NEOVA GROUP

SUSTAINABILITY CONCEPT FOR PEAT

PRINCIPLES OF RESPONSIBLE PEAT PRODUCTION

FINLAND
SWEDEN
ESTONIA

- Public 12.2020

NEOVA GROUP PRODUCES PEAT SUSTAINABLY IN FINLAND, ESTONIA AND SWEDEN

Neova Group Peat Production in 2021

- 216 active production areas ~ 21.300 hectares

Finland, Neova Oy

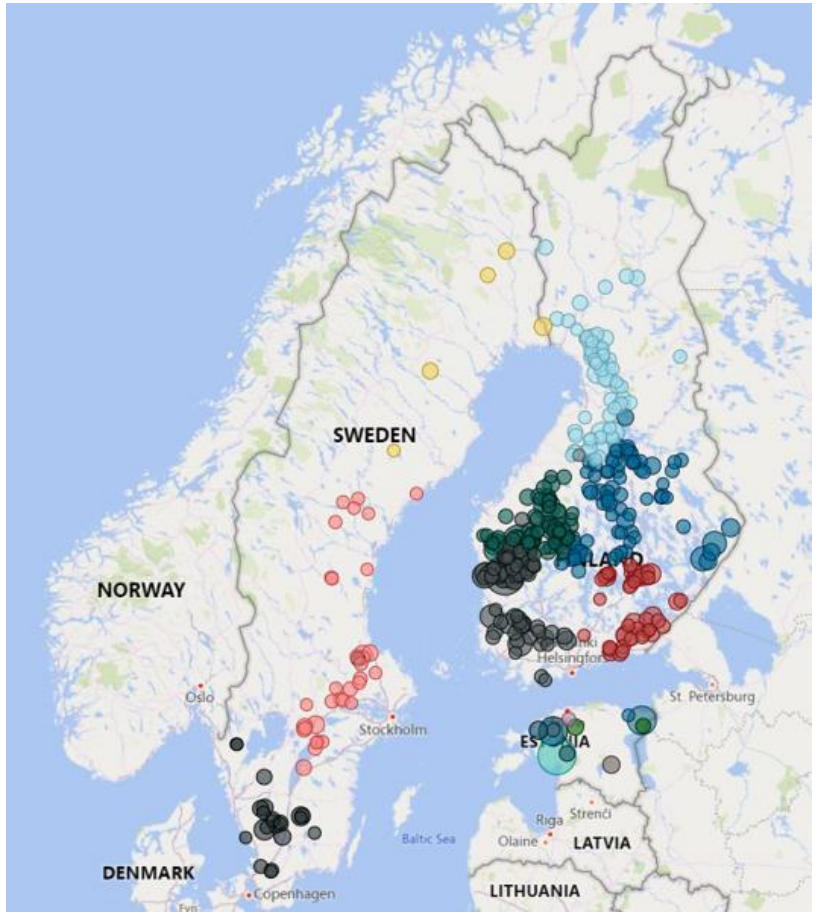
- 149 active production areas ~ 13.600 hectares

Sweden, Neova AB

- 56 active production areas ~ 4.000 hectares

Estonia, Tootsi Turvas AS

- 13 active production areas ~ 3.700 hectares



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For more details, please review the detailed concepts:

- Sustainability Concept for Peat, Finland
- Sustainability Concept for Peat, Sweden
- Sustainability Concept for Peat, Estonia

Link: https://www.neova-group.com/producing-peat-responsibly/sustainability-concept-for-peat/sustainability-concept-for-peat

OVERVIEW OF THE SUSTAINABILITY CONCEPT FOR PEAT

These Concepts describes the sustainability of peat in Finland, Sweden and Estonia

- Peat is a unique organic wetland biomass that forms mainly in boreal peatland ecosystems.
- Peat is slowly renewable (not fossil). (According to The Intergovernmental Panel on Climate Change (IPCC) and EU commission classification).
- Peat has multipurpose uses to promote local food production and healthy environments.
- Peat utilization for activated carbon and other high value-added products purifies contaminated environments and enhances access to clean drinking water.
- Concepts describe the principles of responsibly produced peat by Neova Group in Finland, Estonia and Sweden. Peat production is operated under legal companies: Neova Oy, Neova AB and Tootsi Turvas AS.
- The environmental, social and financial responsibility is based on the EU and national legislation, Neova Oy sustainability guidelines and Neova Group's management system as well as external certifications.

