

## **Quantification and valuation of ecosystem services to optimize sustainable re-use for low-productive drained peatlands (LIFEPeatLandUse)**

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More than half of the original peatlands have been drained in Finland to increase tree growth. However, 20% of the drained peatland area is low-productive, and does not produce enough timber to fulfill commercial purposes. At the same time, their biodiversity is degraded, they may continue environmental loading to watercourses, and act as greenhouse gas (GHG) sources. A key question concerning the use of peatlands in Finland is what to do with these low-productive drained peatlands that have been left aside from active forestry.

These low-productive drained peatlands can be re-used in many different ways. The problem is that the impacts of different re-use options on biodiversity, environment and economy are not yet fully understood and thus it is hard to give proposals for re-use actions. The challenge is to develop mechanisms that can balance the conflicting demands on the use of peatlands and to ensure their sustainable use. Our 5-year EU funded LIFE+ project LIFEPeatLandUse (2013-2018, LIFE12/ENV/FI/150) consolidates the knowledge on the impacts of peatland re-use on ecosystem services. Under investigation, there are seven different peatland re-use options, representing the economic activity as well as measures related to the protection. The purpose is to evaluate and predict their potential impacts on the peatland landscapes, if they were applied in practice. The aim is to find cost-efficient re-use options to low-productive drained peatlands, which help to prevent or stop decline of biodiversity and environmental loading to watercourses, and improve capacity of peatlands to store greenhouse gases.