴ to identify tangible examples and opportunities that will inform Parties', observer organizations' and NPS' efforts on enhancing climate action and international cooperation, thus facilitating progress towards implementing and achieving the Paris Agreement and its goals. We have noted suggestions in submissions on ways to capture operationalizable elements, in a non-prescriptive and facilitative manner.

7. As with TD1.1, TD1.2 will be conducted in multiple formats⁵ – we will continue with plenaries, a world café session and roundtables (RTs). Additionally, we will also facilitate focused exchanges on intersections – broad discussions that will take an integrated and holistic approach to the GST. Finally, to enable greater participation within the GST process, we are also organizing a poster session on inputs provided to the GST, and have facilitated a creative space for films, art, and performances outside the Technical Dialogue discussions, as signaled in Bonn.

8. Upon reflecting on and learning from the process undertaken at TD1.1, we have made two adjustments to the format and structure of TD1.2. First, the format of the roundtable discussions will be adjusted from the process undertaken at TD1.1 to allow for greater inclusivity both in terms of participation and in substance. Each roundtable will begin by hearing prompts⁶ by experts on four sub-topics outlined in section IV below. Then, in order to facilitate interactive discussions, participants will be requested to join a breakout discussion on one of the four sub-topics. Each roundtable will meet within these smaller groups twice during TD1.2, and the breakout groups will report back to the RT, as well as being summarized in the closing plenary. We will have dedicated notetakers within each small group, so that the full proceedings of these discussions will be captured in our summary report.

9. Second, we plan to make a dedicated space within the Technical Dialogue for a more integrated and holistic view of the implementation of the Paris Agreement. While TD1.1 discussions focused separately on the broad topics of the GST, referred to in paragraph 6(b) of 19/CMA.1, real-world planning and actions on these topics are not done in isolation. We will organize focused exchanges on “intersections” to begin to answer the question: how do stakeholders, at various levels, address mitigation, adaptation, means of implementation and support, as well as efforts on loss and damage and the implications of response measures, in an integrated and holistic way? The focused exchanges will start with a panel of experts drawn from differing perspectives and backgrounds, followed by time for interactive exchanges among Parties, observer organizations and other NPS. We, as co-facilitators, have heard many participants call for such exchanges during TD1.1 and think such exchanges are essential to facilitate comprehensive and cohesive findings within the first GST.

10. Building on our discussions at TD1.1, we have developed topics for the roundtables and world café stations, and they are described in detail within section IV below. Further information on these topics, including expert drafted prompts for the discussion, will be provided prior to COP27 on the GST website.⁷

11. While we will strive to comprehensively address major concerns within prompts and panel discussions at TD1.2, some concerns may be reserved for the third and final session of the Technical Dialogue. At TD1.3, we expect to build on the discussions from both TD1.1. and TD1.2. In particular,

⁴ In this note, “topics” refer to the thematic areas of the GST, referred to in decision 19/CMA.1, paragraph 6(b), as well as to the efforts referred to in decision 19/CMA.1, paragraphs 6(b)(i) and (ii).

⁵ See section IV.

⁶ Prompts will be posted in advance here: <https://unfccc.int/topics/global-stocktake>

⁷ <https://unfccc.int/topics/global-stocktake>.

TD1.3 will consider opportunities to enhance and strengthen Parties' actions and support, and international cooperation for climate action, creative ways to overcome challenges, and the intersections across topics.

12. As requested by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA),⁸ we will summarize outputs in a summary report covering all topics of the Technical Dialogue, taking into account equity and ambition, and based on the best available science. Our summary note will cover the proceedings on the roundtable discussions, focused exchanges, world café stations, and the closing plenary statements. The poster session and creative space are meant to inform participants at the session, but the proceedings of these activities will not be captured formally in our report. As mandated, we will prepare the overarching factual synthesis of these reports and make it available for the consideration of the output component of the GST after TD1.3.

III. Conducting the second meeting of the technical dialogue

A. Overall organization of work

13. We continue to employ a learning-by-doing approach to the organization of the Technical Dialogue. The organization of work will be similar to TD1.1, with some improvements responding to good suggestions by participants. The norms for discussion,⁹ to enable a robust and fruitful dialogue, as presented at TD1.1, will continue to apply at TD1.2. We continue to encourage participants to bring forward any good practices to enhance climate action and experience and opportunities to enhance international cooperation on mitigation and adaptation, and to increase support, in order to overcome barriers and challenges faced.

