



Restoring Peatlands on Private Land Requires Enabling Policy Instruments and Local Action

Following the entry into force of the EU Nature Restoration Regulation, Finland needs to restore peatlands at an accelerated pace, across extensive areas. Restoration on state-owned land alone is not sufficient to meet the goals of the Regulation, neither in terms of the required restoration area nor in improving biodiversity and surface water quality. Adequate incentives and clear operational models are needed for restoring peat soils on private land.

Key measures to accelerate peatland restoration

In early 2025, the Geological Survey of Finland GTK and the RELEX Foundation conducted interviews with various stakeholders engaged in the implementation or study of peatland restoration. Based on these interviews, we propose the following measures to expand and accelerate peatland restoration on private land.

- **Local actors should have a key role**
- **Make restoration attractive for landowners through thought-out incentives**
- **Coordinators are needed to connect landowners with funders**
- **Apply cost-effective methods**
- **Build capacity through peer learning and supplementary training**
- **Land consolidation and new forms of landowner alliances to enable large-scale restoration**
- **Ensure a sustainable energy transition on peatlands**
- **Decision-makers should clearly communicate their commitment to peatland restoration to landowners, entrepreneurs, and financiers**

The research by GTK presented in this policy brief contributes to these UN Sustainable Development Goals.



Peatland restoration in Finland

Approximately 60% of Finland's original peatland area—over six million hectares—has been drained for forestry, agriculture, and peat extraction. Drainage has had a major impact on peatlands' carbon storage, carbon sequestration, biodiversity, and the condition of water bodies. In the process of peatland restoration, the water table of drained peatlands is raised back to its natural level, enabling the recovery of characteristic plant and animal species. On areas formerly used for peat extraction and on peat soils used for agriculture, additional measures are needed to recreate functioning peatland ecosystems.

In Finland, peatland restoration has previously focused largely on peatlands drained for forestry within state-owned protected areas. However, restoration on private lands has increased in recent years. The main actor on state-owned land has been Metsähallitus (the state agency managing public lands and waters), which has restored over 55,000 hectares of peatland. On private lands, restoration has primarily been carried out by NGOs, companies, foundations, and individual landowners.

Peatland restoration is more relevant than ever

The rapid progression of climate change and biodiversity loss calls for corrective actions in peatland land use.

According to current research, peatland restoration in Finland cannot deliver quick climate benefits in terms of carbon sequestration, although it will halt the depletion of remaining carbon stocks. However, benefits for biodiversity and water systems may emerge much sooner—within a number of years after restoration. With the EU Restoration Regulation now in force, Finland is preparing a National Restoration Plan with ambitious targets that highlight the need to increase both the pace and scale of peatland restoration on state-owned and private lands.

At present, restoration in Finland is mainly carried out as small, individual projects determined by project-based funding availability. In addition, subsidies have directed restoration towards low-productivity lands, excluding forested marginal areas of peatlands. This prevents the restoration of functional ecological units and fails to account for ecological and hydrological connectivity. **Restoring large-scale landscape or catchment-level peatland areas would improve the efficiency and impact of restoration efforts. However, this requires greater diversity in how peatland restoration is organised and supported.**

Policy recommendations to accelerate peatland restoration

Local actors should have a key role

Implementing peatland restoration in collaboration with local communities is of vital importance. In different regions, the actions of landowners and local communities are motivated by regionally differing drivers: improving water quality, opportunities for hunting and fishing, or income from timber sales are emphasized differently. Attitudes and readiness to support restoration also vary, and the structure of land ownership differs across the country. A unifying factor is the demand for fairness and influence over one's own living environment and property.

To gain acceptance from local communities, it is essential to demonstrate the real impact of restoration activities. Although restoration is rarely opposed in principle, actions should be planned together with local stakeholders while clearly demonstrating the positive environmental impacts. Local people often possess valuable knowledge about their environment and land ownership that is essential for restoration planning. When successful, restoration can offer local communities a way to improve their environment and create jobs and livelihoods in their home region.

In introducing new financing models for peatland restoration and forming larger restoration entities, **pioneering areas** can serve as examples. These areas combine local engagement, secured funding, community spirit, ambition, and responsibility. Good examples of new and replicable practices can set a model for others. Landscape-level pioneering initiatives have already been implemented in the catchment areas of the Iijoki and Kiiminkijoki rivers, as well as in North Karelia.

