

Reed as replacement for peat in soil improvement

Baltic Reed, Stockholm
2024-02-07

Future for reed?



Harvest



Chop



Compost



Package and sell



Recycling, wood-based fuel
and bulk soil

Garden products for hobby market

Econova

- Norrköping, Sweden
- 140 employees
- 630 MSEK revenue

- **10 000 000 soil bags** ←
- 200 000 tonnes bulk soil
- 95 000 tonnes of recycled material
- 4 000 000 seed packages
- 150 000 tonnes forest-based fuel



Soil production – bags

Raw material



Peat



Compost



*Bark
Fertilizer
Sand
Clay
...*

Mixing



Packaging



Peat – main ingredient in soil production

- Mainly old sphagnum moss
- 80-90% of a standard soil bag today
- Large homogeneous volumes
- Water holding capacity
- Easy to adjust pH and nutrient level
- Clean and free from impurities



Peat and climate impact

- Grows in wet peatlands for thousands of years
- The high water level gives anaerobic conditions (no O₂)
- Peat harvesting requires drainage
- Large CO₂ emissions from drained peatlands
- Restrictions to use peat in several countries



Peatland



Sphagnum moss



Peat harvest

A peat-free future

Econova is aiming for 100 % circular and peat-free soil production

- Large amounts of organic material is needed
- Locally produced materials and fertilizers
- Circular materials
- Lightweight materials
- Substrates free from harmful contaminants

2025 20 % less peat

2030 80 % less CO₂-emissions

2035 100 % circular materials in soils production

Our assortment today

- Many peat-replacer already in use
- A couple of 100% peat-free soil products
- “Garden product of the year” in 2016



Fiber mulch



Garden waste



Bark mulch



Biogas digestate



Biochar



Future soil substrates



Sphagnum farming



Decomposed wool



Coffee residues



Aquatic materials



Wettex residues



Forest residues



Wood fibre



Sanitized horse manure



HASOPOR



Foam glass



Biogas digestate

Econova's interest in reed

- Important part in reducing eutrophication in Baltic sea
- Contains nutrients and carbon
- Large coast areas and lakes in need for reed removal
 - Potential large homogeneous volumes
 - Difficult to find usage for harvested reed today
- Dialogue with Raws
 - Expanding straw production in Norrköping
 - Excess reed volumes
- Dialogue with Race for the Baltic



Reed as a replacement for peat

- Treatment
 - Composting, chopping, other?
 - Mix with other materials
 - Need for large sites and environmental permits
- Logistics
 - Collection and transportation
 - Collaboration with harvesting actors
- Season for harvesting
 - Green or yellow reed
 - Animal protection
- Content of salt, heavy metals etc
- Costs - soil is a low price-product

~5 %

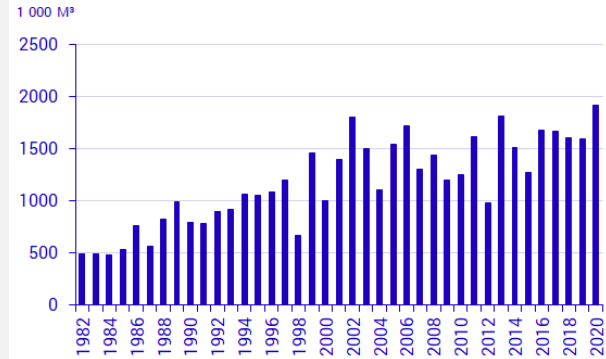


Swedish market for peat

- Hobby gardening: 1,2 million m³
- Professional gardening: 230 000 m³
- Total: 1,4 million m³

(numbers for 2020)

Harvest of peat for cultivation 1982-2020



SCB (Statistics Sweden)

jem & fix



GRANNGÅRDEN
ETABL. 1880

ICA

coop

eKO

PLANTAGEN

K-RAUTA

K BYGG

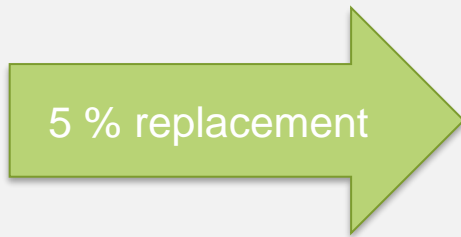
BYGGMAX

ÖoB

Swedish market for ~~peat~~ reed in soil

- Peat in hobby gardening: 1,2 million m³
- Peat in professional gardening: 230 000 m³
- Total: 1,4 million m³

(numbers for 2020)



A photograph of a person sitting on a set of outdoor concrete stairs with a black metal railing. The person is wearing a light-colored jacket and jeans. The background shows a modern white house with large windows and lush green foliage. The image is dimmed with a dark blue overlay.

Thank you!

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