

**Ad Hoc Working Group on Further Commitments
for Annex I Parties under the Kyoto Protocol**

Thirteenth session

Bonn, 2–6 August 2010

Agenda item 3

Consideration of further commitments for Annex I Parties under the Kyoto Protocol

**In-session workshop on the scale of emission reductions to be
achieved by Annex I Parties in aggregate and the contribution
of Annex I Parties, individually or jointly, to this scale**

Report by the chair of the workshop

I. Introduction

1. The Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP), at its twelfth session, requested the secretariat to organize, under the guidance of the Chair of the AWG-KP and taking into consideration the views submitted by Parties on the topics of the workshop and the organizations/experts to be invited, as well as discussions at the twelfth session of the AWG-KP, an in-session workshop at its thirteenth session on the scale of emission reductions to be achieved by Annex I Parties in aggregate and the contribution of Annex I Parties, individually or jointly, to this scale.¹

2. The objective of the workshop was to allow for a focused technical discussion on the quantitative implications of the proposals and issues identified by Parties in their submissions, and for further exploring a possible enhanced scale of emission reductions to be achieved by Annex I Parties, emphasizing that consensus among Parties on their overall level of ambition is deemed important.

3. At its twelfth session, the AWG-KP invited Parties to submit proposals to address the implications of the issues identified in the work programme of the AWG-KP² regarding the scale of emission reductions to be achieved by Annex I Parties in aggregate and for the contribution of Annex I Parties, individually or jointly, to this scale.³

4. The workshop was held in Bonn, Germany, on 2 and 3 August 2010, during the thirteenth session of the AWG-KP, and was chaired by Mr. Adrian Macey, Vice-Chair of

¹ Document FCCC/KP/AWG/2010/7, paragraph 28 (a).

² Document FCCC/KP/AWG/2008/8, paragraph 49 (c).

³ Document FCCC/KP/AWG/2010/7, paragraph 29 (b).

the AWG-KP. The presentation and discussions were facilitated by Mr. Leon Charles (Grenada) and Mr. Juergen Lefevere (European Union).

5. The agenda and invitations to participants were prepared by the Chair and the Vice-Chair of the AWG-KP, taking into consideration submissions from Parties containing their views on the topics to be covered and the organizations/experts to be invited to the workshop,⁴ and the need to ensure a balanced geographical participation of experts and organizations. The workshop was open to all Parties and observers.

6. The following Parties or group of Parties made presentations: Japan, India, the European Union, the Russian Federation, the Alliance of Small Island States, Switzerland and the Plurinational State of Bolivia. The workshop also involved input from international experts and research institutes, who presented the results of relevant technical analyses.⁵ The Vice-Chair of the AWG-KP presented a summary of the main outcomes of the pre-session workshop on forest management accounting, held in Bonn on 30 July 2010. The Chair of the Executive Board of the clean development mechanism (CDM), Mr. Clifford Mahlung, made a presentation on the impact of market-based mechanisms on emission reductions by Annex I Parties in aggregate.

7. Question and answer sessions were held after groups of presentations by the Parties, and by the experts and organizations. In closing the workshop, the chair provided concluding remarks.

II. Summary of presentations and discussions

8. The presentations and discussion during the workshop covered a number of issues relating to the scale of emission reductions to be achieved by Annex I Parties in aggregate and the contribution of Annex I Parties, individually or jointly, to this scale. This summary highlights the main issues raised in the presentations and the discussion among participants.

A. How Parties assess the current level of pledges and the scale of emission reductions by Annex I Parties in aggregate

Goals for limiting the global mean temperature increase

9. The goal of limiting the global mean surface temperature increase to below 2 °C compared with pre-industrial levels, referred to hereinafter as the 2 °C goal, was often referred to by participants in the context of the discussion of the pledges of Annex I Parties. Some participants referred to the link between this goal and long-term global emissions pathways, the peaking of global emissions before 2020 and the range of emission reductions by Annex I Parties of between 25 and 40 per cent below 1990 levels by 2020 as referred to in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) in the context of the scenarios with low stabilization levels of greenhouse gas concentration in the atmosphere. It was noted that this range was confirmed in the recent peer-reviewed scientific literature. A view was also expressed that there were multiple pathways to the 2 °C goal.

10. Some participants expressed views that global mean surface temperature increase should be limited to 1.5 °C or 1 °C compared with pre-industrial levels, and that the

⁴ These submissions are compiled in document FCCC/KP/AWG/2010/MISC.2.

