

# Framing the peat: the political ecology of Finnish mire policies and law

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## SUMMARY

This article aims to reveal the political positioning of ‘mire nature’ in Finnish peatland policy and law. The data analysed include the latest policy documents, laws and regulations related to mires and peat extraction. Analysis is based on frame analysis (i.e. how an object is defined and positioned) and ideas drawn from a political ecology approach. Two main frames can be identified within the Finnish legal and policy framework: peat as a natural resource to be utilised for national energy sufficiency and economic competitiveness, and peat as a valuable source of biodiversity and an integral element of global ecosystem security. Analysis reveals the degree to which the definition of issues or objects in legal and policy terms is important in determining outcomes. It also reveals that national policies have swung back and forth and are prone to economic power struggles. Furthermore, while laws and regulations have offered strong and longstanding support for the extractive use of peat, the latest regulatory developments show a break from this trend. However, the arguments and facts concerning climate change are poorly integrated with Finnish peatland policy and law.

**KEY WORDS:** environmental law, frame analysis, nature conservation, peat extraction, Viirusuo mire

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## INTRODUCTION

Peat extraction is a contested practice that is subject to politicisation. Throughout the history of industrial peat mining, there has been some degree of conflict between the goals of mire protection and peat extraction (Korvela 2009, Ylönen & Simola 2012, Albrecht & Ratamäki 2016). Agriculture, forestry and peat extraction for fuel and horticultural use appear to be the major causes of peatland disturbance globally, while the production and consumption of energy peat is highly concentrated in global terms: Finland, Sweden, Ireland, the Russian Federation and Belarus account for almost 90 % of the total (International Peatland Society 2018). Finland has the highest proportion of wetland of any nation in terms of land area, and over 90 % of the peat extracted is used to produce energy, which accounts for 5–7 % of national annual energy production.

It is well known that peat extraction is associated with several forms of environmental stress such as substantial carbon losses, land use change, biodiversity loss and severe impacts on water quality (see, for example, Ministry of the Environment 2015a). In principle, as noted by Bullock *et al.* (2012), ending the utilisation of peat for energy production could be the first step towards achieving the protection of peatland and the reduction of

greenhouse gas emissions. Yet, the degree of policy coherence currently achieved seems weak (e.g. Regina *et al.* 2016).

Several case studies have addressed the conflicts concerning, and the major interest groups involved in, peatland use (Tolvanen *et al.* 2012, O’Riordan *et al.* 2016, cf. Collier & Scott 2010). Such studies indicate that achieving a solution to the issue of peat extraction which is acceptable to all interest groups will be difficult. The conflictual nature of peat extraction provides the context for this article, but rather than undertake a stakeholder analysis, we are more interested in exploring the way in which the legal and policy framing of an issue at national level can influence the outcome of that issue. The objective is to reveal the political positioning of ‘mire nature’ in Finnish peat extraction policy and law. Approaches to political ecology and framing guide our analysis. The former enables us to analyse the political-economic-ecology nexus of managing mires in Finland, while the latter allows us to reveal the political dynamics and ways of positioning mire nature. Analysing wording, framing and interpretation of legislative and policy instruments is important since they can be crucial in determining the outcome of conservation activities. Such analysis can unveil undesirable power struggles and unintended or perverse consequences. We analyse both policy

programmes and legislation and this analysis identifies the temporal and spatial scaling of peat extraction policies and law. We ask *what kinds of roles* are given to ecology in different institutional settings (by reference to the policy-law nexus), *how* the ecology of mires *is framed* through political and regulatory means, and *how* the ecology of mires *is positioned in relation to economic interests*.

### THEORETICAL APPROACH: MIRES IN THE CONTEXT OF POLITICAL ECOLOGY

Our research is inspired by the political ecology approach, which combines the concerns of ecology and a broadly defined political economy (Blaikie & Brookfield 1987). In general, studying the relationships between economy, politics and ecology differentiates political ecology from research on environmental policy (Walker 2005). The political ecology approach is inherently critical because it does not simply involve describing or explaining the interconnectedness of economy, politics and ecology but also critically evaluates the injustices that result from the ways in which these elements operate together in different situations. Much of the work done on this subject has related to uneven or unjust power relations. In particular, relationships between the (capitalist) West and the Third World and the rights of local communities to land or natural resources has been a special focus of this research (Tan-Mullins 2007). However, there is also a vast literature on First World political ecology that shows how similar problems associated with the unjust use of political or economic power do not take place only between western and developing countries but are also embedded in western societies (McCarthy 2002, 2005; Robbins 2012). Political ecology research often indicates that the object of oppression is essentially to be found in the *social* (Nygren & Rikoon 2008, see also Huber 2016). At this point, our focus turns towards nature and the ecology of mires.