Make restoration attractive for landowners through thought-out incentives

Current public subsidy schemes do not provide sufficient incentives for restoration. Only the most environmentally committed landowners are willing to invest their own money and effort in restoring peatlands. To engage a broader group of landowners, restoration must be accompanied by reasonable compensation that is competitive with income from other types of land use.

At present, state and EU subsidy schemes for restoration contain many obstacles that reduce landowners' interest in applying. For example, under the current

Metka scheme, income from timber harvested during restoration is deducted from the subsidy, which diminishes its attractiveness. From the landowner's perspective, this appears unfair, as it would seem reasonable to recoup investments made in drainage and forestry when the land use changes. Meanwhile, the Helmi programme only applies to certain sites. The EU's Just Transition Fund (JTF) funding has not effectively incentivised the restoration of peat extraction areas, and its use has fallen short of expectations.

In addition to public subsidies, **private financing** is available for restoration, and incentives for landowners can also be created by combining public support with private funding. For companies, environmental responsibility is becoming increasingly important—sustainability principles are integral to financing decisions—and both domestic and international foundations as well as co-operatives are funding nature restoration. Landscape-level planning, which creates larger coherent entities, can attract major investors such as investment funds while also enabling smaller funders to participate in large projects.

Carbon trading on Finnish peatlands involves considerable uncertainty, as the climate impacts of restoration may be limited or take a long time to materialise. It appears that peatland restoration cannot be financed solely through carbon markets. However, Finland has recently developed rules and a metric for **biodiversity value trading**—the so-called “biodiversity hectare”—which provides a foundation for systematic participation by companies and municipalities in restoration efforts.

Coordinators are needed to connect landowners with funders

A landowner may have access to financial incentives for restoration, but few are able to apply for funding on their own. Peatlands should be restored as ecological entities, but land ownership is often fragmented—even within a single peatland—making it difficult for individual landowners to engage others in joint projects.

There is a need for **intermediary actors** who can plan restoration work and help bring together landowners' properties into ecologically and hydrologically meaningful areas making it easier to attract funding. For such intermediaries, local knowledge and approachability are key strengths. The Finnish Forest Centre and the ELY Centres provide advice and planning for restoration projects supported by state subsidies, but in practice their operations are effective only in certain regions of the country. In many regions, companies, NGOs, co-operatives, and operational foundations already act as intermediaries, mainly through project-based funding.

The state could make their work more sustainable by providing long-term support instead of short-term project grants. One possible model is the use of **catchment-area coordinators**, who liaise with landowners and other stakeholders and coordinate restoration activities across entire catchments.

Apply cost-effective methods

By using cost-effective methods, restoration can be carried out at the necessary scale even under challenging economic conditions.

One affordable approach to peatland restoration is a method which involves **directing water to undrained peatlands** that have dried due to nearby drainage ('vesienpalautus'), to restore peatlands' natural ecological functions and services.

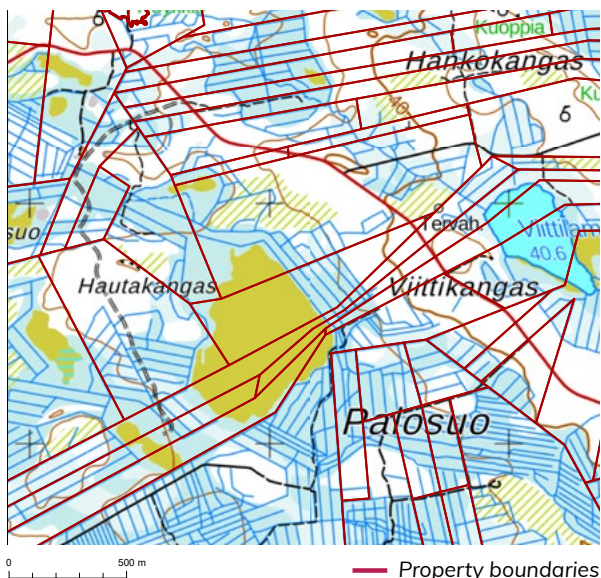
Another option is to **combine private lands with state-owned restoration projects**, where larger project scale can improve cost-efficiency and increase timber sales revenue. On forestry-drained peatlands, timber harvested during restoration can already provide reasonable compensation for landowners—at least on well-located forest plots and under current timber prices—if restoration costs are covered through other funding sources. In addition, such projects bring important benefits for wildlife and local water quality.

