ITU and Climate Neutrality

Arthur Levin, Head, Standardization Policy Division (ITU-T)

GLOBAL FRAMEWORK

- 1992 Framework Convention on Climate Change
- 1997 Kyoto Protocol was adopted at COP-3
 - while Convention encouraged developed countries to stabilize GHG emissions, the Protocol commits them to do so
- 2001 Detailed implementation rules adopted at COP-7 in Marrakesh
 - Annex I (developed countries) to reduce GHG emissions in period 2008-12; a reduction of 5% against 1990 baseline
 - aviation and shipping were excluded
 - Annex II (developing countries) only to monitor and report GHG emissions
- Protocol established Clean Development Mechanism (CDM)
 - allows parties to earn and trade emission credits through projects either in developed or developing countries

GLOBAL FRAMEWORK

- 2005 Kyoto Protocol came into effect for 177 countries
- 2007 Fourth Assessment Report of IPCC
 - clear link between GHG emission and climate change
 - ➤ GHG emissions continue to grow as world continues to industrialize
- 2012 First commitment period under Kyoto Protocol will expire
 - new framework is needed to deliver the stringent emission reduction the IPCC says are needed

TOWARD A NEW FRAMEWORK

- 2007 COP-13 in Bali launched process for negotiation of new Agreement
 - established AWGLCA (Ad Hoc Working Group on Long Term Cooperative Action) to develop work program
- **2008** AWGLCA meetings
 - Bangkok (31 March–4 April)
 - Bonn (2-13 June)
 - Accra (21-27 August)
 - focus of work program will be adaptation, mitigation, technology and financing, plus deforestation
 - continuation of Kyoto Protocol carbon market-based mechanisms under a new Agreement
- 2008 Meeting of COP-14
 - Poznan, Poland (1-12 December)
- 2009 COP-15 meets and expected to conclude Agreement
 - Copenhagen (December)

The CEB Commitment

- UN Chief Executive Board Joint Statement in Fall 2007
 - UN system to attain climate neutrality in 3 years
 - "We, the Heads of the United Nations agencies, funds and programmes, hereby
 - commit ourselves to moving our respective organizations towards climate neutrality
 - in our headquarters and United Nations centres for our facility operations and travel.

In particular, by the end of 2009 we will:

Estimate our greenhouse gas emissions consistent with accepted international

standards;

- Undertake efforts to reduce our greenhouse gas emissions to the extent possible;
- Analyse the cost implications and explore budgetary modalities including consulting with governing bodies as needed of purchasing carbon offsets to eventually reach climate neutrality.
- UN to demonstrate climate neutrality by COP-15 in Denmark in 2009

ITU: The Early Steps

- Documentation limits at major conferences
- Teleconferencing (COG)
- E-work methods in TSB
- •Free on-line ITU-T Recommendations
- Paperless offices and meetings
- Regional meetings

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Meeting the CEB Commitment

- Briefing of senior management in 2007 by EMG (UN Environmental Management Group)
- Agreement with UNEP/SUN in February 2008 to audit ITU emissions and develop an Action Plan
- Setting boundaries
- Data collection and gathering
- Onsite inspections

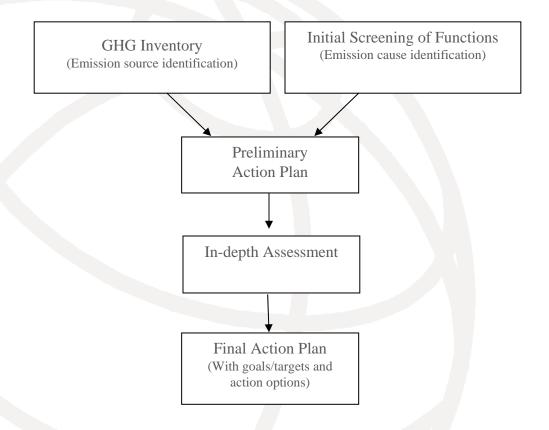
Climate Neutrality in UN

- CN defined as the entire set of policies that an agency uses when it:
 - >estimates its known GHG emissions
 - >takes measures to reduce them and
 - purchases carbon offsets to neutralize those emissions that remain (EMG)

Methodology

- GHG Inventory based on GHG Protocol developed by the World Resources Institute
- SUN model questionnaire to UN agencies
- "whole organization" approach
 - Assess all activities and functions with potential to directly or indirectly contribute to GHG emissions
- ICAO Standard to measure air travel
 - http://www2.icao.int/public/cfmapps/carbonoffset/carbon_calculator.cfm