This article focuses on a critical evaluation of the ecological sustainability of Finnish mire policies and regulation. One critique of the political ecology approach is encapsulated in the question, ‘Where is the ecology in political ecology?’ (Walker 2005). This article identifies the ecology of mires as an object to be positioned and framed in the interface of mire politics, law and economics. Yet, it has also been asked, ‘Where is the political in political ecology?’ (Paulson *et al.* 2003). The problems inherent in making *a priori* assumptions about approaching an area on a given scale are clearly linked to this (Rangan & Kull 2009). Brown &

Purcell (2005) show how political ecology analyses often regard decision-making at local level as being superior but such analyses rarely carry out careful and critical evaluations of the actual sources of legitimacy or sustainability. Brown & Purcell (2005) call this ‘a local trap’ and argue also that there is nothing inherent in the notion of scale, meaning that no specific scale is automatically better or worse for policy arrangements. Instead, they argue, analysis should focus, for instance, on the political strategies and intentions of the actors involved.

Brown & Purcell (2005) interestingly call for stronger theorising of the notion of scale in order to avoid the ‘local trap’. ‘Politics of scale’ points to the politics involved in creating scales and the political implications of the scales created (Bulkeley 2005, Turnhout & Boonman-Person 2011). Defining a scale thus necessarily involves demarcation and definition of boundaries. Framing policy problems as local, regional, national, international or transboundary, or as short-term or long-term problems, involves strategic upscaling and downscaling and can be considered a political act. The outcomes of such processes are crucial because scales, once produced, have real consequences.

In this article the analysis moves between scales but also between parallel institutional arrangements – in other words between policies and regulation. In order to make the political ecology of mires visible at various scales and within institutional arrangements, we use frame analysis as a methodological tool when analysing the empirical data. The concept of framing is of special assistance when it comes to analysing the *political* in political ecology. According to Entman (1993), the essence of framing is “to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation”. Schön & Rein (1994) state that individuals and institutions draw on frames “in order to give meaning, sense, and normative direction to their thinking and action in policy matters”. Framing actions are not always carried out in a self-aware and intentional manner and, therefore, analysing the processes of framing can be revealing (van Hulst & Yanow 2016).

We will apply the approach devised by van Hulst & Yanow (2016), who identify three functions for framing in politics. First, the *substance* of policy issues can be framed (i.e. what is the issue about); second, framing is also used to frame a policy-relevant actor’s *identities and relationships* in positioning itself and others; and third, *policy processes* are framed in order to contextualise the

issue and select relevant stakeholders. Van Hulst & Yanow (2016) also identify three different ways in which these framings operate: *sense-making*, *naming* (including categorising and selecting), and *storytelling*. Performances of sense-making, naming and storytelling can be used for all the three objectives of framing. One can make sense, for example, of what is going on, who is on whose side in the arguments, and what the process looks like. The issues under debate can be named, as can the actors and processes. Finally, narratives can be developed in relation to the issue, the actors and the processes in an attempt to frame the situation.

Our main goal is to reveal the framing of mire ecologies within the context of legislative and policy development. Since we are interested in knowing how ecology (in the sense of peatland ecosystems) is positioned in relation to other ‘substance entities’, we need to reveal the framing of other elements besides ecology. For example, the framing of actors and stakeholders or political interests tell us a lot about the positioning of ecology.

Situating framings in their institutional backgrounds is important since framing never takes place in a vacuum but is constrained and facilitated through the context in which it takes place (Benford & Snow 2000, Uggla *et al.* 2016). Our analysis reveals the differences that exist when mires are framed either through legal norms or through political tools. Before going into the analysis, we describe the data and methods used.

## DATA AND METHODS

Our analysis starts with a case study carried out in Eastern Finland focusing on a lengthy conflict to protect a mire area called Viurusuo. The Viurusuo mire is a raised bog of 360 hectares located in North Karelia, Eastern Finland. A peat mining company, VAPO Ltd, applied for an environmental permit for peat extraction at Viurusuo in 1995, which resulted in a prolonged environmental licensing procedure and a legal battle that involved several sets of court proceedings stretching from 1995 to 2013. The most active stakeholders in the legal battle were regional authorities, nature conservation agencies and local people. The Viurusuo conflict is a strong and representative case for analysis in the Finnish context for several reasons:

(1) The conflict lasted almost twenty years and thus it is possible to correlate the framings developed with changes that have taken place in national regulation and policies as well as the influence of inter-governmental obligations.

(2) The Viurusuo mire is rich in biodiversity values and thus the case involved argumentation over various aspects of mire ecology. The case undoubtedly also involves most relevant national legislative provisions in the context of mires and peat extraction.

