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**Annual meeting of the Environment Management Group  
Hosted by the World Health Organization at its Headquarters  
Geneva, 8 October 2007  
9:00 a.m.-6:00 p.m.**

## **Strategy for a climate-neutral UN**

### **Note by the EMG Secretariat**

#### **Objectives**

1. This paper outlines a strategy for making UN agencies, funds and programmes climate-neutral<sup>1</sup>. It includes an overview of the basic steps that need to be taken, including in areas where there is agreement on a common approach and methodology. It identifies the elements or criteria necessary for ensuring the highest standards possible for attaining a credible climate-neutral approach. It also lists areas where additional work will be required as the UN moves into the implementation phase.

#### **Background**

2. There is growing urgency for the UN system to lead by example by reducing its greenhouse gas emissions. The UN Secretary-General has on several occasions stated the high priority he is giving to this issue. Upcoming high-level events and UN-hosted negotiations make it more important than ever for the UN to move quickly to develop and announce a common approach.
3. Following the meetings in 2006 and 2007 of the UN Secretary-General's Policy Committee, requests were made to the UN Environment Management Group (EMG) to take a leading role in greening the UN and making the UN climate-neutral. The Secretary-General announced on 5 June 2007 his commitment to lead by example on these issues.
4. In response, the EMG Secretariat constituted an open-ended Issue Management Group (IMG) on a climate-neutral UN and reconvened the IMG on sustainable procurement that was established in 2004. These Issue Management Groups met

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<sup>1</sup> The term "climate-neutral" has been used rather than "carbon neutral" to indicate the intention to take as comprehensive an approach as possible (see also paragraphs 21 and 22 below).



- from 25-27 June 2007, hosted by the World Bank at their Headquarters in Washington, D.C. The meetings were organized back-to-back given the inter-linkages between the issues.
5. Based on the conclusions of the Washington, D.C. meeting, the EMG secretariat prepared the following:
    - a) a draft decision by the Secretary-General and by as many Executive Heads as possible committing themselves to move the operations<sup>2</sup> of the organizations of the UN system towards climate neutrality, while some may go further and commit to achieving the goal of climate neutrality (document EMG/AM.07/05/Rev.1);
    - b) a background paper in support of the decision which outlines some of the issues, provides guidance on areas where there is broad agreement on a common approach, describes options that have been identified in discussion, and identifies areas where additional work is needed (this document); and
    - c) a fact sheet on EMG member organizations which provides an initial, first-order estimate greenhouse gas emissions inventory by source, including information on the boundaries used, which will provide an indication of the first-order assessment of the emissions of the agencies, funds and programmes of the United Nations as a whole (see document EMG/AM.07/07).
  6. In letters dated 9 July 2007, the Secretary-General wrote to the executive heads of UN agencies, funds and programmes restating his pledge to make in-house practices more climate-friendly and environmentally sustainable. He outlined his intention to develop an outstanding, climate-neutral approach for the Organization's premises and operations. He invited heads to join him and make common cause in this effort, affirming that a climate-neutral United Nations system will increase public awareness about the need for more sustainable patterns of consumption, and will demonstrate the United Nations is taking steps to practice what it preaches.
  7. The Secretary-General has requested the UNEP Executive Director, Chair of the EMG, to work on proposals to make the UN climate-neutral as part of its broader project of moving the UN towards sustainable management practices.

## Approach

8. "Climate neutrality" is defined by the entire set of policies that an institution uses when it estimates its known greenhouse gas emissions, takes measures to reduce them, and purchases carbon offsets to "neutralize" those emissions that remain. To

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<sup>2</sup> The term "operations" is used here to include facilities operations, official vehicles and the official travel of staff and meeting participants financed by the organization.



- achieve an outstanding approach, the UN must define these components of its climate-neutral policy to attain the highest standards possible. The following elements are proposed:
- a) a commitment to reducing greenhouse gas emissions as part of an integrated and comprehensive environmental management approach;
  - b) the preparation of consistent, comparable and transparent inventory data, according to agreed methodologies, which subsequently undergo periodic independent verification;
  - c) the development and implementation of a package of measures to reduce greenhouse gas emissions;
  - d) a decision to offset the remaining emissions through a reasoned choice of offsets that satisfy a list of agreed criteria, ensuring their high quality;
  - e) regular transparent reporting combined with the public communication of each organization's emissions inventory, together with any targets or goals for emissions reductions;
  - f) the development and implementation of a knowledge-management system serving the entire UN, to document initiatives, data, lessons learned and best practice; to post guidelines and methodologies; to post model strategies and workplans; to provide e-training courses; to host Q&A; to provide technical assistance; and to host e-discussions.
9. Adopting such an approach will make the UN credible, contribute to bench-marking and inspire other bodies to do likewise, both in the public and private sector.
10. A common approach within the UN system brings several advantages:
- a) The more agencies that have agreed to take this step, the greater the impact on the media, raising both the action's profile and public awareness.
  - b) Overall transaction costs to the organizations will be reduced, and there will be other efficiencies of scale.
  - c) A common approach makes practical action on the ground easier. The administration of UN organizations' physical facilities, energy arrangements and travel is complex, and often location-specific. Policy makers and administrators need tools to support this effort.



