



# Economic Growth versus Sustainable Development

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# Sustainability of Peatland

# Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on nature restoration



Brussels, 20 June 2023  
(OR. en)

10867/23

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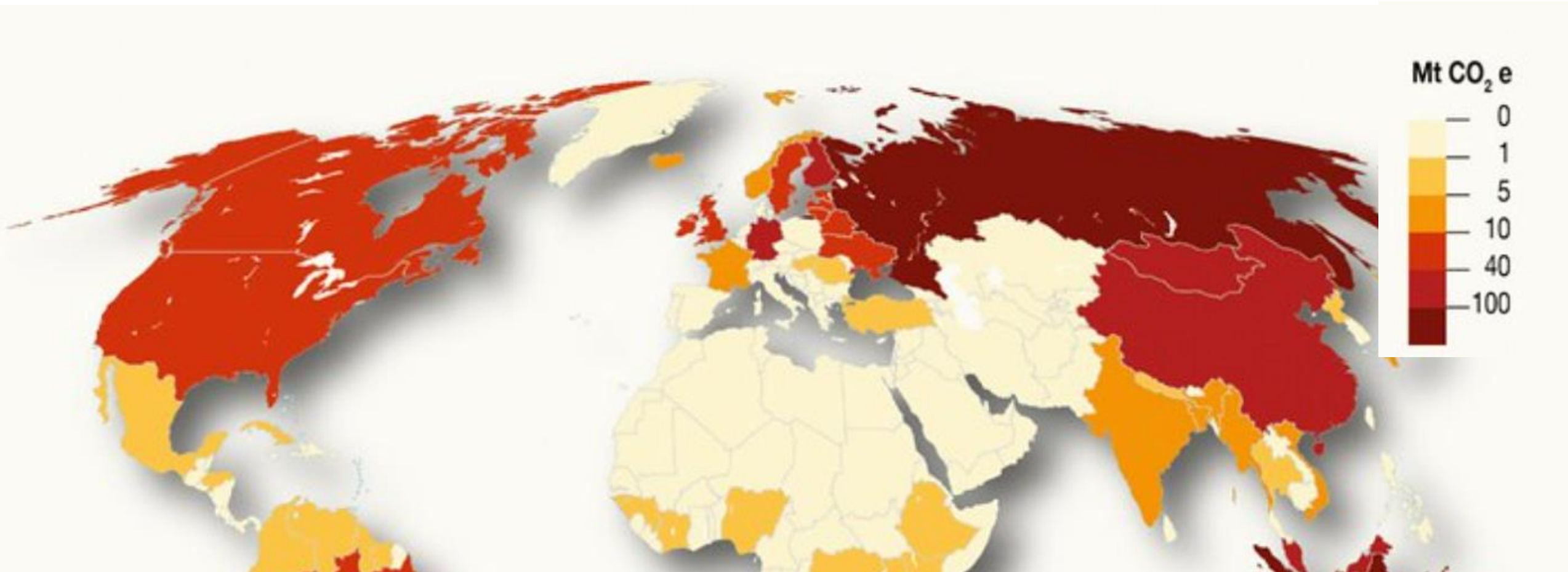
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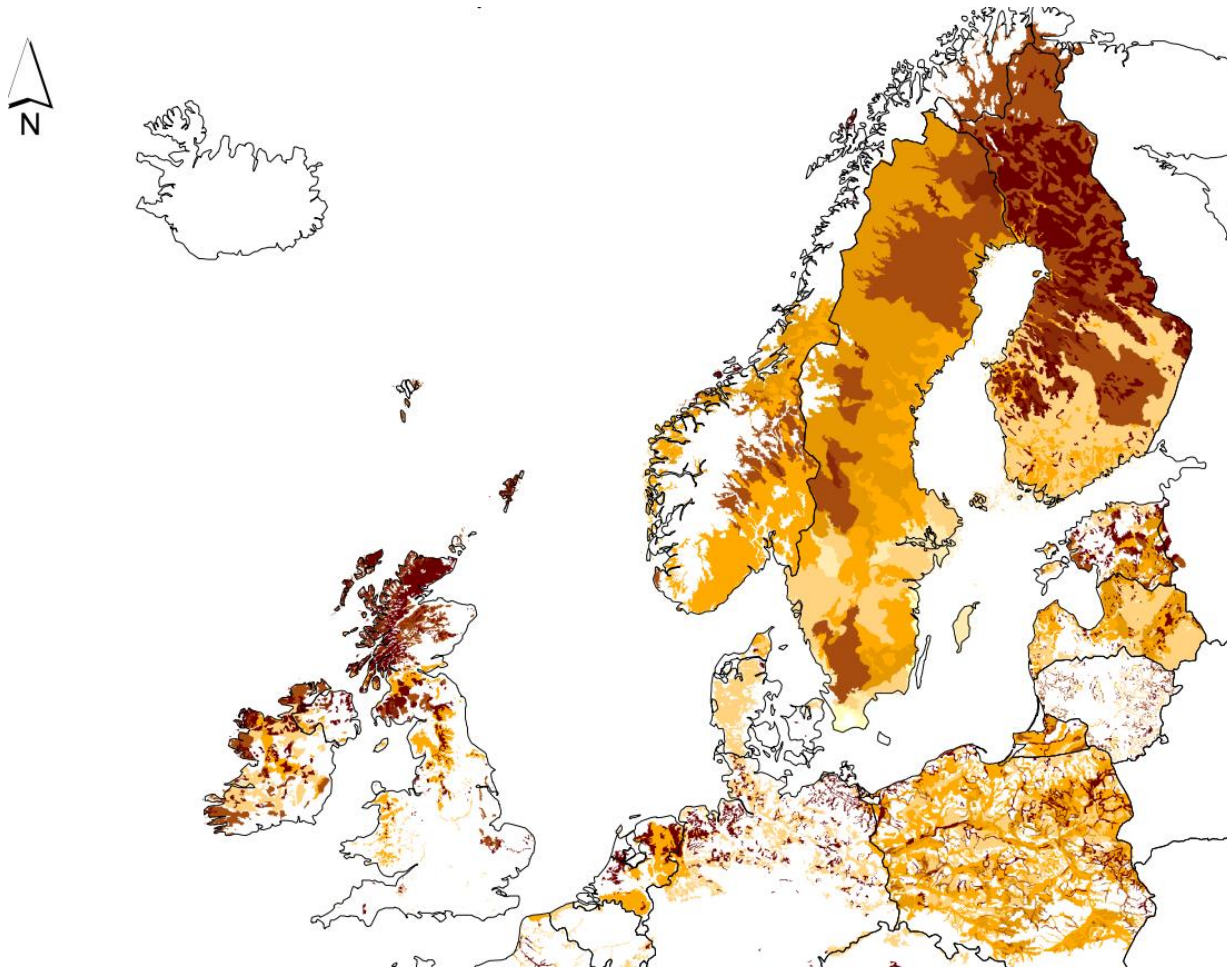
«That proposal emphasises the need for the protection and enhancement of nature-based carbon removals, for the improvement of the resilience of ecosystems to climate change, for the restoration of degraded land and ecosystems, **and for rewetting peatlands.**»



