



Peat Extraction Sector Second Round Table

2nd May 2023

MERLIN

Mainstreaming Ecological Restoration
of freshwater-related ecosystems
in a Landscape context:
INnovation, upscaling and transformation



Welcome and housekeeping

- Please use chat panel to ask for support or share information with participants and mute yourself if you are not speaking
- Please tell us if we speak too fast or anything is unclear
- We hope everyone has read the information sheet
- **We will start recording at the end of this slide**
- Participants add name of institution beside your name to help us get to know you



Purpose of today's meeting

- **Deliverable 4.1** -> identified [cooperation points](#)
- **Today:** Strengthening our Community of Practice
- **Sharing ideas** and having deeper understanding about the cooperation for **PE sector's net zero transition**



CET	Agenda Item	Presenter/Moderator
14:00 – 14:20	Welcome and Introductions	Alhassan Ibrahim, Kirsty Blackstock & Jack Rieley
14:20 – 14:30	Overview of MERLIN & Peat Extraction Cooperation Points	Alhassan Ibrahim, Kirsty Blackstock & Fanni Nyiro
14:30 – 14:40	Speed Presentation: Upscaling of peat extraction nature-based solutions – A MERLIN case study, Komppasuo, Finland	Anna-Kaisa Ronkanen
14:40 – 14:50	Speed presentation: After-use solutions at peat extraction sites - experiences of the peat extraction industry in Finland	Päivi Peronius
14:50 – 14:55	Q&A about the cooperation points and role of participants	Alhassan Ibrahim
14:55 – 15:40	First moderated discussion: Restoration beyond site level and policy requirement	Alhassan Ibrahim, Fanni Nyiro, Esther Carmen, Kirsty Blackstock
15:40 – 15:45	Wrap up and feedback	Alhassan Ibrahim, Esther Carmen, Kirsty Blackstock
15:45– 15:50	Comfort Break	All
15:50 – 16:00	Speed presentation: Getting actors in peat extraction value-chain to support nature-based solutions: Bord na Mona's experience in peatland's rehabilitation	Doreen King
16:00 – 16:10	Speed presentation: Status of rewetting large-scale peat extraction areas in Germany	Mr. Bert von Seggern
16:10 – 16:15	Wrap up and feedback	Alhassan Ibrahim, Esther Carmen, Kirsty Blackstock
16:15 – 16:55	Second Moderated Discussion: Financing options and cooperation with other sectors	Alhassan Ibrahim, Fanni Nyiro & Kirsty Blackstock
16:55 – 17:25	Wrap up, feedback and next steps	Kirsty Blackstock

Role of IPS in MERLIN

Jack Rieley

MERLIN/IPS

Meeting with Westland Horticulture
19th April 2023

ROLE OF IPS IN MERLIN - BRIDGE TO PEAT EXTRACTION SECTOR

Jack Rieley
IPS Vice President 2
Principal Scientist

What is MERLIN?

- MERLIN is an EU Horizon 2020 Green Deal Project addressing net zero emissions
- MERLIN has 46 partners from throughout Europe
- MERLIN has an overall budget of around €21 million
- MERLIN runs from 2021 - 2025
- IPS is a partner
- IPS role in MERLIN is to provide a bridge to the peat extraction sector, to assess if they could have a part to play in upscaling wetland restoration to the landscape level

MERLIN facilitates wetland restoration mainstreaming by:

- Demonstrating the most successful European case studies and enabling future restoration approaches based on them
- Identifying mechanisms that allow for upscaling to spread good practice throughout Europe
- Transforming restoration by co-developing and implementing strategies with different sectors for enhanced implementation of Nature-based solutions
- Enhancing restoration efforts and effectiveness by co-developing a range of tools designed for different target audiences contributing to the upscaling

Role of International Peatland Society in MERLIN

- IPS contributes peatland and peat expertise across all five Work Packages
- MERLIN embraces the three pillars of the IPS as expressed in its three Commissions - Economy, Environment and Society
- MERLIN wants to engage with the European peat extraction sector and downstream companies (value chain) to learn what peat extraction is, where it is conducted, peat industry involvement in restoration, and potential for upscaling
- IPS input to MERLIN is mainly in WP4 (transformation) that in Year 1 identified peat industry participants to join a round table meeting
- In Year 2 a Second Peat industry Round Table in May 2023 will consider restoration upscaling and legislation and regulation barriers

Thoughts and questions for peat industry

- Need inventory of peat extraction and downstream companies in Europe
- What is current area of peatland under extraction, where is it and what is proposed in future?
- What area of peatland has peat industry restored?
- What area does it plan to restore over what timescale?
- What barriers are encountered and how could they be overcome?
- What changes / assistance is required?
- How much GHG emissions could be saved?
- Which EU Green Deal objectives will be addressed?
- How could the peat extraction sector benefit from restoring cutover bogs?
- Could peat extraction sector contribute to funding peatland restoration?

What are potential benefits for peat industry?

- Progress towards net zero emissions by 2050
 - Carbon credits for emissions saved by future rewetting cutover peatland
 - Carbon credits for emissions saved from historical rewetting post 1990
 - Changes to legislation and regulations to enable these to be possible
- Barriers
 - Current regulations for licencing and planning
 - Current Government legislation on use of peat
 - ENGO opposition
 - Low public understanding of peatland and peat

Round Table Participants

- International Organisation and MERLIN Partner - International Peatland Society
- Regional Organisations - Growing Media Europe; Canadian Sphagnum Peat Moss Association; Estonia Peat Association; Finnish Energy Association
- Peat Extraction Companies - Grientsveen AG Netherlands/Germany; Moorkultur Ramsloh (Germany); Neova Group (Finland); Bord na Mona (Ireland)
- Peatland and Peat Consultant - Hofer and Pautz GbR (Germany)

MERLIN Forth Catchment Field Visit, 19 April 2023



International Peatland Society

Professor Jack Rieley, IPS Vice President 2, Principal Scientist

IPS Mission

- **Promoting Responsible Management and Wise Use of Peatlands and Peat**
- **Promotion, gathering, exchange and communication of knowledge and experience, by means of events and projects which address key issues, including climate change, biodiversity, the need for responsible use and restoration**
- **To keep connected peat & peatland experts from industry, science, culture and regulatory bodies**
- **To provide guidance & governance at highest convention levels**

Commission & Expert Group Work: Examples

Examples of what Commissions and Expert Groups do:

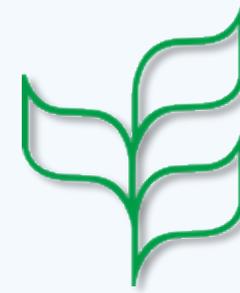
- **Collect data on peat extraction and processing worldwide**
- **Document national/regional policies for peatland use/after-use**
- **Monitor international policy developments by attending COPs and side-events at International Conventions**
- **Keep industry & policy makers informed**
- **Organize symposia & workshops on all peatland related themes**
- **Co-operate with other NGOs, e.g. GME, IMCG, ISHS**