NEOVA GROUP'S GOVERNANCE

- Neova Oy is owned by the Finnish State (50.1%) and Suomen Energiavarat Oy (49.9%). Neova Group is an international company operating in different countries. Our businesses promote:
  - Clean and local food production
  - New high value-added products based on organic wetland biomass refinery
  - Local fuels supply
- In Neova Group: Neova Oy (Finland), Tootsi Turvas AS (Estonia) and Neova AB (Sweden) are the companies that manage the peat production operations.
- Neova Group has a clearly defined management system including corporate and business governance, policies, operating procedures and instructions.
  - Certified and regularly audited ISO 14001 Environmental management system and ISO 9001 Quality management system, implemented in most countries and businesses.
  - RPP (Responsibly Produced Peat) certification and RHP (Potting Soil Trade Regulation) quality mark with third-party audits.
- Our policies guide us to make correct everyday decisions and set out the standards and the operating rules required in health & safety, environmental and quality matters.
  - Neova Group Code of Conduct, Supplier Code of Conduct and Corporate Responsibility Policy.

COMPLIANCE WITH REGULATIONS FOR PEAT PRODUCTION

- Peat production is strictly regulated and subjected to environmental permitting.
  - All the peat production areas are operating under environmental permits issued by national environmental permitting authorities.
- The environmental permit contains regulation on reduction of environmental impacts and monitoring of the impacts.
- The location of peat production is precisely defined in national regulations.
  - Nationally or regionally significant natural values are not at risk of deterioration.
  - The supervisory authority performs fixed-term inspections on peat production.

- See more about the environmental regulation in Finland, Sweden and Estonia, in the appendix.

ENVIRONMENTAL RESPONSIBILITY, 1/2

- Peat production can be located only in peatlands that are not in their natural state. Nationally or regionally significant natural values are not at risk of deterioration.
- Planning and preparation of a peat production area is always regulated by environmental permit.
- Peat production areas' water treatment for drainage water is based on *Best available techniques (BAT). See more about the water treatment in the appendix.*
- Production area preparation and production is done by trained contractors. The contractor must provide contractor liability information and register contract and employee information with the tax authority.
- Neova Group's Supplier Code of Conduct and safety training guide the production work.
- During peat production, Neova Group's environmental specialists, independent environmental experts and authorities monitor that environmental permit requirements are fulfilled, implemented and reported with agreed guidelines.

ENVIRONMENTAL RESPONSIBILITY, 2/2

- Depending on the chosen next land-use form and the landowners in the area it is possible to move to a new phase of use gradually while production continues, and latest when production on the entire area ends.
- The most common forms of next land-use in all countries are afforestation, wetland creation or restoration, and in Finland also agriculture.
- The next land-use form is chosen and created based on the national legislation and environmental permit regulations.
- In next land-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.
- Next land-use also enhances biodiversity.

Afforestation

Restoration

Wetland creation

Agriculture

SOCIAL RESPONSIBILITY

- In Finland, Sweden and Estonia, before authority issues an environmental permit, the stakeholders are given the opportunity to leave objections and opinions about the permit additional conditions and the peat production plan.
- In Neova Group, stakeholder cooperation is carried out through the life cycle of peat production
  - Before permitting we arrange events with local stakeholders to discuss the production plan. This is also part of the required environmental impact assessment process.
  - During the planning of next land-use, for instance, local nature, bird and hunting associations are given an opportunity to influence the design of wetlands.
- Neova Group publishes the Sustainability Report yearly.

FINANCIAL RESPONSIBILITY, NEOVA GROUP

- In recent years, Neova Group has invested significantly in improving profitability and developing new businesses.
  - In 2019, the total investments were around 79,8 million euros[1].
- Neova Group is also a stable dividend payer.

Financial responsibility, Finland

- The business is rural and regional in Finland.
  - Neova Group and its 170 peat production main contractors operate and employ people in about 129 municipalities.
  - The local effects as a taxpayer and purchaser of goods and services are significant.
- The direct employment impact of peat production in Finland is over 2 000 man-years[2] and indirect impacts are about double[3]. Neova Group's share of impacts is about 60%.[3]
  - Neova Group has over 500 employees in Finland.

