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Climate neutral UNFCCC meetings

Note by the secretariat*

Summary

This note describes an initiative to make sessions of the Conference of the Parties (COP) and of the subsidiary bodies climate neutral. It contains information on a method for estimating greenhouse gas emissions relating to conducting these sessions and options for compensating for these emissions through mitigation activities elsewhere.

* This document has been submitted late in order to include information on the latest progress in this work.

CONTENTS

I. Introduction

1. Responding to the increasing challenge of climate change, several United Nations bodies and international and national organizations are starting to estimate the greenhouse gas (GHG) emissions generated from their meetings and office operations and to take steps to control and compensate for them. Recent international events, including big events such as the Olympic Games held in Athens, the World Summit on Sustainable Development (WSSD) held in Johannesburg, and the Renewables 2004 conference held in Bonn, as well as small workshops and seminars, were declared "carbon neutral".

2. In 2004 the UNFCCC secretariat started to work on making the sessions of the Conference of the Parties (COP) and of the subsidiary bodies climate neutral.[1] The goal of this initiative is to compensate for the GHG emissions produced as a result of conducting these events through climate change mitigation activities elsewhere. In doing so, the UNFCCC can set an example to be followed by other United Nations bodies and international organizations.

A. Scope

3. This document describes the initiative of the secretariat to make subsidiary body and COP sessions climate neutral. It presents, for consideration by the Subsidiary Body for Implementation (SBI), a method for estimating the GHG emissions generated from these sessions and proposes options and approaches for offsetting them.

B. Possible action by the Subsidiary Body for Implementation

4. The SBI may wish to consider the information contained in this document and provide guidance to the secretariat on making subsidiary body and COP sessions climate neutral.

II. Background

5. At COP 9, the Kyoto Club, an Italian non-governmental organization (NGO), volunteered to estimate and offset the GHG emissions of the session. The estimated 8,000 tonnes of CO_2 equivalent were offset by emissions credits for two years of operation of a biomass-fired boiler for district heating in Hungary. The emission reductions were verified by the Société générale de surveillance.

6. At COP 10, the secretariat organized a side event to discuss an initiative to make the subsidiary body and COP sessions climate neutral, to present estimates of the GHG emissions associated with the twentieth sessions of the subsidiary bodies and the tenth session of the Conference of the Parties, and to share experiences and exchange views with Parties and other stakeholders on methodological aspects and options for offsetting these emissions.[2] This initiative was well received by the participants in the event.

7. To further advance this initiative, the secretariat has initiated a project to make the twenty-second sessions of the subsidiary bodies climate neutral, as a pilot, using full sponsorship for offsetting its GHG emissions.

III. Approach

8. The activities for making the subsidiary body and COP sessions climate neutral can be grouped into three main clusters:

(a) Estimating the GHG emissions associated with a particular activity (e.g., a COP session)

[1] The Government of the Netherlands provided support for this initiative.
[2] Presentations at this event can be found at <http://ttclear.unfccc.int/ttclear/html/SBSTA21SideEvent.html>.

(b) Offsetting these emissions through climate change mitigation activities elsewhere

(c) Communicating, exchanging views and cooperating with relevant actors on this initiative.

9. The guiding principle for implementing this initiative is to keep it simple, in order to reduce transaction costs. Therefore, ways and means to induce behavioural changes of the participants to UNFCCC meetings, selection of the venue based on "green" considerations, and "green" travelling of the participants, are not addressed, but could be dealt with in future.[3]

IV. Estimating greenhouse gas emissions associated with sessions of the Conference of the Parties and subsidiary bodies

A. Review and selection of methods

10. Existing methods for estimating GHG emissions relating to conducting the sessions include consideration of emissions from travel of participants to the venue, local transport, venue emissions, hotel accommodation of participants, and pre- and post-session activities of the organizers. The air travel of participants proved to be the main source of GHG emissions for previous international and regional meetings. For example, for the Renewables 2004 conference, transport of participants accounted for 97.5 per cent of the total emissions of the event, with air travel contributing 98.5 per cent of the transport emissions.

