

Fact Sheet Norway-Indonesia Partnership REDD+

Indonesia's Peatlandsⁱ

Indonesia has roughly 22 million hectares of peatlands, which equals 5% of the global peatland area. The area covered by peatland in Indonesia is roughly half the size of Sweden.

Peatlands cover around 3% of the globe, but store one-third of the total global soil carbon. Peat is partially decayed vegetation that accumulates over thousands of years, growing at a rate of about one millimeter annually.



Photo: CIFOR

At present, Indonesian peatland stores 132 gigaton of CO₂. In comparison, the world's largest rainforest, the Amazon, is storing 168 gigaton of CO₂.

Loss of Peatlands

Indonesia's peatlands are being deforested, drained, and burned to make way for palm oil and timber plantations, agriculture, and logging activities.

The amount of CO₂ stored in the peatland varies greatly. Some of Indonesia's peatlands are up to 11 metersⁱⁱ deep and stores massive amount of CO₂. The importance of curbing the loss of peatland is illustrated by the fact that Indonesia emits around five times as much CO₂ from degraded peatland as it does burning fuels every year.

Greenhouse Gas Emissions

In 2005, emissions from Indonesia's peatlands amounted to 850 million ton CO₂, roughly 40% of Indonesia's total emissions.

Peatland-related greenhouse gas emissions are an Indonesia-specific challenge, as Indonesia accounts for almost 60% of global emissions from peat decomposition.

Fire from land-clearing is the main source of peat related emissions in Indonesia. In 2005, 470 million tons of CO₂ emissions came from fires on Indonesian peatland. Decomposition of peatland as a consequence of drainage is the second largest emission source, accounting for another 300 million tons of emitted CO₂ in 2005.

Emissions Cuts from Peatlands

The Indonesian government has already begun to curb CO₂ emissions from peat by prohibiting land conversion of peat more than three meters deep. The two-year suspension on new concessions on conversion of natural forests and peat forests into plantations marks another important step.

Going forward, multiple opportunities exist for reducing CO₂ emissions from peat at a relatively modest cost. More than 600 million ton of CO₂ reduction opportunities exist in fire prevention, peatland rehabilitation and water management in agricultural land.

Fire prevention is by far single the largest abatement opportunity and includes prohibiting fire for land preparation, providing manual land clearing, field-based fire detection, and building public awareness of the local economic and social costs of forest fires.



Photo: Mette Kottmann

ⁱAll data from the Indonesia National Council on Climate Change unless otherwise cited
ⁱⁱ<http://www.cifor.cgiar.org/fire/pdf/pdf76.pdf>