- d) The use of agreed methodologies ensures the comparability of data across agencies and over time, allowing aggregation of data across UN agencies.
  - e) A joint approach on technical issues will enable the pooling of expertise to reach credible and better-informed decisions. The criteria that the UN selects to ensure high quality in its approach to climate neutrality may be expected to serve as a reference for others.
11. There are, however, fundamental differences in the structure, geographical location, financing and nature of operations of the agencies of the UN system. In addition, each has a different mandate, different constituents and different priorities. Any common approach should leave enough flexibility to take into account the specific circumstances of the individual organizations and entities; for example, each organization should have some leeway to set some of its own boundary conditions.

### **Climate neutrality, an environment management system and sustainable procurement**

12. The climate-neutrality plan of the UN should be part of a broader effort to “green” the way the UN works, or part of a comprehensive environmental management system (EMS). Each organization’s climate efforts should also be part of its own integrated environmental management approach.
13. For larger offices, a dedicated staff person is necessary. In addition, senior management champions are needed to secure buy-in from their fellow managers.
14. Some aspects of each organization’s environmental impacts should be addressed through a set of policies and programmes separate from the climate-neutrality programme. For example, there could be separate policies on sustainable procurement, waste recycling, water consumption, recycling, sustainable transport for commuting, etc. An EMS approach would enable different elements to be brought together in an integrated manner.
15. The EMG is also carrying out activities on sustainable procurement in parallel to its work on climate neutrality. A paper outlining a strategy and next steps is being prepared.
16. Additional work within the EMG on the overall environmental performance of United Nations operations and the environmental responsibilities of the Organization could be envisaged in the future.



## Inventories and calculation of greenhouse gas emissions

### Methodology

17. The UN will calculate its greenhouse gas (GHG) emissions based on the GHG Protocol of the WRI/WBCSD (which is compatible with the new standard ISO 14064 for GHG accounting).
18. The GHG Protocol is one of the most commonly used formats for reporting GHG emissions. It not only provides basic tools and methods, but also addresses an array of related questions, such as a recommended process and internal organization, budgeting, reporting systems etc. In conjunction with the methodology, several calculators or Excel spreadsheet tools have been developed. More information may be found at [www.ghgprotocol.org](http://www.ghgprotocol.org) and [www.wri.org/climate/pubs\\_description.cfm?pid=3756](http://www.wri.org/climate/pubs_description.cfm?pid=3756).
19. Several agencies have already adapted versions of these Excel sheets or developed similar models in order to facilitate data collection from different field offices. While there should be the flexibility for individual UN agencies and programmes to make minor modifications tailored to their specific needs and structures, it will be important to preserve a broad compatibility of data to allow for the meaningful aggregation of data across the UN system, and to retain compatibility with the GHG Protocol and ISO 14064 and 14065 standards.
20. Default emission factors for geographical regions are provided, allowing specific estimates to be made. The emission factors recommended in the GHG Protocol should be used to calculate emissions, except in specific cases where more accurate and documented data are available, or if linked to the organization's environmental strategy (for example, choice of electricity supplier).
21. When deciding how to frame the Organization's greenhouse gas commitment, using the term "climate neutrality" allows a more comprehensive approach. While carbon dioxide is the greatest contributor to global warming, there are several reasons for opting to include the six gases covered by the Kyoto Protocol, namely CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>. Such coverage corresponds more closely to the approach being taken in the international climate change process under the UNFCCC and the Kyoto Protocol.
22. A climate-neutral approach also provides a fuller, more environmentally credible perspective. A practical example is the case of air travel where the full greenhouse effects of aircraft emissions are significantly higher than those from CO<sub>2</sub> alone, according to the IPCC.



23. To ensure the highest standards, the inventory should be reviewed and verified once completed by an independent external party, consistent with the ISO 14064 and 14065 standards.