⁵ Mr. William Hare from Climate Analytics, Mr. Sivan Kartha, nominated by the South Centre and affiliated to the Stockholm Environmental Institute, Mr. Robertus Dellink from the Organisation for Economic Co-operation and Development (OECD), Ms. Olga Gassan-Zade from Point Carbon and Ms. Lim Li Lin from the Third World Network.

aggregate level of ambition of Annex I Parties should be increased accordingly above the 25–40 per cent level, for example to 50 per cent.

Cumulative emissions and carbon budget

11. Some participants considered that the effective stabilization of global temperatures depended on cumulative global emissions and this link was well established by the science. The allocation of the carbon budget and related atmospheric space to achieve the 2 °C goal should be achieved following the principles of equity and historic responsibility.

12. These participants noted that in applying the equity principle, different indicators could be used, such as equal per capita cumulative share of emissions. In applying the principle of historic responsibility, consideration needed to be given to the cumulative emissions from some point in the past. Due consideration also needed to be given to the fact that the global carbon budget is limited, that developed countries have used a large share of this budget and that in the longer term this could create limitations for the further development of developing and, in particular, least developed countries. Moreover, according to some participants, if the concept of a carbon budget were applied, developed countries may have already exhausted their share of the global carbon budget. Other participants noted that there could be different approaches to historic responsibility, which were not solely linked to levels of Annex I emission reductions, but in the more encompassing principle of common but differentiated responsibilities and respective capabilities of the Convention.

Scale of emission reductions and comparability of pledges

13. Several participants addressed the effect of the current pledges by Annex I Parties that are also Parties to the Kyoto Protocol. These pledges were expected to result in emission reductions of between 17 and 25 per cent below 1990 levels by 2020. If pledges by all Annex I Parties were considered, the level of emissions reductions could be even lower, between 13 and 18 per cent. Some participants noted that this was not consistent with the range of 25–40 per cent and the 2 °C goal.

14. If pledges from Annex I Parties remained unchanged and if global emissions peaked later than 2020, it could be still possible to keep with the 2 °C goal; however, this would require significantly more action after 2020, at a higher cost compared to the action and pledges at an earlier stage to achieve the same goal. In addition, scenarios that had lower emissions reductions than the ranges referred to in paragraph 9 above had very little probability to lead to temperature stabilization below 2 °C. It was also noted that current pledges by Annex I Parties did not create sufficient incentives for the development of new, more efficient and less carbon intensive technologies.

15. On comparability of pledges of Annex I Parties, several participants considered that no single set of indicators would be appropriate to fully reflect the national circumstances in the context of setting the pledges. An example was provided by the Russian Federation of how its national circumstances, including being a major producer and exporter of energy resources and having a large forestry sector, had implications for its decisions regarding its pledge.

16. While acknowledging that the scale of emission reductions in accordance with pledges may not be sufficient, some participants noted that moving to the upper range of pledges by a number of Annex I Parties could only be achieved in the context of a global effort, including from countries that are major emitters. Other participants emphasized that the two legal instruments, the Convention and the Kyoto Protocol, provided the foundation for relevant discussions on mitigation actions by respective groups of countries.

B. What are the quantitative implications of the use of LULUCF, emissions trading and the project-based mechanisms on the emission reductions by Annex I Parties in aggregate; how to ensure that efforts and achievements to date and national circumstances are taken into consideration and what could be the implications on emission reductions by Annex I Parties in aggregate

17. A number of issues with potential implications for effective emission reductions by Annex I Parties for the second commitment period were discussed during the workshop, including the carry-over of units from the first to the second commitment period (carry-over of units) and the surplus of emissions in the pledges for the second commitment period (surplus units), and the use of land use, land-use change and forestry (LULUCF), emissions trading and the project-based mechanisms. Some participants argued that given their quantitative implications, rules for the treatment for these issues, which are currently under negotiation, should be agreed before finalizing the consideration of emission reductions by Annex I Parties. Others argued that the emission reductions should be based on scientific requirements and the rules should be adjusted accordingly.

Impacts from LULUCF

18. Most recent data and options for treatment of emissions and removals from LULUCF were considered by Parties at the workshop on LULUCF organized by the secretariat under the guidance of the AWG-KP Chair on 30 July in Bonn. The Vice-Chair of the AWG-KP reported that the most recent estimates of the quantitative implications of the use of LULUCF had not changed substantially compared with previous estimates. The maximum potential contribution from the LULUCF sector to the aggregate emission reductions of Annex I Parties remained around a maximum of 1 Gt CO₂ annually, corresponding to around 8 per cent of emission levels of the total emissions of Annex I Parties in 1990.

