Peatland loss fuels climate change

Advice to the UN-FCCC Contracting Parties

Global emissions from loss of organic peat soils amount more than 3000 million tonnes of carbon dioxide (Mt/CO_2) per year; around 10% of all global anthropogenic emissions. These emissions from peat soil loss are currently not accounted under the Kyoto Protocol; just reported[1]. Preventing emissions from drained and degrading peat soils in non-Annex 1 is not currently eligible under CDM. The Bali Action Plan allows to address the large soil carbon emissions.

We call for:

- Mandatory (net-net) accounting of peatland emissions under the Kyoto second commitment period
- Options for developed countries to reduce emissions by addressing peatland degradation in developing countries
- For any REDD policy: inclusion of soil-carbon but also of deforested peatlands

Guidance for the relevant Poznan meetings

AWG-KP: Status of LULUCF emissions in 2nd commitment period

Under point 3 b) on the agenda, Parties will discuss the status of LULUCF emissions in the 2nd commitment period (Agenda item 17). Discussion is about the 4 options in the AWG LULUCF document 2008/L.11, 27-08-08.

The most effective incentive to target emissions from LULUCF (incl. peat) can be provided by option 4 in this document: the land based approach. This will lead to full accounting of the LULUCF (incl. peat) emissions, inclusion of all greenhouse gas emissions and removals for accounting with 1990 as base year.
A second best would be option 3 (forward looking baseline for article 3.4) with the choice under 'Other issues' to make accounting for all activities under 3.4 compulsory.

The emissions from extracted peatlands will in this approach be treated among the other LULUCF emissions and similarly to current industrial emissions. That should be guaranteed by full implementation of the Revised 2006 IPCC Guidelines for National Green House Gases inventories for the inventory of LULUCF emissions for consideration under KP in the 2nd commitment period.

SBSTA: methodological decision on REDD

Point 5 on the SBSTA agenda is to discuss the decision on "Reducing Emissions from Deforestation in Developing Countries: approaches to stimulate action". In line with article 7 and 8 of this decision SBSTA will discuss methodological issues to assess forest cover and associated carbon stocks and greenhouse gas emissions.

Contracting parties are urged to incorporate all five carbon pools named by IPCC[2] to calculate Land Use and Forestry emissions, including soil carbon[3]. This will enable appropriate incentives for maintaining forests with high soil carbon stocks such as peatlands while not disadvantaging those with other forest types.

AWG-LCA: include ending peatland emissions under REDD

Point 3 b) on the agenda is to discuss national and international mitigation.
Wetlands International urges the Contracting Parties to work on options under the Bali Action Plan:

- Regarding b) ii '*mitigation in developing countries, supported by technology, financing and capacity building*', to include projects that end or prevent the predictable emissions from peatland loss (drained areas), to be supported by developed countries.
- Regarding point b) iii dealing with REDD:
  - To use the IPCC five carbon pools to determine stocks and losses for forests,
  - To include areas deforested since 1990 with still substantial carbon stocks for REDD activities

[1] Kyoto Protocol 3.4: no mandatory accounting. Reporting under land use categories.
[2] IPCC 2006, National Greenhouse Gas Inventories Volume 4
[3] Other carbon pools are living biomass divided into above and underground, dead biomass divided into litter and dead wood.

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3000 Mt CO_2 from peatlands: a global issue

Peatland degradation is responsible for more than 3000 million tonnes of carbon dioxide (Mt/CO_2) per year[4]; around 10% of all reported emissions. Peatlands only cover 3% of the global surface but occur in more than 170 countries. Although most emissions, 2000 Mt/CO_2, are currently concentrated in South-east Asia, another 1000 Mt/CO_2 is emitted from peatlands in other parts of the world.

Peatlands have sequestered and stored atmospheric carbon for thousands of years, but turn into a source of carbon dioxide as a result of drainage, fires and exploitation.

Huge carbon stores up in smoke and down the drain

Peat soils are huge carbon storehouses, storing 550Gt carbon, which is as much carbon this is as all accessible fossil coal reserves (585 Gt), and twice as much as all global forest biomass. When the normally wet peat soil comes in contact with the air, it starts oxidating and decomposing, releasing carbon dioxide. Key driving forces behind the loss of peatlands are drainage of peatswamps for agriculture or forestry, peat extraction for fuel or horticultural use, and wildfires after drainage.

High emissions from small areas: low hanging fruit

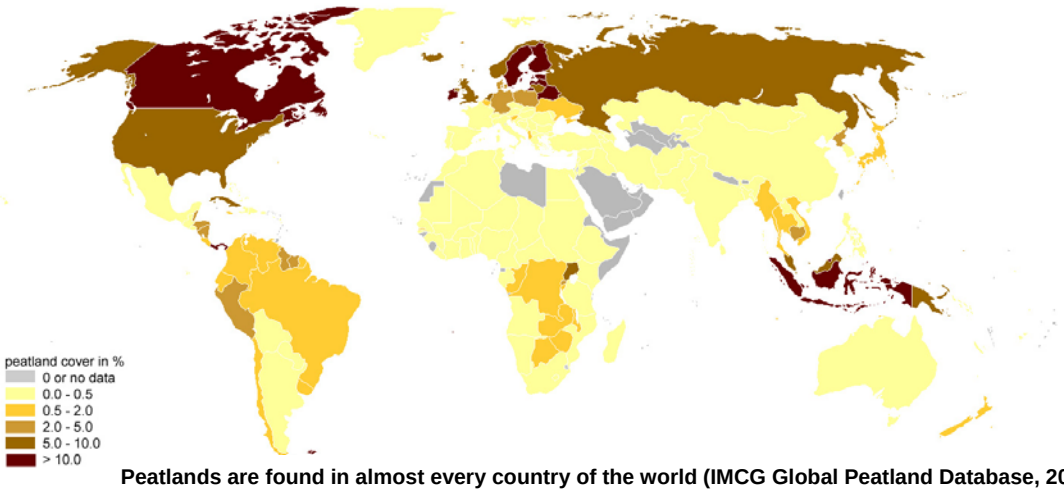
Restoring degraded peatlands is one of the low hanging fruit for climate mitigation. Pilot projects in South-east Asia, Russia, Argentina and the Himalayas demonstrate that relatively minor investments in ending drainage and restoring the vegetation cover have significant impacts in terms of reducing greenhouse gas emissions.

Measuring peatland emissions

Peatlands represent a terrestrial carbon pool about which sufficient robust data exist, and for which methodologies, techniques and technology are available for relevant measurements, both in developed and in developing countries. Satellite data in combination with field research on drainage depths can be used to track trends in emissions. CO_2 emissions from drainage can be fairly accurately measured, as there is a clear almost linear relation between drainage depth and CO_2 emissions in different climate zones. Baseline establishment can be made using past and current in-situ observations.

Peatlands also critical for biodiversity conversation and water regulation

Peatlands support many specialized species and unique ecosystem types. They also play a key role in water resource management, storing a significant proportion of global freshwater resources. Peatland degradation can disrupt water supplies and decrease flood control benefits, making peatland restoration a priority strategy for climate adaptation strategies.



Peatlands are found in almost every country of the world (IMCG Global Peatland Database, 2008)

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[4] Global assessment of peatlands biodiversity and climate change (Wetlands International and GEC, 2007)