### **Setting the boundary and coverage**

24. Decisions taken regarding the boundary determine which GHG emissions the organization chooses to count and report when calculating its inventory. Geographical, organizational and operational boundaries need to be addressed when developing the inventory.
25. Organizations should agree on basic principles regarding the boundary, but should retain the flexibility to set more minor details of their own boundary conditions, provided that these decisions are explained. In general, any greenhouse gas emissions that are not included in the inventory should be documented, together with an explanation of why they are not covered. At this point, the inventory exercise should be limited to the operations of UN offices and staff and not cover projects implemented by external entities.
26. In setting the boundary, key considerations will be data availability and what is practical and manageable. As an overall strategy, organizations should aim to cover large emissions sources first, and to refine and improve the inventory and boundary over time. An initially overly ambitious coverage could become unmanageable in terms of data collection and the staff resources required.
27. When determining the boundary, organizations should include emissions from the UN system's operations which can be influenced by management-level decisions, and exclude emissions associated with decisions for which individual staff members are responsible and that relate to their personal sphere. Applying such a criterion excludes, for instance, emissions from commuting. While these emissions should not be included in the organization's boundary, organizations should have an active policy of promoting sustainable transport, local circumstances allowing – e.g. car sharing, public transport, cycling, infrastructure for soft modes of transport etc.

### *Air travel*

28. One of the Organization's largest sources of GHG emissions is official travel. There are several options in terms of what to include in the inventory, particularly with regard to workshops and meetings organized by the UN. At a minimum, the inventory should include all travel paid for by the UN, including travel of staff members, consultants, experts and participants attending meetings.



29. As a general rule, to facilitate the collection of travel data, data owners need to be identified upfront so that information can be collected in advance as part of the reporting system

#### *Meetings*

30. With regard to meetings organized by the UN, there should be flexibility for each organization to decide on whether or not to include emissions associated with hotels, meeting rooms, local ground transport, waste generation, etc. Standardized methods and figures for geographical locations around the world would facilitate this process.
31. In specific cases, organizations may chose to apply a wider boundary, such as at high-profile events, where organizations could decide to offset the emissions from the travel of all participants attending the meeting: full delegations, representatives of NGOs, the media, etc. Should this wider boundary be applied, cases where national delegations have already offset their own travel would need to be taken into consideration in order to avoid offsetting the same emissions twice.

#### *Field offices and shared space*

32. There is significant variation between UN agencies with regard to the number and size of offices located away from headquarters. UN agencies should include the GHG emissions of all field offices in the inventory. Data collection for inventory purposes may be more difficult in hardship duty stations, or duty stations with rented space. In the case of field offices where data is not readily available, estimates of GHG emissions could be made based on clearly defined assumptions and proxies, such as emissions per square metre of office space. In cases where UN agencies share office space, each organization's share of total electricity consumption can be estimated on the basis of square metres of office space or other emissions-sharing criteria.

#### **A data-collection system**

33. Setting up a data-collection system for the inventory is intrinsically linked to decisions made regarding the boundary, strategy, monitoring and verification. It is one of the most time-consuming steps in the process. Data availability and limitations will vary from one organization to another and from office to office. The time required to compile the inventory will depend on the quality of the existing information, but ultimately a standard data-collection system will need to be put into place. This is a longer-term exercise which will be refined continuously as the boundary expands. Data-sharing could contribute to reducing the time required. The scope for adapting existing electronic administrative and management systems to



- provide a comparable system-wide cost-effective data-collection tool should be explored.
34. Initial experience suggests that, beyond a certain point, time spent on improving the accuracy of data and methodologies for calculating emissions does not lead to significant differences in the numbers. Rules of common sense and scientific treatment regarding significant digits, precision and accuracy in calculating and reporting results should be adhered to.
  35. When calculating the inventory, some organizations have augmented their calculated emissions by a multiplying factor in order to build in a safety margin to take into account scientific and data collection uncertainties.
  36. Examples of smaller source categories that could be added later in the process are electricity losses, courier, mail and shipping.

### **Reducing greenhouse gas emissions**

37. A credible approach by the UN requires that the Organization first undertake an ambitious programme for reducing GHG emissions, and not merely achieve climate neutrality through the purchase of offsets. Each organization should prepare a strategy and programme, and set targets for emissions reductions over time (these need not be quantitative).
38. GHG emissions from buildings operations and from air travel are likely to be the most significant contributors to the overall emissions of the UN. Reducing emissions can be achieved in several ways, including through behavioural changes, engineering solutions and operational and policy changes.
39. Emissions from air travel can be influenced easily by management decisions, and efforts are needed to reduce the impacts from this category. The options include: increased use of video conferencing; restricting travel only to essential trips; considering distance traveled and stopovers and not merely cost factors when determining the routing of air tickets; favouring the use of more efficient aircraft; increased use of the train, etc.
40. A focus on energy efficiency in buildings will be a key strategy for reductions. A professional energy audit of buildings results in a range of options for reducing energy usage, from low-cost options such as energy-efficient lighting, motion sensors and timers, to more costly retrofitting.
41. Energy-efficiency improvements in buildings are often win-win solutions, as the investments pay for themselves over time through reduced electricity costs, and