Assessment Methodology



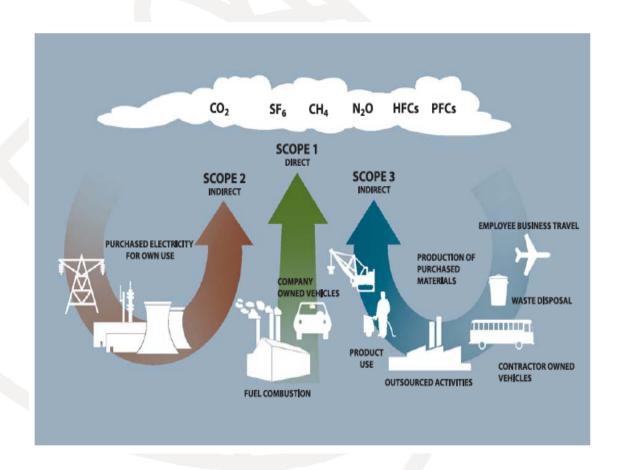
Setting Boundaries

- Common approach for all UN agencies
- Only audit Geneva buildings
- Commuting
- Main Inquiry Areas
 - > Travel
 - > Sustainable Procurement
 - Building and physical plant
 - Waste management
 - > Electricity, water and fuel consumption
 - ➤ Computers, paper use, recycling

UNEP Approach

- A GHG Inventory is a summary list outlining the total amount of the GHG emitted by an organisation in a year of operation. <u>Carbon dioxide</u>, <u>methane</u>, <u>nitrous oxide</u> and three groups of <u>fluorinated</u> gases (<u>sulfur hexafluoride</u>, <u>HFCs</u>, and <u>PFCs</u>) are the major greenhouse gases listed under the <u>Kyoto Protocol</u>.
- A Climate Footprint is the total amount of GHG (expressed as carbon dioxide equivalents) that an organization has direct control over during a financial year of operation. A Climate Footprint is defined by a boundary of operation which in the case of the UNEP is defined to include all GHG emissions associated with staff (e.g. travel) and office operations (e.g. electricity consumption). All project related emissions are excluded.
- The Climate Footprint will be developed using the "Greenhouse Gas Protocol's" Corporate Accounting and Reporting Standard as developed by the World Resources Institute (WRI). This Protocol provides an international standard against which companies or organizations can measure their GHG Footprint. The Protocol provides for reporting of GHG emissions under three scopes.

UNEP (cont'd.)



Gathering Data

- ITU replies to SUN questionnaire
- One day On-site visit
 - Meetings with mangers
 - > Inspect physical plant
- Identify data collection needs and implement capture and retrieval systems
 - > e.g. travel
 - > e.g. same electricity monitor for all 3 buildings

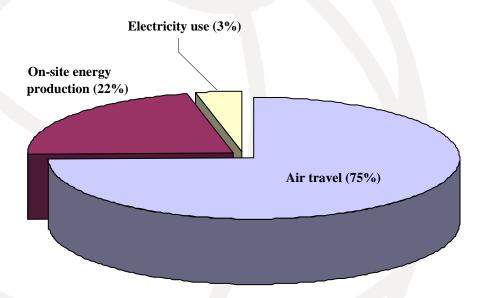
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The Numbers

- Greenhouse Gas (GHG) emissions profile
 - > Emissions from air travel: 3030,5
 - Emissions from on-site energy production: 878,4
 - > Emissions from purchased electricity: 143,1
 - > Other sources: 2,6
 - ➤ Total émissions: 4054,6 tonnes CO2 eqv.
 - Multiplying this by a factor of 1.05 to account for regional office emissions
- ITU's total GHG emissions in 2007 amount to 4258,4 tons CO2 eqv

Pie Anyone?

ITU Emission Profile (2007)



Next Steps

- Implement Energy Saving Measures to reduce GHG emissions
- Cost-Benefit Analysis
 - The total amount of greenhouse gas emissions caused by ITU headquarters in Geneva is estimated at 4,055 tons per year.
 - purchase emission offsets for this whole amount at current prices (at the European Climate Exchange; 25 Euros per ton of CO2 equivalent)
 - Equals an annual cost of 101,375 Euros for carbon neutrality

Key Measures

- Expand travel data capture and database and develop policy for missions
- Upgrade videoconference facilities, provide training and incentives to encourage greater use
- Consider switch from hydro based electricity to greener energy (wind, solar)
- Conduct review of waste stream
- Install electricity meters for each building

Key Measures: Change the Behavior

- Greater involvement of staff
- Conduct survey to understand comfort level
 - possible lower room temperatures (22 to 20)
 - > Better use of natural light
 - Conduct energy awareness campaign
 - > Review of e-commuting needs
- Upgrade videoconference facilities, provide training and incentives to encourage greater use

Pay the Piper

 Seek authority from Council to purchase carbon credits needed to attain climate neutrality

- Or....
 - Develop and engage in ITU projects to assist Member States to combat climate change
- Develop and implement Action Plan to reduce GHG emissions