

Drained wetlands give off same amount of greenhouse gases as industry, researchers find

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Drained wetlands in Sweden account for the same amount of greenhouse gas emissions as Swedish industry. This is shown by a summary of research from the University of Gothenburg, Sweden and the Swedish University of Agricultural Sciences.

Forests and agricultural fields on drained previous wetlands make up between five and ten percent of Sweden's surface area. When these wetlands are drained, they become a significant source of [greenhouse gas emissions](#).

"We note that drained wetlands which have been forested or used for agricultural purposes are a significant potential source of greenhouse gases of a magnitude that is at least comparable with the industrial sector's greenhouse gas emissions in Sweden."

Emissions from these drained wetlands can be reduced, but that involves rewetting the land – resulting in a negative impact on forestry production. According to the researchers, compromises may be necessary.

"As long as wetlands remain wet, only methane is given off," says Åsa Kasimir Klemedtsson from the Department of Earth Sciences at the University of Gothenburg. "However, for more than a hundred years land has been drained for agriculture and forestry, producing large

quantities both carbon dioxide and nitrous oxide."

Together with researcher Örjan Berglund from the Swedish University of Agricultural Sciences, Dr Kasimir Klemedtsson was commissioned by the Swedish [Environmental Protection Agency](#) during the summer and autumn of 2012 to compile information about [greenhouse gases](#) from drained wetlands.

New rules were introduced at last year's Durban [Climate Change Conference](#) with the second [Kyoto Protocol](#) phase. These rules include the possibility of reporting wetland drainage or rewetting of drained wetlands. Sweden now faces the choice of whether to include these ahead of the second Kyoto Protocol phase.

Provided by University of Gothenburg

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