(3) Viurusuo has ultimately been protected and saved from peat extraction but not through a court decision. The fact that the Finnish government bought Viurusuo from a peat mining company is an indication both of Viurusuo’s exceptional qualities and of the fact that if some values of public interest are not protected through legal norms, then political decisions and perhaps new legal provisions are also needed. This offers ample justification to examine the Viurusuo case from the perspective of the nexus of policy and law.

In Finland, judicial oversight of administrative acts is the task of the administrative courts and the Supreme Administrative Court. On appeal, the administrative court reviews the legality of the decision of the authority. If the appellant does not accept the decision of the administrative court, it is in most cases possible to appeal to the Supreme Administrative Court. Since 2000 the Finnish Environmental Protection Act (86/2000 and the new Act 527/2014) has guaranteed to a broad range of actors the right to appeal to the administrative courts.

In Finland, all appeals relating to the Environmental Protection Act and the Water Act (587/2011) are handled by the Vaasa Administrative Court. Three rulings were given by the Vaasa Administrative Court in respect of the Viurusuo case and two further rulings were given by the Supreme Administrative Court. The research data drawn from the Viurusuo campaign comprises in sum the content of these rulings. We go through the case step by step as it was handled in the courts and analyse it by reference to the legal norms referred to and/or applied, as well as to the relevant legal literature.

In addition to the Viurusuo data and the legal norms behind it we also analyse the most important policy documents relating to mire conservation in Finland. These are the *Proposal for a national strategy for sustainable and responsible use and conservation of mires and peatland* published in 2011 (referred to hereafter as ‘the National Strategy’); *The government decision in principle for the sustainable and responsible use and conservation of mires and peatlands* published in 2012 (referred to hereafter as ‘the Decision in Principle’); and *The proposal of the mire conservation group for supplemental mire conservation* published in 2015 (referred to hereafter as ‘the Proposal’).

The data have been analysed with the help of van Hulst & Yanow's (2016) ideas on how framing operates. We have explored the way in which the ecology of mires has been 'named' and categorised (in terms of what is included as well as what is excluded), the way in which the positioning of mire ecology has been justified by sense-making, and the role of mire ecology in the storytelling concerning mire conservation. We also pay special attention to the institutional setting surrounding the framing situations and, in the spirit of van Hulst & Yanow (2016), discuss what has ultimately been identified as the substance (legally or politically), as well as the identity of those identified as relevant actors and how this has affected the framing of processes.

## FRAMING THE ECOLOGY OF MIRES THROUGH LEGAL PROVISIONS

### Key legal provisions relating to mires and peat extraction in Finland

Finland has never had a separate act concerning peat, mires or peat extraction. On occasion, demands for such regulation have been introduced; for example, during the 1970s when the Land Extraction Act (555/1981) was under preparation and peat extraction was left out of its scope of application. The reasons for excluding peat extraction from the scope of this regulation were not stated clearly. One argument was that other acts (e.g. the Water Act and the Nature Conservation Act 1096/1996), together with the mire protection programmes, were sufficient to protect the nature values of mires. Attempts made later, in the 1980s and 1990s, to prepare an act covering peat extraction proved unsuccessful (Korvela 2009).

In general, the regulation of peat extraction is under constraining pressure from three drivers: attempts to limit climate change, the aim of protecting natural values through land use planning, and the restriction of environmental damage to mires caused by the industrial use of peat (Belinskij 2015). In Finland each of these objectives is governed by its own regulatory framework and involves policies that operate at different political and geographical scales. Earlier analysis of the Viurusuo conflict showed that the extensive discussion around the various ecosystem services offered by Viurusuo could ultimately be narrowed down to two legally important questions. The first question concerned two ponds in the middle of the mire, while the other question concerned the moor frog (*Rana arvalis*). In terms of the general themes behind mire conservation identified by Belinskij (2015), both of these topics fall within the category of protecting nature values.

The other two categories - climate change and restricting environmental impacts - were also discussed during the campaign, but the Viurusuo case was not significant in terms of climate change or environmental damage. On this point, we illustrate how and why nature values were regarded as important in this case while, perhaps surprisingly, the other two themes were not.

### Five rounds of appeal

In the first phase, in the early 2000s, the Vaasa Administrative Court ruled that the permit granted to VAPO Ltd was defective because the regional authority, namely the Water Court, had not taken into account all the applicable legislation when granting it. The Water Court had only ruled that VAPO Ltd's project did not cause environmental damage to water areas through draining or dust effects. The Vaasa Administrative Court noted that VAPO Ltd planned to drain two ponds located in Viurusuo and thus the project needed to be evaluated against the provision in the Water Act and its regulations concerning the protection of small aquatic habitats, including ponds, in their natural state. The permit was revoked and the case was referred back to the authority.