14. Given that TD1.2 will undertake its work through “a focused exchange of views, information and ideas in in-session roundtables, workshops or other activities”,¹⁰ we will organize the meeting in multiple formats, as follows:

- (a) An opening plenary, to introduce the organization of work
- (b) A World Café, covering all topics of the GST and systems transitions
- (c) Three roundtables, structured around the three thematic areas of the GST, as was the case at TD1.1
- (d) Focused exchanges on intersections, responding to the need expressed by many participants for integrated and holistic approaches
- (e) A closing plenary, to summarize and react to discussions at TD1.2.

15. As announced on 16 August 2022,¹¹ we will use two further formats for TD1.2 which will not be captured within our summary note, though we hope that they can inform the discussions indirectly:

- (a) A Poster Session, on inputs to the GST
- (b) A Creative Space, to showcase films, art and performances related to the GST.

16. Details on each of these formats can be found below.

⁸ Decision 19/CMA.1, paragraph 31.

⁹ https://unfccc.int/sites/default/files/resource/GST_Technical_Dialogue_Information_Note.pdf
appendix III

¹⁰ Decision 19/CMA.1, paragraph 6(a).

¹¹ <https://unfccc.int/topics/global-stocktake/global-stocktake-governance-and-facilitation/the-first-global-stocktake-call-for-poster-inputs-and-information-on-td12-creative-space>

17. We note with appreciation that some Parties, observer organizations and other NPS have followed the encouragement in the conclusions for SBSTA and SBI56¹² stakeholders to hold informal intersessional discussions at the local, national, regional and international level, to inform the work under the Technical Dialogue. We look forward to hearing any key messages from such events that participants may wish to convey at TD1.2. We also note with appreciation the excellent initiative by the COP27 Presidency in organizing thematic days, several of which are relevant to the Technical Dialogue. We understand that some participants are also participating in an informal climate datathon¹³ on information relevant for the GST which will present its results at a special COP27 Presidential event on Science Day.

18. We recognize that other processes under the Convention and Paris Agreement are addressing topics related to the GST and its Technical Dialogue. We invite participants to include information from those processes within the Technical Dialogue.

19. Figure 1 below illustrates an indicative timeline of the above-mentioned TD1.2 events. To facilitate participation, we are making every effort to avoid clashes among these events, negotiating sessions, and other mandated events. In contrast to TD1.1, we are currently planning not to hold any roundtable discussions in parallel, though this may change due to time and space constraints.

20. **This timeline is subject to change.** We will inform participants of any changes via the GST website, during upcoming consultations, and at the opening plenary. As always, please continue to consult the COP27 Daily Programme and CCTV for specific timings and locations. Please note, given the time constraints, some clashes may still occur, particularly with lunch breaks and coordination meetings. All efforts are being made to avoid such conflicts, but we appreciate the understanding of Parties in agreeing to go forward with the GST/ Technical Dialogue activities in such circumstances.

Figure 1: Indicative timeline for relevant events

	Monday, 7 Nov	Tuesday, 8 Nov	Wednesday, 9 Nov	Thursday, 10 Nov	Friday, 11 Nov	Saturday, 12 Nov
AM			RT 1.1	RT 1.2		SBI/SBSTA Closing Plenary
	GST TD Opening Plenary		RT 2.1	RT 2.2	GST TD Closing Plenary	
PM			RT 3.1	RT 3.2		
		GST TD World Café	Focused Exchange	Focused Exchange		

B. Participation

21. Participation at the meetings of the Technical Dialogue is open-ended across the multiple formats. We encourage balanced participation within the formats for discussion to facilitate the greatest amount of interactive exchange between participants. We aim to facilitate continuity and flexibility in participation across all three meetings of TD1.

22. We expect significant expertise to be brought to each of the roundtables, focused exchanges, and the world café by Parties, observer organizations and other NPS. Consequently, bearing in mind logistical limitations, we expect space for technical experts from Party delegations. With the assistance of the

¹² <https://unfccc.int/documents/506476>

¹³ <https://www.openearth.org/cop27-datathon>.

secretariat, we will invite observer organizations from the nine NGO Constituencies and NPS. Secondary badges will be issued to invited experts and participants to secure them their seat at the tables in the roundtable discussions. Subject to space constraints, the discussion rooms will be open to other observers.