# Emissions from peatlands by country



# Distribution of peatlands in Europe



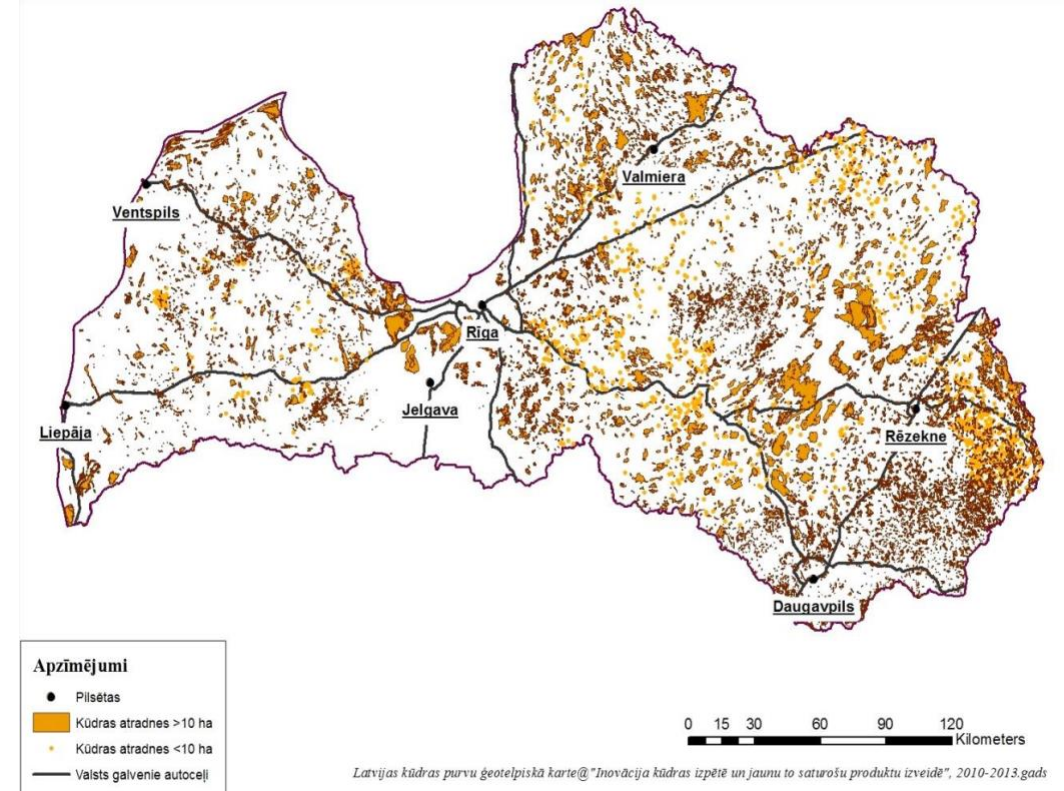
Top five countries with largest peatland area - 1. European Russia (20,800,000 ha); 2. Finland (8,313,381 ha); 3. Sweden (6,797,032 ha); 4. Norway (4,865,000 ha); 5. Belarus (3,014,298 ha).

