

This document is to give you some more background information on the methodology for estimation of greenhouse gas (GHG) emissions from peat extraction area and from use of extracted peat. The methodology is compiled by Jüri-Ott Salm¹ and can be used in relation to Annex C of the RPP certification scheme.

Impact assessment of a peat extraction site should include estimation of greenhouse gases emissions which is based on methodologies used in national greenhouse inventory reports following IPCC standards. Thereof the methodology for assessment is following [IPCC² 2014, 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands](#), Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and Troxler, T.G. (eds). Published: IPCC, Switzerland.

This document provides latest information how to estimate emissions from land-use category: Peatland Managed for Extraction in two climate/vegetation zones: Boreal and Temperate.

Emission factors are given based on Tier 1 methodology – default values provided by IPCC 2014 and [IPCC 2006](#).

There could also be more country specific values available, in this case Tier 2 or 3 methodologies could be used³ or more specific data given, e.g. emissions from stockpiles in Finland (294 t CO_{2eq} ha⁻¹ y⁻¹). Tier 2 and 3 values have to be checked from National Inventory Reports available at [UNFCCC site](#)⁴ but if a company has more relevant data these could be used with special comments describing the methodology on how it has been collected.

There are two exemptions to methodology used in the assessment:

- I. Off-site CO₂-C emissions include both energy and horticultural (non-energy) use of peat (Based on [IPCC 2006](#) off-site emissions from peat used for energy should be reported in the Energy Sector but such differentiation is not followed in current context);
- II. Emissions from stockpiles are also attributed to other countries as these could be similar in the whole region due to generally alike peat and climate properties.

¹ Jüri-Ott Salm, PhD, 2012, (Supervisor) Ülo Mander, Emission of greenhouse gases CO₂, CH₄, and N₂O from the effects of different land-use practices : Impact of Drainage and Land Use Change), University of Tartu.

² Intergovernmental Panel on Climate Change (the United Nations body for assessing the science related to climate change).

³ Tier 2 approach for carbon loss from drained organic soils incorporates country-specific information. A Tier 3 approach allows for a variety of methods and may use measurements or process-based models or other more elaborate approaches, adequately validated using observation data that take into account temporal and spatial variations.

⁴ United Nations Framework Convention on Climate Change