



# Moving Towards a Climate Neutral UN

The UN system's footprint and efforts to reduce it



UNEP

This is a United Nations Environment Programme publication, prepared in its capacity as secretariat of the UN Environment Management Group (EMG), with contributions from the institutions of the UN system. This publication has been produced with the support of GRID-Arendal and Zoi Environment Network.



Printed at Imprimerie Nouvelle Gonnet, F-01303 Belley, France

© 2009 UNEP

ISBN: 978-92-807-3067-8

Cover photo:

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UNEP promotes environmentally sound practices globally and in its own activities. This publication is printed on fully recycled paper, post consumer waste and chlorine-free. Inks are vegetable based and coatings are water-based.

# **Moving Towards a Climate Neutral UN**

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# Foreword

**Climate change is the defining challenge of our generation. Scientists warn we have less than 10 years to halt the global rise in greenhouse gas emissions if we are to avoid catastrophic consequences. For this reason, I made climate change a top priority as soon as I took office. It is a practical and moral imperative. The decisions we make today will affect almost all the work of the United Nations for sustainable development, social progress, human rights, peace and stability.**

In combating climate change I resolved that the United Nations should lead by example. On World Environment Day 2007 I mandated that we would use energy more efficiently and eliminate wasteful practices in our headquarters and offices around the globe. In New York I instructed that the Capital Master Plan for the new Secretariat building be a model of energy efficiency and green best practice.

All heads of United Nations agencies, funds and programmes have joined this effort. The UN system is collectively developing a climate-neutral approach for its premises and operations. I would like to thank the members of the UN System Chief Executives Board

and, in particular, Mr. Achim Steiner, Executive Director of the United Nations Environment Programme, in his capacity as Chair of the Environment Management Group, for coordinating this initiative.

While much remains to be done, I am pleased to note we have made progress. This report documents the steps we have taken towards climate-neutrality and environmental sustainability. I hope it serves as inspiration for further achievement.

The responsibility for the future lies in our hands. Let change begin at home.



New York, 4 December 2009

**Ban Ki-moon**  
United Nations Secretary-General

# Acknowledgements

This publication is the result of the collective effort of over a thousand staff members from across the UN system who have pooled their expertise, skills and know-how in service of the organization as a whole and to support efforts to combat climate change. It has brought together staff from within each organization, from the climate neutral focal point in each agency, to facility managers, staff from travel units, procurement, engineering, as well as the senior staff who have championed the process.

Countless hours of work have gone into the preparation and use of the greenhouse gas calculators, emissions reductions guides and other tools, the provision of training, and putting into place data collection systems.

United Nations Environment Programme (UNEP)'s Environment Management Group secretariat is grateful to the World Bank, which has been climate neutral since 2006, for playing an instrumental role in launching the UN's climate neutral initiative by hosting the kick-off meeting and generously sharing its experience.

Acknowledgement is also made for the information and data used in the UN Greenhouse Gas Calculator from the World Resources Institute (WRI), the Intergovernmental Panel on Climate Change (IPCC), the United States Environmental Protection Agency (US EPA) Climate Leaders Programme and the International Energy Agency (IEA), and the considerable time commitment from staff of the United Nations Department of Field Support/Information and Communications Technology Division (DFS/ICTD) to develop the UN Greenhouse Gas Calculator, the UN greenhouse gas database and reporting tool. UNEP would also like to express its appreciation to the secretariat of the International Civil Aviation Organization (ICAO) for the development and maintenance of a custom-built interface to the ICAO Aviation Carbon Emissions Calculator for use by UN system organizations. UNEP is grateful to the Government of Norway for financial support for the climate-neutral initiative.

Special thanks are due to the climate neutral focal points and their colleagues across the UN system, the UN Secretary-General's Climate Change Support Team and the UN Chief Executives Board secretariat.

# Preface

**Combating climate change and catalyzing the transition to a low carbon, more resource efficient global Green Economy is everyone's responsibility – international, regional and national organizations and the individuals that work for them, regional and municipal authorities and companies and civil society.**

The UN system is responding to the Secretary-General's call to make its in-house practices alongside its field operations more climate-friendly and environmentally sustainable. This publication presents the first greenhouse gas inventory for the UN system and an overview of the initial steps that have been taken to manage these emissions.

This first-ever footprint of the UN system includes data from UN headquarters, major centres and field office operations. It covers the full range of institutions that make up the UN system, from the Secretariat and its regional economic commissions, to the specialized agencies, funds and programmes.