- Finland and Sweden contribute to half of the peatland area in the EU.
- 20 million tonnes of peat are extracted yearly in Europe.



# Latvia

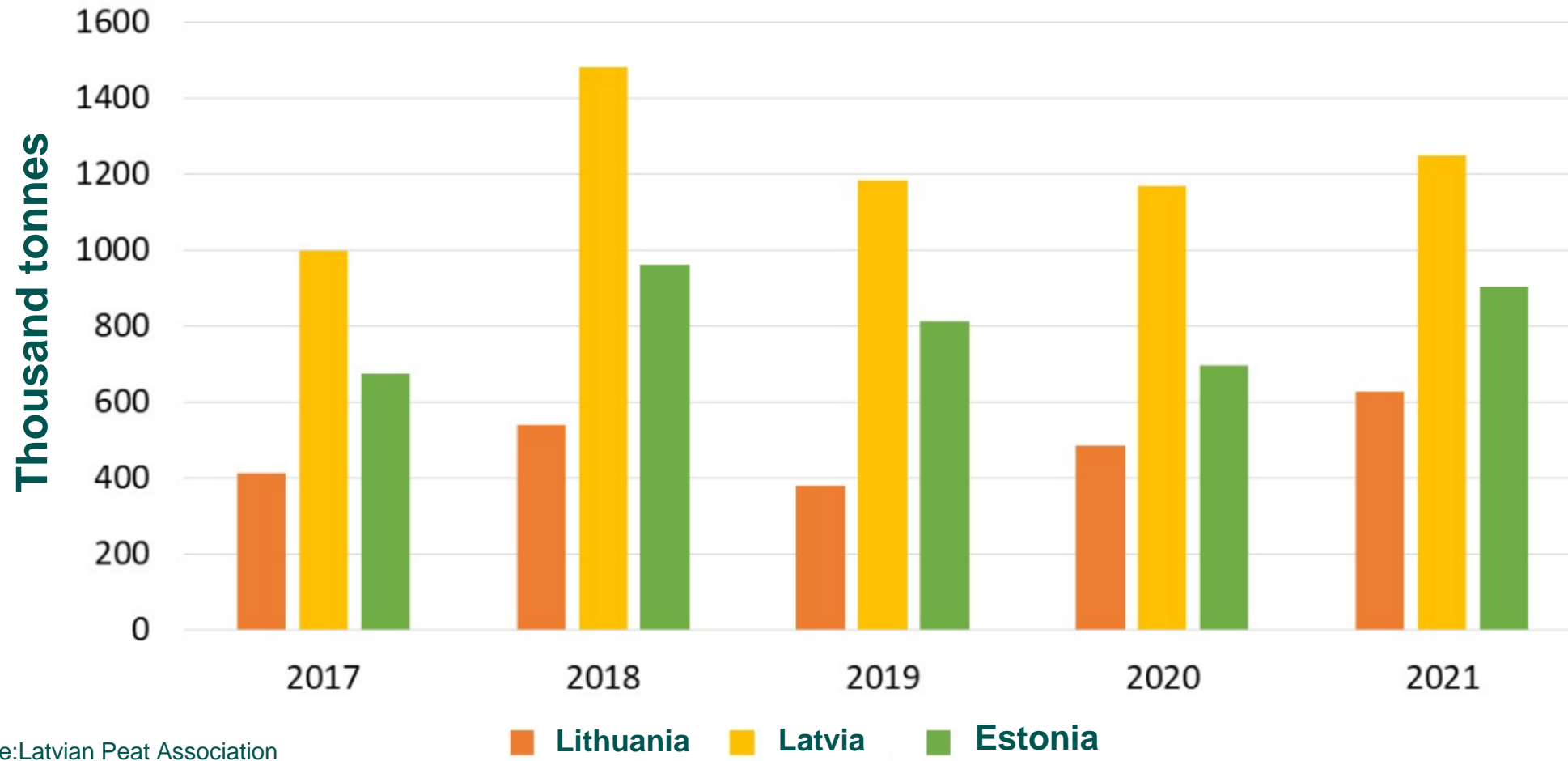
- Peatlands cover 10% of Latvia's territory
- Peat extraction takes place in 4% of the territory of peat deposits
- 40% of the territory of peat deposits is in specially protected natural areas
- There are **18,000 ha of degraded peatlands** in Latvia, which is 36% of all areas affected by peat extraction in Latvia.