In the second phase, the case was again before the Vaasa Administrative Court in 2005 pursuant to the appeal that VAPO Ltd made after the regional authority refused its renewed permit application. The authority had refused to grant the permit for two main reasons. First, the authority concluded that Viurusuo was so rich in nature values that peat extraction would contravene the prohibition on causing deterioration in *special natural conditions* under the Environmental Protection Act (86/2000). The government bill on which the act was based specifically mentioned water areas in their natural state as an example of a type of area that had special natural conditions (Government bill 1999). Second, the authority made reference to the Water Act and stated that draining the ponds would violate its provisions on the protection of small aquatic habitats in their natural state. During the permit procedure, the Nature Conservation Act was also discussed but VAPO Ltd argued that Viurusuo did not contain any of the natural habitats or species protected under it. In its ruling, the Vaasa Administrative Court stated that the first point to be decided was whether draining the ponds violated the prohibition on endangering them set out in the Water Act. If not, it was only then that the question of whether deterioration would be caused to special natural conditions, in contravention of the Environmental Protection Act, needed to be addressed. The ruling stated that VAPO Ltd's project would violate the Water Act's provisions on

protecting small aquatic habitats.

Vapo Ltd appealed to the Supreme Administrative Court. In this third phase, which took place in 2006, the Supreme Administrative Court interpreted the provision on the protection of special natural conditions laid down in the Environmental Protection Act narrowly. The court stated that such protection should be evaluated only on the basis of the pollution caused by a project. Since, in the Viurusuo case, the deterioration of special natural conditions would be caused by peat extraction and not by pollution, this particular provision did not apply. This interpretation stemmed from the scope of application of the Environmental Protection Act, which refers to pollution. Pollution is defined as an emission or deposit of a substance, energy, noise, vibration, radiation, light, heat or odour caused by human activity in the environment. Therefore, instead of the provisions of the Environmental Protection Act applying, the case hinged on whether the project violated the Water Act's provisions. The Supreme Administrative Court decided that since the Vaasa Administrative Court and the approving authority had interpreted the geographical scope of the protection of small aquatic habitats in a different manner, the case had to be returned to the authority for a new assessment. To guide this new assessment, the Supreme Administrative Court discussed geographical scales, concluding that while Viurusuo is about 300 hectares in size, the evaluation had to be restricted to the area where draining of the ponds would have actual effects. The Water Act did not require conservation of the whole of the mire area.

Having reconsidered the application, the approving authority awarded VAPO Ltd a permit subject to certain restrictions. The ponds and their surrounding area (47.3 hectares) needed to be excluded from the project. The various stakeholders were dissatisfied with the outcome and submitted several appeals, based on various new arguments, to the Vaasa Administrative Court. The new questions raised were as follows:

- (1) Does the project contravene the general objective of the Environmental Protection Act, to combat climate change?
- (2) Does the project contravene the provisions on landscape conservation under the Nature Conservation Act and Land Use and Building Act (132/1999)?
- (3) Does the permit contain all the provisions necessary for preventing pollution with respect to impacts upon nearby households or lakes (e.g. Sysmäjärvi lake, which is part of the Natura 2000 conservation network)?

The Vaasa Administrative Court's ruling, given in 2009, answered the first two questions in the negative. Its reasoning in relation to the landscape conservation argument was that Viurusuo was reserved for peat extraction in the regional plan and that, therefore, the landscape argument was not valid. As for the climate change argument, the court stated that this kind of general objective was not a matter to be covered in individual permit applications; thus highlighting the challenges in tackling small but cumulative and/or multiple pollution inputs. The court's response to the third point was to place further restrictions on the project by increasing the size of the protected area to 60 hectares both around the ponds and extending to households adjacent to Viurusuo. The objective was to minimise the negative effects of dust, noise and drainage. None of the stakeholders felt satisfied with this decision and, accordingly, they appealed to the Supreme Administrative Court.

In this fifth round of appeals, many of the arguments described above were repeated but a new and important one was also introduced. Up to that point, the Nature Conservation Act had not formed a central part of the legal argumentation employed, but at this juncture signs indicating the presence of moor frogs had been discovered. The moor frog is listed under Annex IV of Council Directive 92/43/EEC (the EU 'Habitats Directive'), which lists those species that require strict protection. The Directive prohibits the deterioration or destruction of the breeding sites or resting places of these species (Article 12(1)(d)). In its decision, in 2011, the Supreme Administrative Court declared that the project might have negative effects for the moor frog and that a new evaluation was needed in this regard. Therefore, the Supreme Administrative Court overruled the earlier decisions and returned the case to the approving authority.

