SB.2017.1.BackgroundNote

Informal background note for discussions on the scope of the next periodic review of the long-term global goal under the Convention and of progress towards achieving it

Note by the Chairs of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation

21 April 2017

I. Introduction

1. The objective of this informal background note is to inform further consideration¹ by the SBSTA and the SBI at their forty-sixth sessions, on the scope of the next periodic review of the long-term global goal under the Convention and of progress towards achieving it.

A. Background

- 2. At its sixteenth session, the Conference of the Parties (COP), which took place in 2010, Parties had agreed on a long-term global goal to reduce greenhouse gas emissions so as to hold the increase in global average temperature below 2 °C above pre-industrial levels. In addition, the COP decided to periodically review: the adequacy of the long-term global goal in the light of the ultimate objective of the Convention (theme 1); and overall progress towards achieving the long-term global goal, including consideration of the implementation of the commitments under the Convention (theme 2). Furthermore, the first periodic review was tasked with the consideration of the strengthening the long-term global goal, including in relation to a temperature rise of 1.5 °C above pre-industrial levels.²
- 3. Two years later, COP 18 decided to establish a structured expert dialogue (SED) to support the periodic review and to ensure scientific integrity through a focused exchange of views, information and ideas.³ The first periodic review was the 2013–2015 review. The "Report on the structured expert dialogue on the 2013–2015 review. Note by the co-facilitators of the structured expert dialogue" was published in 2015.⁴ It summarizes the face-to-face dialogue between over 70 experts and Parties on the adequacy of the long-term global goal in the light of the ultimate objective of the Convention; and the overall progress made towards achieving the long-term global goal, including consideration of the commitments under the Convention. It includes a technical summary and a compilation of the summary reports on the four sessions of the SED. The technical summary synthesizes information on the work done by the SED and includes 10 messages capturing the key findings from its sessions.
- 4. The first periodic review led to the adoption of a decision⁵ at COP 21 that addressed the two themes of the review (see para. 2 above). The COP decided to strengthen the long-term global goal. The goal is now, in accordance with Article 2, paragraph 1(a), of the Paris Agreement,⁶ to hold the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.⁷ In relation to theme 2, the COP decided that, in the light of the overall progress made towards achieving the long-term global goal, including consideration of the implementation of the commitments under the Convention, Parties should act urgently and ambitiously under the Convention while recognizing the technological, economic and institutional challenges.⁸

¹ The SBSTA 44 report, document FCCC/SBSTA/2016/2, paragraph 47, available at http://unfccc.int/resource/docs/2016/sbsta/eng/02.pdf and the SBI 44 report, document FCCC/SBI/2016/8, paragraphs 133, available at http://unfccc.int/resource/docs/2016/sbi/eng/08.pdf.

² Decision 1/CP.16, paragraphs 4, 138 and 139, available at https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf,

³ Decision 1/CP.18, paragraphs 85-91, available at http://unfccc.int/resource/docs/2012/cop18/eng/08a01.pdf.

⁴ FCCC/SB/2015/INF.1, available at http://unfccc.int/resource/docs/2015/sb/eng/inf01.pdf.

⁵ Decision 10/CP.21, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf#page=23.

⁶ Available at http://unfccc.int/files/meetings/paris nov 2015/application/pdf/paris agreement english .pdf.

Decision 10/CP.21, paragraph 4, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf#page=23.

⁸ Decision 10/CP.21, paragraph 5, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf#page=23.

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5. Subsequent reviews will take place following the adoption of an assessment report of the Intergovernmental Panel on Climate Change (IPCC) or at least every seven years, as decided by the COP at its sixtheenth meeting.⁹

B. Status of discussions on the second periodic review

- 6. In December 2015, COP 21 requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI) to consider the scope of the next periodic review with a view to forwarding a recommendation for consideration by the COP by no later than 2018, as appropriate. It agreed that the next periodic review should be conducted in an effective and efficient manner, avoid duplication of work and take into account the results of relevant work conducted under the Convention and its Kyoto Protocol and the subsidiary bodies.¹⁰
- 7. In May 2016, at their forty-fourth sessions, the SBSTA and the SBI considered the scope of the next periodic review, as mandated at COP 21. They noted the relevant work on the global stocktake (GST) under the Ad Hoc Working Group on the Paris Agreement (APA), the facilitative dialogue, which will take place in 2018, and the technical examination processes (TEPs). They agreed to further consider this matter (see section IV for more information).

