



Case study #14: Komppasuo peat extraction area

Case study cluster: peatlands and wetlands

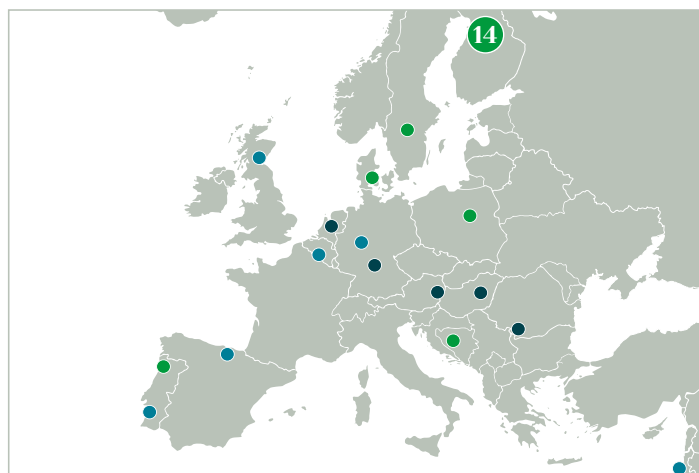
Country: Finland

Scientific partner: Finnish Environment Institute

Implementation partner: Tapio oy

Twinning case study: restoration of Haapasuo peat extraction area, FreshHabit Life IP project

Website: www.syke.fi/hankkeet/MERLIN,
www.tapio.fi/merlin



Demonstration

- **Type of restoration:** restoration of peat extraction areas in large northern Oulujoki-Iijoki river basins and other basins running to Bothnian Bay of the Baltic Sea
- **Size:** approx. 20 000 hectares of peat extraction sites which are going to be closed within 5 years
- **Location(s):** Oijärvi village in the municipality of Ii in the North-Ostrobothnia region, Oulujoki-Iijoki river basin
- **Value of the case:** peatland restoration, tested land-use options for old peat extraction areas, improvement of water quality and aquatic biodiversity, reduction of overall greenhouse gas emissions, biodiversity recovery, business opportunities, potential of nature-based solutions for flood protection
- **Stakeholders involved:** Neova oy, Center for Economic Development, Transport and Environment of North-Ostrobothnia region, Ministry of Agriculture and Forestry, IPS, municipalities, nature protection NGOs, environmental permitting authorities

- **Sectors involved:** land-owners, peat extraction companies, agencies, tourism
- **Innovations being applied:** Evidence based results to guide decisions over future land-use/ restoration measures in abandoned peat extraction sites and to scale up goal-oriented planning approach in/to the case study area.

Implemented within MERLIN

- **Restoration measures:** Re-wetting and afforestation of peat extraction area
- **Size:** 130 ha
- **Scope:** local
- **Vicinity:** rural
- **Stakeholders involved:** Local and regional hunting and forest associations and environmental groups, peat companies, public economic and environmental authorities, Ministry of Agriculture and Forestry
- **Estimated costs:** 537,000€ (including planning, monitoring and construction costs)



Lessons learnt

- Pilot and refine large-scale peatland restoration methods
- Active stakeholder engagement is essential

Additional information

Peat extraction has been started at Komppasuo bog in the year 1987 and ended in the year 2021. Totally 1.5 to 3 metre of peat has been cutover mainly for energy production. The remaining peat depth varies from 0.1 m to more than 2 metres in the site.



Strengths

- Well-established restoration benefits
- Few stakeholder conflicts
- Strong policy support

Weaknesses

- Difficult water-level management
- Economic trade-offs
- Water-climate trade-offs

Opportunities

- Paludiculture and ecotourism
- Biodiversity recovery
- Optimised restoration methods
- Sustainable after-use

Threats

- Loss of water management
- Difficult water-level regulation
- Policy and market uncertainty
- Unsuitable future land use