Financial responsibility, Sweden

- The business is rural and regional in Sweden.
  - The local effects as a taxpayer and purchaser of goods and services are significant.
    - The direct taxes payable were 42,9 million SEK (3,9 million €) and the indirect taxes 13,5 million SEK (1,2 million €).
    - The purchases in 2019 were 410,4 million SEK (37 million €) allocated to provinces in Sweden.
  - Neova Group has almost 200 employees in Sweden.
    - approximately 30 employees and 60 subcontractors are operating in peat production.

Financial responsibility, Estonia

- The business is rural and regional in Estonia.
  - Tootsi Turvas AS and Kekkilä-BVB Eesti OÜ (owned by Neova Oy) and its contractors operate and employ people in small municipalities.
  - The local effects as a taxpayer and purchaser of goods and services are significant.
  - Tootsi Turvas AS and Kekkilä-BVB Eesti OÜ have 50 employees and approximately 150 subcontractors in Estonia.

The information is based on 2019 data.

APPENDIX

ONE OF THE WORLDS' TIGHTEST ENVIRONMENTAL LEGISLATION REGULATES PEAT PRODUCTION: FINLAND

Key legislation concerning peat production:

- Environmental Protection Act (527/2014)
- Environmental Protection Decree (169/2000)
- Adjoining Properties Act (26/1920)
- Act on Environmental Impact Assessment Procedure (252/2017)
- Nature Conservation Act (1096/1996)
- Nature Conservation Decree (160/1997)
- The Habitats Directive annex IV species (Council Directive 92/43/EEC)
- Water Act (587/2011)
- Waste Act (646/2011)

National programs for environmental protection of peat production:

- Government resolution on the sustainable and responsible use and conversation of mires and peatlands, 30th August 2012.
- Energy and climate strategy, 2016.
- Government Decree on Water Resources Management (1040/2006)
  - Regional Water Management plans 2016-2021.
- Land Use and Building Act (132/1999)
  - Nationwide land use targets provided in this Act

- Significant voluntarily actions exceed permit requirements
- Stakeholders have possibility to influence to licensing

Other Acts and Decrees applied to peat production:

- Act on Water Resources Management (1299/2004)
- Environmental Damage Insurance Act (81/1998)
- Act on the Safe Handling and Storage of Dangerous Chemicals and Explosives, Chemicals Safety Act (390/2005)
- Reindeer Husbandry Act (848/1990)
- Government Decree on the Assessment of Soil Contamination and Remediation Needs (214/2007)
- Government Decree on noise emissions levels *(993/1992)*
- Act on Compensation for Environmental Damage (737/1994)
- Land Extraction Act (555/1981)
- Antiquities Act (295/1963)

ONE OF THE WORLDS' TIGHTEST ENVIRONMENTAL LEGISLATION REGULATES PEAT PRODUCTION: SWEDEN

Key legislation concerning peat production in Sweden:

- Miljöbalken 1998:808.
  - Peat production (torvtäkt) is regulated under Chapter 9
  - Environmentally hazardous activities and health protection of peat extraction is under paragraph 6a - f.
  - Chapter 11 is for Water operations.
  - In Sweden is dewatering forbidden in the southern part of Sweden. It is possible to apply for an exemption to lift the ban.
- Artskyddsförordningen (2007:845)
- Miljöbedömningsförordningen (2017:966)

National programs for environmental protection of peat production

- the Wetland index of Sweden (Våtmarksinventeringen VMI)

Other Acts and Decrees applied to peat production:

- Forest Act habitats
- Water Act habitats,
- The EU Birds Directive Annex 1 species
- Habitats directive Annex IV(a) species

- Stakeholders have possibility to influence to licensing
- Peat production can only be permitted and located on already altered, drained peatlands or on areas that have lost their natural values.
  - Permit for peat production is mainly issued on peat areas in VMI-class 4 or 3
- Dewatering, trenching and ditching is forbidden according Miljöbalken (1998:808) chapter 11 paragraph 13. There is possibility to apply for an exception from the prohibition and often necessary for enabling peat harvesting.