The Impact of Conventions



INTERNATIONAL CONVENTIONS, AGENCIES, AGREEMENTS AND PROGRAMMES

Implications for peat and peatland management



Convention on
Biological Diversity

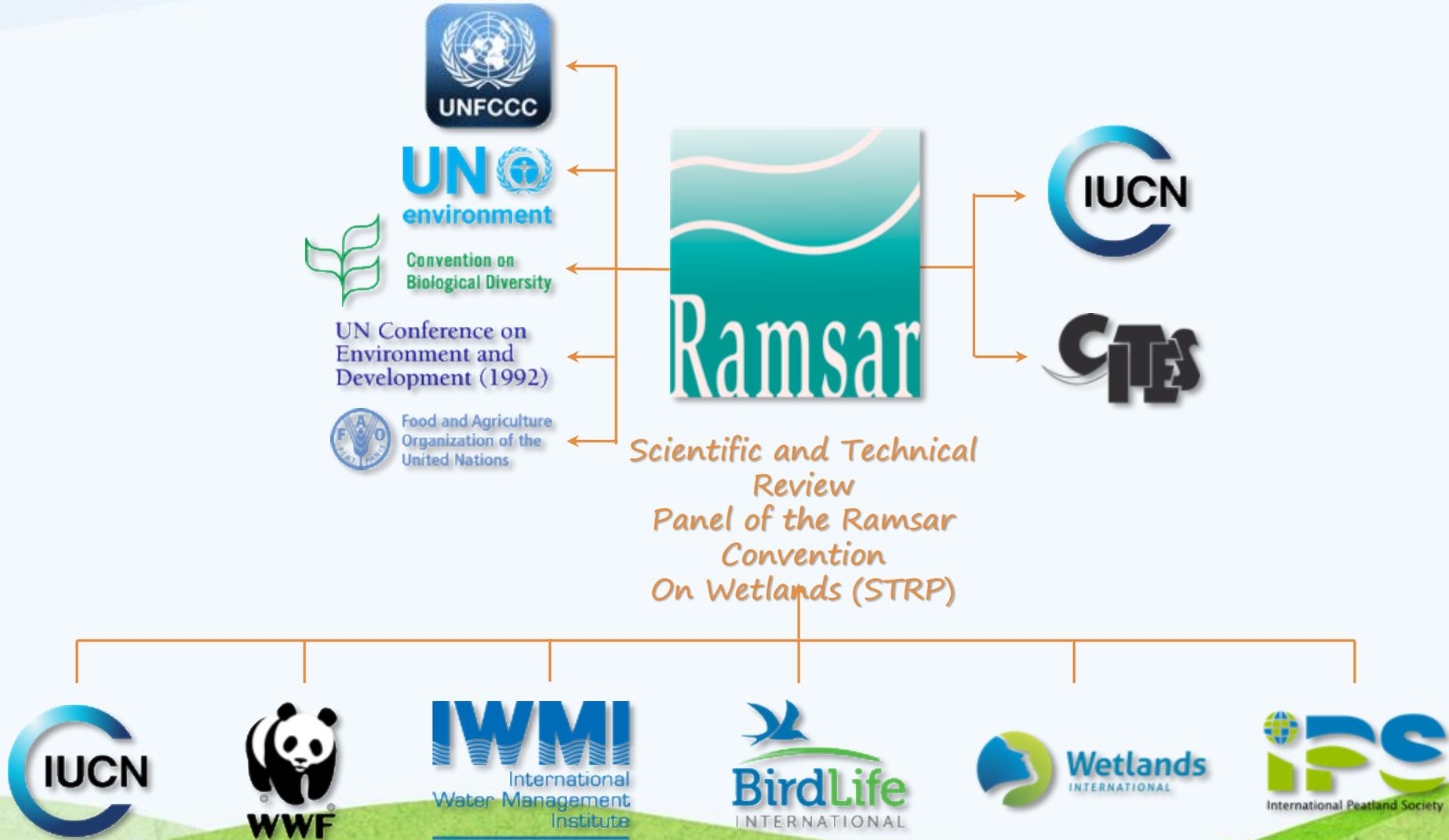


Food and Agriculture
Organization of the
United Nations

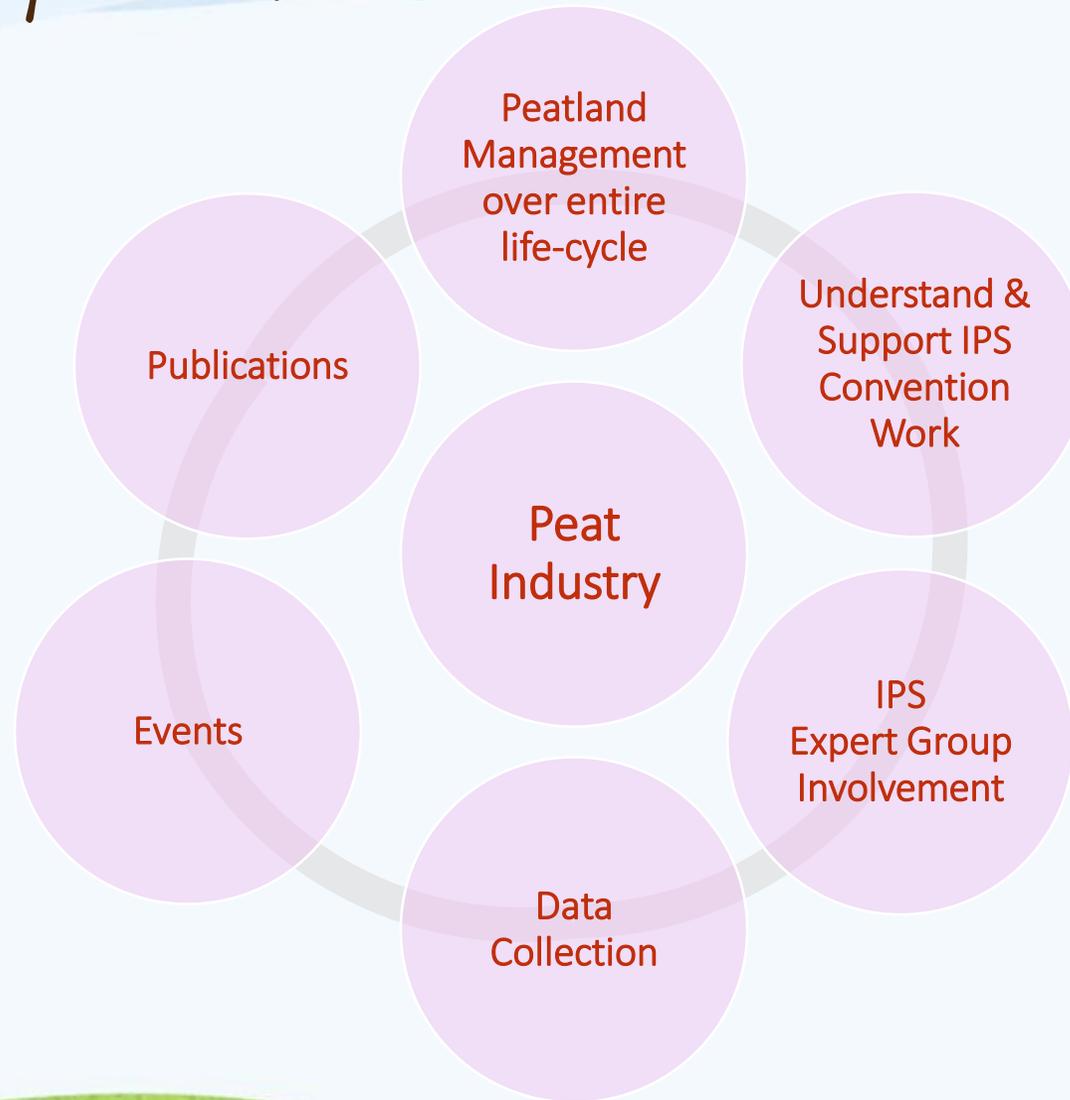


Science for a food secure future

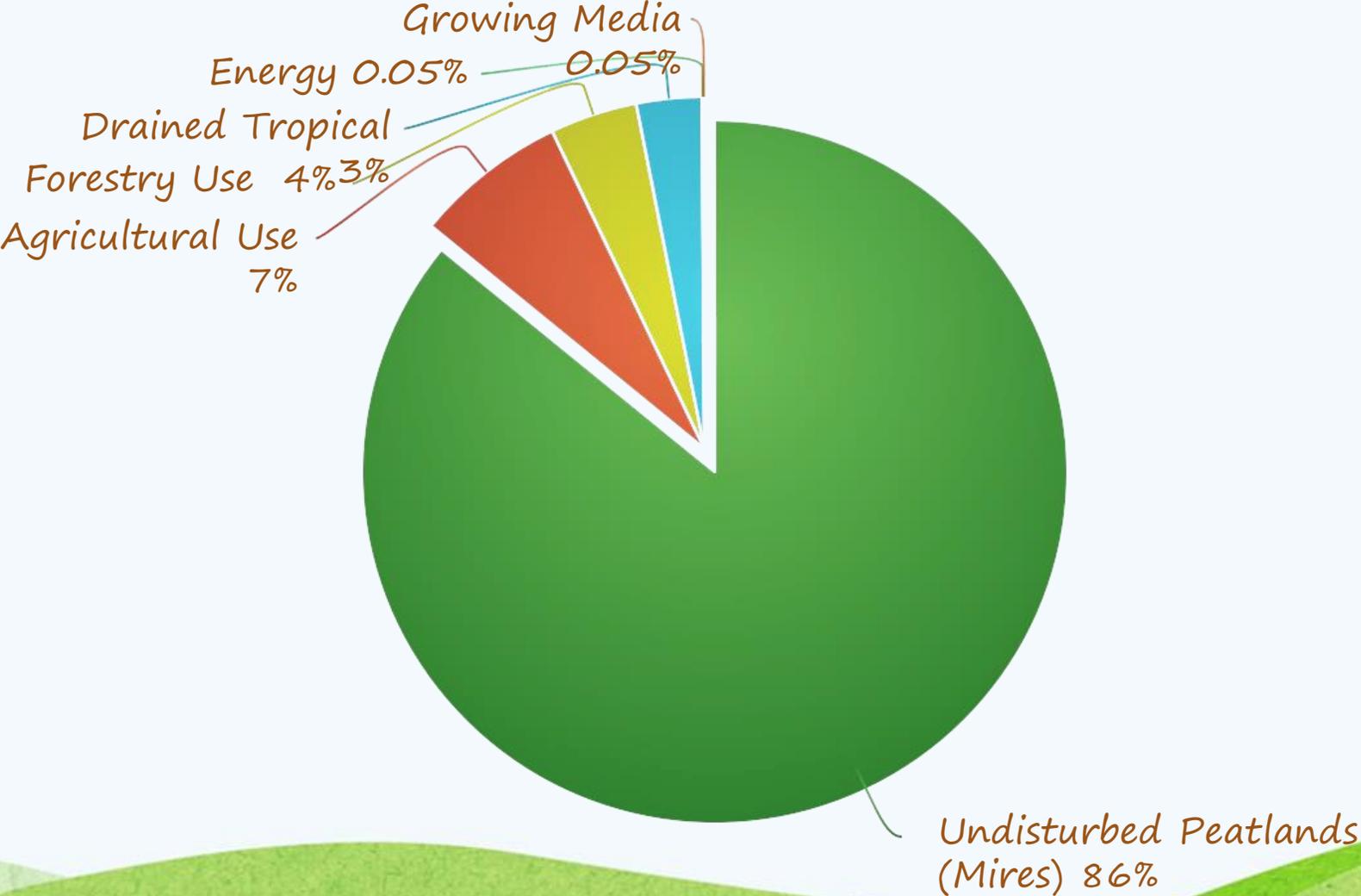
Relationships between UN bodies, non UN bodies, Agencies, Programmes and NGOs that have implications for Peatlands and Peat



What can the peat industry do for itself under the patronage and with the support of IPS:



Peatland Use Worldwide



**Thanks for watching
and listening!**



Introductions

- Your name
- Your organisation(s)
- Why did you attend this meeting?
- What do you hope the H2020 MERLIN project will do for you?

The MERLIN project

Kirsty Blackstock

The MERLIN project

- Need to protect & restore in more places
- Solutions that last - not traditional restoration

<https://project-merlin.eu/>



- **H2020 “Green Deal” call** freshwater restoration to respond to climate and biodiversity emergency whilst leaving no-one behind
- **47 partners** from academia, NGOs, water agencies, municipalities and practitioners
- £21M (**50% into restoration measures**)
- Duration: 2021-2025
- *Ambition:* Contributing to **societal transformation using nature-based solutions**