19. The Vice-Chair reported that the LULUCF workshop had helped to enhance understanding of the possible contribution of LULUCF to pledges, and of options for forest management and the implications thereof. Different rules for treatment of LULUCF would lead to different outcomes for individual Parties but would not change the overall maximum potential contribution of the LULUCF sector.

Impacts from the mechanisms

20. A number of participants addressed the use of emissions trading and the project-based mechanisms (CDM and joint implementation (JI)) under the Kyoto Protocol, which would give Annex I Parties access to more cost-effective mitigation actions and provide an opportunity to increase their level of ambition in reducing emissions. Emissions trading and JI allowed greater access to mitigation opportunities among Annex I Parties, while the CDM provided for offset credits to be added into the overall emissions budget of Annex I Parties.

21. In this context, some participants discussed the potential future volume of certified emission reductions (CERs) in a second commitment period, which according to one estimate, for the period 2013–2020, was potentially around three times higher than the 1 Gt reported by the Chair of the CDM Executive Board for the period up to 2012 based on estimates provided by the United Nations Environment Programme Risoe Centre. It was noted that the supply of CERs would be limited by project potentials and capacity in developing countries.

22. Some participants pointed out that owing to the number of variables involved and the dependence on assumptions, it was difficult to estimate the impacts of changing the rules of emissions trading and the project-based mechanisms on the aggregate emission reductions of Annex I Parties for the second commitment period. It was apparent that some proposed changes to the mechanisms would increase the supply of units (e.g. the incorporation into the CDM of carbon dioxide capture and storage, nuclear activities and additional LULUCF activities, and the development of any new market-based mechanisms), whereas others would decrease the supply of units (e.g. discount factors in CDM and any stricter limits on supplementarity).

Impacts of carry-over of units

23. The issue of carry-over and surplus units was addressed in a number of presentations and in the discussion. It was noted that carry-over and surplus units may significantly lower the effective level of emission reductions by Annex I Parties in the second commitment period. Political choices may limit the implications of carry-over units (see para. 25 below).

24. On the other hand, the level of ambition of the pledges and the use of carry-over units may have an impact on the market, including on the carbon price, estimated by Point Carbon for the second commitment period (2016) at EUR 19 per tonne.

Overall assessment of the impact of the use of LULUCF, carry-over and surplus units and the use of mechanisms

25. Some participants estimated that the use of LULUCF, carry-over and surplus units and the use of mechanisms may reduce the effective aggregate level of emission reductions from Annex I Parties, which, in accordance with current pledges, amounted to between 13 and 18 per cent below 1990 levels (or between 17 and 25 per cent for Annex I Parties that are also Parties to the Kyoto Protocol). This aggregate emission reduction could be reduced to 7–13 per cent if possible use of LULUCF were considered (in accordance with the preferred option for rules for LULUCF for individual Parties). This could be reduced further to 1–7 per cent if the effect from carry-over and surplus units were considered.

26. The following options to deal with the implications from carry-over and surplus units, the use of LULUCF credits and increase in the effective aggregate level of ambition of Annex I Parties were presented and discussed:

- A partial or total removal of carry-over units from the first commitment period through a cap or a restriction of purposes;
- The removal of surplus in pledges;
- Removal or limitation of LULUCF crediting;
- Introduction of a levy on transfer of units.

27. Alternatively, it was suggested that Annex I Parties could present pledges that focused on domestic effort only, or increase the level of pledges to deliver emission reductions that were consistent with the 2 °C goal.

C. How to enhance transparency of pledges for emission reductions for Annex I Parties under the Kyoto Protocol

28. Some participants noted that there were a number of uncertainties affecting the pledges, and considered that more transparency in presenting and assessing the pledges could help build confidence among Parties in their assessment of the extent to which the pledges could contribute to achieving the 2 °C goal. It was acknowledged that transparency

was important in the process of negotiating the new targets for Annex I Parties as it created a solid technical basis to facilitate the political discussion. In addition, transparency could create a better understanding of challenges and opportunities that Parties faced and hence lead to more willingness to enhance the level of ambition.

29. Among the issues where more transparency was required, participants noted the following:

- The quantity of units from mechanisms Annex I Parties are likely to use;
- Whether rules for banking and carry-over of units will remain the same or change;
- How emissions and removals from LULUCF will be treated.

30. Switzerland provided examples based on its own pledge on how the transparency of pledges could be enhanced, so as to improve understanding of their environmental impact and to facilitate comparability. These included providing quantitative and qualitative information on a common set of elements, even if this information was preliminary and subject to changes resulting from domestic legislation or international instruments.