It is an excellent example of coordination within the UN system, where a collection of diverse institutions has come together despite differences in mandate, constituents and priorities to adopt a common approach and single methodology. This is in large part due to the network of climate neutral focal points across the UN system and countless others who have contributed in sharing their knowledge, expertise and experience.

In 2008, the organizations that make up the UN system are collectively responsible for three-quarters of a million tonnes of carbon dioxide equivalents – around

1.5% of the amount emitted by New York City in that year. UN peacekeeping operations emitted an additional one million tonnes of carbon dioxide equivalents.

While the UN system's worldwide footprint is small when compared with the global total, we hope to send out a collective signal to the world that combating climate change begins at home and that we take accountability and credibility seriously.

This is in many ways just the beginning and major challenges lie ahead. Over the coming year, the UN will make its greenhouse gas inventory methodology more user-friendly. Collective efforts are needed to improve data quality and fill current data gaps, particularly on travel and field offices in order to bring the inventory numbers up to a standard against which we can meaningfully measure the effects of our emission-reduction measures. Above all we need to make the transition from a collection of success stories to emission reduction plans with targets for each UN organization.

I am sure that these efforts towards a lower-carbon UN will contribute to lowering the organization's environmental impacts while reducing operating costs, promoting credibility and hopefully inspiring others to take a climate-friendly, resource efficient path.



**Achim Steiner**

Under-Secretary General

Executive Director of UNEP

Chair of the UN Environment Management Group

# 1. CLIMATE NEUTRAL UN

## The UN system

The UN system is made up of the organizations established by the Charter of the United Nations, namely, the United Nations principal organs, the specialized agencies provided for in Article 57 of the Charter and a number of programmes established by the General Assembly under its authority derived from Article 22 of the Charter. The agencies are legally independent international organizations with their own rules, membership, organs and financial resources.

The international institutions that make up the UN system have diverse fields of action and operations, structures, mandate and governing body arrangements, and varying field office presence.

The UN System Chief Executives Board for Coordination (CEB) brings together the executive heads of the organizations that make up the United Nations system, under the chairmanship of the Secretary General of the United Nations.

The agencies, funds and programmes of the UN system together with the secretariats of Multilateral Environmental Agreements (MEAs) are member of the UN Environment Management Group (EMG), which was established by the General Assembly to coordinate environmental issues across the UN system. The secretariat for the EMG is provided by UNEP.

### Progress so far

The aggregated GHG emissions of the UN system organizations for their facility operations and travel in 2008, not including peacekeeping, are estimated at approximately 770'000 tonnes of CO<sub>2</sub> equivalent. The average annual GHG emissions across the UN system are approximately 8.3 tonnes of CO<sub>2</sub> equivalent per staff member.

Policies and measures are being implemented across the UN system to reduce greenhouse gas emissions. The focus so far has been on improving the energy-efficiency of buildings and office equipment, increased use of renewable energy, raising staff awareness on energy-savings and

the greening of meetings. Areas where efforts have begun but which hold considerable future potential include the use of information and communication technologies to reduce emissions and streamlining air travel. Measures to cut emissions have also reduced the consumption of energy, water and paper – and therefore costs, and improved planning and efficiency in work delivery.

A number of organizations have already put into place offsetting initiatives. Five UN system institutions have declared themselves climate- or carbon-neutral, while six others have offset specific events.

# Moving towards climate-neutrality

At the October 2007 meeting of the CEB, the executive heads of the UN agencies, funds and programmes made a commitment to move their respective organizations towards climate neutrality in headquarters and UN centres for their facility operations and travel (see Annex II for the text of the statement).

In particular, they agreed to estimate greenhouse gas (GHG) emissions consistent with accepted international standards, to undertake efforts to reduce GHG emissions to the extent possible; and to analyze the cost implications and explore budgetary modalities – including consulting with governing bodies as needed – of purchasing carbon offsets to eventually reach climate neutrality. The initial milestone for this work was set for December 2009.