MERLIN



Sharing & shaping
good-practice in
business



Agriculture



Insurance



Peat
Extraction



Water Supply
& Sanitation



Navigation



Hydropower

Sharing & shaping
good practice in
places



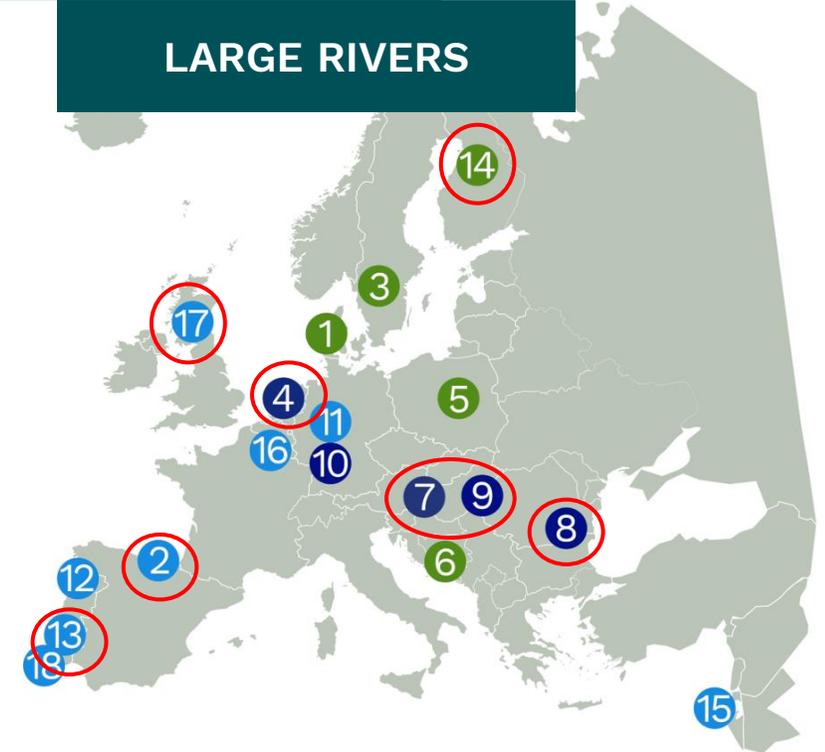
18 restoration
case-studies

PEATLANDS
AND WETLANDS

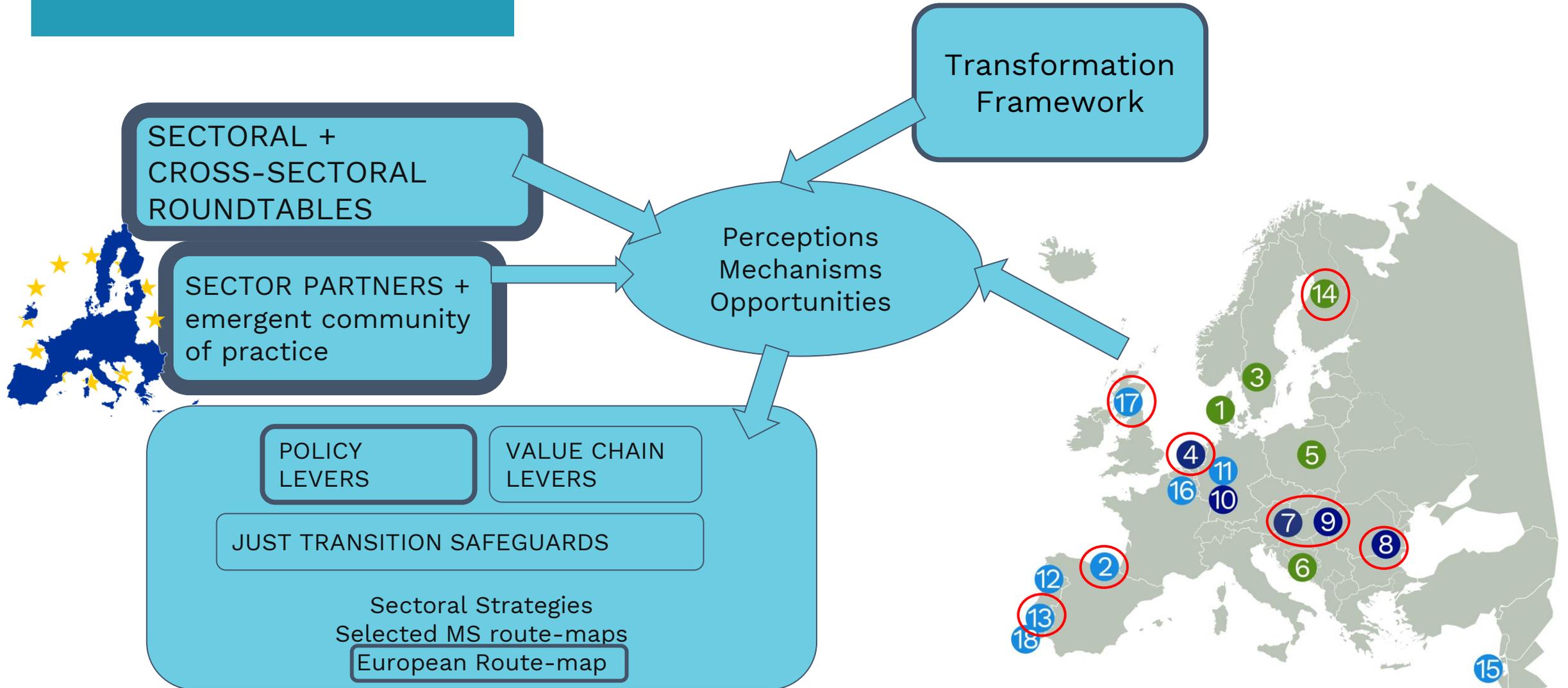


SMALL STREAMS
AND BASINS

LARGE RIVERS



MERLIN's WP4



Progress since last roundtable

→ Linking to policies

→ Exploring cases

→ Indicators, measures, plans, financing and business opportunities

- D4.1 briefing finalised and **submitted**
- Including **Cross-sectoral briefing**
- Peat extraction sector **cooperation points**
- **Desktop reviews** as living documents





Peat Extraction Sector in MERLIN

Alhassan Ibrahim



Why PE sector



- Peatland restoration key to achieve Green Deal goals
- For carbon storage and net zero emissions by 2050
- Restoration is a key requirement of responsible peat production and wise use of peatlands
- PE sector has expertise to support mainstreaming of NbS

Who we engage

- Sector experts, including
 - Individual companies
 - Umbrella organisations
 - Policymakers
 - Academics





- Main focus in MERLIN: rewetting or revegetation of extracted peatlands **not just on-site but at a landscape scale**
- Specific cooperation points have been identified based on sectoral partners' feedback



Targeted cooperation

- the **meaning of net zero** in the peat extraction industry
- the meaning of **upscaling to a larger landscape** and the industry's main barriers in NbS implementation
- how to **incentivise** peat extraction companies to restore extraction sites on a landscape scale with NbS, what their **benefits** are
- **policy changes and cross-sectoral cooperation** needed for upscaling restoration



Speed Presentation 1

Upscaling of peat extraction nature-based solutions - Policy and financing experience from a MERLIN case study, **Komppasuo, Finland**

By Anna-Kaisa Ronkanen, SYKE

Upscaling of peat extraction nature-based solutions – A MERLIN case study, Komppasuo, Finland

2nd RT discussion on peat extraction sector

2.5.2023

Anna-Kaisa Ronkanen
Finnish Environment Institute

MERLIN

Mainstreaming Ecological Restoration
of freshwater-related ecosystems
in a Landscape context:
INnovation, upscaling and transformation



Hard to balance economic, social and environmental needs

- The environmental permit obligations end when production has ceased, and the area has been converted to a new land use. However, the Environmental Protection Act does not apply to the physical alteration or structural pollution of the environment, nor to land use and nature protection, which are regulated separately.
- Landowner decides on land use after peat extraction

MERLIN CS14 demonstrate and test different NbS to peat extraction area

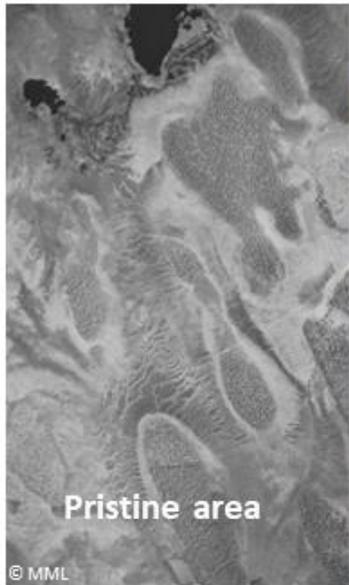
- Greenhouse gas emissions
- Water emissions
- Biodiversity



Picture: Anttila J, Tapio oy

CS14 Komppasuo

- Owner: Neova Oy
- Total extraction area: 240 ha
- Restoration area (2022-2023): 120 ha
- Extracted peat layers: 1.5 m to 3 m from the surface of the bog
- Remaining peat layer: 0.1 m to > 2 m



Pristine area



Peat extraction starts



End of peat extraction



Before restoration



Before restoration



Restoration starts

1961

1987

2021

Summer 2022

Autumn 2022



Wetlands

- Wetland 1: Leading idea is to retain solids and nutrients from runoff
- Wetland 2: Bird friendly area – small construction works to support bird's habitat
- Wetland 3: very shallow wetland

Peatland restoration

- *Sphagnum*, *Eriophorum* etc.
- Different techniques will be tested

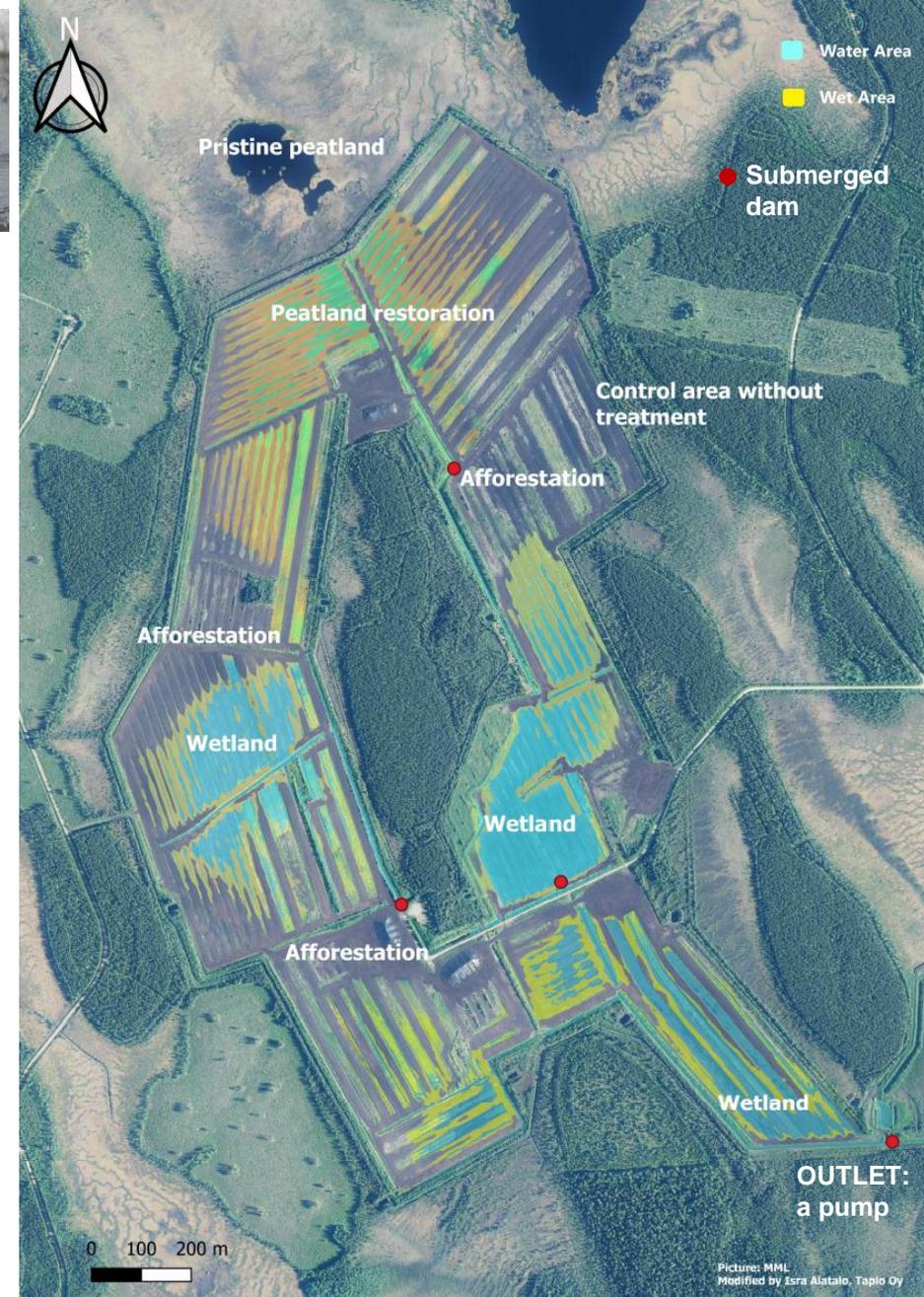
Dry areas area inside the peat production area that aren't blue or yellow in picture