11. **Top-down** and **bottom-up** methods are used to estimate GHG emissions from air travel. Top-down methods use average carbon emission factors per passenger-kilometre calculated from historical data for large numbers of flights (e.g., at world level or by a global airline company). Bottom-up methods use detailed emission factors based on fuel consumption by different aircraft models, utilization factors for the aircraft, cruise altitudes, weather conditions, etc. The latter methods can be more accurate but are resource intensive and require detailed data, which are difficult to obtain.

12. Both methods group air travel by distance (e.g., short-, medium- and log-haul flights) and use specific emission factors for each group. In order to take into account the greenhouse effects of aircraft emissions other than CO_2, such as water vapour and NO_x, the Intergovernmental Panel on Climate Change (IPCC) recommends the use of a radiative forcing index (RFI)[4] when estimating aircraft emissions for long-haul (high altitude) flights. The estimate of emissions is therefore higher by this factor than if only CO_2 were considered. A consequence of estimating emissions in this way is that the name "climate neutral" would be more appropriate to describe this initiative, than the more familiar term "carbon neutral".

13. Several models/tools from various organizations[5] were used to estimate the GHG emissions generated by the air travel of one passenger from Bonn to Milan (COP 9), to Buenos Aires (COP 10) and to Montreal (COP 11), and the costs for offsetting those emissions. It was noted that although flight distances estimated for each destination by the various models were similar, estimated **GHG emissions differed substantially**, up to a factor of three, with estimates by top-down methods being much lower than those by bottom-up methods; the **price per tonne of CO_2 equivalent used is different in each model, and is much higher than the market price** to include overheads and running costs.

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[3] "Greening" an event includes, in addition to neutralizing its GHG emissions, using as few natural resources as possible, reducing waste generated, protecting biodiversity and human health, and creating opportunities for local development.

[4] IPCC 1999: *Special Report on Aviation and the Global Atmosphere*.

[5] Top-down: World Resources Institute, FutureForests, CO2.org, myClimate; bottom-up: Atmosfair/500ppm.

14. The secretariat has chosen to use a top-down method and to apply the IPCC RFI to estimate the GHG emissions generated by air travel to COP and subsidiary body sessions. Although air travel is expected to be the main contributor to these emissions, emissions from other activities should not be neglected. These other emissions are estimated based on the estimated percentage of these emissions relative to total emissions at previous meetings.

B. Estimating greenhouse gas emissions of the twentieth sessions of the subsidiary bodies and the tenth session of the Conference of the Parties

15. A prototype tool, developed by the secretariat, was used to estimate the GHG emissions of the twentieth sessions of the subsidiary bodies and the tenth session of the Conference of the Parties. Preliminary estimates (table 1) show that 25,234 tonnes CO_2 equivalent were emitted by the tenth session of the Conference of the Parties (equivalent to about 4.1 tonnes CO_2 equivalent/participant).[6] The figure for the twentieth sessions of the subsidiary bodies was 2,900 tonnes CO_2 equivalent.

Table 1. Preliminary estimate of greenhouse gas emissions from the tenth session of the Conference of the Parties

Activity		Air					
		Short haul (<452 km)	Medium haul (>452 and <1600 km)	Long haul (>1600 km)	**Car**	**Train**	**Total**
Travel of participants							
Distances	(km)	61 446	487 788	81 006 651	210 149	55 463	
GHG emissions	(tonnes CO_2 eq)	11	61	24 059	35	3	**24 169**
Electricity consumption							
COP venue	(tonnes CO_2)						**61**
Others							
Local transportation, hotel accommodation, waste processing	(tonnes CO_2 eq)						**1 004**[a]
Total	(tonnes CO_2 eq)						**25 234**

[a] Estimated considering air travel to generate 98.5 per cent of emissions from total transport and transport to generate 97.5 per cent of total emissions.