The UN system set out its approach in the UN Climate Neutral Strategy. In this document, the UN defined its “climate neutrality” as the entire set of policies that it uses to estimate its known GHG emissions, measures to reduce them, and to purchase carbon offsets to “neutralize” those emissions that remain, aiming at the highest standards possible. It identifies the following elements that should be included:

- a commitment to reducing GHG emissions as part of an integrated and comprehensive environmental management approach;
- the preparation of consistent, comparable and transparent inventory data, according to agreed methodologies, which subsequently undergo periodic independent verification;
- the development and implementation of a package of measures to reduce GHG emissions;
- a decision to offset the remaining emissions through a reasoned choice of offsets that satisfy a list of agreed criteria, ensuring their high quality;
- regular transparent reporting combined with the public communication of each organization’s emissions inventory, together with any targets or goals for emissions reductions;
- 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 work plans; to provide e-training courses; to host Q&A; to provide technical assistance; and to host e-discussions.

The UN Climate Neutral Strategy highlighted advantages of harmonization. A common approach across the UN system brings greater impact, lowers transactions costs, facilitates practical action on the ground through the

development of common tools, ensures comparability of data across organizations, and pooling of results for better-informed decisions and knowledge-sharing.

The UN Environment Management Group (EMG) was tasked with coordinating the UN system’s efforts to move towards climate neutrality, and has been working through a network of climate neutral focal points from each organization.

In addition, the Sustainable United Nations facility (SUN) was established in UNEP’s Paris-based Division for Technology, Industry and Economics to provide additional support on becoming climate neutral, particularly on emissions reductions.

The EMG secretariat and SUN have been working with the UN system to develop common methodologies, tools, guidelines and briefing information, and provide training and technical support. Annex III contains a list of resources prepared and planned to support the UN system’s move towards climate neutrality. Most of these are in the public domain and aim to encourage institutions and individuals to reduce their own climate footprint.

The data collection procedure in each organization was managed and coordinated by the designated climate neutral focal point within each organization. Focal points received training on the use of the calculator tools and the inventory process through workshops, teleconferences and several web-based training sessions. In addition, the EMG secretariat established a GHG Helpdesk consisting of a team of experts which provided assistance to climate neutral focal points via phone and e-mail on technical and organizational issues.

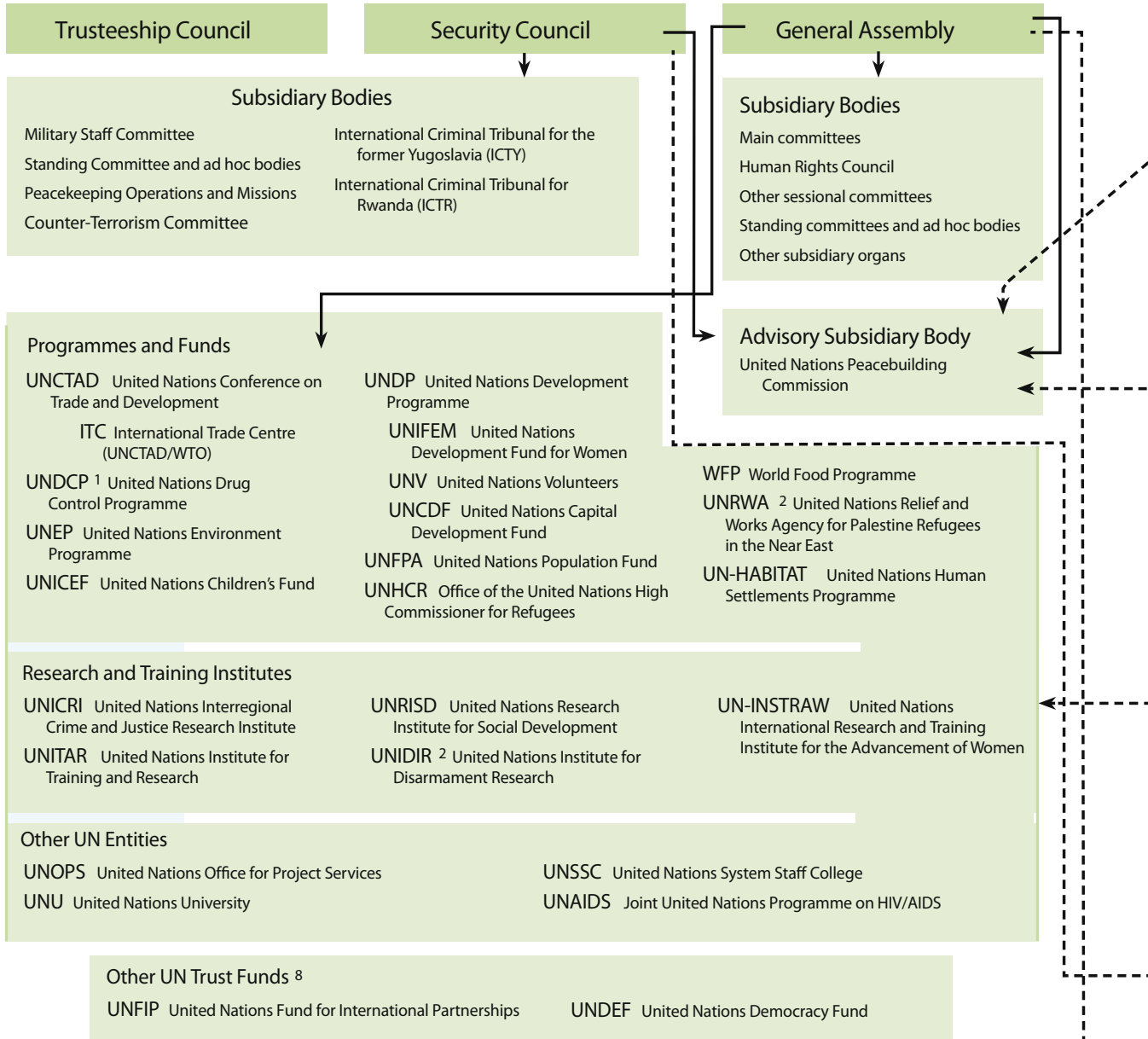
The focal points typically worked on the internal data collection with offices and departments which had access to relevant information. Facility managers, travel agents, and technical and administrative staff were therefore heavily involved in collecting and aggregating information for the GHG inventory.