- Afforestation – ash fertilization + (sowing / natural)
- Reindeer husbandry – food plants (also wet areas)

Reference area

- 2 peat strips
- No any treatment

- All structures are designed to be maintenance-free.
- The design is based on high-pulse laser scanning data.



Challenges and opportunities

Sufficient water balance to keep the area wet all year round

- Deep insulation ditches enclosing the area
- High soil embankments preventing surface flow

Remaining peat is thick and hard

- Transfer technique used has left behind a hard and variable thickness of peat layer
- Re-wetting is a risk for high suspended solids load from the area

Different methods of transplanting

- Bog moss require stable water table fluctuation
- Shaping the surface layer to resemble natural bog

Safety and acceptability

- Deep ditches are not visible after re-wetting and pose a danger
- Reindeer husbandry and hunting are key community activities

Careful filling of ditches

Re-direction of runoff from surrounding area

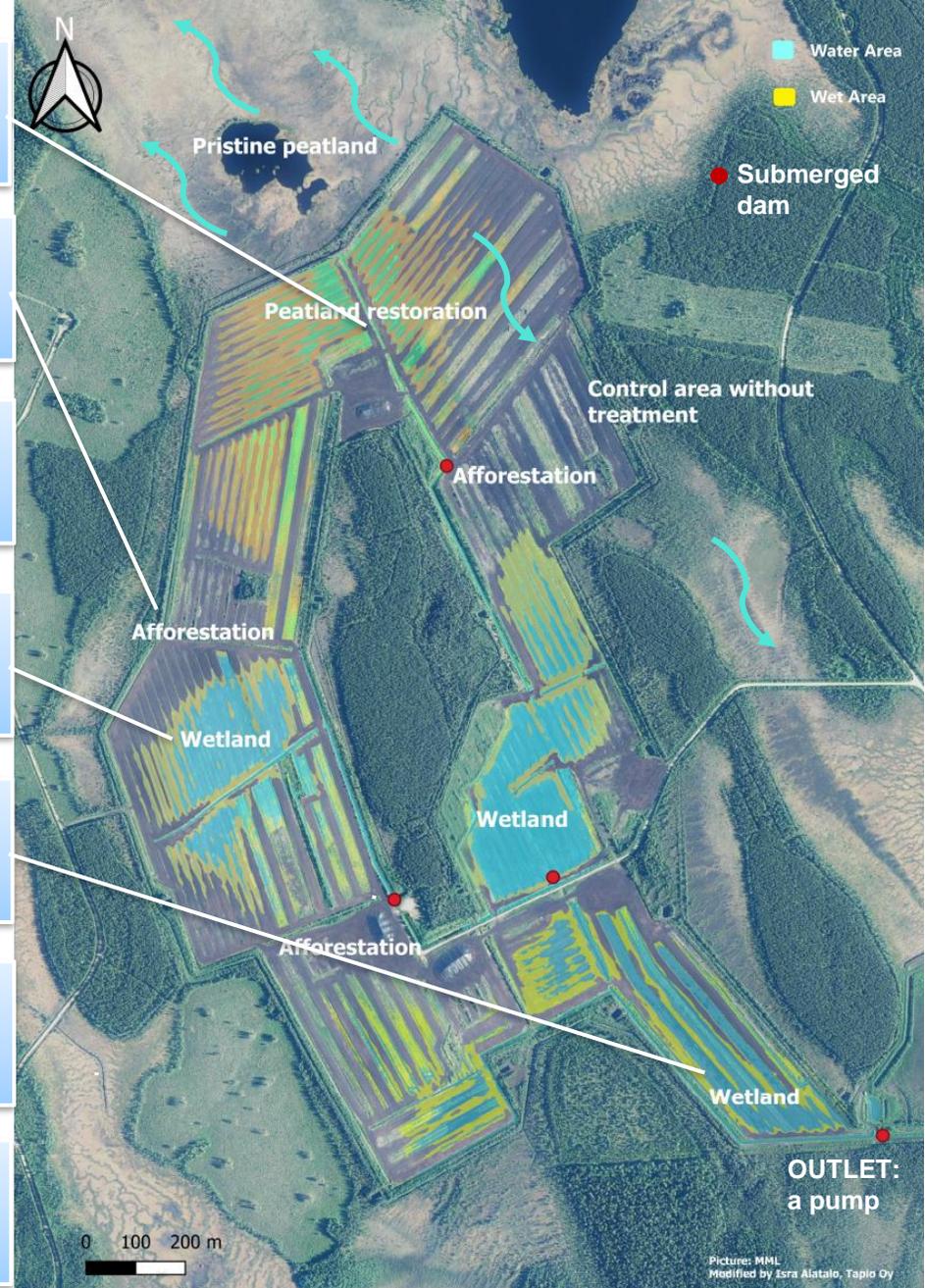
Well designed dams

Revegetation as pretreatment to wetland areas

Lowest wetland work as a treatment step

Safe and nature trail through the area

Goal-oriented implementation plan



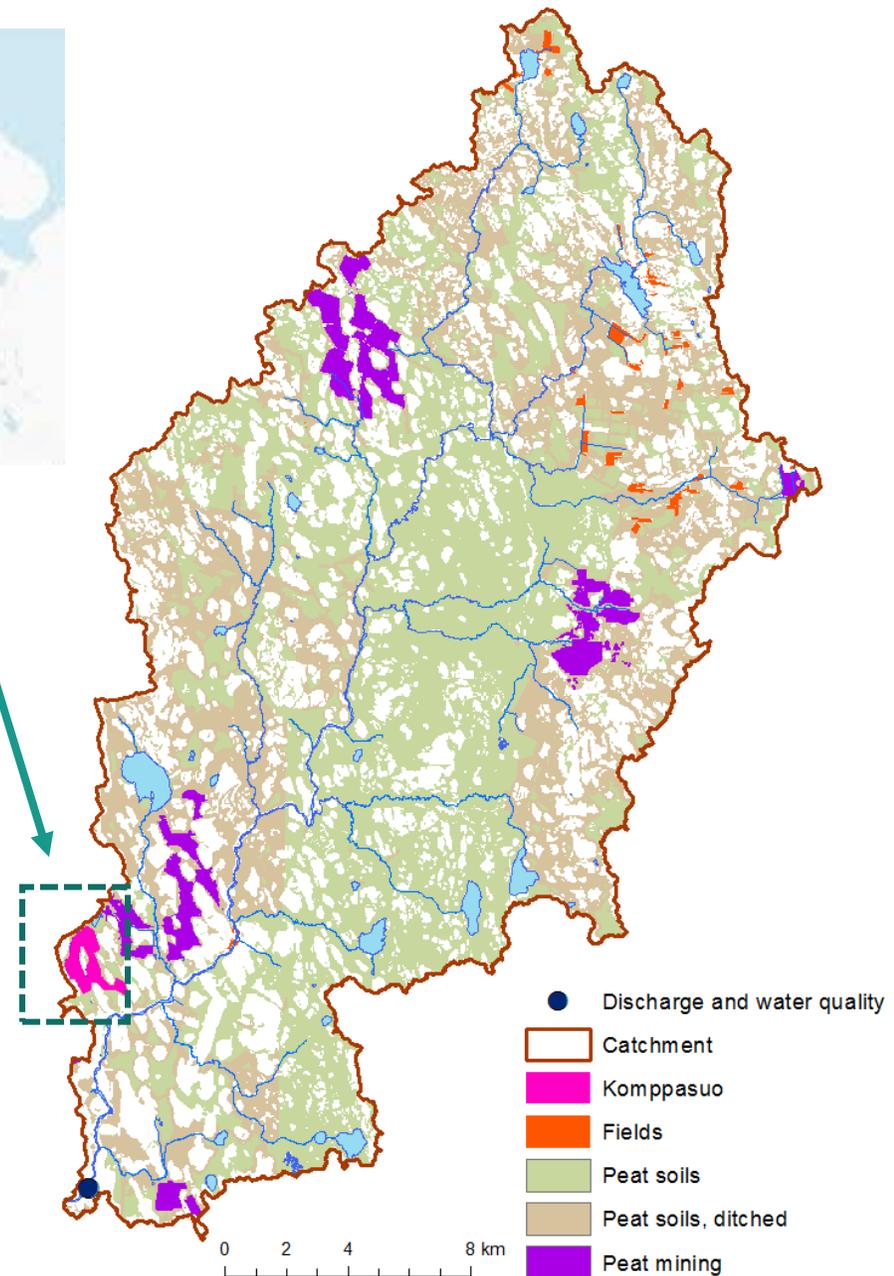
Scaling plan

Monitoring data from different after-use areas

- Changes in greenhouse gas emissions
- Changes in nutrient, carbon and suspended solid loads to the downstream water body
- Changes in biodiversity

Based on hectares/rewetted areas impacts can be scaled up in different scales

- Mapping potential sites in the river basin/region/Finland
- Identifying land-use options
- Applying national scale watershed model to river basin using different type of restoration scenarios.
- What is cumulative effect of restoration measures in the river basin?