Source:Latvian Peat Association



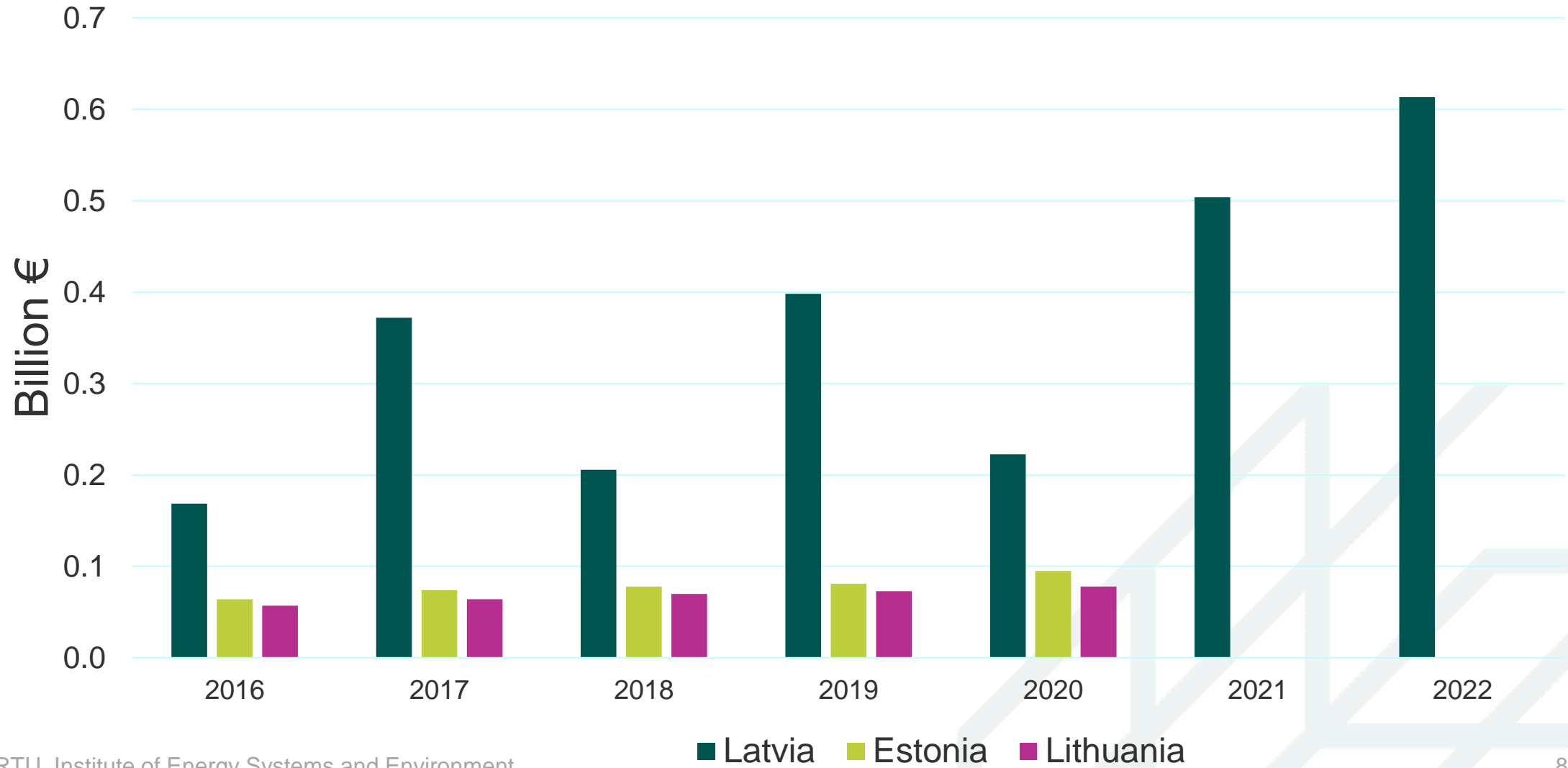
# Peat extraction in Baltic countries 2017-2021