II. Relevant experiences with the 2013–2015 review and the structured expert dialogue, taking into account successes and shortcomings

A. Institutional modalities

- 8. A joint contact group: The first periodic review was carried out with the assistance of the SBSTA and the SBI through a joint contact group.
- 9. A structured dialogue between experts and Parties: The SED considered the inputs to the review through scientific workshops and expert meetings and supported the work of the joint contact group.
- 10. The Joint Working Group: The SBSTA–IPCC Joint Working Group has met regularly since its establishment at SBSTA 2. During the period 2013–2015, its meetings helped to ensure coordination and the exchange of information on the periodic review, among its other activities. It is composed of presiding officers of the Convention and the IPCC and members of the secretariats. In general, meetings take place during the sessions of the COP.

B. Practical modalities

- 11. Balance:11
- (a) Balanced chairing: The joint contact group was established by the SBSTA and the SBI and cochaired by representatives of developing and developed countries. The SED was chaired by co-facilitators selected by Parties and represented both developing and developed countries;
- (b) Balanced participation: The SED brought together a large number of government delegates, scientists and civil society representatives from all regions;
- (c) Balance in substance: At each SED meeting, great efforts were made to strive for geographical, gender, regional, institutional and thematic balance, notably the balance between the two themes of the review (see the SED Final Report, figure 112). This was achieved through the development of guiding questions and careful planning of input, including presentations (at the first SED meeting, five Parties/groups of Parties presented. Some Parties felt that presentations should only have been made by non-Party experts, so at the subsequent SED meetings there were only presentations by non-Party experts).

⁹ Decision 2/CP.17, paragraph 167, available at http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf.

Decision 10/CP.21, paragraphs 9 and 10, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf#page=23.

See figure 1 of document FCCC/SB/2015/INF.1, as well as annexes V and VI, available at http://unfccc.int/resource/docs/2015/sb/eng/inf01.pdf.

¹² FCCC/SB/2015/INF.1, available at http://unfccc.int/resource/docs/2015/sb/eng/inf01.pdf#page=4.

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- 12. Division of responsibility: The review was conducted by the COP, with the assistance of the SBSTA and the SBI. The subsidiary bodies established a joint contact group (see para. 8 above), supported by the SED (see para. 9 above). The SBSTA and the SBI, and the SED, periodically reported to the COP.
- 13. A source of input to other UNFCCC processes: The process of the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) was informed by the 2013–2015 review as well as the IPCC Fifth Assessment Report and the work of the subsidiary bodies. The SBSTA and SBI Chairs and the SED co-facilitators informed the ADP on the work undertaken in the context of the 2013–2015 review throughout the first review period (2013–2015), as appropriate. The timely output of the review in 2015 supported the work on the Paris Agreement.
- 14. Complementarity with other UNFCCC processes: The 2013–2015 review and the research dialogues held annually were complementary. The review process encouraged the research and systematic observation community to produce climate science to inform the UNFCCC process.
- 15. Transparency of organization: Information on the process was shared continuously and guided by the Parties.
- 16. Open, face-to-face dialogue: The SED meetings ensured that there was a science-policy interface and that the meetings were open to all Parties and observers.
- 17. Time for discussion: At all SED meetings, the amount of time allocated to discussions was significant, always exceeding that allocated to the presentations themselves (see the statistical analysis in the SED Final Report, figure 1).¹³
- 18. Guiding questions: The SED meetings were structured around guiding questions, which were developed using input from Parties and were made available to experts and Parties before each meeting.
- 19. A phased approach with an ongoing dialogue: The first review took three years (2013–2015). It consisted of several phases, including information gathering and compilation, technical assessment through the organization of meetings (the SED), technical studies 14 and the preparation of summary reports, including a synthesis report. The SED brought together experts and Parties at five meetings held between June 2013 and February 2015. In its first phase, the review focused on information gathering and compilation and technical assessments. In the later phase, the SED co-facilitators prepared a report on the SED, encompassing a technical summary including 10 messages, as outcomes of the review. The summary including 10 messages, as outcomes of the review.
- 20. The consideration of inputs as they became available: The review was undertaken in a flexible and appropriate manner in line with decision 2/CP.17,¹⁷ allowing for adequate and timely consideration of the inputs to the review as they became available.¹⁸
- 21. The best available science: The review was informed by the best available science, with 53 experts making a total of 60 presentations. An additional 20 experts attended the meetings and participated in the discussions. The presentations were delivered by experts from the IPCC, processes and bodies under the Convention, United Nations organizations and agencies, and other regional and intergovernmental organizations.
- 22. Numerous sources of information: The main sources of information, as mandated, were:¹⁹
- (a) The assessment and special reports and technical papers of the IPCC;
- (b) Submissions from Parties, national communications, first biennial update reports from developing country Parties and biennial reports from developed country Parties, national inventories, reports on international consultation and analysis, international analysis and review, and other relevant reports from Parties and processes under the Convention;²⁰

