### Conclusions and recommendations

# Fifteenth meeting of greenhouse gas inventory lead reviewers

26 and 27 February 2018, Bonn

- 1. The 15<sup>th</sup> meeting of greenhouse gas (GHG) inventory lead reviewers (LRs) was held in Bonn, Germany, on 26 and 27 February 2018. A total of 38 experts from Parties not included in Annex I to the Convention (non-Annex I Parties) and 61 experts from Parties included in Annex I to the Convention (Annex I Parties) were invited to the meeting. Of the 62 experts who attended, 32 were from non-Annex I Parties and 30 were from Annex I Parties. The secretariat held a refresher seminar for LRs and experienced reviewers on the morning of 26 February, before the LRs meeting, which was attended by 60 experts (32 from non-Annex I Parties and 28 from Annex I Parties). The refresher seminar focused on simplifying data analysis of GHG inventories with the use of review tools.
- 2. In accordance with decisions 13/CP.20, 22/CMP.1 and 24/CMP.1, the meeting contributed to facilitating the work of LRs in fulfilling their task to ensure the consistency of reviews across all Parties and provided suggestions on how to improve the quality and efficiency of the reviews. These conclusions and recommendations will be reported to the Subsidiary Body for Scientific and Technological Advice (SBSTA), in accordance with decisions 13/CP.20 and 22/CMP.1 in conjunction with decision 4/CMP.11. Such reports provide the SBSTA with inputs for providing further guidance to the secretariat on the selection of experts and the coordination of the expert review teams (ERTs) and the expert review process.
- 3. The Conference of the Parties invited LRs to provide guidance on such matters as review tools, materials and templates<sup>1</sup> and to provide suggestions on how to improve the quality, efficiency and consistency of the reviews.<sup>2</sup> It also requested SBSTA 48 (April–May 2018) to consider the experiences in conducting desk reviews, taking into consideration any relevant conclusions from the meetings of GHG LRs up to 2017.<sup>3</sup>

## I. Coordination and planning of the 2017 and 2018 review cycles

- 4. The LRs noted the secretariat plan to organize the 2018 review cycle, which takes into consideration the secretariat's work programme for the biennium 2018–2019.<sup>4</sup> In accordance with this work programme, while inventory submissions from Parties remain annual and technical reviews of the GHG inventories submitted by Annex I Parties are to be implemented every year for every Party involved, the core budget contains provision to support the individual reviews of these inventories and the related supplementary information under the Kyoto Protocol only once per Party per biennium. Additional individual reviews can be carried out if supported through supplementary funding.
- 5. The LRs also noted with concern the information provided by the secretariat that, as at 27 February 2018, there were insufficient resources from the Trust Fund for Supplementary Activities to organize the 2018 review cycle for the additional 22 Parties (see para. 6 below) fully in accordance with the relevant mandates of decisions 13/CP.20, 22/CMP.1 and 4/CMP.11. Therefore, the secretariat's plan for the 2018 review cycle will cover only half of the Annex I Parties; the secretariat will expand the plans to cover the remaining 22 Parties, fully in accordance with the mandates, if enough resources are available in the fund in time for the organization of reviews.
- 6. The LRs also noted the proposal provided by the secretariat on the need for Parties to provide support to the supplementary funding for activities related to Annex I GHG inventory reviews by 2 April 2018 at the latest, in order to organize reviews by ERTs of up to 44 submissions, and to strengthen the

<sup>&</sup>lt;sup>1</sup> Decision 13/CP.20, annex, paragraph 48.

<sup>&</sup>lt;sup>2</sup> Decision 13/CP.20, annex, paragraph 44.

<sup>&</sup>lt;sup>3</sup> Decision 13/CP.20, paragraph 15.

<sup>&</sup>lt;sup>4</sup> Document FCCC/SBI/2017/4.

capacity of the secretariat to improve the efficiency and timeliness of the 2018 review cycle. The LRs requested the secretariat to remind Parties of the need to increase contributions to the Trust Fund for Supplementary Activities to ensure the timely organization of reviews.