energy-saving measures achieved through staff awareness require little effort. The IPCC Fourth Assessment Report finds that direct and indirect emissions from the buildings sector are one of the highest contributors overall to global warming. By 2030, about 30% of the projected GHG emissions in the building sector can be avoided with net economic benefits.

42. The purchase of renewable electricity can assist organizations in reducing their GHG emissions. In some areas, renewable electricity can be directly or indirectly obtained through renewable energy certificates (RECs). When purchasing RECs, as with offsets, additionality needs to be considered.

### Offsetting greenhouse gas emissions

43. Measures to reduce greenhouse gas emissions should be implemented on an ongoing basis as part of a plan with specific targets. To achieve climate neutrality, the remaining greenhouse gas emissions should be offset. The UN's approach to the selection of offsets will be essential to the overall credibility of its climate neutral policy.
44. It is essential that the choice of offsets satisfies a set of criteria carefully selected to ensure very high standards of reliability, overall credibility, environmental benefits, sustainable development benefits and more. This is particularly important as there have been cases of offset projects that have failed, of approaches with little real greenhouse gas emissions reductions, and of a lack of verifiability and transparency. There is growing discussion and concern at the governmental level and among NGOs and civil society about the need and means to ensure that offset programmes are legitimate and deliver what they promise, with guarantees for the consumer.
45. In parallel with the increase in offset providers, independent standards for ensuring the quality of offsets have also emerged, in addition to those developed under the Kyoto Protocol, with at least four other international major alternatives currently in existence. This paper does not compare and contrast these standards, but instead highlights a minimum set of criteria or principles that should guide the UN's choice of offsets, which should meet the levels defined under the Kyoto mechanisms at the very least.
  - a) *Additionality*  
Offsets must generate real emissions reductions that would not have otherwise occurred.
  - b) *Verification and certification*  
An independent and credible validation or verification process should exist to verify the performance of the offset projects and certify emissions reductions as



they occur. The reductions must be real, demonstrable and measurable. Emissions reductions should be certified against validated additionality tests and against the baselines, assumptions and acceptable methodology used for calculating the reductions.

- c) *Transparency*  
There should be full disclosure of all relevant information in an easily accessible form for potential consumers or purchasers of offsets. This includes information on methodologies, pricing, progress in reductions, etc.
  - d) *Time-frame and permanency*  
The time period within which the reductions take place should be clearly indicated. Emissions reductions must be permanent. After purchase, the offset certificates should be “retired” or removed from circulation and further re-sale.
  - e) *Sustainable development benefits*  
The offset activities should also generate real sustainable development benefits.
  - f) *Intergovernmentally accepted standards*  
The UN’s choice of offsets should be consistent with intergovernmentally accepted standards.
  - g) *Avoidance of own projects*  
Consistent with the goal of benchmarking the highest standards, organizations should voluntarily exclude the purchase of offsets in self-generated or self-supported activities to avoid potential conflicts of interest. The decision to maintain a firewall between the organizations’ own operations and their choice of offsets should be viewed as promoting the institution’s credibility and reputation rather than undermining any schemes or projects it may be supporting.
46. Discussions should begin among the institutions of the UN system to explore the conditions that would need to be satisfied – such as adequate third party oversight – in order for offsets from self-generated or self-supported activities to be included in the future.
47. Applying the criteria above should ensure that the UN purchases its offsets from a regulated and non-chaotic market, providing basic safeguards and guarantees of environmental credibility with independent verification and validation. The urge to seek the lowest financial cost option risks sacrificing the quality and credibility of the climate-neutral scheme as a whole.
48. Individual or committee-based decisions within actual projects could also take into account the following elements, should they be considered desirable:



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- a) the promotion of employment;
  - b) the provision of additional social benefits;
  - c) the selection of certain types of projects for their good environmental performance, such as renewable energy and energy efficiency, etc;
  - d) the minimization of unintended secondary negative environmental impacts; and
  - e) the provision of support for a particular geographical region.
49. Some organizations may wish to offset their emissions ahead of the development of and agreement on common, UN-system-wide criteria for offsets. In such cases, these organizations should consider setting aside the necessary funds, based on current market prices, into a designated trust fund or account, instead of taking quick decisions on offsets that may not ultimately satisfy the quality criteria we are seeking.
50. Some utility companies offer the purchase of renewable energy certificates or allow consumers to stipulate which type of electricity (hydroelectric power, electricity from renewable sources, etc.) they wish to purchase. Care needs to be taken, however, to ensure that opting for these schemes genuinely results in additionality, including how the electricity is produced and distributed to and within the grid.