¹³ FCCC/SB/2015/INF.1, available at http://unfccc.int/resource/docs/2015/sb/eng/inf01.pdf#page=4.

¹⁴ Including document FCCC/SB/2014/INF,3, available at http://unfccc.int/resource/docs/2014/sb/eng/inf03.pdf.

Decision 2/CP.17, paragraph 164, available at http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf, and FCCC/SB/2015/INF.1, available at http://unfccc.int/resource/docs/2015/sb/eng/inf01.pdf.

¹⁶ FCCC/SB/2015/INF.1, paragraphs 6–122, available at http://unfccc.int/resource/docs/2015/sb/eng/inf01.pdf.

Decision 2/CP.17, available at https://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf.

¹⁸ Decision 1/CP.18, paragraph 90, available at http://unfccc.int/resource/docs/2012/cop18/eng/08a01.pdf.

¹⁹ Decision 2/CP.17, paragraph 161, available at http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf.

Summarized in document FCCC/SB/2014/INF.3, available at http://unfccc.int/resource/docs/2014/sb/eng/inf03.pdf (it should be noted that there were limitiations on the availability of data from Parties and reporting cycles).

- (c) Other relevant reports from United Nations agencies and other international organizations, including reports on emission projections, technology development, access, transfer and deployment, and reports on gross domestic product, including projections;
- (d) Scientific information on the observed impacts of climate change, including from reports coordinated by relevant regional and subregional agencies.
- 23. A special event to disseminate the SED outcomes: The SBSTA and the SBI held a special event on the 2013–2015 review in June 2015 on the margins of the sessions of the subsidiary bodies to launch the final report on the SED. The co-facilitators of the SED presented the report, followed by a panel discussion and a question and answer session.
- 24. A direct link between the IPCC and policymakers: The SED meetings were a platform for dialogue on the latest scientific knowledge, as it became available, from the IPCC and beyond. The information shared at the SED meetings fed directly into the discussions of the joint contact group over the course of three years. Numerous experts from the IPCC presented the latest findings at the SED meetings. The meetings focused on the latest scientific knowledge from the IPCC fifth assessment cycle. Contributions were made by all three of the IPCC Working Groups.
- 25. Review based on two themes: The review of the adequacy of the long-term global goal in the light of the ultimate objective of the Convention (theme 1) led to Parties deciding on a more ambitious goal.²¹ It also led to the realization that scenarios that limit warming to below 1.5 °C relative to pre-industrial levels by 2100 and the range of impacts at the regional and local scales associated with those scenarios were limited. This prompted Parties to encourage the scientific community to address this, and to invite the IPCC to prepare a special report on the matter.²² The review of overall progress towards achieving the long-term global goal, including consideration of the implementation of the commitments under the Convention (theme 2), led to the decision that Parties should act urgently and ambitiously under the Convention while recognizing the technological, economic and institutional challenges.²³
- 26. Review guided by principles: The 2013–2015 review was guided by the principles of equity, and common but differentiated responsibilities and respective capabilities.²⁴ It always took into account the relevant principles and provisions of the Convention.

III. Relevant work under the Paris Agreement

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A. The global stocktake under the Ad Hoc Working Group on the Paris Agreement

- 27. In their discussions on the scope of the next periodic review, SBSTA 44 and SBI 44, as mentioned in paragraph 7 above, noted the relevant work on the GST under the APA.²⁵
- 28. In accordance with Article 14, paragraphs 1–3, of the Paris Agreement, the GST is a process whereby the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) shall periodically take stock of the implementation of the Paris Agreement to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals. It shall do so in a comprehensive and facilitative manner, considering mitigation, adaptation and the means of implementation and support, and in the light of equity and the best available science and it shall undertake its first GST in 2023 and every five years thereafter unless otherwise decided by the CMA. Furthermore, the outcome of the GST shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of the Paris Agreement, as well as in enhancing international cooperation for climate action.²⁶

²¹ Decision 10/CP.21, paragraph 4, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf#page=23.