- 7. The LRs requested the secretariat to inform Annex I Parties as early as possible but no later than 30 April 2018 on the specific plans for the 2018 review cycle, including which Parties will be invited to host an in-country review.
- 8. The LRs took note of the significant share of declined invitations to review in the 2017 review cycle. To ensure sufficient participation in the 2018 review cycle, the LRs requested the secretariat to send the invitations to review as early as possible after the finalization of the review plan for 2018.

#### **Desk reviews**

- 9. At their 14<sup>th</sup> meeting, the LRs indicated their intent to consider the desk review option further at their 15<sup>th</sup> meeting, taking into consideration the additional experience gained in 2017. The LRs welcomed the improvements made to this review approach, noting in particular the development of a specific annual review report (ARR) template, which helps to focus these reviews on the assessment of the implementation of previous recommendations, recalculations and issues identified during earlier stages of the review process.
- 10. The LRs encouraged the secretariat to develop a list of all categories for which recalculations have changed, in any year of the time series, the emission/removal estimate for a category by more than 2 per cent and/or national total emissions by more than 0.5 per cent, at the level of the data entry in the background common reporting format tables, to be distributed to the ERT prior to each desk review.
- 11. The LRs emphasized their role in communicating to the ERT the priorities for desk reviews as specified in decision 13/CP.20, annex, paragraph 76.
- 12. The LRs noted the need for Parties to encourage and facilitate the participation of their experts in desk reviews, noting that without greater support from Parties it will be very hard for the secretariat to organize desk reviews and ensure geographical balance in the ERTs.

## II. Training and availability of review experts

- 13. The LRs welcomed the information on training activities undertaken by the secretariat in 2017 and planned training activities in 2018. The LRs also welcomed the organization of the refresher seminar held prior to their 15<sup>th</sup> meeting on simplifying data analysis of GHG inventories with the use of review tools.
- 14. The LRs noted with concern that not all the land use, land-use change and forestry (LULUCF) experts, both new and experienced, who participated in reviews in 2017 have met the mandatory requirement to pass the examination on the review of activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol of the updated Kyoto Protocol training programme. The LRs noted that all such LULUCF experts, as well as new LRs, must fulfil this mandatory requirement to be able to take part in reviews under the Kyoto Protocol.
- 15. Noting that the training courses for the review under Article 8 of the Kyoto Protocol are planned in June–July 2018 with the three-day examination period in late July 2018, the LRs strongly encouraged all experts, in particular LULUCF experts and new LRs, to take this opportunity and pass the mandatory required courses, including the course on application of adjustments, with a view to taking part in the reviews.
- 16. The LRs noted the importance of the training programme for review experts for the technical review of GHG inventories of Annex I Parties,<sup>5</sup> which has the objective of facilitating review experts in acquiring appropriate technical knowledge and skills for the technical review of information reported under the Convention related to GHG inventories.

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<sup>&</sup>lt;sup>5</sup> Decision 14/CP.20, annex.

- 17. The LRs also noted, in particular, the importance of the hands-on training seminars to complete the instructed courses of the training programme referred to in paragraph 16 above, to be held regularly twice a year, one in Bonn and another one regional, in order to invite more new inventory experts to acquire technical knowledge and skills and to take part in the technical reviews of information reported under the Convention related to GHG inventories, and to take part in the training programme for the reviews under Article 8 of the Kyoto Protocol and subsequently to take part in the annual reviews under the Kyoto Protocol.
- 18. The LRs reiterated the importance of Parties nominating new experts with experience in GHG inventories, including robust general and sectoral technical expertise, to the UNFCCC roster of experts and regularly updating their nominations. They also reiterated the importance of the support from the Parties in ensuring that their experts can complete the required training programmes, in order to have more qualified reviewers available for the GHG inventory review process.
- 19. The LRs acknowledged the resource constraints, both human and financial, in the secretariat and encouraged Parties to continue to support the training activities by providing sufficient resources to continue and strengthen the implementation of the training programme.