ONE OF THE WORLDS' TIGHTEST ENVIRONMENTAL LEGISLATION REGULATES PEAT PRODUCTION: ESTONIA

Key legislation concerning peat production in Estonia:

- Earth Crust Act (01.01.2020) and it's regulations
- General Part of the Environmental Code Act (01.01.2020) and it's regulations
- Water Act (07.05.2020) and it's regulations

National programs for environmental protection of peat production:

- General principles of Earth's crust policy until 2050
- National development plan of the energy sector until 2030
- General Principles of Climate Policy
- Resolution of the Riigikogu General Principles of Climate Policy until 2050

- Stakeholders have possibility to influence licensing
- All extraction areas, where Tootsi Turvas AS operates are bigger than 25 ha and therefore mandatory Environmental Impact Assessment (EIA) procedures have been done before issuing environmental permit.

Other Acts and Decrees applied to Estonian peat production:

- Environmental Impact Assessment and Environmental Management system Act
- List of peat Areas Disturbed by Extraction and Abandoned or the list of Peat Areas Suitable for Extraction
- Specified Requirements for Preliminary Estimate
- Environmental Monitoring Act
- Environmental Registry Act
- Specified Requirements for Environmental Impact Assessment Report
- Regulation for Handling Extractive Waste
- Safety Requirements for Mining
- Specified Requirements for Plan for Mining

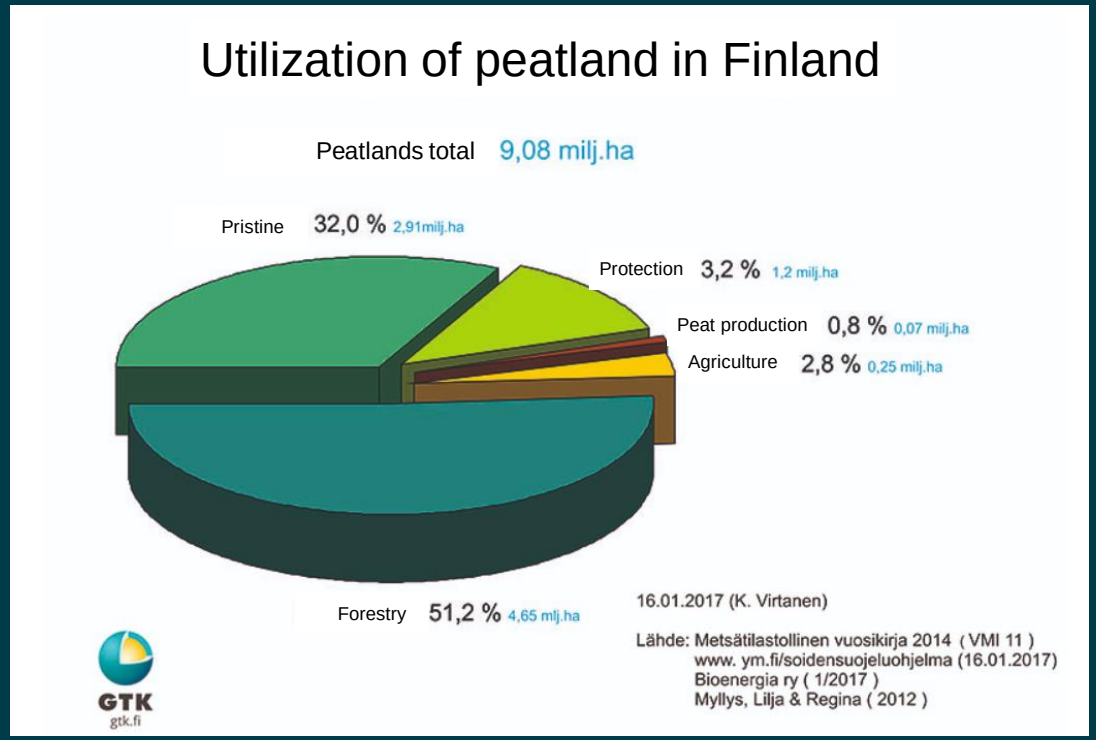
NEOVA

IN FINLAND THERE IS 9,08 MILLION HECTARES OF PEAT LAND. ~ ONE THIRD OF ALL THE LAND IN FINLAND. ONLY 0,8 % OF IT IS USED FOR PEAT PRODUCTION