Water and climate impacts of multi-functional wetlands in former peat extraction sites (MoVeTu)

- 2 years project, recently funded
- Aim is to assess the water and climate impacts of existing wetlands constructed on former peat extraction areas in Oulujoki-Iijoki River Basin Management Area
- Oldest wetland is 20 years old
- Water emissions from 17-23 wetlands
- Greenhouse gas emissions from 3-5 wetlands

A new project to boost up-scaling



Euroopan unionin
osarahoittama

Uudistuva ja osaava Suomi 2021–2027



Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet

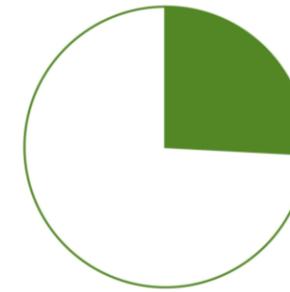
Scaling plan

Just Transition Mechanism

- [Innovation and skills in Finland 2021-2027 Structural funds](#)
- Totally 3 159 milj. € (1935 milj. € from EU)
- 119,4 milj. € for Oulujoki-Iijoki River Basin Management area
- 4,8 mil. € for restoration activities at old peat extraction sites
- Target to restore 2 500 ha

Carbon Market and compensation funds

- 70% directly for restoration
- Now mainly for poorly growing forestry areas
- Lack of evidence/data to include peat extraction sites



Area of Finland 33.8 milj. ha

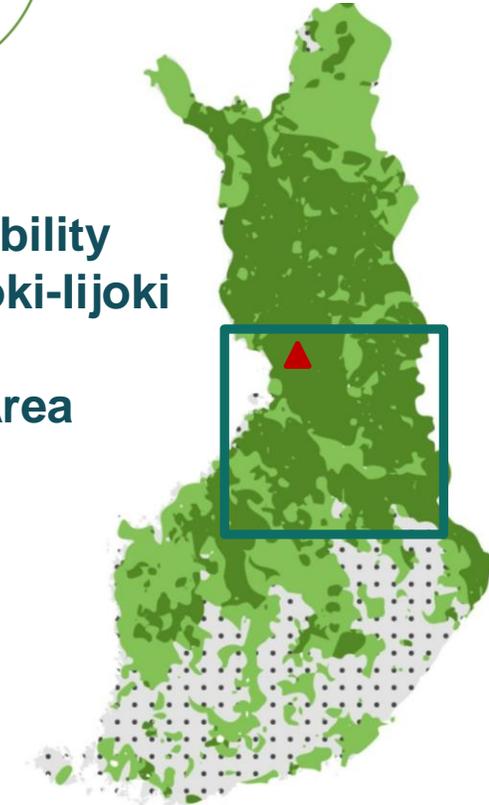
27%

Peatlands
9.2 milj. ha

Regional scalability plan for Oulujoki-Iijoki River Basin Management Area

Plenty of peatlands

Little of peatlands



Lähde: VMI12, VMI13, KHKI (2019), GTK

May 2022



June 2022



September 2022



November 2022



February 2023





Speed Presentation 2

**After-use solutions at peat extraction sites -
experiences of the peat extraction industry
in Finland**

By Päivi Peronius, Neova Group, Finland

AFTER-USE SOLUTIONS AT PEAT EXTRACTION SITES

– EXPERIENCES OF THE PEAT EXTRACTION INDUSTRY IN FINLAND

Merlin round table meeting May 2nd 2023

Päivi Peronius, Head of Peat Assets

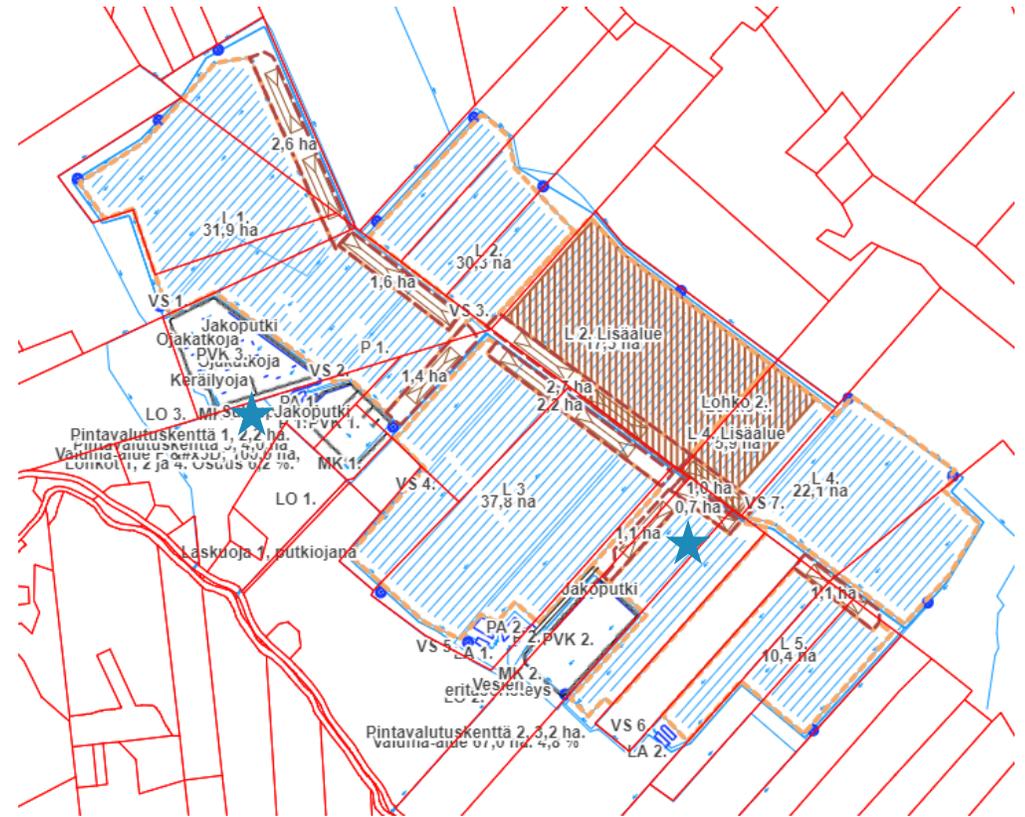
AGENDA

1. Land ownership
2. Environmental permits
3. Factors affecting to the after-use
4. Next land use in areas owned by Neova
5. Neova's biodiversity promises and new after-use opportunities



LAND OWNERSHIP

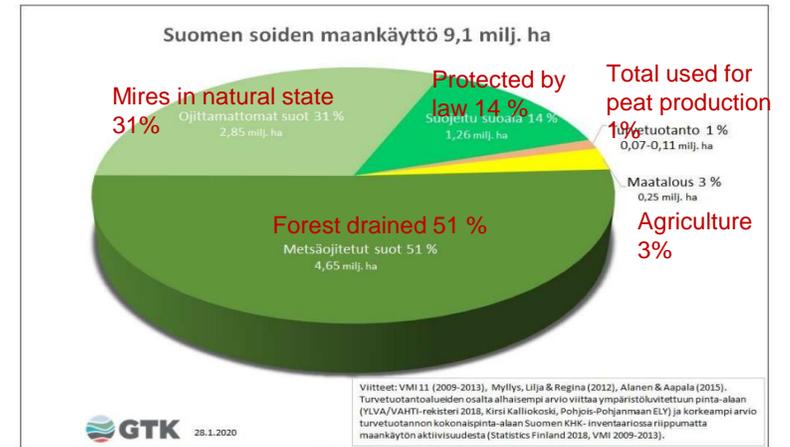
- Land ownership is very fragmented.
- Part of production areas are owned by the producer and part are rented from other landowners.
- In one production area can be numerous landowners.
- When the rented areas are no longer needed for peat production, the areas are handed over to the landowner after the aftercare works has been completed.
- The landowner has the right to make decisions of the next land use.



Land ownership in Nanhiansuo, Huittinen

ENVIRONMENTAL PERMITS

- Peat production is always regulated by an environmental permit.
- Today only peatlands which natural state has been changed by human activity can be used for peat production.
- Peat production is never possible in areas protected by law.
- Permit covers preparation, production and aftercare phases.
 - At the aftercare phase peat stores are emptied, the area is cleaned, all machines and unnecessary structures are removed.
 - The environmental monitoring (e.g. water samples) continues during the aftercare period.
- In Finland, **environmental permit do not specify the form of after-use.** It's always landowners right to make the decision of the next land-use.
- The next land-use form is chosen and created based on the national legislation.



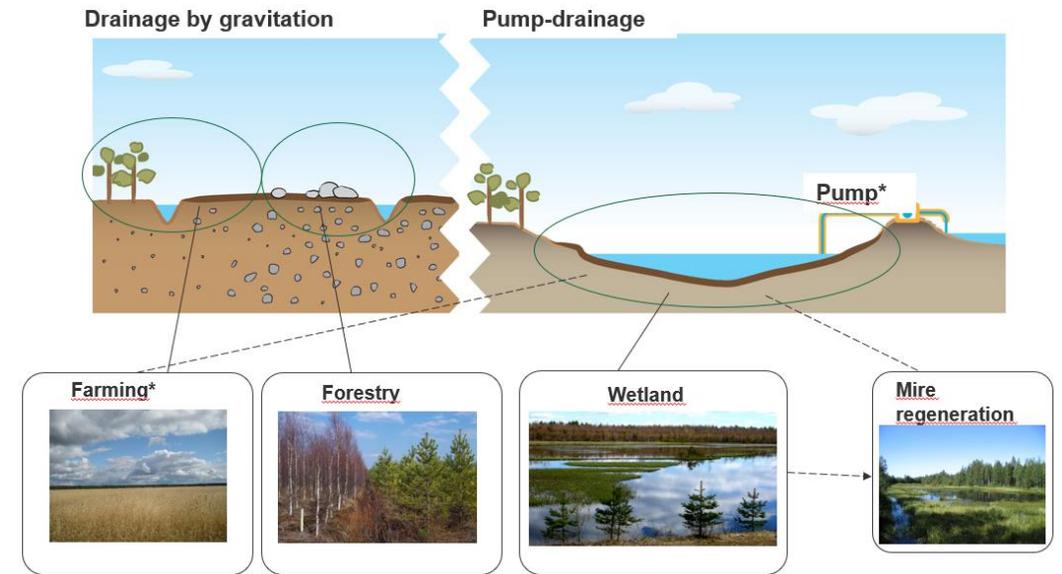
Kuva 2 Turvemaiden käyttö Suomessa (GTK, 2020)

Hirvineva, Liminka



FACTORS AFFECTING TO THE AFTER-USE

- Land ownership must always be taken into account in the starting points for the next land use planning.
- The topography, hydrology, soil (or heavily rocky area) of the area influence strongly to the form of the next land-use.
- When the production area has been dependent of pump drying, at least part of the area may end up as a wetland.
- All areas are unique, in one production area are usually several forms of after-use.
- The areas return to a carbon-accumulating ecosystem as the forest starts to grow or new peat begins to form as a result of restoration.