Source:Latvian Peat Association



# Revenue from peat products





# Peatland Development Solutions. CO<sub>2</sub> reduction

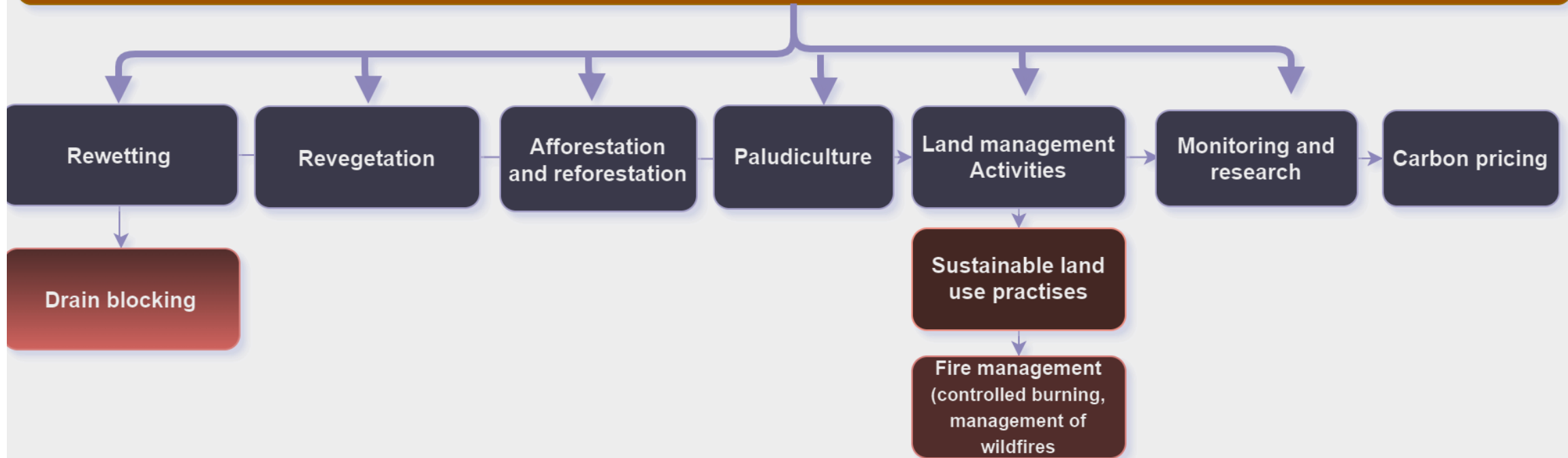
# Different Approaches

- Carbon mitigation
- Carbon Storage
  - in products with high added value
  - in products ...



# Mitigation strategies

Existing mitigation strategies and methods  
for the reduction of GHG from peatlands



# Rewetting

## Emissions

- Rewetting decreases organic matter decomposition considerably decreasing CO<sub>2</sub> and N<sub>2</sub>O emissions but CH<sub>4</sub> emissions increase
- **If the water table is not controlled, fluctuation can result in high GHG emissions even after decades of rewetting.**
- Non or very slowly reversible changes to the physicochemical soil properties result in increased fluxes of greenhouse gases and nutrient exports, and these can remain elevated for several decades.

## Biodiversity

- **Shift in the soil environment from aerobic to anaerobic could trigger a change in soil biology and soil chemistry.**
- Plant species that do not thrive under poorly drained conditions will be replaced by those that grow well.