Preservation of peatland is guaranteed

for future generations

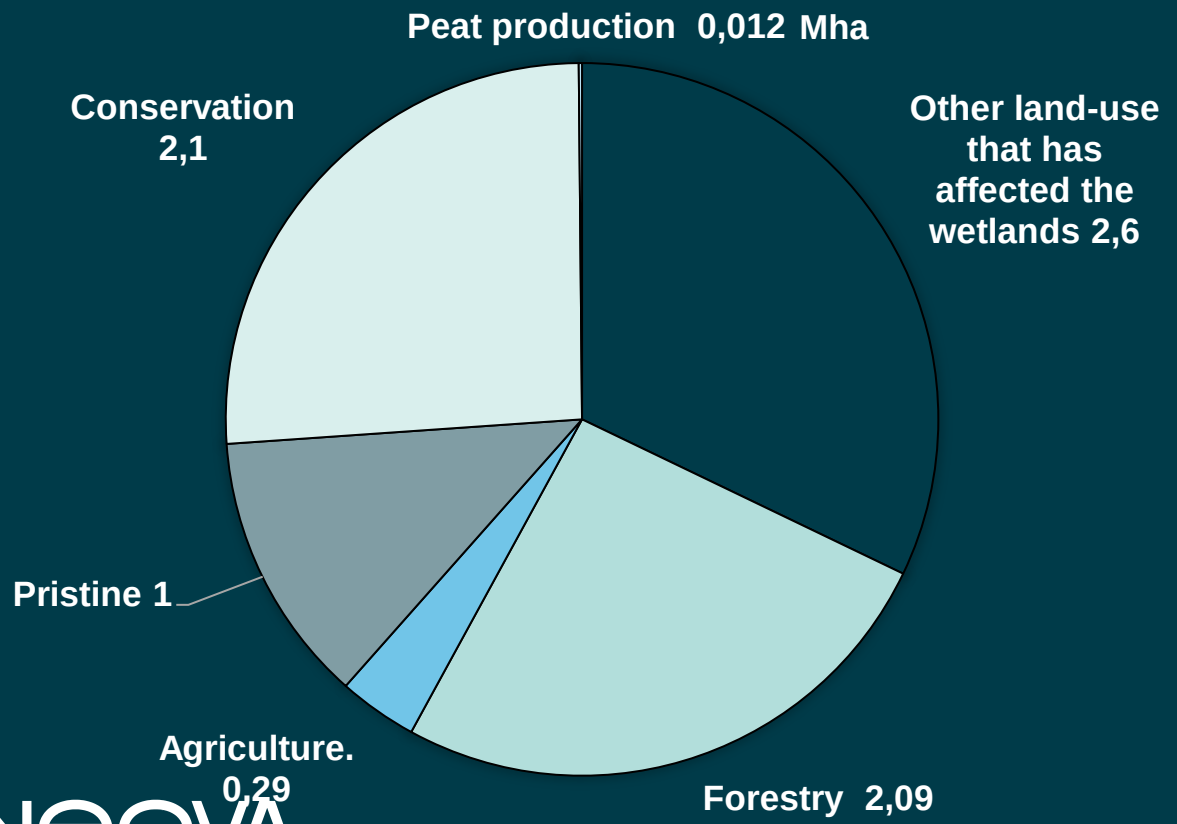
- 1/3 of Finnish land area is covered by peatlands, 9.08 million hectares.
- Only 0,8 % of peatlands is under peat production.
- Peat usage is not exceeding annual accumulation of peat.
- Peat forms all the time, cold and rainy climate on Northern hemisphere is favorable for peat formation.
- Peat is only produced on peatlands that are no longer in their natural state.



Sources: Metsätilastollinen vuosikirja 2014, www.ym.fi/soidensuojeluohjelma (16.1.2017), Bioenergia ry (1/2017); Myllys, Lilja & Regina (2012)

IN SWEDEN THERE IS ~10 MILLION HECTARES OF PEATLANDS

~ ONE FIFTH OF ALL THE LAND IN SWEDEN (TOTAL 45 MILLION HECTARES) ONLY 0,03 % OF IT IS USED FOR PEAT PRODUCTION.