Multiple land use forms in former Pelsonsuo (Vaala 2017) peat production area



NEXT LAND-USE IN AREAS OWNED BY NEOVA

- Afforestation has been most common after-use form - on a larger scale it's the fastest way to create a new carbon sink for areas released from peat production.
 - The afforestation of old production areas has been also the will of the state. In recent years, private landowners have had the opportunity for financial afforestation support.
- During last 10 years creating wetland areas have become more popular.
- Neova has created about 2 900 hectares of various wetlands between 1990 and 2022. There are more than 150 wetland sites, of which 45 sites also receive water from external areas.

- In total, about 100,000 hectares have been under peat production in Finland. More than 50 % of this areas has been moved to next land uses.
- In the long period, the most common forms of next land-use in Finland (Finnish Bioenergy association):
 - Afforestation 75%
 - Farming fields 20 %
 - Wetland creation or restoration 5 %

Re-wetting / restoration in part of Aitoneva, Kihniö Finland

1. Peat production about to end.



2. Same area after making the dam. After two years the vegetation on the area consisted mainly of sedge species (Carex sp). Open water area begins to develop vegetation like the shores of shallow lakes.



3. and 4. a few years after the end of peat production the area resembles an open bog. Common cranes, swans, geese and smaller ducks and waders thrive in the area.



NEOVA'S BIODIVERSITY PROMISES AND NEW AFTER-USE OPPORTUNITIES

- We convert all the closed energy peat production areas (ca. 20,000 hectares) to next land use by the end of year 2025 (Finland)
 - We have converted about 15,700 hectares into next land use between 2020 and 2022.
 - From Neova owned areas (8 500 hectares) - 85 % were afforested and 15 % were formed wetlands.
 - We also returned areas to landowners to start next land use
- In areas owned by Neova we increase biodiversity by restoring (wetlands and afforestation) 2,000 hectares during 2021-2025 in collaboration with local stakeholders (total Estonia, Finland, Sweden).

New after-use opportunities for old peat production areas

- Cultivation of reed canary grass (paludiculture)
- Wind and solar power areas
- Sphagnum farming - experiment has been started

NEOVA

KEY TARGETS  **BIODIVERSITY**

We convert all the closed energy peat production areas, **ca. 20,000 hectares** to next land use by 2025 and thereby reduce greenhouse gas emissions and enhance biodiversity.

We increase biodiversity by restoring (re-wetting or afforestation) **2,000 hectares** during 2021–2025 in collaboration with local stakeholders.

KEY TARGETS  **GREENHOUSE GAS EMISSIONS**

We reduce CO₂ eq. emissions in our own operations by **50%** by the end of 2025 from 2018 level (scope 1 & 2 without compensation actions).

We reduce carbon intensity in our value chain (scope 1 & 2 & 3) by **50%** by the end of 2030 from 2020.



Rastunsuo bird lake and its surroundings are one of the most valuable bird areas in Northern Savonia.

<https://www.sll.fi/sisa-savo/paikallisluonto/rastunsuon-lintujarvi/>

In 2016, Rastunsuo area was transferred to the ownership of the North Savo Nature Conservation District. As part of the My Nature Gift for 100-year-old Finland campaign, it was protected in 2017 as a 27-hectare bird sanctuary.





THANK YOU !

Hirvineva, Liminka wetland formed 1993-95, picture taken 2018



Q&A

MERLIN



Discussion in break out groups



Topics for discussion

Next 40min

Group 1

- What does it mean for restoration to go beyond the site level for the peat extraction sector?

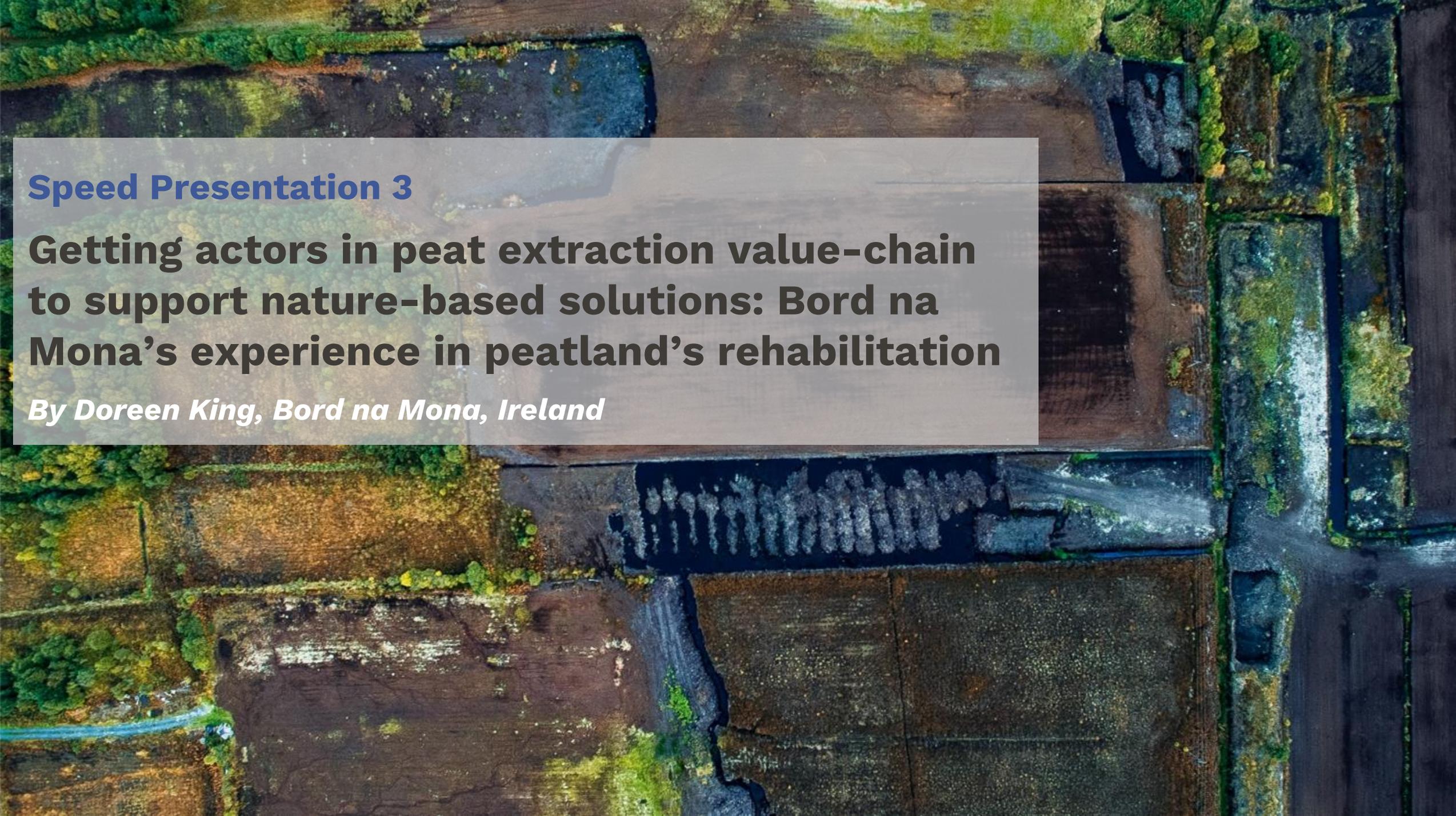
Group 2

- How can policy help to go beyond site level?
- What needs to change?

Group 3

- What does it mean for restoration to go beyond the site level for the peat extraction sector?
- How can policy help to go beyond site level?
- What needs to change?

Feedback & Comfort Break

An aerial photograph of a peat bog. A dark, narrow drainage ditch runs horizontally across the middle of the frame. To the right of the ditch, there is a wooden structure, possibly a bridge or a walkway, made of dark logs. The bog surface is a mix of dark brown peat and patches of green moss or vegetation. The overall scene is a natural, somewhat desolate landscape.

Speed Presentation 3

Getting actors in peat extraction value-chain to support nature-based solutions: Bord na Mona's experience in peatland's rehabilitation

By Doreen King, Bord na Mona, Ireland

DK 02nd May 2023

Bord na Móna's Experience in Peatland Rehabilitation

Getting actors in Peat extraction value chain to support nature-based solutions



Bord na Móna – Transition

Bord na Móna Background

Bord na Móna established in 1946.

Purpose: To develop Ireland's peat resources for the economic benefit of the State.

Peat was used for electricity generation, home heating (peat briquettes) and for horticultural purposes.

Max employment - over 6000 direct employees in the 1950's

BnM Preparation for Transition away from Peat Production:

Renewable Energy – Bord na Móna constructed the first windfarm in Ireland in 1992.

Purchase of AES Waste collection and Recycling - 2007

Drivers for Change

Legislation - requirement to obtain planning permission for peat production > 30 hectares

Closure of two ESB peat power stations.

Climate change – peat is a high carbon fossil fuel

Increased awareness of value of peatlands for carbon storage, biodiversity and amenity.

Recognition of need to move away from peat production

Transition Away from Peat

2021: Bord na Móna made a decision to permanently cease peat production

New vision and strategy that does not involve peat extraction.

Renewable energy, recycling, waste management, carbon sequestration and biodiversity conservation.