# No social gains, no economic gains




# No biodiversity gains



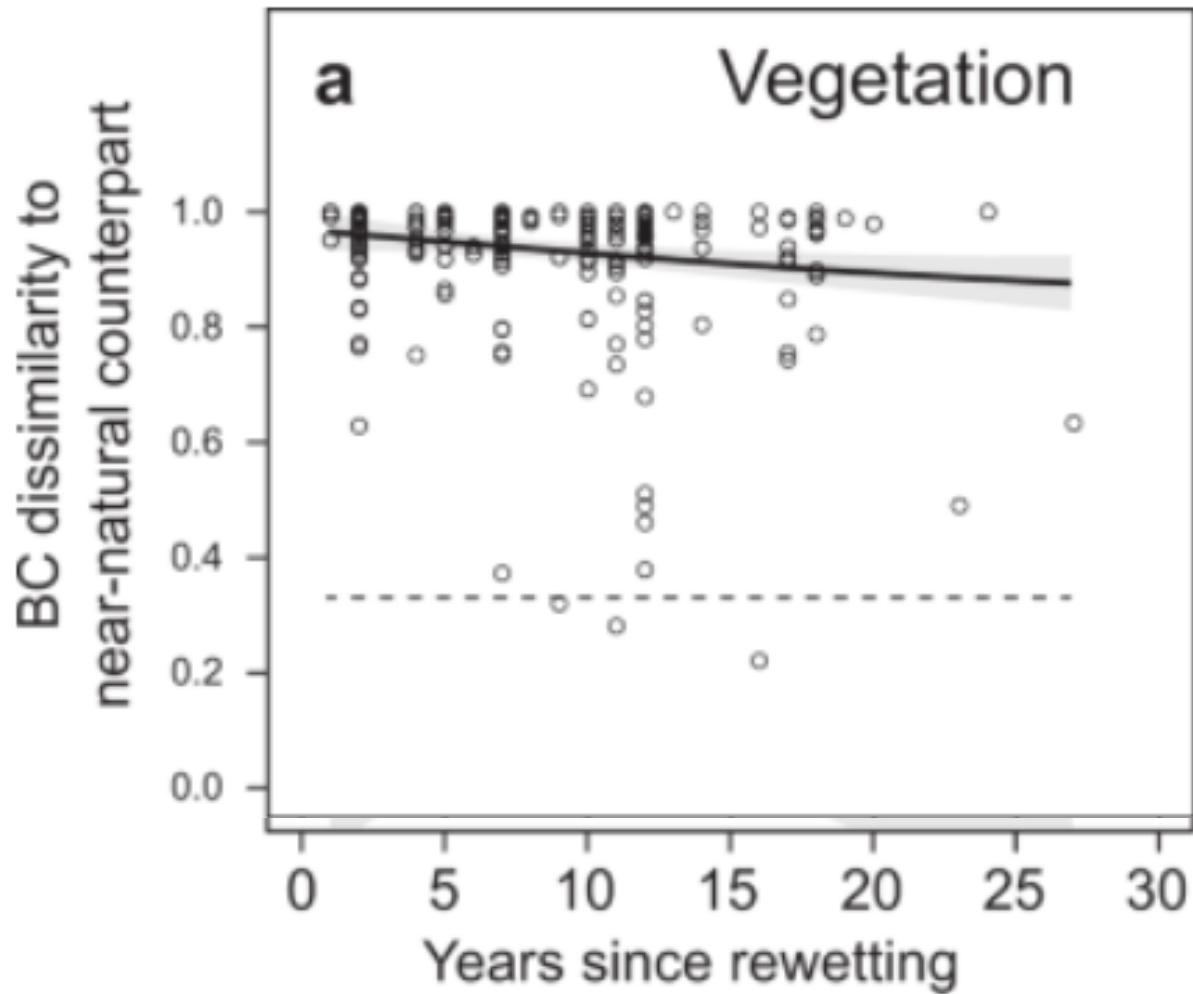
# nature

## Rewetting does not return drained fen peatlands to their old selves

[J. Kreyling](#) , [F. Tanneberger](#), [F. Jansen](#), [S. van der Linden](#), [C. Aggenbach](#), [V. Blüml](#), [J. Couwenberg](#), [W-J Emsens](#), [H. Joosten](#), [A. Klimkowska](#), [W. Kotowski](#), [L. Kozub](#), [B. Lennartz](#), [Y. Liczner](#), [H. Liu](#), [D. Michaelis](#), [C. Oehmke](#), [K. Parakenings](#), [E. Pleyl](#), [A. Poyda](#), [S. Raabe](#), [M. Röhl](#), [K. Rücker](#), [A. Schneider](#), ... [G. Jurasinski](#)