Utilization of peatland in Sweden:

- Peat production 0,12 % (Neova Group's production area covers 0.04 %)
- Farming and cultivation 3 %
- Protected 21 %
- Undrained 10 %
- Forestry 21 %

Sustainability concept for Peat Sweden 2020:

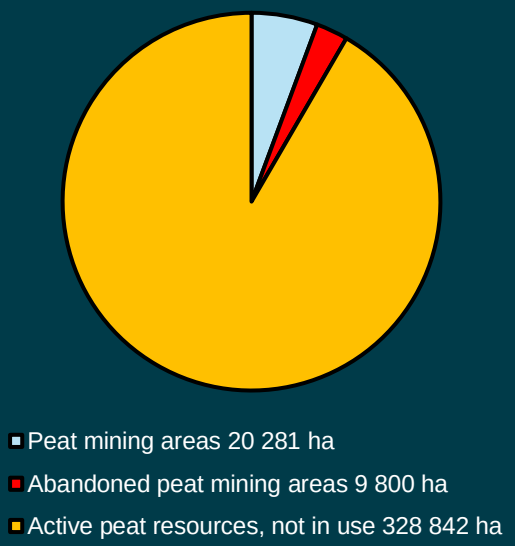
- Publications from the Swedish EPA 2009. Våtmarksinventeringen 25 år, nationell slutrapport för våtmarksinventeringen (VMI) i Sverige.
- https://www.svensktorv.se/Homepage/Download-File/f/1216699/h/7b5f66996b4759dfdb1d3337fb91ee8b/TorvFakta+20191212
- Olsson, M 2015 (2016). Emissions of greenhouse gases from peatland managed in forestry and agriculture.

UTILIZATION OF PEATLAND IS SUSTAINABLE

In Estonia, 358 923 ha are defined as active peat resources

(i.e. not under protection or unsuitable for production in other reasons).

Only 6 % of active peat resources are used for peat mining[1]



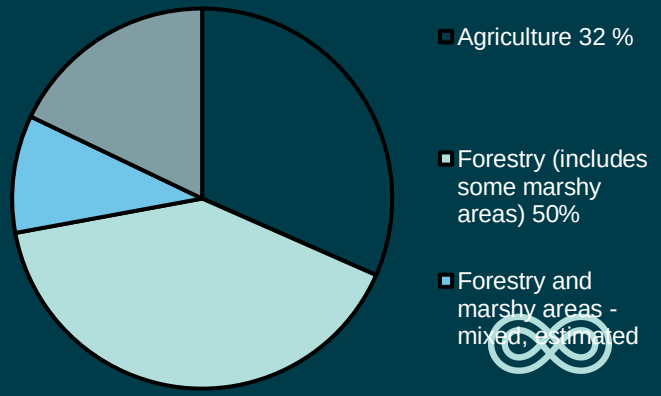
- According to Earth Crust Act, peat resources are taken into account if the thickness of the peat layer is 90+ cm, it doesn't matter if that area is in bog or forest.
- According to Tallinn Technical University studies, there are currently about
  - 271,300 hectares of pristine bogs in Estonia and
  - 769,816 hectares are covered by peat areas were peat layer is 90+ cm.

- **In Estonia, 358 923 hectares are active peat resources i.e.**
  - **covered by peat areas were peat layer is 90+ cm AND**
  - **not under protection or unsuitable for production in other reasons.**