The full UN system has been covered by this exercise, through forty-nine reporting entities. The reporting entity is typically a distinct UN agency, fund, programme, regional commission or institute, but in some cases the reporting office has been based on administrative responsibility or the specificity of its mandate and activities. In this report, the term “UN organization” is used interchangeably with reporting entity.



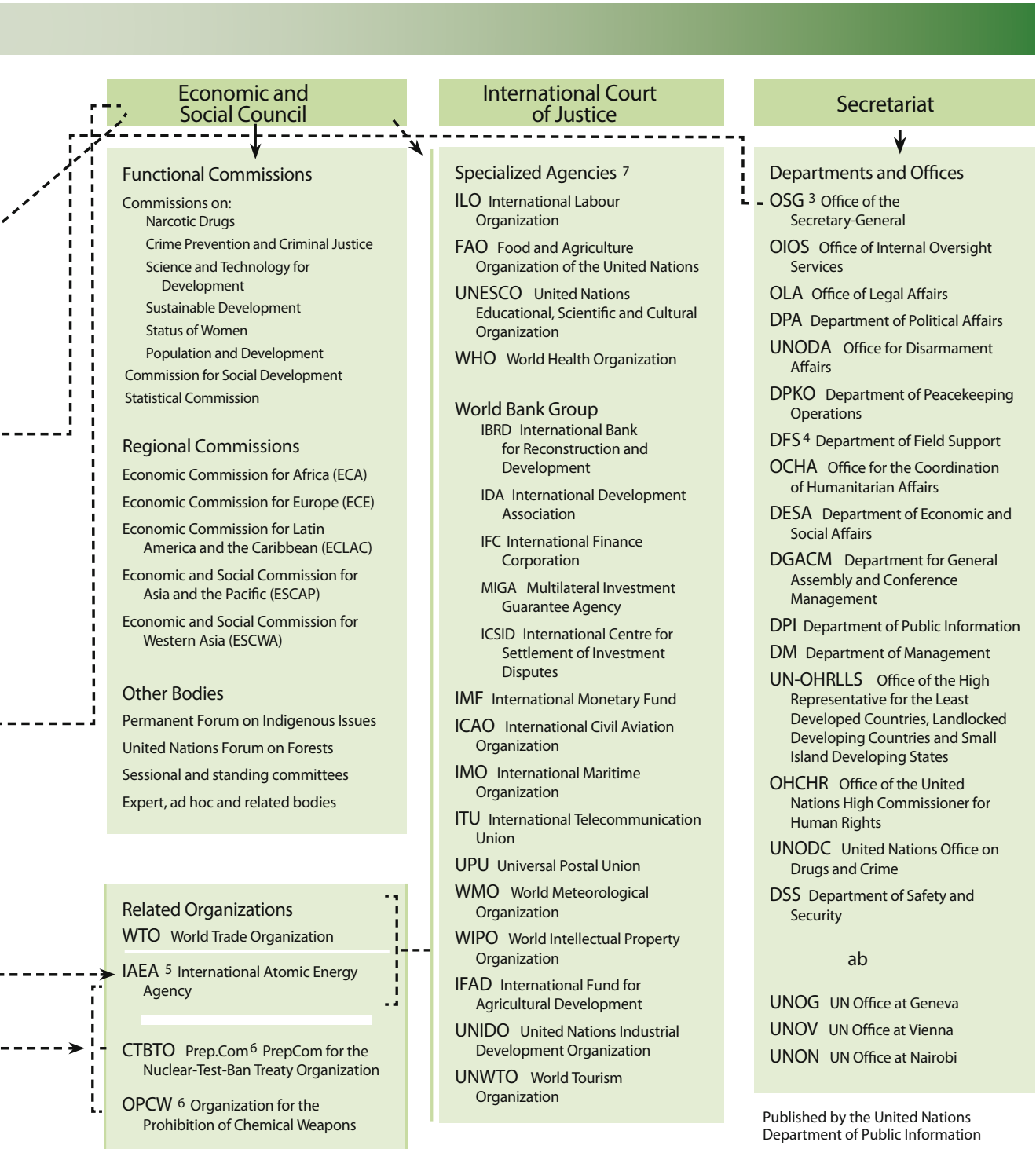
# The United Nations System

## Principal Organs



NOTES: Solid lines from a Principal Organ indicate a direct reporting relationship; dashes indicate a non-subsidiary relationship.

- The UN Drug Control Programme is part of the UN Office on Drugs and Crime.
- UNRWA and UNIDIR report only to the GA.
- The United Nations Ethics Office, the United Nations Ombudsman's Office, and the Chief Information Technology Officer report directly to the Secretary-General.
- In an exceptional arrangement, the Under-Secretary-General for Field Support reports directly to the Under-Secretary-General for Peacekeeping Operations.
- IAEA reports to the Security Council and the General Assembly (GA).
- The CTBTO Prep.Com and OPCW report to the GA.
- Specialized agencies are autonomous organizations working with the UN and each other through the coordinating machinery of the ECOSOC at the intergovernmental level, and through the Chief Executives Board for coordination (CEB) at the inter-secretariat level.
- UNFIP is an autonomous trust fund operating under the leadership of the United Nations Deputy Secretary-General. UNDEF's advisory board recommends funding proposals for approval by the Secretary-General.



# Challenges and limitations

This report presents the UN's GHG inventory for the calendar year 2008 and information on emissions reductions and offsets that has been gathered for the first time. In order to obtain this information, it was necessary to set up data collection systems where they did not previously exist, to train staff in GHG foot-printing techniques and the use of new tools specially developed for the purpose.