16. Table 2 shows that Parties and observer States make up only 35 per cent of the participants at COP sessions and about 60 per cent at subsidiary bodies sessions. For COP 10, Parties and observer States accounted for only 43 per cent of the GHG emissions from travel; observer organizations accounted for more than 46 per cent of the GHG emissions from travel (41 per cent by NGOs); and media accounted for 5.3 per cent.

[6] The Renewables 2004 conference generated about 3,500 tonnes of GHG (1.44 tonnes CO_2 equivalent/participant). The 10-day WSSD meeting generated about 290,000 tonnes of CO_2 (6.6 tonnes CO_2 equivalent/participant).

Table 2: Participation statistics[a] and greenhouse gas emissions from travel for sessions of the Conference of the Parties and subsidiary bodies

	SBI/SBSTA 20	COP 10	
Participants	**Number of participants**	**Number of participants**	**GHG emissions from travel (tonnes CO_2 eq)**
Parties	837	2 213	10 425
Observer States	2	9	39
Total Parties + observer States	**839**	**2 222**	**10 464**
United Nations Secretariat units and related bodies	24	73	335
Specialized agencies and related organizations	41	91	546
Intergovernmental organizations	34	96	531
Non-governmental organizations	410	2 922	9 789
Total observer organizations	**509**	**3 182**	**11 201**
Media	3	789	1 411
Total	**1 351**	**6 193**	**23 076**

[a] Secretariat and local staff, which are not included in this table, accounted for 4.5 per cent of the total GHG emissions from travel shown in table 1

17. Some organizations and delegations are already offsetting their emissions. As these emissions are considered as part of the GHG emissions of the session they may be offset twice. Nevertheless, the identification of these cases and the assessment of the way the emissions are estimated and neutralized may become a resource intensive activity that may not be justified by the value of the emissions that are counted twice.

V. Issues for consideration by the Subsidiary Body for Implementation

18. To make this initiative efficient and effective, the SBI may wish to consider the following key issues:

(a) When and what to offset?

(i) The GHG emissions of COP and subsidiary body sessions can be offset immediately or recorded and offset when an offsetting scheme is agreed upon. A two-track approach can also be used: a short-term solution for the next COP and subsidiary body sessions and a long-term solution afterwards. In the long term, the benefits of offsetting COP and subsidiary body sessions together or even offsetting retroactively all COP and subsidiary body sessions could be considered

(ii) Although Parties and observer States contribute less than half of the GHG emissions for a COP session (about 43 per cent for COP 10) as indicated in paragraph 16 above, it is highly recommended that emissions generated from all individuals participating in the sessions be offset

(b) What should be the source of funding?

(i) Funding for offsetting can be sought from many sources, such as governments, intergovernmental organizations (IGOs), NGOs, the host country, the private sector or sponsors and individual participants. The experience of WSSD shows that sponsors, delegations and IGOs are likely to be the main contributors to an

offsetting scheme.[7] The funds needed to offset the GHG emissions of COP and subsidiary body sessions depend on the carbon price that is used. This price is linked to the vehicle for offsetting. For example, Point Carbon (emission trading market) quotes the price of carbon as the European Union Allowance (EUA), which changes daily,[8] and the World Bank (carbon fund) indicates USD 3-5/tCO_2 for the Prototype Carbon Fund and EUR 5–6/tCO_2 for the Netherlands Clean Development Facility. For clean development mechanism (CDM) projects, the carbon price is agreed by negotiation and is thus unknown

(ii) A little more than EUR 180,900 would be required to neutralize COP 10 emissions.[9] This means an average of EUR 29 per participant. If COP 10 had been held in Bonn or in Montreal, the offsetting costs would have been EUR 79,500 for Bonn and EUR 109,800 for Montreal. The voluntary contribution by each participant is rather high and hence is not a preferred option for this initiative. Considering the above, it is recommended that the most of the funding for this initiative should be drawn from sponsors. If sponsorship will be accepted as a source of funding, criteria and the process for acceptance should be based on UNFCCC practice for working with sponsors and on United Nations guidelines on this matter[10]

(c) How to offset?