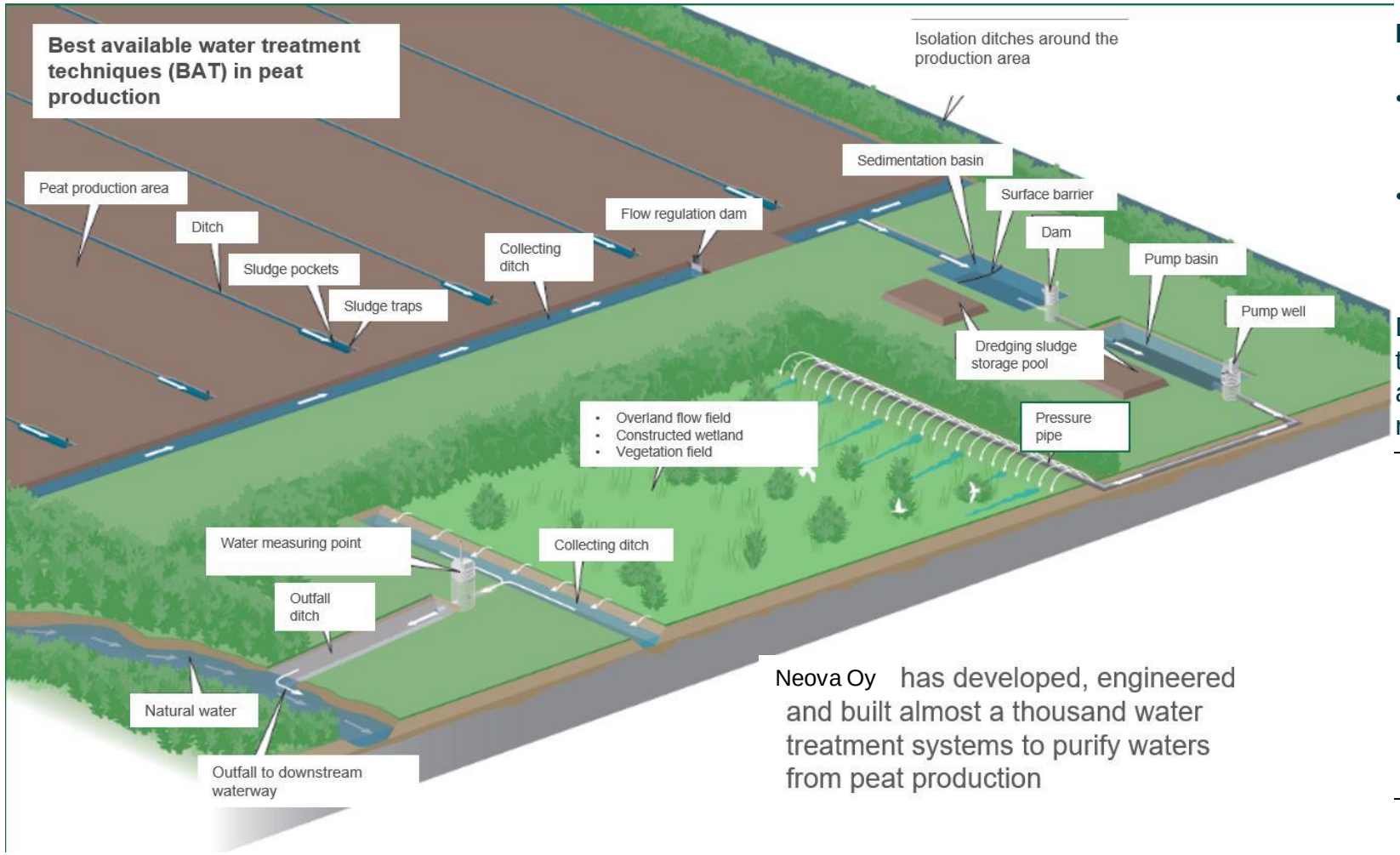
    - According to survey from 2011, mining was permitted on 20 281 hectares
    - 9 800 hectares are abandoned mining areas.
    - Rest of active peat resources are not been used in various reasons.

In Estonia → peat and/or wetland areas cover ~1,2 million ha of the land area (22,5 %).

Estonia 4,523 million hectares



PEAT PRODUCTION AREA STRUCTURES AND WATER TREATMENT SYSTEMS IN FINLAND



Best available technique (BAT)

- Is a technology approved by regulators for meeting regulations for peat production's water treatment.
- It is defined on a case-by-case according to the characteristics of each production area and receiving waterbody.

Definition of Best Available Technique is to meet the local environmental permit requirements and aims to minimize the environmental impacts and risks in all operations.

In Finland, in addition to a sedimentation basin, BAT always includes an overland flow field, wetland or chemical water purification.