# No biodiversity gains



# Rewetting strategy

Exposed peat generates  $N_2O$  emissions resulting in

18 714 kg  $CO_2$  eq / ha



- 2.1% GDP

- 600 mil. € products

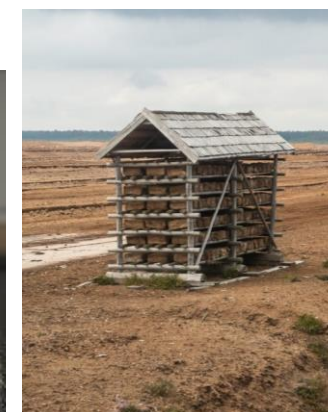
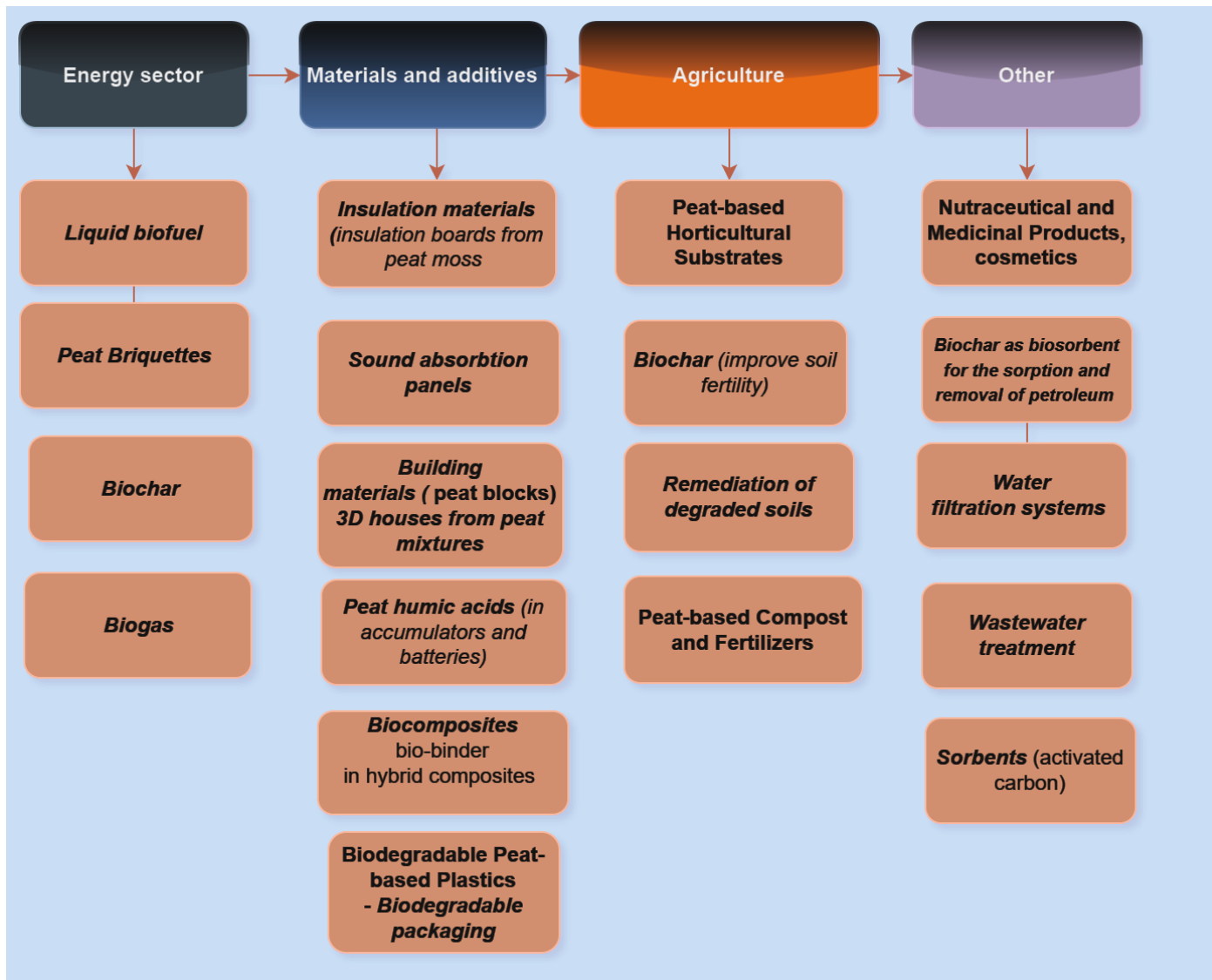
- 2250 employees