23. The time for dialogue during the sessions of the Subsidiary Bodies (SBs) scheduled for the first week of COP27 will be limited. We will look ahead collectively to TD1.3 and encourage engagement of participants of the roundtables between sessions. Furthermore, there remains the opportunity to provide further updates of inputs, or new inputs, up to three months before TD1.3 (5 March 2023).

C. Opening plenary

24. We heard opening statements by Parties, observer organizations and other NPS during the opening plenary at TD1.1. At TD1.2, we will hold a brief opening meeting in which we will share the organization of work and content and scope of the discussions to ensure a shared understanding by all participants. Due to time constraints, we do not foresee that there will be sufficient time to open the floor for interventions by major negotiating Groups, Parties, observer organizations and other NPS. Major negotiating Groups, Parties, observer organizations and other NPS are welcome to provide written submissions on their views at the outset of TD1.2, if desired.

25. We encourage participants to also attend a virtual informal consultation we will be conducting on Tuesday, 18 October, from 15:00 to 16:30 CEST, where time will be provided for Parties, observer organizations and other NPS to provide their expectations for the discussions at TD1.2.¹⁴

D. World café

26. The world café is an engagement process,¹⁵ which makes use of an informal setting for participants to explore topics across the scope of the GST, in a larger room with several small tables. The setting facilitates interactive exchanges, as participants can rotate and circulate, with signals every 30 or 45 minutes. An expert and notetaker will remain at each table to provide continuity and context and help to build on previous discussions.

27. In this facilitated setting, relevant experts, Parties, constituted bodies, observer organizations and other NPS will discuss specific issues in dynamic, interactive exchanges across thematic areas with the aim of sharing ideas, forging greater understanding and connections between participants, and identifying creative approaches to address gaps and barriers. This format aims to establish a shared information basis, as well as provide specific spaces to discuss interconnections among topics as participants circulate around stations.

28. The World Café proved to be very popular at TD1.1, as it provided participants with the opportunity to discuss concrete solutions. We will be increasing the number of tables at TD1.2 to a total of 20 topic stations.

29. Twelve stations will follow a similar format as at TD1.1, four stations each covering issues related to migration, including response measures, adaptation including loss and damage, and means of implementation and support. There will also be eight additional tables related to system transformations (energy, transport, industry, agriculture, health, land, water, and urban). The focus on systems transformations will facilitate space for dynamic, interactive exchange between Parties, observer organizations and other NPS, specific implementation opportunities and challenges in each of these systems and sectors in an integrated manner.

30. We will brief experts and notetakers assisting us at world café tables to guide discussions towards more consistent outputs across tables, having heard suggestions for improvement from TD1.1 in this regard.

E. Roundtables

¹⁴ [Link to the virtual Informal Consultation on Microsoft Teams](#)

¹⁵ For more information on this methodology, please see: <http://www.theworldcafe.com/wp-content/uploads/2015/07/Cafe-To-Go-Revised.pdf>.

31. We will organize three roundtables at TD1.2, following the same clusters of topics as at TD1.1, which will meet in two, two-hour sessions. As discussed above, the roundtable meetings will be taken in a slightly modified format, to improve on TD1.1. We have requested that sufficiently large rooms are made available for the roundtables, within which four breakout groups can discuss. This will allow for more in-depth discussions and focus on specific topics. All participants will hear prompts on all four topics in the particular RT, and also hear reports, to ensure transparency and inclusivity.

32. At the first roundtable meeting, after hearing prompts from four invited experts, we will request the participants to divide into four small breakout groups to discuss each prompt in greater detail. The breakout group topics can be found in section IV. Along with the four experts, four invited facilitators will be assigned to each breakout group to guide the discussions, which will be recorded by a rapporteur. We invite volunteers from Party delegations to be rapporteurs for each of the breakout groups.

33. The second roundtable meeting will begin with a report back from the first meeting of discussions by the facilitators and rapporteurs. After these reports, the breakout group discussions will continue. Towards the end of the breakout group discussions, participants will discuss any convergences around findings within the group and how to capture outputs of their discussions to the closing Plenary meeting.