### **Mismatch between the mire ecology of Viurusuo and regulatory tools**

The story of the Viurusuo case could have continued. However, it came to a conclusion when VAPO Ltd withdrew its permit application and the Finnish government bought Viurusuo in 2012. The reasons for the purchase were explained in a joint news release: (1) the project was against the public interest; (2) it put biodiversity at risk; (3) it would destroy habitats; (4) pristine nature would be destroyed; (5) Viurusuo was home to endangered species; (6) Viurusuo contained endangered habitats; (7) the project would destroy the landscape; (8) protecting Viurusuo formed part of the general conservation objectives for mires; and (9) Viurusuo provided an ensemble of nature values (Ministry of the Environment 2012). Framed in this way, Viurusuo

was held to be more than just a land area reserved for peat extraction with two small but valuable ponds and a moor frog population.

As a legal battle, the Viirusuo case illustrates clearly the ways in which laws operate and can be utilised as tools for nature conservation and the protection of ecological values. Legal provisions offer a powerful means of framing and setting boundaries. They do all the things van Hulst & Yanow (2016) indicate that framing is capable of doing. Laws frame the substance of the discussion, they categorise actors and their roles (by declaring their arguments either valid or invalid and thus identifying actors as stakeholders or otherwise) and open or close (dialogic or fact-finding) processes. All of this is performed through sense-making, naming and storytelling. Viirusuo was named and categorised as an area reserved for peat extraction (through land use planning tools). Therefore, Viirusuo had already been ‘landscaped’ and could not be ‘re-landscaped’ into something else. Its landscape values were thus selected through a political naming process rather than being based on the ecological values of the mire. All the provisions contained in the Environmental Protection Act were subordinated to pollution control. Hence, if no pollution existed, a permit to operate would be granted. These provisions were used to select and categorise stakeholders and geographical scales. Only those actors and regions affected by pollution were party to the case. Korvela (2009) has posed the question of whether greenhouse gases released during peat extraction could be identified as pollution under the Environmental Protection Act but goes on to note that this kind of approach does not fit well with the traditions of pollution regulation. No single source of greenhouse gases in itself causes climate change and it is impossible to pinpoint cause and effect relationships because the effects are not local. Indeed, the legal norms of the Finnish legal system operate strongly on the local scale. Making sense of Viirusuo as a case concerning global climate change mitigation was not something that could draw support either from legal norms or from the court’s interpretation. Thus, the processes of discussing or analysing Viirusuo from this perspective were closed and consequently the climate was not identified as a legally-recognised ‘stakeholder’. Exceptional nature or use values of public interest would be needed in order for Viirusuo to be regarded as important at a regional or national level. The presence of strong local interests does not suffice for a protection decision. However, certain aquatic habitats, such as ponds, can cause cases to be elevated from the local to the

regional or national scale, and evidence indicating the presence of a single animal species, when endangered, can result in such cases being raised to the status of Community Interest within the EU.

Legal norms offer strict rules for decision making and if an issue does not have a rule, it is not part of the decision making process. Jasanoff (2005) suggests that legal institutions provide the most influential forms of boundary work in contemporary societies. As Valve & Kauppila (2008) state, “[t]he law creates order in a messy world. The law segregates real world processes and interactions into regulatory categories and sub-categories. Within these categories the law must further differentiate between relevant and irrelevant legal concerns and justifications.” In respect of the subject-matter at hand, for example, if a species is not listed or otherwise named as a protected species, it has no value to which legal discretion can be applied. If a problem was not caused by pollution it cannot be prohibited on the grounds of the Finnish Environmental Protection Act. The Finnish Nature Conservation Act is very selective and restrictive in the approach it takes to the identification of ecologies or nature values to be conserved, as it identifies and lists isolated areas, species or habitats. The Environmental Protection Act offers a slightly more holistic and interactive approach to ecology. However, since (until 2014) the scope of its evaluation had been limited to the effects of pollution, it possessed very limited ability to take into account human activities or socio-ecological relationships in connection with peat extraction. The legal provisions applicable to the conservation of mire ecologies have been weak in terms of recognising and handling the holistic and interdependent character of ecology. This has been further amplified by the fact that the relevant legal provisions operate mostly at local scale. Even now, national regulations do not tie Finnish mires into the global ecological system.

The effectiveness of multiscale legal evaluation of the ecological values of a mire can also be weakened because of politics. In the Viirusuo case it was obvious that the mire area held natural values of a kind that would qualify it for inclusion in the Natura 2000 network, but when Natura 2000 was being planned (in the 1990s) the Finnish government decided not to include areas reserved for peat extraction within the Natura 2000 network. Viirusuo was subject to such a reservation and, as a result, Viirusuo and other similar mires fell outwith the scope of the Nature Conservation Act’s provisions on protected areas. Because of this decision Viirusuo

does not have the legal status of a nature conservation area and, therefore, the case cannot be narrated or governed as a story about a conservation area.

