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## RIAU DECLARATION ON PEATLANDS AND CLIMATE CHANGE Pekanbaru, 26<sup>th</sup> January 2006

**The Workshop on Vulnerability of Carbon Pools in Tropical Peatlands** was held in Pekanbaru, Riau, Sumatra from 23-26 January 2006. It was attended by 61 participants from 12 countries. It was organised by the Global Carbon Project (GCP), the Global Environment Centre (GEC) and the Centre for International Forestry Research (CIFOR). It reviewed the extent of and carbon store in tropical peatlands, land use change and fire, greenhouse gas (GHG) emissions, future climate scenarios and management options. A field visit to the Kampar Peninsular to assess current peatland plantation management practices was facilitated by APRIL/PT Riau Andalan Pulp and Paper. The workshop was supported by The Asia Pacific Network for Global Change (APN); the joint project of Wetlands International and GEC on Integrated Management of Peatlands for Biodiversity and Climate Change (funded by UNEP-GEF); and the joint Project of Wildlife Habitat Canada, Wetlands International and GEC on Climate Change Forests and Peatlands in Indonesia (funded by CIDA); GCP and CIFOR.

The workshop noted that peat is one of the world's most important carbon stores (storing about 30% of global soil carbon) and tropical peatlands are an extremely important component – storing 30% of peatland carbon. The most extensive tropical peatlands are in SE Asia and cover about 30 million ha of which over 20 million ha are in Indonesia and 4 million ha in Riau province.

Tropical peatlands play an extremely important global role for carbon storage and climate moderation as well as providing a range of other benefits such as biodiversity, water management, and livelihood support to local communities. The fundamental component of peatlands is water. As water level decreases in peatlands so does capacity for sequestering and storing carbon.

Current management practices in peatlands combined with climate change and variability are having a major negative impact on peatlands. In the past 10 years about 3 million ha of peatland in SE Asia have been burnt releasing 3-5 billion tonnes of carbon. In addition, the drainage of peat for oil palm and timber and pulpwood plantations as well as other agriculture and unsustainable logging is estimated to have affected more than 6 million ha and released an additional 2 billion tonnes of carbon over the same period. Thus the emission of carbon dioxide from peatlands in SE Asia represents one of the largest single sources of GHG emissions globally and is equivalent of 10% of the average global fossil fuel emission over the same period. This is accelerating global climate change.

It is recognized that unsustainable practices in management of peatlands in SE Asia is the main cause of peat fires and associated transboundary smoke haze in SE Asia which causes massive health, social, economic and environmental impacts.

Subsequent El Niño events will increase likelihood of drought and associated fires will have a major negative impact on peatlands carbon stores and people in the SE Asia region. The next El Niño event is predicted within four years. The predicted changes to climate over the next 50 years as a result of increasing GHG emissions, including hotter temperatures and changes in rainfall patterns combined with land use change and deforestation, will lead to increased degradation of peatlands, increased emissions of GHGs and further acceleration of climate change.



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**The workshop proposed the following target :**

**All stakeholders (including government, non-government, research, private sector and local communities) should urgently work in partnership to prevent peatland fires and degradation. In addition, promote rehabilitation and sustainable use of peatlands in SE Asia to provide multiple benefits to the people in the region and safeguard the global environment.**

**The workshop recommended relevant stakeholders to:**

#### **Regional and global actions**

- Expedite the implementation of the ASEAN Peatland Management Strategy and associated National Action Plans. These should be complemented by plans at the provincial and local level in regions with extensive peatlands.
- Strengthen policies and institutional arrangements for peatland management and strictly enforce policies and rules for the management and conservation of peatlands.
- Stop the further conversion and/or drainage of deep peat and peat domes and maintain and restore the hydrology of peatland systems to prevent fires, minimize GHG emissions, and maintain ecological services.
- Improve current forestry, agriculture and plantation management practices to ensure that they contribute to the sustainability of peatlands.
- Promote international cooperative studies to assess the role of peatlands in mitigating climate change and the potential future impacts of climate change and land use on the peatland carbon pool.
- Undertake an assessment of the vulnerability of peatlands to climate change and extreme events. Effectively disseminate the knowledge generated by the scientific community for use by decision makers and to support the assessment processes and later develop adaptation strategies to guide peatland managers, in particular plantation operators.
- Strengthen activities for monitoring changes in the status of tropical peatlands to guide wise management.

#### **Riau Province**

- Establish a Riau Peatland Management Partnership to bring together key stakeholders to work together to maintain and rehabilitate peatlands and promote sustainable use.
- Develop through a multistakeholder process, a masterplan for the future conservation and sustainable development of the Kampar Peninsular given its importance as one of the largest and currently relatively intact tropical peatlands in the world.
- Develop integrated management plans for each peatland to maintain the provision of ecosystem functions and services including carbon storage and water supply – as most major peatland ecosystems function as one hydrological unit but are administered by two or more District (Kabupaten) administrations and are managed by a range of agencies.
- Incorporate peatlands as a key part of integrated river basin management since peatlands in Riau form the largest stores of freshwater in the province and play a key role in regulating river flow and preventing saline intrusion and that peatland degradation will jeopardise future water supply.
- Support community-based initiatives for protection and sustainable use of peatlands in Riau as an incentive to maintain peatlands and associated ecosystem services.