### **Assessment of cost implications**

51. To complement this paper, an initial, first-order estimate of each organization's inventory of greenhouse gas emissions has been prepared, as well as data on the UN's aggregate greenhouse gas emissions (document EMG/AM.07/07).
52. This document contains information on the aggregated greenhouse gas emissions for those organizations that were able to provide data, and as per the boundary defined for this exercise. In addition, some conclusions are drawn with regard to the costs of offsetting, which are lower than might have been expected.
53. Meeting the costs of offsetting can be done individually by organizations or through a collective approach, as discussed below. In either case, a coordinated approach can bring gains from reduced transactions costs, avoided conflict of interest and greater impacts.
54. Innovative approaches could also be considered, such as:
- a) new partnerships with the private sector;



- b) inviting governments to contribute to trust funds for the costs of offsetting; and
  - c) inter-agency or intra-organization trading schemes, e.g. in the initial allocation of travel allowances.
55. Innovative options for raising funds for eventual offset purchases would be of particular importance for organizations engaged in humanitarian work, in order to ensure that resources that at present could be used to save lives or heal sickness are not used for carbon offset projects, which, while these clearly having positive impacts on sustainable development, they do so for the future.
56. In committing the organization to future climate neutrality, there are inherent uncertainties in the overall costs which will depend on the fluctuation in the market price of offsets. To protect the organization from fluctuations over time and therefore in costs, contracts could be signed to supply a defined level of offsets over a number of years. The expected cost of offsetting future emissions based on current prices could be increased by a certain percentage as a contingency. Alternatively, an inter-agency working group could be tasked with proposing a suite of options or financial instruments to address this problem.
57. A trust fund with a built-in reserve could also help to insulate against price uncertainties. If price fluctuations are significant, it may make sense for a portfolio approach to be adopted and a fund manager appointed to minimize costs. The actual date the offset takes place also need not be predetermined. For example, offsets could be purchased for the next year's emissions. If governments opt to increase their mitigation beyond the Kyoto Protocol first commitment period, the price of carbon will rise, especially as the "low hanging fruit" carbon reduction options are used up.

### **Administrative arrangements**

58. UN agencies, funds and programmes should develop rapidly any related administrative and procurement procedures that will be needed to handle the purchase of offsets and the management of risk, including the creation of trust funds, the establishment of an inter-agency working group, and so on. Institutional arrangements should be developed to enable a coordinated approach to be taken by the UN system.
59. The task of purchasing offsets could also be assigned to an external institution as part of the package, which may also require lighter internal administrative arrangements and savings with regard to staff costs.
60. The funds, programmes and agencies of the UN should pool efforts for the purpose of fostering and purchasing quality offsets. A coordinated approach ensures:



- a) lower transaction costs;
  - b) comparability and consistency in offset choice; and
  - c) safeguards that the criteria for high-quality offsets are met.
61. A portfolio approach will ensure that collective action provides the flexibility to cater for the specific preferences of individual organizations.

### **Self reporting, communication and outreach**

62. The UN's climate-neutral policy will be available in the public domain, with full transparency on the details of inventory coverage, targets for the evolution of this coverage over time, details of emissions reduction policies, criteria for the selection of the offsets, and transparency on the additionality and other criteria necessary to ensure high-quality and credible offsetting. Consultations with NGOs and civil society on the self-reporting mechanism will improve transparency, credibility and effectiveness.

### **Knowledge-sharing and support**

63. A knowledge-management system will be developed to:
- a) document initiatives both by the UN and others;
  - b) post relevant inventory and other data;
  - c) post guidelines and methodologies;
  - d) post model strategies and workplans;
  - e) record lessons learned and best practice;
  - f) make available e-training courses;
  - g) host Q&A and e-discussions; and
  - h) provide technical assistance to organizations wishing to become climate-neutral.
64. This system will be linked to each agency's webpage on climate neutrality, and its content and work programme reviewed regularly by relevant technical working groups and management committees.



65. UNEP, as the lead agency supporting the climate-neutral UN project of the EMG, has initiated and will further develop capacity for the provision of technical advisory services to respond to the needs of UN agencies, funds and programmes to become climate-friendly and eventually climate-neutral.

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