However, after the Viurusuo campaign was over, one new legal provision that had the potential to affect the ways in which mires can be framed in the context of the peat industry came into force. This provision is Section 13 of the new Environmental Protection Act (527/2014), which states that peat extraction must be prohibited if it will damage nationally or regionally significant natural values. This Section was drafted partly to support the national-level planning discussed below.

Section 13 provides a new perspective on law. Its aim is to protect significant natural values of mire areas, whereas earlier provisions of the Environmental Protection Act focused solely on the prevention of pollution originating from mire areas affecting the surrounding environment (Government bill 2013). Previously, peat extraction could be limited only if it affected species or areas protected by the Nature Conservation Act or small aquatic habitats referred to in the Water Act. Nevertheless, Section 13 does not constrain the climate impacts of peat extraction as such, nor does it prevent agricultural or forestry uses of mires.

Furthermore, Section 13 lays down certain limitations concerning its scope of application. First, it does not apply if the area in question is reserved for peat extraction in a legally binding land-use plan, provided that its natural values were taken into consideration in preparing the plan. Second, peat extraction can be allowed if the natural state of the mire has clearly changed due to ditch drainage.

## FRAMING THE ECOLOGY OF MIRES IN NATIONAL LEVEL POLICY DOCUMENTS

### National strategy as a compromise

In 2011, the National Strategy was published by the Ministry of Agriculture and Forestry (Ministry of Agriculture and Forestry 2011). It was the first Finnish national strategy paper to apply the ecosystem services approach. The National Strategy recognised five categories of ecosystem service although the original Millennium Ecosystem Assessment (2005) mentioned only four categories. The difference between the two was that in the Finnish National Strategy biodiversity was not framed as a background condition for ecosystem services but was instead presented as one service category among others (see also Salomaa *et al.* 2018). Furthermore, the Millennium Ecosystem Assessment also positioned supporting services as a category

behind other more visible and tangible services whereas the Finnish National Strategy equated supporting services with all the other categories. The Millennium Ecosystem Assessment attempted to communicate the fact that without sufficient biodiversity or healthy supporting services, no cultural, provisioning or regulating services would be available. The Finnish approach instead seemed to suggest that the relationship between these categories was a matter of choice. This way of framing the role of biodiversity and supporting services did not go unnoticed (see Salomaa *et al.* 2018). A member of the working group gave a dissenting opinion on the matter (Lindholm 2011). The National Strategy itself was inherently conflictual. On the one hand it stated that biodiversity conservation is a way of using nature: “*The strategy covers all uses of peatlands: agriculture, forestry, peat extraction, biodiversity protection, nature products and hunting, reindeer herding and recreation and education*” (Ministry of Agriculture and Forestry 2011). On the other hand it declared that biodiversity is a “*precondition to human life and a foundation for any services*” (Ministry of Agriculture and Forestry 2011).

In addition to sustainability, biodiversity and conservation goals, the National Strategy stated that the use of peatlands as agricultural land and for peat extraction was to be guaranteed. The arguments supporting peat extraction were given as: ‘securing the availability of domestic fuel, supporting the national security of supply and promoting competitiveness of domestic fuel’ (see also Albrecht 2015). It introduced the idea that peat extraction should occur only in mires that have been drained or whose natural state has otherwise been altered (Viurusuo is not one of these). This approach had already been suggested in 2009 in the Finnish Future Account for Climate and Energy Policy (Valtioneuvoston kanslia 2009). However, the National Strategy indicated that this policy should apply only in respect of new areas acquired for peat extraction. Mire areas already assigned to the peat industry would not be protected retrospectively (Viurusuo was subject to a reservation for peat extraction in the regional plan). In the dissenting opinion given in relation to the National Strategy, the critique that was made addressed the fact that ongoing financial support was being given to the peat industry while the development of conservation measures was a matter for the future. Furthermore, according to the dissenting opinion, the criteria for ‘a mire in a natural state’ were too restrictive and would allow peat extraction to be carried out in mire areas where the majority of the mire was in a near-natural state but there had been ditching in some small parts.

### From State to voluntary conservation

The National Strategy was used as a background paper for the Government Decision in Principle for the sustainable and responsible use and conservation of mires and peatlands (Finnish Government 2012). The Decision in Principle is a 19-page soft law document guiding Finnish peatland policy development. It also served to guide the drafting of new legislation, such as Section 13 of the Environmental Protection Act mentioned in the previous section. The Decision in Principle suggests that peat should be extracted only from mire areas that have been drained or otherwise altered from their natural state. This would occur mainly in areas newly allocated for the industrial extraction of peat, as already suggested in the National Strategy. In addition, the Decision in Principle strongly indicated a general need to protect mires in their natural state retrospectively. This was to be ensured by preparing a supplemental mire conservation programme and by securing funding - for instance, to buy mire areas from peat companies and other private landowners - in order to implement it.