Nature based solutions - Rehabilitation of bogs a key element of this transition



Key Actors

Bord na Móna Senior Management
Bord na Móna Employees/ Operatives
Bord na Móna Ecologists/ Engineers / Technical
Bord na Móna – Other Business Units

Irish Government
Department of Environment, Climate and Communications
Government/ NewERA
National Parks and Wildlife Services
Environmental Protection Agency
NextGenerationEU
Bord Failte/ amenity

Local Land Owners and Farmers
Farming Organisations
Local residents and community groups

Scientific Community/ NGOs
Non Governmental organisations

Turfcutters
Existing/ Former Customers for Peat

General Public

Bord na Móna – Support for Nature Based Solutions

Internal - Bord na Móna

Bord na Móna Board and Senior Management:

Realisation that peat production coming to an end sooner than anticipated

Look at the bogs through a different lens

Recognise the alternative opportunities for peatlands:

- Carbon storage / Sphagnum farming
- Amenity Value
- Renewable Projects

Key person(s) needed to drive change

Bord na Móna Employees (Operatives):

- Concerns about job security,
- Provide assurances
- Provide training where required
- Provide education on the benefits of re-wetting. What we are doing and why
- Provide new opportunities

Bord na Móna Ecologists/ Engineers/ Technical

- Develop skills/ knowledge in new areas – training
- Recruit to build up expertise e.g. carbon monitoring
- Outsource where required

Other Bord na Móna Business Units

- Keep them informed
- Work together
- Align strategies.

External – Government Agencies

Irish Government

- Ensure Government has an appreciation of the importance of peat production on local economy and need for a Just Transition.

Department of Environment, Climate and Communications:

- Ensure recognition of importance of bogs in storing carbon and as potential sites for renewable project.
- Inclusion of bog rehabilitation in Climate Action Plan
- **Commitment to fund nature based solutions**

NewERA

Government body providing commercial advice to BnM

- Recognition of need for change
- Provide support for change in direction

National Parks and Wildlife Services

Regulator for the PCAS Rehabilitation Scheme

- Ensure adequate information provided for each rehab site
- Collect data – pre and post rehab
- Ensure good communication to understand requirements

External – Government Agencies

Environmental Protection Agency

Regulator for IPC licence for peat production

- Ensure IPC licence requirements satisfied
- Keep informed
- Ensure regular communication

NextGenerationEU

Funders for the scheme – through NRRP

- Liaise with DECC to ensure all information provided

Other Semi states Agencies

- Bord Failte – engage re opportunities for future amenity
- Coillte – engage re plans for existing forestry on Bord na Móna lands.
- Uisce Eireann/ ESB/ Bord Gais – communicate re existing or proposed infrastructure

Bord na Móna – Support for Nature Based Solutions

External Groups

Local Land Owners and Farmers

- Keep informed
- Address their concerns
- Regular communication and site meetings where required

Farming Organisations

- Explain the scheme
- Highlight the Climate Action benefits
- Proactive engagement
- Bring them on the journey

Local residents and community groups

- Keep informed
- Engage with and address concerns
- Facilitate future amenity

Scientific Community/ NGOs

- Engage – arrange workshops, present at conferences
- Address concerns / queries
- Share information and data
- Facilitate research projects
- Utilise available expertise

External Groups (contd)

Non Governmental Organisations

- Keep informed
- Engage with and address concerns
- Arrange presentations/ site visits

Turfcutters

- Ensure legal turbaries not impacted
- Address unauthorised turfcutting
- Understand it is an emotive issue
- Funding for housing retrofit (outside of scheme)

Existing/ Former Customers for Peat

- Keep informed – direct or through national media
- Funding for housing retrofit (outside of scheme)
- Hort peat – facilitate alternative suppliers where possible

Provision of adequate funding and Just Transition is critical to delivery of any Nature Based Solution

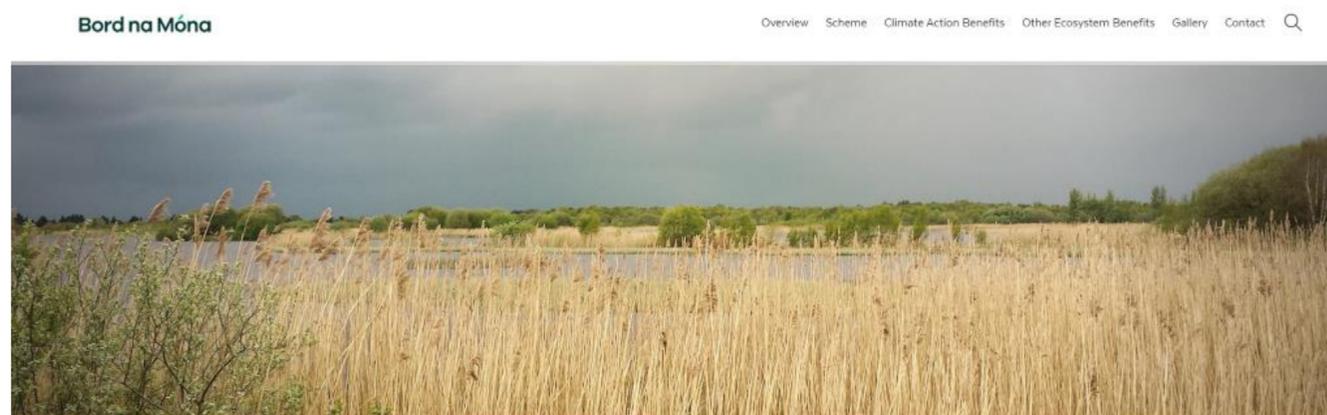


Peatlands Climate Action Scheme – Stakeholder Engagement

Stakeholder Engagement

- Information on the scheme available on PCAS Website – bnmpcas.ie
- Draft Rehabilitation Plans uploaded to website for consultation purposes
- Brochure and letter delivered to all residences within a kilometre of each bog.
- Emails issued for each bog – Local Authorities, NGOs, Gov. Bodies, Elected Reps, Farming Organisations, Community Groups etc.
- Community Liaison Officer available to take calls, emails and facilitate on-site meetings
- All submissions and queries addressed in Final Rehabilitation Plans
- Where NIS is required, newspaper advertisement and public consultation process
- Final rehabilitation plans, AA Screening Reports/ NIS and Determinations uploaded to website following consultation period
- Communication via teams / Zoom meetings (> 60 virtual meetings and presentations held to date)
- Site visits with interested groups – IFA, ICMSA, OCC, Community Groups etc.
- One on one site meetings with local landowners/ residents or other interested parties as requested

Website: bnmpcas.ie

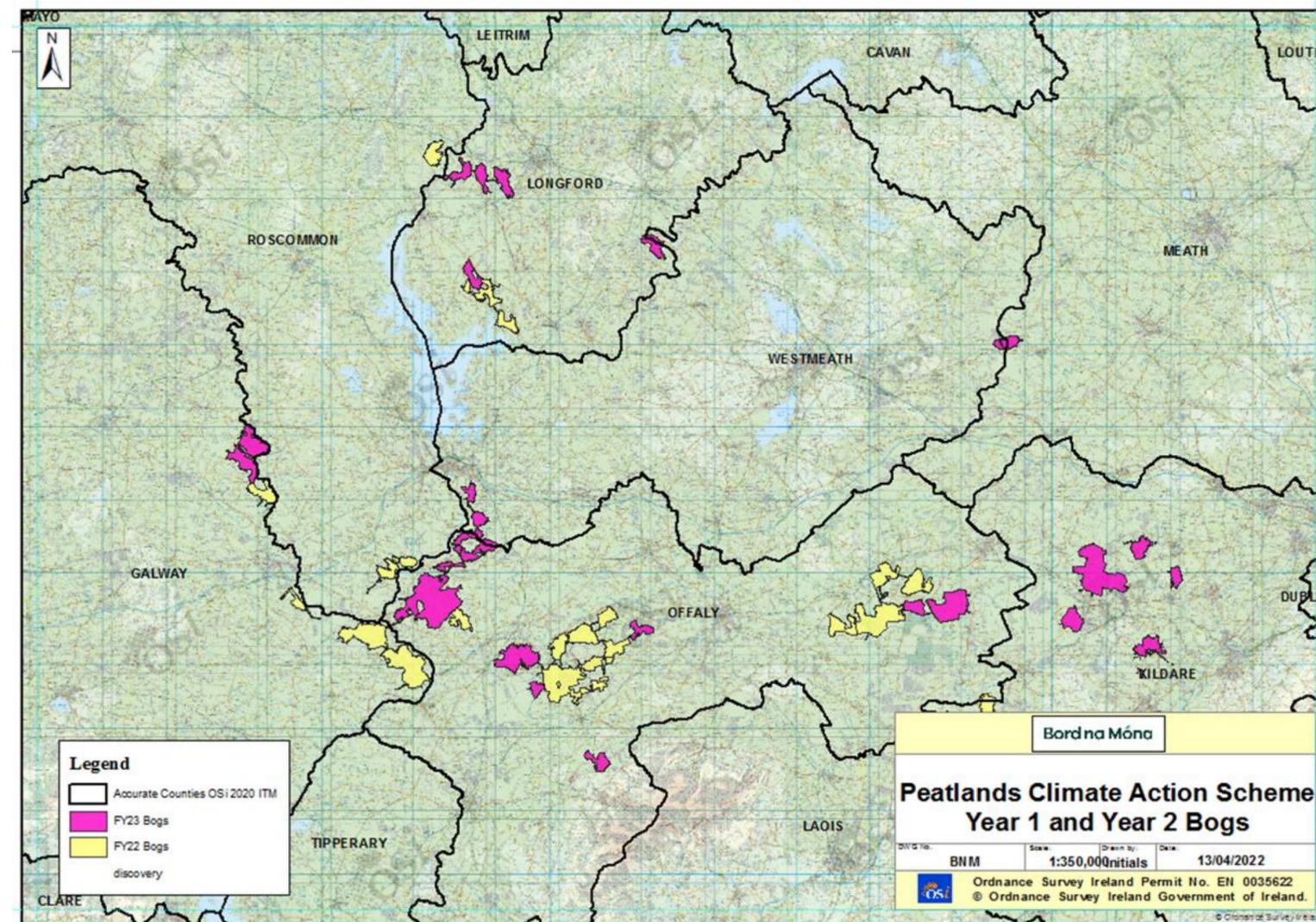


Peatlands Climate Action Scheme

Bord na Móna has recently announced the cessation of peat production on all of their bogs. Peat had been extracted from these Bord na Móna bogs under Integrated Pollution Control (IPC) licences issued and administered by the Environmental Protection Agency. As part of Condition 10 of this licence, decommissioning and rehabilitation must be carried out when industrial peat production ceases.