The data collection systems and tools are in their first iteration, and will be refined and improved over the coming months and years. The results presented in this report should be viewed as a first effort which will become more comprehensive and precise over time. Efforts will be made to raise the level of accuracy in inventory data, for example by improving transparency and traceability, filling data gaps, obtaining better coverage of field offices and replacing proxies and estimates with actual data. In many cases, organizations' GHG inventories will require improvement before they can be used as a base year.

In some cases, there have been constraints in the funding related to the allocation of staff resources that are required for the introduction of GHG foot-printing across the UN. Making the internal institutional arrangements,

such as committees, senior level champions and assigning of responsibilities has also taken time.

The overall coordination exercise across organizations with diverse mandates, management structures and geographical locations has also presented challenges, with case-by-case solutions needed, for example when defining a common boundary. Situations where several organizations are sharing common office space also require special coordination to allocate emissions to each organization.

In developing common tools, a further challenge has been the fact that different enterprise resource planning (ERP) systems are in use across UN system organizations. This has complicated the extraction of input data for the GHG calculator tools.

It was not always possible to meet all the data-collection challenges in the current inventory and achieve a high level of accuracy, coverage and comprehensiveness across organizations. The performance indicators and relative emissions are therefore expected to change in the future, due to improved and more systematic inventory-data collection systems and emissions-reduction efforts.

# Next steps

## Greenhouse gas inventories

The UN system is using a common methodology to calculate its GHG emissions and has agreed on what emission sources to include in the inventory.