1 865 kg  $CO_2$  eq / ha





# Products with high added value



# Example. Use the peat land in our advantage

361 790 kg CO<sub>2</sub> eq / ha by replacing EPS

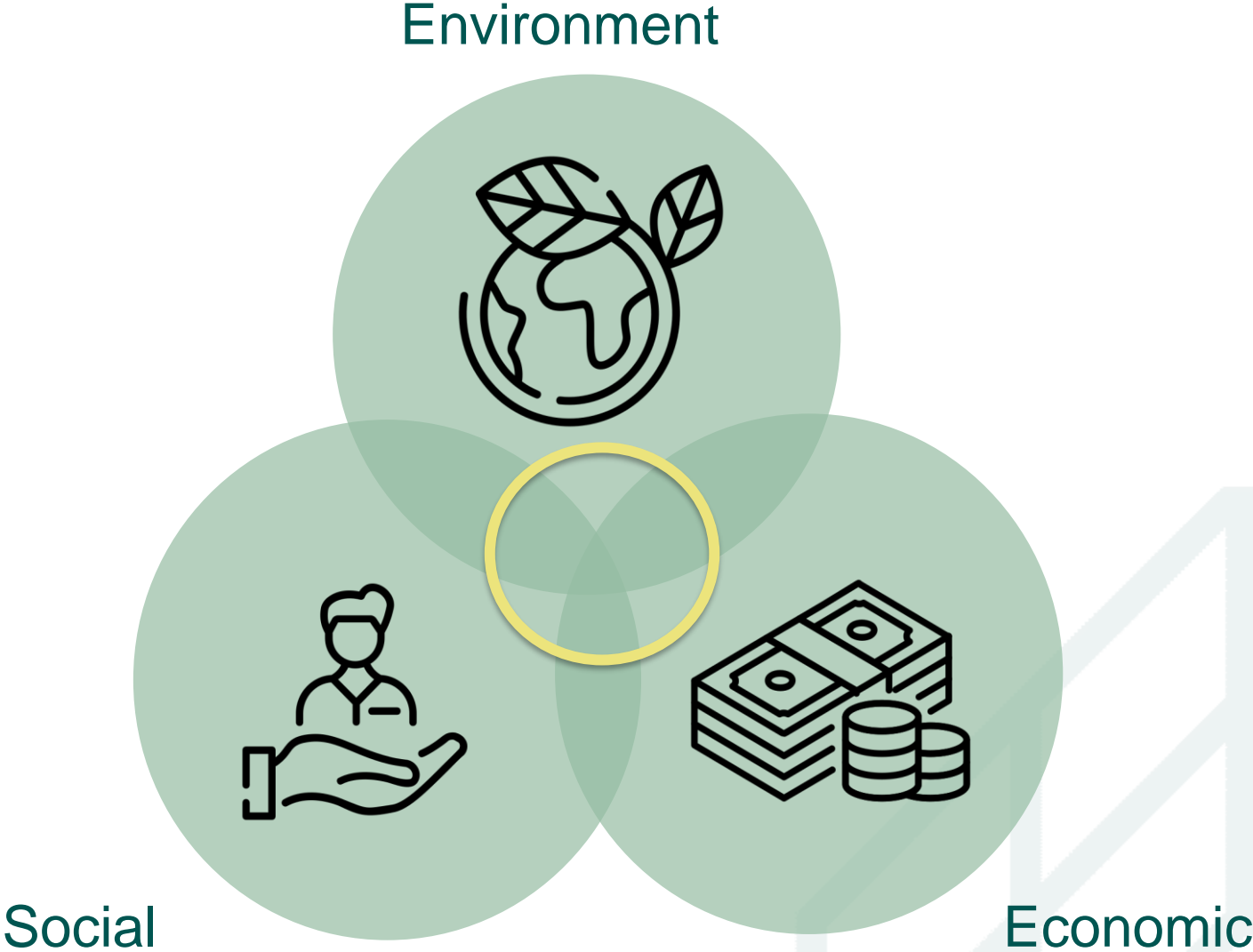


Peatland can save GHG emissions by:

- Replacing the fossil alternatives
- Storing the carbon in the product



# Economic Growth **by** Sustainable Development



## More information:



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