34. The topics for roundtable discussions can be found in section V. Note that placement of an issue in a roundtable gives it a 'home' and ensures it will be discussed, while it can be raised in other discussions as well. Based on feedback from TD1.1, we are working with experts to develop both a detailed prompt for each discussion, as well as further sub-questions for which we will request participants within the breakout groups to respond. While participants are free to continue to raise other relevant issues within the discussions, we request that the discussions within these sessions be as focused as possible on their assigned topics in order to enable to make the discussions as productive as possible.

F. Focused exchanges

35. In addition to the world café and roundtables, we will host focused exchanges on intersections across thematic areas of the GST. We will invite several panelists to kick off each exchange, followed by an interactive exchange to allow for active participation and discussion among participants from Parties, observer organizations and NPS.

36. The discussions will be facilitated by the Technical Dialogue co-facilitators and will be captured in the summary report.

37. More detail on the topics for these discussions is provided in section IV and additional details on panelists will be provided on the GST website ahead of the meeting.

G. Poster Session

38. A Poster Session will provide an opportunity for those who have made input submissions to highlight and discuss their work with other participants prior to the world café and roundtables. Thereafter, the posters will be made available for viewing. This format will make the rich information in written submissions accessible to all participants, in a summarized form. While we will be unable to capture the specific conversations at the poster session, we are exploring the ability to have the posters posted virtually and linked to the input submission portal website.

H. Creative Space

39. A Creative Space will be hosted in the Green Zone to showcase films, art and performances related to the GST with the aim of facilitating a wide range of perspectives to be heard at COP27. Creative works and discussions will not be captured in our summary report.

I. Closing Plenary

40. At the closing/reporting plenary of TD1.2, remarks will be made by the SB Chairs and the Executive Secretary of the UNFCCC and reports from the World Café and roundtables will be presented. This will provide an opportunity to hear what emerged in these dialogues to promote transparency and a common understanding across all participants. The co-facilitators will offer some initial impressions of

the discussions and open the floor for comments from groups of Parties, Parties, observer organizations and NPS.

IV. Topics for the second meeting of the technical dialogue

41. In this section, we highlight topics that emerged as benefitting from more discussion, as identified by participants during TD1.1 and identified in our summary report.¹⁶ In addition, we carefully considered updated and new submissions by participants, and topics identified in the inputs received. The list of topics is not exhaustive nor prescriptive. Participants are encouraged to add other topics and perspectives to the discussion. The focused exchanges will enable discussions across topics, as indicated above. We would encourage participants to focus on implementation, and to come prepared to discuss options for operationalizing good practices while remaining mindful of challenges. We have noted suggestions in some submissions for a technical appendix as one possible way to capture options for implementation, in the outputs of the Technical Dialogue. We look forward to hearing further views on this and other suggestions. Finally, given time constraints, as noted above, some issues may be considered in greater detail at TD1.3.

A. Roundtable 1: Mitigation, including response measures

42. The aim of RT1 is to move from what to how, from models and pledges to implementation and action, taking into account barriers, challenges and opportunities. These discussions should develop findings in response to the SB Chairs' guiding question 10: In order to achieve the goals defined in Articles 2.1(a) and 4.1 of the Paris Agreement: a) What further action is required? b) What are the barriers and challenges, and how can they be addressed at national, regional and international levels? c) What are the opportunities, good practices, lessons learned and success stories?

Box 1

1. Enhancing global mitigation pathways: Assessing collective progress on mitigation and enhancing ambition, fairness and implementation towards the achievement of the Paris Agreement long-term goals, taking into account nationally determined contributions and long-term low greenhouse gas emission development strategies by Parties
2. Transforming energy and industrial systems: Assessing collective progress in and enhancing mitigation efforts in energy production, consumption and industrial systems
3. Transforming land and other systems: Assessing collective progress in and enhancing mitigation efforts and preserving and enhancing greenhouse gas sinks in AFOLU, waste, and other systems
4. Response measures: Assessing collective progress in and enhancing efforts made to address the social and economic consequences and impacts of response measures while implementing mitigation policies and actions towards the achievement of the Paris Agreement long-term goals

B. Roundtable 2: Adaptation, including loss and damage

43. The aim of RT 2 is to discuss and assess collective progress on Article 7.14, paragraphs a to c, and loss and damage. These discussions should aim to develop key findings that can inform later stages of the GST1, including at TD1.3 (June 2023) where we will discuss the overall progress made in achieving the global goal on adaptation (Art 7.14 d), which will also benefit from more information from the Glasgow work programme. As in other roundtable discussions, should move from “what” to “how”, from knowledge generation to implementation, taking into account barriers, challenges and opportunities.