The criteria for ‘a mire area in a natural state’ were defined more broadly than in the National Strategy. This alignment changed the direction of Finnish peatland policy towards more sustainable pathways than was previously the case. A natural state scale, comprising Classes 0 to 5, was introduced to allow for ‘re-landscaping’ of the country’s mires. Classes 4 to 5 comprised pristine or near-natural mires that had high natural values, where peatland-altering activities would no longer be permitted. Classes 2 and 3 comprised partly drained mires whose water economy and vegetation had been altered but not entirely or irreversibly. Peat extraction would be allowed in these mires only if, for example, the natural values were lower than average or there were plenty of similar mires in the region *and* the peat extraction project would provide important regional benefits. Most peat extraction would be permitted in Classes 1 and 0. However, the Government bill introducing the new Environmental Protection Act 2014 stated that there was no reason to prohibit peat extraction in mires falling within Classes 0, 1 and 2 (not just 0 and 1) (Government bill 2013, Airaksinen 2015).

The classification of mires and the allocation of peat extraction sites was, according to the Decision in Principle, undertaken in order to: (1) ensure and allow the natural values of mires to be protected; (2) improve the state of mire ecology; (3) enhance the restoration of mires; (4) mitigate water pollution; (5) strengthen the role of land use planning for peatlands; (6) ensure the sustainable use of mires and peatlands; (7) develop regulation; (8) enhance the

knowledge base for climate-aware mire policies; (9) secure domestic food production taking into account climate and energy policies; (10) promote the multiple use of mires (e.g. recreation, tourism); (11) develop mechanisms for land exchange; and (12) improve the knowledge base and information systems for mires and peatlands. The national importance and role of energy derived from peat and the peat industry in general were addressed under the title ‘sustainable use’. The need to reduce peat usage and tighten emission-reduction goals was mentioned.

Enabling the continuation of peat extraction was ensured, for example, by offering suitable areas for production to replace (through land exchange) those that would be protected. Allocation was the main tool for all the targets listed in the Decision in Principle. The Decision in Principle stated that a supplemental mire conservation programme was to be drafted by the end of 2014. Implementation would be carried out by regulatory means, especially through regional land use planning guided by the natural state classification of mires. The scope for application of Section 13 of the Environmental Protection Act thus remained limited in relation to mire areas that were reserved for peat extraction in a land use plan. The establishment of a nature conservation programme, as provided for by the Nature Conservation Act, was also planned.

The Proposal was published in 2015 (Ministry of the Environment 2015b) and was a disappointment to many. Data collection and analysis carried out in respect of Finnish mires in order to allocate them to Classes 0 to 5 was carried out as planned but the implementation of supplemental conservation through establishing a national nature conservation programme was somewhat watered down. In granting the working group an extension, from January to September 2015, the scope of the working group’s aims was altered. Now, on private land, voluntary means for conserving mires were to be examined instead of establishing a statutory nature conservation programme (see Salomaa *et al.* 2018). Immediate action to protect mires was to be taken only in relation to public land, and priority was given to the southern and northern parts of Finland where the need to protect mires was urgent. The reason for these changes was the fact that the Finnish government of the time had cut the state budget for the acquisition of private land for nature conservation and related compensation by more than 50 %.

From the perspective of framing, we would summarise these recent policies as follows. The preparation of the National Strategy involved a variety of stakeholders and the underlying story indicated that including their interests in the decision-

making process was a viable goal. The National Strategy did not involve a sufficiently strong effort to discuss possible or even obvious incompatibilities, nor did it try to position stakeholders in relation to each other or in relation to the ecology of mires. The process was rather open and dialogical but not politically strong from a decision-making perspective. Various elements in the ecosystem services framework were not clearly prioritised (see Salomaa *et al.* 2018).

The sustainability of peat as an energy source was not questioned and the conflict between domestic (peat) energy sufficiency and climate policy targets was not resolved or even outlined. Instead, it was hoped that the climate policy targets would be achieved by improving the techniques and technology used in peat extraction. In much the same - rather obscure - way, the National Energy and Climate Strategy for 2030 is mainly concerned with the fact that peat is more cost-effective than coal and other imported fossil fuels (Ministry of Economic Affairs and Employment 2017). Placing faith in technology is a rather apolitical argument (see Robbins 2012). Therefore, it can be said that the political framing was rather weak (making sense of the situation, naming important elements, creating stories about how to turn the Finnish mire policies into sustainable pathways). The importance of mire ecology was identified and acknowledged but not politically positioned.