## III. Guidance on the development of review tools and materials

#### A. Review tools and materials

- 20. The LRs noted that the development of the new data warehouse with GHG emission data from Parties' GHG inventory submissions is still ongoing and could not be completed owing to insufficient funding. They also noted that this affects the functioning of review tools, the GHG data interface, the status reports under both the Convention and the Kyoto Protocol and the aggregate GHG information that are linked to this warehouse.
- 21. The LRs noted that the GHG Locator, a review tool widely used by ERTs, has been improved following the recommendations of the 14<sup>th</sup> meeting of LRs, and has been used during the 2017 review cycle as an offline tool. Moreover, they noted that the overall functionality and performance of this tool was enhanced in 2017, allowing more experts to use it before, during and after reviews. Despite the progress achieved, the LRs noted that the development of the online version of the GHG Locator is still pending.
- 22. Considering the feedback received from experts during the 2017 review cycle, the LRs noted the plan of the secretariat to further enhance the review tools, in particular the online GHG Locator, the Comparison Tool and the Statistical Outlier Detection Tool. The LRs noted that there are insufficient financial resources to implement all the planned developments, but recommended that the secretariat prioritize those improvements that can be completed for the 2018 review weeks.

#### B. Status report

23. The LRs noted with appreciation the work of the group of experienced LRs that conducted an assessment of the standardized set of data comparisons in accordance with decision 13/CP.20, paragraphs 4 and 5, and as requested in the previous LRs meeting.<sup>6</sup> The LRs considered the proposals made by the group regarding changes to the status report.<sup>7</sup> The LRs agreed with the proposal and requested the secretariat to implement it for the 2019 review cycle, subject to the availability of financial resources.

<sup>&</sup>lt;sup>6</sup> FCCC/SBSTA/2017/INF.8, annex, paragraph 24.

<sup>&</sup>lt;sup>7</sup> The proposal for the status report for Parties under the Convention is available at

https://unfccc.int/files/national reports/annex i ghg inventories/review process/application/pdf/status report tem plate revised conv v1 20180215.pdf and, for Parties under the Kyoto Protocol, at https://unfccc.int/files/national reports/annex i ghg inventories/review process/application/pdf/status report tem plate revised kp v1 20180215.pdf.

24. The LRs also noted that the group of experienced LRs referred to in paragraph 23 above suggested additional recommendations<sup>8</sup> to those presented, indicating that they should be considered for future work on revising the status report.

#### C. Inventory virtual team room

- 25. The LRs noted that around 200 experts, LRs, review officers and Party representatives used the GHG inventory virtual team room (iVTR) (including the modules library, questions and answers, review issues tracking system (RITS) and report preparation) during the 2017 review cycle. For the second year in a row, the iVTR users participating in a survey have indicated that iVTR improves the efficiency in conducting the review. From this feedback, the LRs noted the benefits of continuing the use of the iVTR.
- 26. The LRs also noted some difficulties expressed by users in using some of the modules, including the RITS module for finding and tracking issues in a single database, and the report preparation module when used with different software platforms. They requested the secretariat to identify the possibilities of further enhancing the RITS and the report preparation modules of the iVTR for the next review cycles. The LRs noted the need for Parties to support the further development of the iVTR by providing additional financial resources.
- 27. The LRs requested the secretariat, in cooperation with a small group of LRs, to improve the RITS module based on the issues identified in the questionnaire and during the meeting. The LRs invited the secretariat to report on the progress made at their next meeting.

#### D. Other review materials

- 28. The LRs noted the need to annually review and update, as necessary, the *Handbook for the Review of National Greenhouse Gas Inventories* (hereinafter referred to as the review handbook), to reflect any updated review processes and procedures. In particular, for the 2018 review cycle, the LRs noted the need to ensure that the review handbook reflects the latest procedures related to RITS, the conduct of desk reviews, the application of the significance threshold and how to use the review tools.
- 29. The LRs requested the secretariat, in cooperation with a small group of LRs, to develop a decision tree to describe the steps for the use and application of the significance threshold in the review process for its use by all ERTs at the next review cycle. The LRs requested the secretariat to report on the experiences using the decision tree at the next LRs meeting with a view to its potential improvement and inclusion in the review handbook for the 2019 review cycle.

## IV. Improvements to the quality, efficiency and consistency of reviews, in accordance with decisions 13/CP.20 and 4/CMP.11

30. The LRs reaffirmed their role in leading ERTs and the review process, ensuring the quality and consistency of the reviews and supporting new experts. The LRs recognized their role in promoting the use of tools and materials and the need to follow up on the quality assurance process.