²² Decision 1/CP.21, paragraph 21, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf#page=4.

²³ Decision 10/CP.21, paragraph 5, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf#page=23.

²⁴ Decision 1/CP.16, paragraph 139(a), available at http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2.

The SBSTA 44 report, document FCCC/SBSTA/2016/2, paragraphs 45–48, available at http://unfccc.int/resource/docs/2016/sbsta/eng/02.pdf and the SBI 44 report, document FCCC/SBI/2016/8, paragraphs 131–134, available at http://unfccc.int/resource/docs/2016/sbi/eng/08.pdf.

Paris Agreement, Article 14.1–3, available at http://unfccc.int/files/meetings/paris nov 2015/application/pdf/paris agreement english .pdf.

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- 29. COP 21 requested the APA to identify the sources of input for the GST, to develop its modalities and to report to the COP, with a view to the COP making a recommendation for consideration and adoption at CMA $1.^{27}$
- 30. According to the reflections note²⁸ by the Co-Chairs of APA 1–2, which took place in Marrakech, Parties identified the following starting points and approaches that could be used to conduct the work referred to in paragraph 29 above: (1) identify possible additional sources of input, develop the modalities for the GST and identify the outputs of the GST that will lead to its outcome; (2) clarify the outcome of the GST, which will shed light on the modalities of the GST and the sources of input needed; and (3) clarify conceptual issues before focusing on the identification of sources of input and the development of modalities.
- 31. COP 21 requested the SBSTA to provide advice on how the assessments of the IPCC can inform the GST of the implementation of the Paris Agreement pursuant to its Article 14.²⁹ SBSTA 45 provided advice, including that lessons could be learned from past experience, with a reference to "in particular the activities relating to the 2013–2015 review, taking into account successes and shortcomings.³⁰
- 32. SBSTA 45 also advised that dialogue between IPCC experts and Parties on the findings of the IPCC products, enabling a focused scientific and technical exchange of information in an open and transparent manner, could be utilized. Furthermore, it advised that convening special events could be of value, and that the SBSTA–IPCC Joint Working Group could be used to enhance communication and coordination between the SBSTA and the IPCC in the context of the GST. The 2013–2015 review utilized all three of the aforementioned modalities (see paras. 9, 23 and 10 above).

B. The 2018 facilitative dialogue

- 33. SBSTA 44 and SBI 44, as mentioned in paragraph 7 above, noted, in the context of their discussions on the scope of the next periodic review, the relevant work on the 2018 facilitative dialogue.³¹
- 34. COP 21 decided to convene a facilitative dialogue among Parties in 2018 to take stock of the collective efforts of Parties in relation to progress towards the long-term global goal referred to in Article 4, paragraph 1, and to inform the preparation of nationally determined contributions pursuant to Article 4, paragraph 8, of the Paris Agreement.³²
- 35. The objectives of the facilitative dialogue are to take stock of aggregate efforts in relation to Article 4, paragraph 1, and to inform the preparation of nationally determined contributions pursuant to Article 4, paragraph 8, of the Paris Agreement. "Aggregate efforts" refers to whether or not the nationally determined contributions of all countries deliver a global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and rapid reductions are undertaken thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty in order to achieve the long-term global goal of well below 2 °C or 1.5 °C.
- 36. Prior to COP 21, the secretariat was requested to prepare a report on the aggregate effect of the intended nationally determined contributions (INDCs). The analysis, ³³ which was updated in 2016, indicated that much greater emission reduction efforts than those associated with the INDCs will be required in the period after 2025 and 2030 to hold the temperature rise below 2 °C above pre-industrial levels with a probability of 66 per cent.³⁴

²⁷ Decision 1/CP.21, paragraph 99, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf.

http://unfccc.int/resource/docs/2017/apa/eng/linfnot.pdf.

Decision 1/CP.21, paragraph 100, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf.

³⁰ FCCC/SBSTA/2016/4, paragraphs 48–56, available at http://unfccc.int/resource/docs/2016/sbsta/eng/04.pdf.