Rehabilitation Completed to date

- 13,300 hectares rehabilitated to date on 38 bogs – Year 1 and Year 2
- Commencing rehabilitation on additional fourteen bogs this Summer – Year 3 of scheme



33,000 hectares on 82 bogs to be rehabilitated under the scheme

Peatland Climate Action Scheme – Rehab Images



Peatlands Climate Action Scheme – Rehab Images



Peatlands Climate Action Scheme – Rehab Images



Thank you

Bord na Móna





Speed Presentation 4

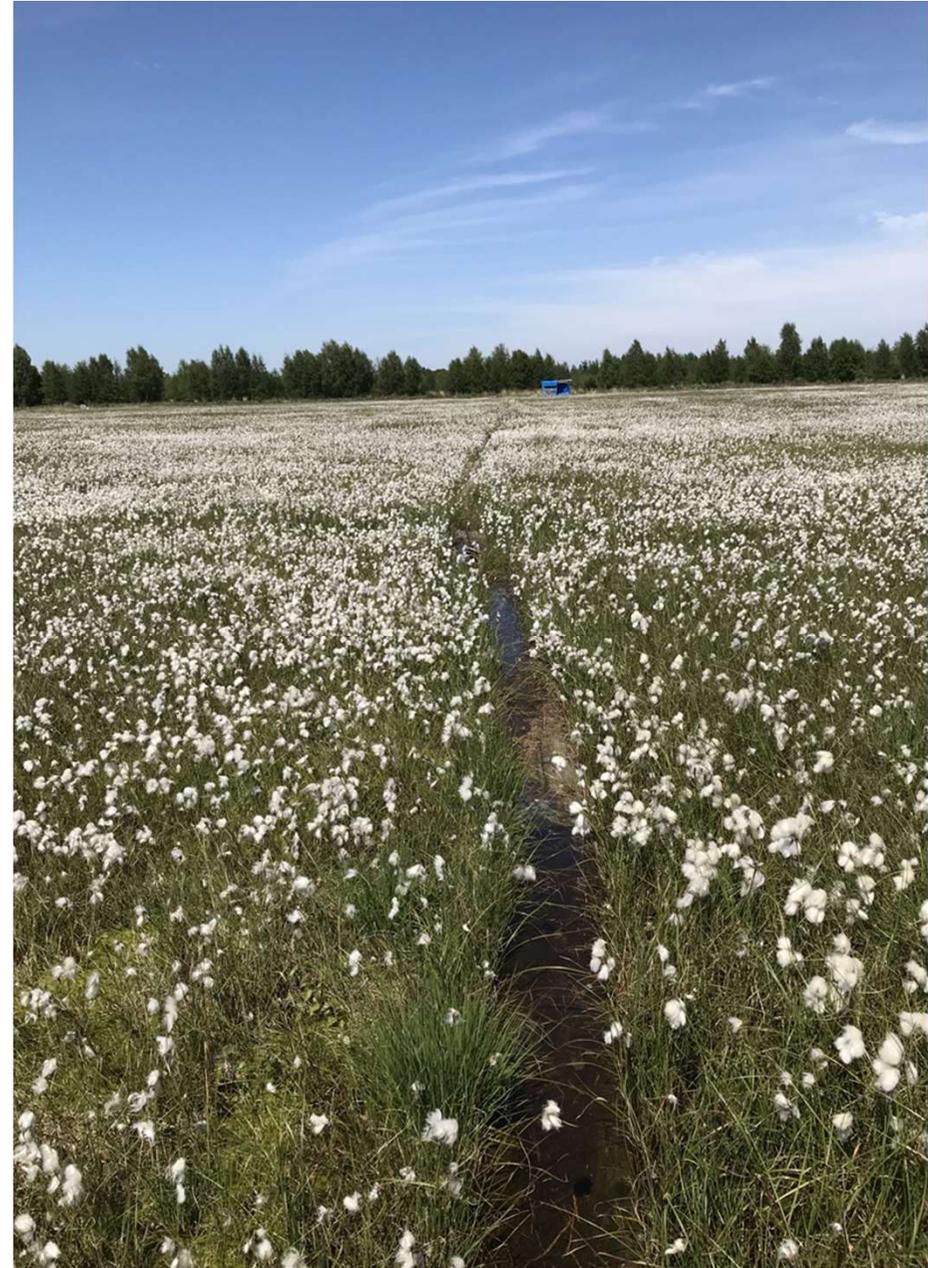
Status of rewetting large-scale peat extraction areas in Germany

Bert von Seggern, Klasmann-Deilmann, Germany

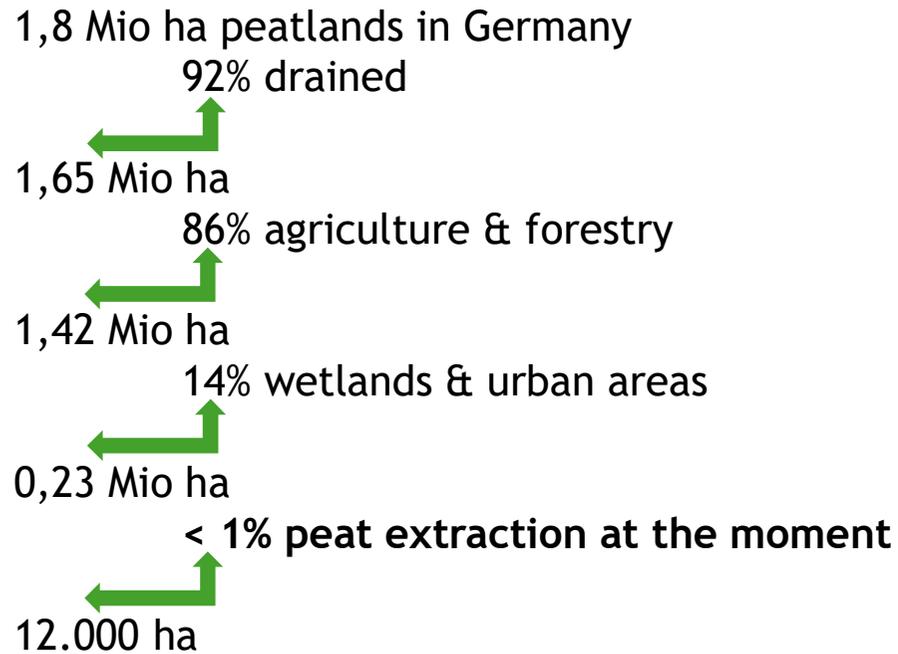
Status of rewetting large-scale peat extraction areas in Germany

Bert von Seggern

Director Production & Sustainability



Condition and use of peatlands



+30.000 ha
peatland
restoration after
peat extraction of
former
agricultural land



How do we get from peat extraction to renaturation?

In order to protect peatlands, agricultural land should also be restored.



Restoration states after peat extraction



Too wet

-Flooded raised bog restoration area
with high methane emissions

4-15 t CO₂e./ha/a



Too dry

-Dry raised bog restoration area
resulting in
degeneration through oxidation

6-12 t CO₂e./ha/a



± optimal

-Near-natural raised bog restoration area
with
optimal source-sink balance

0 t CO₂e./ha/a

Peat land restoration 2.0



Surface preparation

- Hydrological assessment
- Plan temporary water management
- If necessary: level the area, construct trenches & plan irrigation and drainage system



Peat moss application

- Spreading of sphagnum moss bundles (4/m²) or sphagnum moss fragments over a wide area
- Flexible moss cultivation possible in the greenhouse or outdoor
- No removal from natural stocks necessary



Peat moss development

- Rapid regeneration of the bog-forming peat mosses
 - Bind approx. 2 t CO₂ equ./ha/yr
- Preservation of the peat body
- Increase of biodiversity

Future of Rewetting 2.0 - KD`s current status



In Germany till 2040 ...

... 42T ha of valuable peatland will have been developed by industry in Germany.

- 30T ha already now restored after peat extraction from former agriculture land
- 12T ha from the current peat extraction





we make it grow

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Q&A

MERLIN



Discussion in break out groups



MERLIN

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Topics for discussion

Next 40min

Group 1

→ **What are the financing options for restoring beyond site level to the sector?**

Group 2

→ **What are the financing options for restoring beyond site level to the sector?**

Group 3

→ **How can the peat extraction sector cooperate with other sectors within the catchment to restore beyond the site level?**

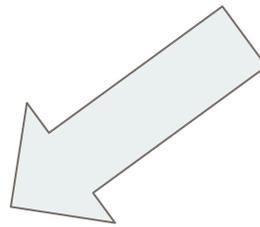
Feedback



Next Steps

Integrate findings in

- Policy recommendation
- Peat Extraction Sectoral Strategy
- Routemap



Progressing PE Sector Cooperation in MERLIN

- Prepare and share draft notes by May
- Receive feedback and corrections
- Final notes by end of June.
- Next roundtable?

Useful links

Peat extraction sector briefing

https://project-merlin.eu/mainstreaming.html#peat_extraction

Briefing D4.1 Final

https://project-merlin.eu/files/merlin/downloads/deliverables/MERLIN_D4.1_Briefing_EUs_ector_perceptions_Dec2022.pdf

Questionnaire report

https://www.hutton.ac.uk/sites/default/files/files/MERLIN-all%20sector%20questionnaire%20report_20221125.pdf

First RT Notes

https://www.hutton.ac.uk/sites/default/files/files/Note%20of%20Peat%20ORT%20meeting%20v%203_0_final.pdf

Other useful information about MERLIN

<https://www.hutton.ac.uk/research/projects/merlin-mainstreaming-ecological-restoration-freshwater-related-ecosystems>

<https://project-merlin.eu/mainstreaming.html>

Thank you for your participation



We will keep in touch with you and hope to engage again soon

Image sources

In order of appearance:

1. https://www.syke.fi/en-US/Current/Mainstreaming_ecological_restoration_of_%2861911%29
2. <https://www.neova-group.com/sustainability/in-balance-with-nature/biodiversity/biodiversity-programme-goals/#cc442c8d>
3. <https://yle.fi/a/3-12350801>
4. <https://www.bordnamona.ie/peatlands/peatlands-and-climate/>
5. <https://klasmann-deilmann.com/en/products-solutions/peat-bog-restoration/>