<sup>&</sup>lt;sup>8</sup> Whether the Party is using the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and other IPCC guidelines; whether the Party has provided the relevant justification in the national inventory report for the categories for which it has not estimated emissions and removals on the basis of insignificance; and improving the presentation of methods and emission factors used with more information provided by sector and by gas with the shortcuts for methodologies and emission factors used in key categories.

<sup>&</sup>lt;sup>9</sup> Possible functions to improve the RITS module include: (a) managing a full list of findings, serving as data repository; (b) tracking the assessment and treatment of issues from one review to another; (c) including questions and answers between ERT and Party, and recommendations, and being the basis for the elaboration of the draft ARR; (d) containing all issues and only reflect findings in the ARR which should be available to the Party; (e) allowing exporting of issues/findings in Microsoft Excel format; (f) including tracking statistics (country, sector, LRs, category, etc.); (g) being updated once the ARR is finalized following the quality assessment/quality control process; (h) integrating the assessment report, and the questions and answers and report preparation modules of the iVTR; (j) having an automatic filling function for the key category status based on the already existing results of the key category analysis done by the secretariat; (k) having the possibility of retrieving automatically information previously documented in RITS, for example in relation to recommendations in the previous ARR not implemented/fully implemented.

- 31. The LRs welcomed the presentation by the International Energy Agency (IEA) on comparing the IEA data with the data in the GHG submission to the secretariat. The LRs concluded that the comparison is a cornerstone supporting the review process of the energy sector. They noted, in particular, that consolidation of methods and energy data across stakeholders at the national level is essential to enhance data quality and make the comparison results more effective. The LRs encouraged the LRs, the secretariat and IEA to collaborate to improve the usefulness of this comparison and requested the secretariat to invite a group of LRs and energy experts to provide guidance on the further elaboration and development of the IEA data comparison.
- 32. The LRs welcomed the presentation by the European Environment Agency on the European Union internal review of its member States' GHG inventories.
- 33. The LRs discussed specific ways to improve the consistency and efficiency of the review process based on the experiences from the 2017 review cycle and the background paper on consistency prepared by the secretariat. In particular, the LRs recommended that LRs promote the following procedures:
- a) When assessing a Party's implementation of a previous recommendation in ARR table 3, ERTs should ensure that they make their assessment based on the original issue without expanding or modifying it. Any additional related issues should be included in ARR table 5;
- b) The LRs noted some challenges in assessing the implementation of previous recommendations that cannot be assessed in an objective manner. In such cases, the ERTs should consider closing previous vague or general recommendations if the rationale cannot be identified from previous ARRs.
- 34. While noting that the 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (hereinafter referred to as the Wetlands Supplement) has not been made mandatory for reporting under the Convention, the LRs noted that the Wetlands Supplement contains the best scientific information available at the time of its production. The LRs noted that once a Party has used emission factors and/or methodologies from the Wetlands Supplement, it should continue to use them until justifiably improved methodologies and/or emission factors are developed.

#### Future meetings of greenhouse gas inventory lead reviewers

- 35. The LRs recognized that the focus of the LRs meeting should be the improvement of the quality, consistency and efficiency of the review process. The LRs also recognized that the conclusions and recommendations from their meetings should contain the more critical and relevant issues to be presented in a concise way and limited to the main scope in accordance with the mandate.
- 36. The LRs recommended that their future meetings be organized by the secretariat in consultation with the LRs and last up to three days, with activities in the following sequence:
- a) A refresher seminar based on practical examples and exercises to allow active participation of LRs and other participants;
- b) Discussions co-chaired by LRs, including through break-out groups, to facilitate the exchange of experiences and interaction among LRs. The themes for the discussions at each meeting should be prepared by the secretariat in consultation with the LRs well before each meeting. If necessary, discussion papers should be provided and participation of relevant external participants identified;
- c) Short summary presentations of information from the secretariat on relevant issues, such as revised tools prepared by the secretariat, statistics and information on the review process. The materials prepared by the secretariat on these issues should be provided in advance, allowing the LRs to be prepared and ready for participating in discussions and formulating questions as necessary during the meeting;
  - d) Preparation and adoption of conclusions and recommendations.