Over the coming months and years, the UN system will improve the quality of data and coverage, and will fill data gaps, improving the accuracy of data, especially for the larger source categories such as air travel. It aims to replace estimates with actual data where possible, and gradually expand to achieve full coverage of field offices.

This will entail corresponding improvements to data collections systems, integrating links to ERP systems in use, improving the methodology used by the UN on an ongoing basis, and moving the UN's overall reporting system onto an online Internet-based platform. The agreed common boundary will also be kept under continuous review.

To support these efforts, training will be provided on an ongoing basis to ensure that field offices have the necessary skills and training to prepare high quality data and inventories.

## Emissions reduction measures

A range of different measures is being implemented across the UN system in all duty stations, from energy efficiency measures, efficient lighting and the refurbishing of buildings, to staff awareness programmes, sustainable procurement and even the introduction of environmental management systems.

The next steps will involve making the transition from a collection of success stories to the development of coherent emissions reduction strategies for each or-

ganization, which the UN system has agreed to do as its next step in 2010. These plans will address the full range of measures to reduce emissions, including from travel, which is the largest source category for many UN system organizations. Performance indicators will be developed to assess progress which will be reflected in the inventories.

## Offsets

The UN System Chief Executives Board opted to purchase only offsets generated under the Clean Development Mechanism (CDM). Only a few organizations have purchased offsets. A handful of organizations are or will be fully climate-neutral, one will have offset part of its footprint, while several others have made only specific high-profile events climate-neutral. Some organizations have highlighted that they have yet to hold consultations with their governing bodies on related budgetary issues.

In the future, common approaches to offsetting will be explored across the UN system, as appropriate, to internalize climate change costs, build additional incentives for emissions reductions and efficiency gains.

## Sustainable Management of the UN

At the annual senior officials meeting of the UN Environment Management Group in September 2009, the UN system decided to consolidate its work on a climate neutral UN and parallel work on sustainable procurement into a single work stream, on sustainable management in the UN. The UN climate-neutrality strategy will henceforth be addressed as part of a broader effort to "green" the way the UN works, which will, in a holistic and systematic manner, address the full range of sustainability issues.

# 2. GREENHOUSE GAS INVENTORY FOR 2008

**Establishing an inventory of GHG emissions from the various activities and operations is the first step towards reducing these emissions. The inventory allows the institution to identify the main emission sources and to take targeted action to reduce these emissions and also obtain efficiency gains.**

Many UN agencies collected their GHG data for the first time in 2008, whereas some have been preparing inventories since 2004. It is the first time that a coordinated approach for a UN-wide GHG inventory with a common methodology has been implemented. The use of a common boundary and methodology ensures that data can be aggregated and compared across all UN system organizations.

This exercise has been a difficult but successful process that resulted in real number baseline GHG inventories crucial for moving towards climate neutrality. Since this was the first time most organizations have prepared a GHG inventory, data gaps, estimates and the use of proxies could not be avoided. However, the exercise has been a useful learning experience which will improve practices and make data collection more efficient and easier in the future.

## UN system methodology and tools

The calculation of GHG emissions is based on the GHG Protocol of the World Resources Institute (WRI) and World Business Council on Sustainable Development (WBCSD), which is compatible with the new ISO 14'064 standard for GHG accounting. It is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage GHG emissions and draws upon internationally recognized methodologies for calculating GHG emissions from buildings and transport. The goal is to provide a credible and transparent approach to quantifying and reporting GHG emissions reductions.

### UN Greenhouse Gas Calculator

The UN Greenhouse Gas Calculator estimates GHG emissions resulting from building-related emissions and travel by road and rail. It provides the methodology and suggests emission factors for calculating GHG emissions from official vehicles, buses, trains, taxis,

self-generated power, refrigerants, purchased heat and steam, and electricity. The calculator was developed, programmed and designed by the United Nations Department of Field Support/Information and Communications Technology Division (DFS/ICTD) with input from the WRI, which provided emission factors and internationally recognized methodologies. Contributions were also made by staff from over a dozen organizations across the UN system who have pooled their expertise, skills and know-how in the service of the organization as a whole.

The tool is specially designed for the UN agencies, funds and programmes to facilitate the preparation of their baseline GHG inventories. It aims to ensure that the inventories of the UN organizations are consistent, comparable with one another, transparent and based on the best available information sources.

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1. [www.unemg.org/sustainableun](http://www.unemg.org/sustainableun)