New, more innovative public financing mechanisms could also be developed. Because restoration is often a multi-year process, continuity of funding is essential. Instead of one-time payments, an **installment-based model** could be used to spread restoration costs over a longer period, easing pressure on public budgets while encouraging long-term landowner commitment to restoration.

Build capacity through peer learning and supplementary training

Actors involved in restoration don't always have enough expertise to identify opportunities or to plan, implement, and manage large-scale projects. Gaps may include experience, skills, personnel, technical capacity, networks, and knowledge of funding options.

Restoration capacity can be strengthened by fostering networking and peer learning among domestic actors, while also drawing on international experience. Skills development can be further supported through adult education and by making use of existing **peatland expertise knowledge hubs**.



In Northern Ostrobothnia, the drained peatland landscape is characterised by long, narrow property strips, a structure that complicates both forestry and restoration. Base map: ©National Land Survey of Finland.

Land consolidation and new forms of landowner alliances to enable large-scale restoration

Fragmented land ownership often hinders the creation of large, meaningful restoration projects, even when coordinators are in place. Direct land purchases are rarely feasible, as most landowners are unwilling to sell, particularly if the compensation is considered inadequate. Land swaps, however, are generally viewed more positively.

The **land consolidation procedure** used in agriculture and forestry by the National Land Survey of Finland has already been applied on a small scale for peatland restoration and shows potential for addressing this bottleneck. To facilitate restoration-related land consolidation, a **state land bank** similar to the agricultural model could be established to provide lands needed for swaps.

Another approach includes establishing **restoration cooperatives**, modelled after drainage associations, where no single landowner could block a project. A third approach is a '**consolidation bonus**' (already

offered by the private restoration company Hiilipörssi), where landowners who join together to create larger restoration areas receive additional compensation.

Ensure a sustainable energy transition on peatlands

The construction of wind and solar power needed for the energy transition, together with increased mining activity, affects peatland restoration and conservation. Former peat extraction sites are seeing a surge in solar power projects, with expectations and land reservations often blocking other land-use planning.

High land lease revenues from solar power make it more attractive to landowners than restoration. Some renewable energy companies have expressed interest in combining rewetting and restoration with solar plant development, but practical knowledge and expertise on how to integrate these activities remain limited. To ensure a sustainable energy transition on peatlands, land-use regulation, incentives, and guidance are needed for renewable energy developers.

Decision-makers should clearly communicate their commitment to peatland restoration to landowners, entrepreneurs, and financiers

The state needs to clearly signal that long-term opportunities exist in peatland restoration. This requires a **commitment to restoration area targets**, for example through the National Restoration Plan. Such a commitment would reduce uncertainty for contractors considering entering the sector. Currently, only Metsähallitus offers a predictable framework for contractors, with long-term peatland restoration projects and extended agreements with entrepreneurs. Clear signals from the state would also show private investors that peatland restoration is a viable long-term investment.

Legislation needs to shift in focus to accelerate restoration. Currently, the forestry and mining industries and their governing laws, as well as water legislation, outweigh measures aimed at improving environmental conditions. Peatlands can be drained without consulting other landowners, but restoration cannot proceed if it affects neighboring properties.

Restoring peatlands on private land requires effective policy incentives and local ownership

Actors involved in peatland restoration and conservation have a clear understanding of what effective restoration and protection require. Above all, landowners need a clear incentive system with long-term state commitment. Beyond financial incentives, additional policy instruments are necessary, many of which are already used in other contexts, such as land consolidation in agriculture and forestry, cooperation among landowners in drainage associations, and state

collaboration with local communities and companies on water protection.

Restoration on private lands depends on voluntary local engagement, solutions perceived as fair by all parties, and effective operational models. Large-scale peatland restoration is most successful when a diverse group of actors works towards a common goal—an effort the state can support in multiple ways.

Sources and additional information

GTK's research areas, policy briefs and research projects

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Front cover image: Constructed wetland at Jurvasenlampi in the Kiiminkijoki catchment area. Photo: Finnish Forest Centre.



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