¹⁶ https://unfccc.int/sites/default/files/resource/GST%20TD1_1_sreport_26_09_2022_Final.pdf

44. These discussions should develop findings in response to the SB Chairs' guiding question 10: In order to achieve the goals defined in Articles 2.1(a) and 4.1 of the Paris Agreement: a) What further action is required?, b) What are the barriers and challenges, and how can they be addressed at national, regional and international levels? c) What are the opportunities, good practices, lessons learned and success stories?

Box 2

1. Art 7.14 a: Recognize adaptation efforts of developing countries
2. Art 7.14 b: Enhance the implementation of adaptation action: moving from plans to implementation and increasing ambition towards transformative adaptation, taking into account barriers, challenges and opportunities
3. Art 7.14 c: Review of the adequacy and effectiveness of ongoing adaptation and support at different scales
4. Assessing collective progress and enhancing efforts on averting, minimizing and addressing loss and damage, moving from knowledge generation to implementation

C. Roundtable 3: Means of implementation and support: Finance, technology and capacity-building

45. This roundtable and breakout groups will take stock of implementation of the Paris Agreement to assess collective progress towards making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development (Article 2.1 c), as well as how support for developing countries across finance, technology and capacity-building (Articles 9, 10, and 11) has enabled collective progress towards the long-term temperature goal (Article 2.1 a) and increased 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 (Article 2.1 b).

46. In this context, the roundtable on means of implementation and support, including finance, technology, and capacity-building, might focus its discussions on existing areas of support, emerging needs, and further efforts to align and scale up support to meet Paris Agreement goals. Discussions at this roundtable will take into account the progress towards the goal of developed countries of mobilizing jointly USD 100 billion annually by 2020 and continuing through 2025 to address the needs of developing countries, from a wide variety of sources, and in the context of meaningful mitigation actions and transparency on implementation (paragraph 53 of decision 1/CP.21 and Article 9).

47. The list of topics identified in Box 3 related to the four breakout groups for this roundtable have been raised in inputs received to date. These topics, and others, may be considered during this roundtable at TD1.2 and in more detail at TD1.3.

Box 3

1. Finance: Aligning financial flows and meeting needs for system-wide transitions to net zero emissions and transformative climate resilient development
2. Finance: Enhancing the catalytic role of international climate finance for scaling up climate action
3. Technology: Enabling and enhancing cooperation on innovation and technology development and transfer
4. Capacity: Enhancing and retaining capacities in support of Paris Agreement implementation

D. Focused exchanges on intersections

48. As noted above, there will be a dedicated space within the TD1.2 for a more integrated and holistic view of the implementation of the Paris Agreement. While TD1.1 discussions focused separately on the broad topics of the GST, referred to in paragraph 6(b) of 19/CMA.1, real-world planning and actions on these topics are not done in isolation. We will organize focused exchanges on "intersections" to begin to

answer the questions: *What does the transformation to low-GHG emissions and climate resilient development entail and how can we enable greater progress? How do stakeholders, at various levels, address mitigation, adaptation, means of implementation and support, as well as efforts on loss and damage and the implications of response measures, in an integrated and holistic way?*

49. Two-hour focused exchanges will be organized on each of following topics:

- (a) Pathways towards low GHG emissions and climate-resilient development
- (b) International cooperation on holistic and integrated approaches

50. Each panelist will provide their perspective on the topic of the discussion, laying out key issues to consider and interacting with each other to begin the discussion. The ensuing interactive discussion among participants will provide time for Parties, observer organizations and NPS to engage, and can build from observations and findings from TD1.1 and TD1.2 across roundtables and the world café.

51. More details on the panelists and scope for discussion will be posted to the GST website ahead of COP27. We think such exchanges are essential to facilitate comprehensive and cohesive findings within the first GST.

