

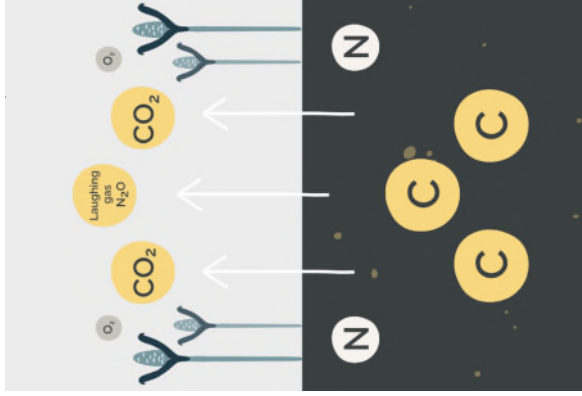


# Start-up for Agriculture on Rewetted Peatlands

17<sup>th</sup> of October 2023

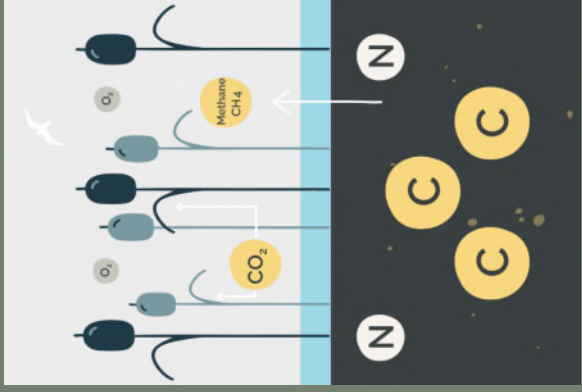
**CHALLENGE:** Drained peatlands accelerate the climate crisis

**PROBLEM:**  
**DRAINED PEATLANDS**



**95% of peatlands** in Germany have been **drained**. These are responsible for **7.5% of German greenhouse gas emissions**.

**SOLUTION:**  
**REWETTING**



**Rewetting stops emissions** almost immediately and completely.

**KEY:**  
**AGRICULTURE**



**80% of the drained peatlands are farmed.** Incentives for rewetting and perspectives thereafter are missing.

**DIMENSION:** Germany must rewet massively

**The current approach to rewetting is clearly failing the set goals.**

## ANNUAL REWETTING – MASSIVE SHORTFALL

Necessary to achieve Paris Agreement\*

50,000 hectares p.a.

**VS.**

Current speed:  
< 2,000 hectares p.a.



\* Based on the transformation path of the Greifswald Mire Centre.

**SOLUTION:** "Paludi at Scale" solves the "chicken and egg" problem

**We establish paludiculture\* farms on rewetted peatland as „lighthouse“ projects.**



## **PROOF OF CONCEPT HAS BEEN DEMONSTRATED**

**Research institutions** such as the Greifswald Moor Centrum as well as **pioneering farms** have proven the cultivation of paludiculture.

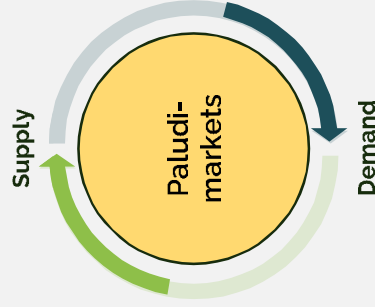
Our business modelling builds on the **delivered proof of concept** and scales paludiculture.

## **PROOF OF MARKET WILL SHOW PALUDI AT SCALE**

By leveraging the experience from the proof of concept our proof of market will **solve the "chicken and egg problem"**.

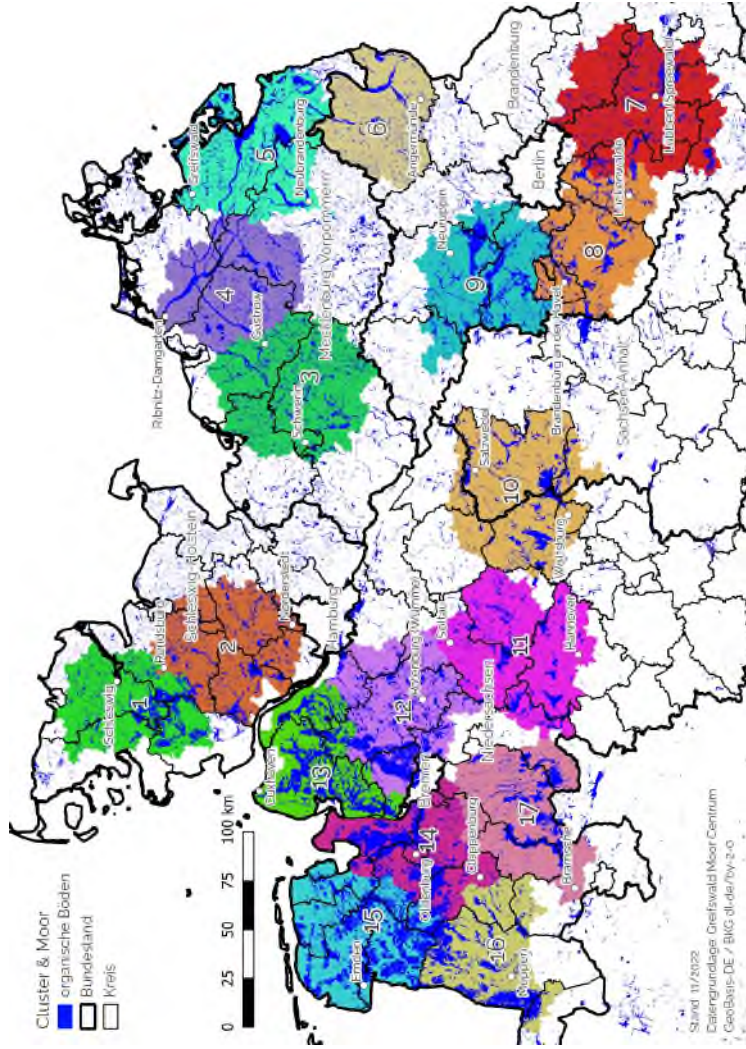
**Our supply of sufficient paludi biomass** allows to realize reliable delivery quantities and purchase guarantees.

