HIGH-LEVEL CONFERENCE ON WORLD FOOD SECURITY: THE CHALLENGES OF CLIMATE CHANGE AND BIOENERGY

3-5 June 2008
FAO Headquarters – Rome, Italy

Climate-Friendly Event

The problem with international conferences is that the travel of large numbers of participants adds to the emission of greenhouse gases. Also, extra energy is consumed for running the conference. But some issues are so big and of concern to so many that alternatives, such as video-conferencing, are not feasible. The 3-5 June High Level Conference on World Food Security: the Challenges of Climate Change and Bioenergy, which assembled approximately 4500 participants, was one such occasion.

The FAO, as conference convenor, therefore took a number of measures to make the HLC as climate friendly and environmentally sustainable an event as possible.

Firstly, in order to reduce its carbon footprint, the FAO offset a significant portion of the greenhouse gases generated by the three-day meeting. Conference-related emissions were offset for delegates from countries most vulnerable to climate change, the Low Income Food Deficit Countries (82 countries of which 77 attended the HLC), via the purchase of Certified Emissions Reductions (issued under the Kyoto Protocol's Clean Development Mechanism) from a small-scale hydro-electricity project located in Honduras. Details on methodology and results, on the project and criteria for its selection, are provided below.

The FAO thanks the United Kingdom's Department for International Development for its generous financial support which enabled this initiative to be realized.

Secondly, on a practical level:

- Conference documents were printed, double-sided, on (newly sourced, cheaper yet high-performing) recycled paper.
- Participants were urged to consult documents on line (at banks of internet PCs provided for the purpose) and to think twice before requesting extra copies. The quantity of paper consumed for the conference was nonetheless estimated at over 10 tonnes and will function as a benchmark to improve upon in the future.
- Alternatives to plastic-bottled drinking water were provided and eco-catering supplies were trialled.
- Differentiated waste bins were available throughout the conference area and participants were encouraged to dispose of their conference rubbish on-site, rather than in their hotel rooms, so we could measure the waste generated after the event.
- Comfort-indexed temperature/humidity control was the order of the day and energy consumption over the three days was measured for purposes of future comparison.
- Zero-emission transport escaped our grasp (security considerations prevailed) but the use of public and group transport – and walking – was encouraged.

The FAO will be building on these measures and introducing others for future events and aims to make them standard practice in the day to day running of the Organization.

Project Selection Criteria

To make a meaningful contribution to reducing global greenhouse gas emissions, offset projects have to go beyond "business as usual", i.e., emissions reductions have to be additional to what would have happened without the project. Currently, the most credible and widely accepted approach for ensuring additionality is that established under the Kyoto Protocol's Clean Development Mechanism. The CDM Gold Standard provides a supplementary level of assurance that the project demonstrates positive environmental and social impact on sustainable development and the Millennium Development Goals.

Project

The La Esperanza Hydro-electric Project is a small containment run-of-river hydro-electric project in the Intibuca region of Honduras, at the site of an abandoned hydro-power plant near the city of La Esperanza. It was developed by a consortium of local entrepreneurs, Consorcio de Inversiones S.A. (CISA), today an independent power producer that supplies the grid with climate-friendly energy. This high quality renewable energy project was the first ever to be issued certified emissions reductions (CERs) under the Kyoto Protocol's Clean Development Mechanism, in 2005, and is in the final phase of Gold Standard registration.

Total installed capacity is 12.8 MW. Emission reductions, expressed in carbon dioxide equivalents, CO2e, are estimated at approximately 37,000 tonnes per annum, achieved by displacing diesel generation from the national grid. Currently (2003) grid electricity generated in Honduras is made up of 61% diesel and 39% hydro and biomass.

The project provides major additional contributions to sustainable development and the Millennium Development Goals:

- rural electrification (4 villages newly electrified) and reduced dependency on firewood
- increased local employment (129 seasonal, 32 permanent)
- improvement of the watershed through reforestation of deforested and degraded land
- greater engagement of women in community issues
- training of municipal authorities in environmental management
- road maintenance and repairs

CERs from this project have been sourced through atmosfair which will retire 1360 tonnes of CO2e ("carbon credits") on behalf of FAO.

Carbon Offsetting Methodology

<u>Air travel</u>

Air travel emissions were calculated using the on-line calculator, www.atmosfair.de, selected for its conservative approach. Where Heads of State, Heads of Government or Ministers were involved, it was assumed that they travelled in business class. It was also assumed that travel was via the most direct route to Rome from the capital of each country. No deductions were made for those delegates travelling to Rome for multiple purposes, e.g., the World Food Programme Executive Board meeting the week immediately after the FAO Conference.

Land travel (to and from airports at each end)

Emissions from ground travel between Rome's Fiumicino airport and the FAO/central city were estimated using the route calculation function of the website for the municipal transport company, www.atac.roma.it, which indicated average emissions of 11 kg CO2e per return car trip. It was conservatively assumed that each LIFDC delegate travelled in a separate car (whereas in reality some would have shared and others taken the airport train or availed themselves of FAO shuttle buses). It was also assumed that the emissions generated by travel to and from the airport in the country of origin were of the same dimension. No deductions were made for (e.g., commuting) emissions avoided in the home country.

Stay in Rome

The UNDP's Human Development Report 2007/2008 was used to calculate other emissions associated with an assumed three-day stay in Rome by all LIFDC delegates, i.e., other local travel, food and water consumption, waste, etc. This estimate of 21.3 kg per delegate per day is based on the average per capita emissions in Italy in 2004 (7.8 tonnes per annum). Emissions avoided in the home country were not deducted.

Conference Facility Emissions

Emissions generated by electricity and methane consumption at FAO headquarters over the three days were measured. No deductions were made for those parts of the complex not directly used for the HLC, as it was assumed that all staff on site over the period were there uniquely for Conference purposes

Outcome

The incremental emissions generated by 434 LIFDC delegates' air and ground travel, stay in Rome and energy consumption at FAO Headquarters over three days was calculated to be 1360 tonnes of CO2e. The cost of offsetting those emissions was Euro 32650 (US$ 50340).

Conclusion

A number of (e.g., OECD) governments and organizations already offset greenhouse gas emissions associated with their business travel as a matter of policy. Governments or organizations who are yet to take this step might wish to refer to the above methodology to see how it can be done. Interested parties are also welcome to contact julie.mackenzie@fao.org for further information.