E. World Café topics

52. As noted above, the world café will build upon TD1.1, with new topics for consideration. Across 12 tables, each of the roundtable topics will be considered (four tables per roundtable). The topics identified for these world café stations were chosen based upon the discussions at TD1.1, as well as inputs to the GST.

53. These will be joined by eight systems transitions tables focusing on energy, transport, industry, agriculture, health, land, water, and urban systems. Starting from the basic question of how this system will be transformed in light of the Paris Agreement, these world café stations aim to consider the topics of the GST in a holistic and crosscutting manner while also considering the real-world circumstances of a system which has many competing priorities. As such, based on the system being considered some stations may have more consideration of emissions mitigation, while others may focus more on adaptation. We will invite participants to discuss the range of opportunities available within these systems to enhance the implementation of the Paris Agreement and its goals, as well as creative solutions to address challenges as these systems transform.

54. We expect that the topics discussed at the world café may inform later discussions at the roundtables and focused exchanges, but we will not be making formal links between the world café stations and the roundtables.

55. Box 4 lists the topics for world café stations at TD1.2. Further information on the topics that will be discussed and the experts leading the discussions at the tables will be shared on the GST website.

Box 4

Mitigation, including response measures

1. Urgency to move from incremental to transformational change in order to reduce global GHG emissions around 43% below 2019 levels by 2030, around 60% by 2035 and 84% by 2050 as outlined in the IPCC AR6
2. Early signs of transformation and key mitigation actions to accelerate it, including avoiding new fossil fuel intensive infrastructure, preparing to enable the transition by further advancing zero carbon technologies, market structures and planning for a just transition, and applying the zero emission technology and behavioral changes to sustain reductions to zero across systems
3. Concrete action to be taken by national and subnational governments, institutions facilitating international co-operation, businesses financial institutions and citizens to accelerate transformation towards net zero CO₂ or GHG emissions

4. How do we develop creative and imaginative approaches to impacts of response measures, building on discussions at TD1.1?

Adaptation, including loss and damage

5. How can adaptation needs of countries be better addressed: innovative tools/support, including finance, technology, enabling environment, across different scales to move away from incremental to transformational adaptation?
6. How can support be given for early warning systems at local, national, regional and global scales? How do we use scientific advances in attribution of climate change impacts, in taking regional and local action?
7. Methodological gaps: how to assess adequacy and effectiveness of adaptation action and support, how to assess and address transboundary, cascading and compounding risks and impacts, across multiple scales?
8. Technical assistance for averting, minimizing and addressing loss and damage: How to build across efforts on disaster response, longer-term recovery and sustainable development?

Means of implementation and support

9. How to shift existing financial flows and trends?
10. Supporting deployment of solutions at scale: What can we learn from experience of supporting mitigation and adaptation
11. Technology and innovation cooperation: Tools, actors and systems
12. Capacity: How to enhance and retain institutional capacities at the national level (exchange of experiences and lessons learned)

Systems Transformation

13. How do we transform energy systems?
14. How do we transform land systems?
15. How do we transform transport systems?
16. How do we transform water systems?
17. How do we transform industrial systems?
18. How do we transform agricultural systems?
19. How do we transform urban systems?
20. How do we transform health systems?

Appendix I

Guiding questions by the SB Chairs for the Technical Assessment component of the first Global Stocktake

Revised questions, 18 February 2022

The following guiding questions and their responses should be considered in the light of equity and the best available science, including the latest reports of the Intergovernmental Panel on Climate Change:

Mitigation guiding questions

1. What is the collective progress in terms of the current implementation of, and ambition in, mitigation actions towards achieving the goals defined in Articles 2.1(a) and 4.1 of the Paris Agreement?
2. Taking into account nationally determined contributions, long-term low GHG emission development strategies and relevant commitments and initiatives, what are the projected global GHG emissions, and the emission reductions still needed, in 2030 and 2050 in order to achieve the goals defined in Articles 2.1(a) and 4.1 of the Paris Agreement?
3. What efforts are being undertaken to plan, implement and accelerate mitigation action towards achieving the goals defined in Articles 2.1(a) and 4.1 of the Paris Agreement?
4. How adequate and effective are the current mitigation efforts and support provided for mitigation action towards achieving Articles 2.1(a) and 4.1 of the Paris Agreement?
5. In order to achieve the goals defined in Articles 2.1(a) and 4.1 of the Paris Agreement:
6. What further action is required?
7. What are the barriers and challenges, and how can they be addressed at national, regional and international levels?
8. What are the opportunities, good practices, lessons learned and success stories?