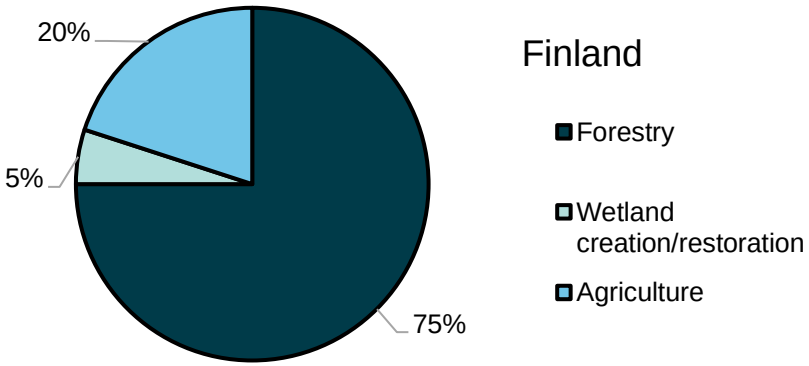
In Sweden and Estonia BAT is most commonly sedimentation basin. For some areas there is also constructed overland flow fields or wetlands for water purification.

NEXT LAND-USE ON CUTAWAY PEATLANDS

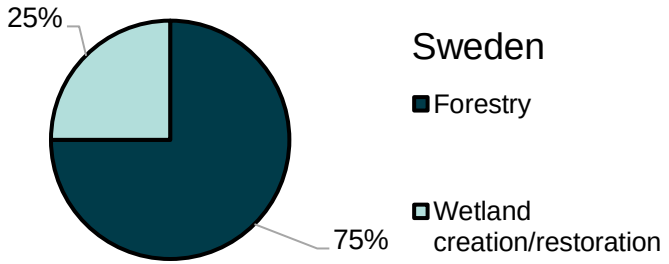
The most common forms of next land-use are afforestation, wetland creation or restoration, and in Finland also agriculture.

- In recent years Neova has established all together 101 wetlands covering 2700 ha to areas released from peat production across Finland.

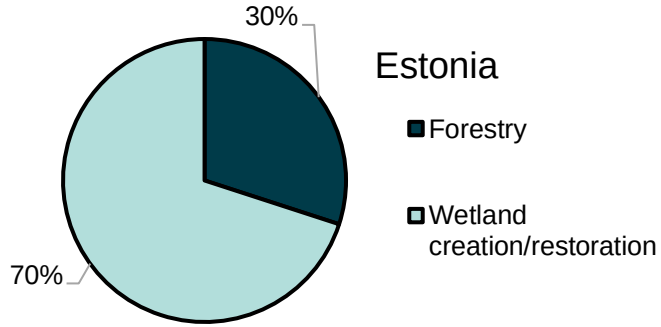
The next land-use form is chosen and created based on national legislation and environmental permit regulations. Landowner is always involved in process when peat production ends.



Approximately **50 000** hectares of peat production area in Finland has been transferred to next land-use during the last 30 years.[1]



Approximately **1 360** hectares of Neova AB and Hasselfors Garden AB peat production area has been transferred to next land-use during the last 30 years.



Approximately **4 694** hectares of Tootsi Turvas AS peat production area has been transferred to next land-use during the last 30 years.

THE NEXT LAND-USE FORM IS CHOSEN AND CREATED BASED ON THE NATIONAL LEGISLATION AND ENVIRONMENTAL PERMIT REGULATIONS

In Finland, the decision of the next land-use after peat production is not included in the environmental permit and according to national legislation, the decision of the next land-use form can only be made by the landowner. The responsibility of the peat producing company is to complete the aftercare tasks of peat production and clean up the area before it is able to be transferred to next land-use, minimizing environmental impacts.

- Landowning in Finland is fragmented.
- More than 60% of Finland's land area is privately owned.
- The Finnish state owns about 30% of the land. Municipalities, parishes and companies own about 10%.[1]

In Estonia and Sweden, the next land-use is regulated in environmental permit and next land-use form is chosen and created in cooperation with authorities and landowners.

- In Estonia land area for peat production is owned by the state.
- In Sweden peat is produced mainly on rented land area that are mostly owned by state or bigger private landowners.

PEAT PRODUCTION AREAS IN THEIR NEXT LAND-USE FORM

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.

Nygårdsmyran Gåtängarna, Sweden 2020. Production has ended in 2011 on 13,5 ha and area has been restored as wetland.

Sompaneva, Finland 2018. Production has ended in 2014 and 13,3 ha area has been restored as wetland.

Alsmyran, Sweden 2020. Production has ended in 2011 on 80 ha and area has been restored as wetland and partially as forest.

NEOVA