The Decision in Principle was politically braver. It clearly framed (and named) the mire policy of Finland as a conservation policy. It also outlined the process and tools needed to implement it. Mire ecosystems, including their potential in terms of climate change mitigation, gained a significant role in steering future decision-making. Acquiring mire areas for conservation purposes from peat companies and other private landowners was clearly stated as a goal. This goal was lost in the subsequent Proposal, which restored the economy as a main actor by securing the freedom of private landowners. Combining this with the reduction of financial support for the acquisition of land positioned the conservation of mire ecologies as less important.

## DISCUSSION

Mires have mainly been framed in two different ways in Finland. First, they are perceived as a Finnish natural resource to be taken and utilised so that national energy sufficiency and economic competitiveness can be strengthened. The second

way of framing mires is to position and name them as a valuable source of biodiversity and an integral element in maintaining global ecosecurity. This framing is based on storytelling about how peat extraction disturbs many ecosystem functions and how these disturbances are extremely slow to fix, assuming they can be fixed at all. This way of framing is especially visible in the context of climate change and it positions Finnish peats in a global scale. Finnish mires are part of the global ecosystem. When viewed in relation to the categorisation of ecosystem services in the Millennium Ecosystem Assessment, mires represent and produce many of the supporting and regulating services. These services are given primary position on purpose, because they support and enable the production of other services. Therefore, based on this framing, Finnish mires are not first and foremost a Finnish national resource to be utilised for economic benefit alone, but they are a component in ensuring healthy ecosystems globally.

Finnish mire policy and law have offered stronger support to the first way of framing than to the second. The economic interests of the peat industry have received strong political and legal support in Finland. These interests seem to be the norm against which conservation needs to be justified, and deviating from the use of peat is viewed as an exception that needs to be reasoned for.

The way in which mires were categorised and named in the National Strategy also accentuates the first form of framing. Furthermore, Finnish legislation concerning the environment and natural resources has for a long period of time resonated with, and thus reinforced, this way of framing natural resources including peat. Environmental permitting procedures mainly deal with - that is to say, regulate - isolated entities or situations, such as protected species or the risk of pollution at a site. A permit must be issued if there is no evidence of the presence of protected species or habitats or no proof of the potential for harm to be caused by pollution. As long as greenhouse gases are not defined as pollution, the operational scope of the provisions of the Environmental Protection Act is rather local. The impacts on the global ecosystem caused by peat extraction have no significance in the context of the existing permitting procedure.

The new Section 13 of the Environmental Protection Act is one tool that can be used to break the trend of supporting extractive use of peat. In cases where the protection of species or the conservation of nature are not at issue (no evidence of endangered species or biotypes) and land use plans do not support such protection, Section 13 may be applied in order

to prevent peat extraction if the mire area is shown to have nationally or regionally significant natural values. However, Section 13 is subject to numerous exceptions and in some cases a land use plan may in any event still allow peat extraction from a mire that has significant natural value. The provisions governing the protection of endangered species are rather strong where the species are ‘named’, i.e. listed in the EU Habitats Directive. International climate policy and law are taken into account mostly at the level of national policy planning, and its integration into those decision-making processes remains incomplete. The National Proposal makes it clear that climate policy is still in the ‘gathering of knowledge’ phase rather than at a stage where political decisions are made on the basis of that knowledge.

Perhaps the biggest shortfall in Finnish mire policy from the perspective of global ecoscurity is that it takes no clear stance on the use of peat for energy production. The National Energy and Climate Strategy clarifies that taxation is used to ensure that the cost effectiveness of peat falls somewhere between that of forest-based products and that of imported fossil fuels. However, it entirely lacks a vision for the role of peat in overall energy production and the reduction of peat use. This lack of clarity is at least partly responsible for the fact that every new strategy, decision, land use plan, piece of legislation and peat extraction permit appears to be the result of a seemingly never-ending battle between peat use and mire protection. Furthermore, peat extraction permits deal mostly with issues at local level. To change this situation, the Finnish Government should state clearly what kind of role peat is to play in the Finnish energy mix both in the short term and in the long term, and align taxation policy to the consequences of those decisions.

To conclude, Finnish legal norms offer security in respect of situations, events and isolated entities at local or national level but give less consideration to the protection of ecosystems on a global scale or on the basis of a holistic approach. On the other hand, where they do regulate, they regulate strongly, whereas policy tends to vacillate and be prone to political and economic power struggles. Since economic interests are strongly embedded in the structures of Finnish mire policy and law, we suggest that improvements in the economic tools - especially taxation - that target these structures should be considered in order to efficiently reduce the climate effects of peat extraction and to integrate climate targets into decision-making.

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