Adaptation guiding questions

1. What is the collective progress in terms of the current implementation of, and ambition in, adaptation actions towards achieving the goals defined in Articles 2.1(b) and 7.1 of the Paris Agreement?
2. What efforts are being undertaken to plan, implement and accelerate adaptation action towards achieving the goals defined in Articles 2.1 (b) and 7.1 of the Paris Agreement and with a view to recognizing the adaptation efforts of developing country Parties, what efforts have been undertaken by these Parties towards achieving these goals?
3. How adequate and effective are the current adaptation efforts and the support provided for adaptation towards achieving the goals defined in Articles 2.1(b) and 7.1 of the Paris Agreement?
4. How can the implementation of adaptation action towards achieving the goals defined in Articles 2.1(b) and 7.1 of the Paris Agreement be enhanced, taking into account the adaptation communication referred to in paragraph 10 of the Paris Agreement?
5. In order to achieve the goals defined in Articles 2.1(b) and 7.1 of the Paris Agreement:
6. What further action is required?
7. What are the barriers and challenges, and how can they be overcome at national, regional and international levels?
8. What are the opportunities, good practices, lessons learned and success stories?

Finance flows and means of implementation guiding questions

1. What is the collective progress in terms of the current implementation of, and ambition in, making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development towards to achieving the goal defined in Article 2.1 (c) of the Paris Agreement?
2. What is the collective progress in terms of the implementation of, and ambition in, the provision and mobilization of scaled-up financial resources from a wide variety of sources, instruments and channels towards achieving the goals defined in Article 9 of the Paris Agreement, noting the significant role of public funds, and aiming to achieve a balance between finance for adaptation and mitigation?
3. What is the collective progress in terms of the state of current implementation of, and ambition in, technology development and transfer towards achieving the vision defined in Article 10.1 of the Paris Agreement? What is the state of cooperative action on technology development and transfer?
4. What is the collective progress in terms of the state of current implementation of, and ambition in, enhancing the capacity of developing country Parties to implement the Paris Agreement? How effective has been the implementation of capacity-building efforts?

5. In order to achieve the goal defined in Article 2.1(c) of the Paris Agreement as well as scale up the provision and mobilization of means of implementation (including finance, technology development and transfer and capacity-building), including in the short term, both from public and private sources, at the national and international levels to achieve the Paris Agreement goals:
6. What further action is required?
7. What are the barriers and challenges and how can they be overcome at national, regional and international levels?
8. What are the opportunities, good practices, lessons learned and success stories?

Guiding questions related to efforts referred to in Decision 19/CMA.1, paragraph 6(b), that may be taken into account as appropriate, that:

Address the social and economic consequences and impacts of response measures:

1. What is the collective progress in terms of the current implementation of, and ambition in, efforts made that address the social and economic consequences and impacts of response measures while implementing mitigation policies and actions towards the achievement of the Paris Agreement goals?

Avert, minimize and address loss and damage associated with the adverse effects of climate change:

1. What is the collective progress in terms of the current implementation of, and ambition in, efforts made to enhance understanding, action and support towards averting, minimizing and addressing loss and damage associated with the adverse effects of climate change? What further action is required to strengthen these efforts?

Cross-cutting guiding questions

1. How are fairness considerations, including equity, being reflected in Parties' NDCs?
2. How is climate action respecting, promoting and considering Parties' respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity?
3. How are Parties recognizing the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, in order to achieve the purpose and long-term goals of the Paris Agreement?
4. In what way are NPS (including subnational governments, indigenous peoples and local communities, youth, non-governmental organizations, international organizations, the private sector, financial institutions and multi-stakeholder initiatives) contributing to the progress made to achieve the purpose and long-term goals of the Paris Agreement?

In order to achieve the purpose and long-term goals of the Paris Agreement:

1. What integrated and holistic approaches are available?
2. How can science and innovation be accelerated, encouraged and enabled?
3. How can international cooperation for climate action be enhanced?