(i) Several vehicles for offsetting GHG emissions exist such as purchasing emission credits from stand-alone projects, from a carbon fund, or from an emission trading scheme. Regardless of the vehicle for offsetting, preference should be given to offsetting activities in developing country Parties to maximize the use of resources by creating ancillary social and economic benefits in these countries

(ii) The CDM and other development projects are the most probable vehicles for offsetting. CDM projects have a rigorous mechanism for ensuring additionality, for avoiding double counting, and for monitoring and verification. However, purchasing certified emission reductions (CERs) from CDM projects could be seen as a conflict of interest (the secretariat would be servicing the regulator issuing CERs and be a participant in the market) and the secretariat would need an account in a registry where CERs can be transferred and cancelled. To avoid these potential problems, Parties, sponsors or intermediaries can purchase the credits and submit to the secretariat the proof that these credits were cancelled

(iii) Non-CDM development projects should be selected taking into consideration such principles as completeness, consistency, accuracy, transparency, relevance and conservativeness.[11] The projects have to comply with relevant standards and

[7] At WSSD the emissions were offset by 31 corporations (USD 185,000), 7 government delegations (USD 80,000), 5 IGO delegations (USD 50,000), NGOs (USD 5,000), and 1,000 individuals (USD 7,605). The contribution was made to the Johannesburg Climate Legacy (a voluntary association/trust fund created for the WSSD event).

[8] The EUA is the unit of trade in the EU Emissions Trading Scheme. On 8 February 2005, for example, the EUA was EUR 7.17/tCO_2.

[9] Assuming EUR 7.17 /tCO_2.

[10] Guidelines are available on the United Nations and Business web site (<http://www.un.org/partners/business/index.asp>).

[11] See ISO/DIS 14064/2 on *Specifications with Guidance at the Project Level for Quantification, Monitoring and Reporting of Greenhouse Gas Emission Reductions and Removal Enhancements* and WRI/WBCSD on *The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard* for details on these principles.

legislation as well as good practice.[12] The offsetting can be done by purchase and withdrawal of verified emission reductions[13] from well-recognized climate protection projects. The use of this type of projects may be opposed on such grounds as additionality, double counting, certification and monitoring

(d) Roles of key stakeholders

(i) It becomes clear that Parties, the secretariat and sponsors will have to play an active role in implementing this initiative. Parties may wish to consider the following key questions. Should this activity be contracted out and run solely by the sponsors, should an interested group of Parties be set up to run this activity with the assistance of the secretariat, or should the secretariat manage this activity by itself with the support of sponsors?

(e) Record of progress and review of the pilot activity

(i) A yearly inventory could be prepared to keep track of the GHG emissions of COP and subsidiary body sessions, taking into account existing guidelines and standards for preparing GHG inventories for organizations.[14] The section on "Social and environmental responsibilities" of the UNFCCC income and budget performance document could be extended to include an environmental budget and could be used to report these GHG emissions

(ii) After a certain period of operation, should this initiative be reviewed to assess its efficiency and effectiveness and if so, what should be an appropriate timeframe?

19. The SBI is invited to decide if the secretariat should continue with this initiative in making COP 11 and future sessions of the subsidiary bodies and the COP climate neutral, and to provide guidance to the secretariat on its further work on this initiative.

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[12] For example ISO 14064 on *Greenhouse gases*, US-DOE 1605(b) on *General Guidelines for Voluntary Greenhouse Gas Reporting*, WRI/WBCSD on *The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard*.

[13] Emissions offset in voluntary markets for emissions reductions that are not compliant with the Kyoto Protocol. They are for sale to corporations and individuals who want to offset their emissions for non-regulatory purposes, are verified by independent verifiers, but are not certified by a regulatory authority for use as a compliance instrument.

[14] For example ISO-140645-3 on *Specifications with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals* and WRI/WBCSD on *The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard.*