The SBSTA 44 report, document FCCC/SBSTA/2016/2, paragraphs 45–48, available here: http://unfccc.int/resource/docs/2016/sbsta/eng/02.pdf and the SBI 44 report, document FCCC/SBI/2016/8, paragraphs 131–134, available at: http://unfccc.int/resource/docs/2016/sbi/eng/08.pdf

Decision 1/CP.21, paragraph 20, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf.

³³ FCCC/CP/2016/2, available at http://unfccc.int/resource/docs/2016/cop22/eng/02.pdf.

In aggregate, mitigation efforts of INDCs are expected to lead to levels of 8.7 Gt carbon dioxide (in 2025) and 15.2 Gt carbon dioxide (in 2030) higher than scenarios for limiting temperature rise to below 2 °C.

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- 37. In response to an invitation from COP 21,³⁵ and in the context of the INDCs, a Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways will be produced by the IPCC.³⁶ The final draft will be considered by the IPCC for approval at its plenary session in September 2018, three months prior to the facilitative dialogue.
- 38. COP 22 requested its President, in collaboration with the incoming President of COP 23, to undertake inclusive and transparent consultations with Parties on the organization of the facilitative dialogue, including consultations during the forty-sixth sessions of the subsidiary bodies (May 2017) and COP 23 (November 2017). They are to jointly report back to COP 23 on the preparations for the dialogue.³⁷

C. The technical examination processes

- 39. In addition, in their discussions on the scope of the next periodic review, as mentioned in paragraph 7 above, SBSTA 44 and SBI 44 noted the relevant work on the TEPs.
- 40. The TEP on mitigation consists of regular in-session thematic technical expert meetings and focused follow-up work to be conducted by Parties, international organizations and partnerships throughout the year. Parties to the Convention resolved to start the process in 2014 and to further accelerate it by 2020 in order to implement scalable best practice policies and bridge the ambition gap.
- 41. COP 21 called for the strengthening of the existing technical examination of opportunities with high mitigation potential and associated adaptation, health and sustainable development co-benefits in the period 2016–2020 taking into account latest scientific knowledge. It requested the secretariat to organize the TEP on mitigation and disseminate its results, including by organizing regular technical expert meetings on mitigation focusing on specific policies, practices and actions representing best practice and with the potential to be scalable and replicable.
- 42. The TEP on adaptation was established at COP 21 as part of the enhanced action prior to 2020 in the decision adopting the Paris Agreement.³⁸ It is taking place in the period 2016–2020 and its objective is to identify concrete opportunities for strengthening resilience, reducing vulnerabilities and increasing the understanding and implementation of adaptation actions, including through the following four functions:
- (a) Facilitating the sharing of good practices, experiences and lessons learned;
- (b) Promoting cooperative action on adaptation;
- (c) Identifying actions, including actions that could enhance economic diversification and have mitigation co-benefits;
- (d) Identifying opportunities to strengthen enabling environments and enhance the provision of support for adaptation in the context of specific policies, practices and actions.
- 43. COP 21 decided that the TEP on adaptation is to be organized by the subsidiary bodies, conducted by the Adaptation Committee and supported by the secretariat. It comprises annual technical expert meetings, an annual technical paper and an annual summary for policymakers (SPM).³⁹

IV. Next steps

44. At their forty-fourth sessions, the SBSTA and the SBI agreed to further consider the scope of the next periodic review at their forty-sixth sessions (May 2017) and to refine it, taking into account relevant experiences with the 2013–2015 review. They noted that an in-session workshop on the scope of the next periodic review could be useful and that they may consider the matter further at their forty-sixth sessions.

³⁵ Decision 1/CP.21, paragraph 21, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf#page=2.

Decision IPCC/XLIV-4, "Global warming of 1.5°C – An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty", available at https://www.ipcc.ch/apps/eventmanager/documents/40/101020160815-INF.6,Rev.1-Outline%20SR1.5.pdf.

Decision 1/CP.22, paragraph 16, available at http://unfccc.int/resource/docs/2016/cop22/eng/10a01.pdf.

Decision 1/CP.21, paragraph 124, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf#page=2.

³⁹ Climate Action Now: Summary for Policymakers 2016 is available at http://unfccc.int/resource/climateaction2020/media/1281/unfccc.spm 2016.pdf.

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As per the mandate from COP 21,⁴⁰ the SBSTA and the SBI will consider the matter with a view to forwarding a recommendation for consideration by the COP no later than in 2018, as appropriate.

⁴⁰ Decision 10/CP.21, paragraph 10, available at http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf#page=23.