On the demand side, we **develop paludi products with businesses and build value chains.**

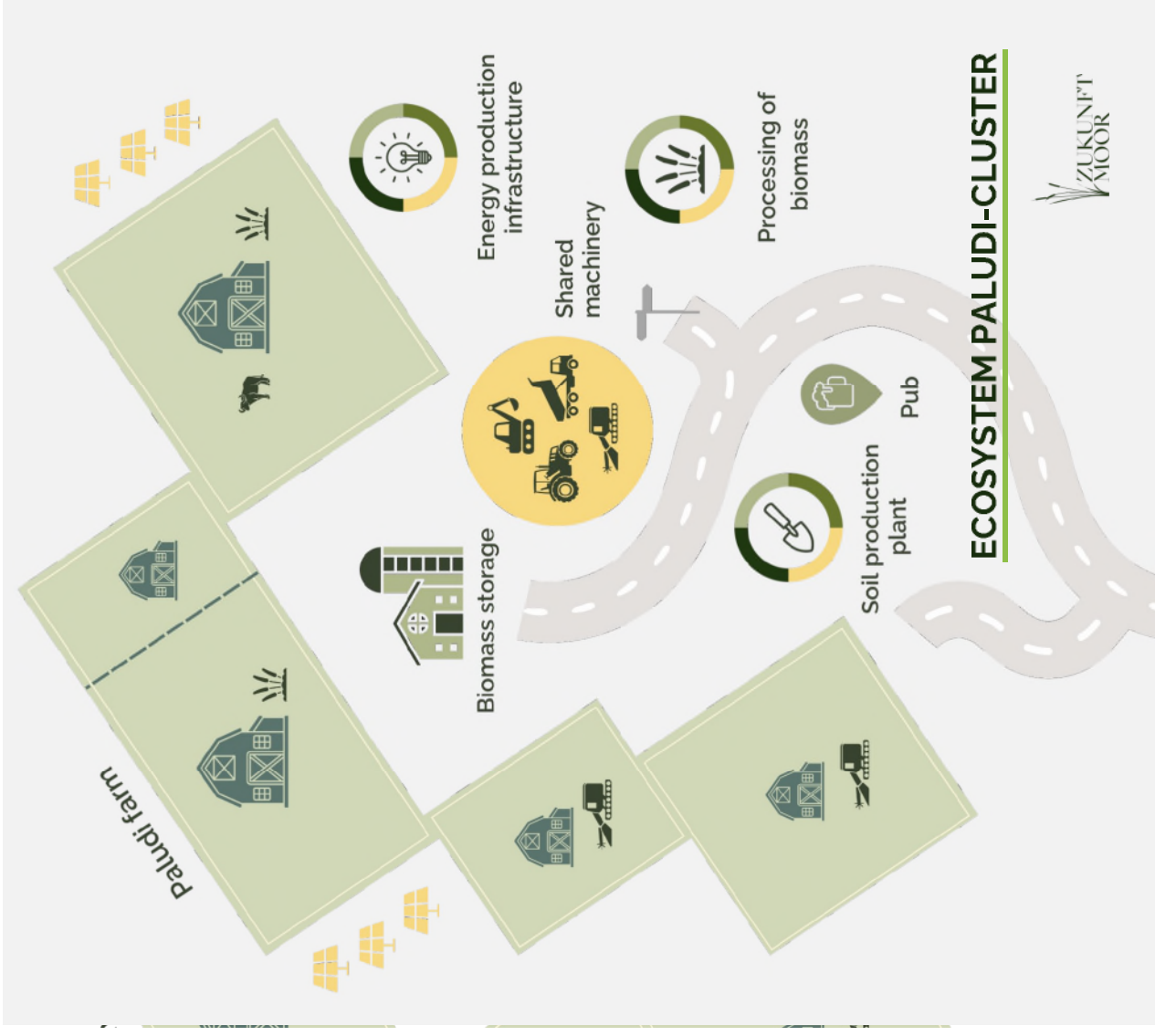


\* Paludiculture is composed of 'palus', Latin for 'swamp, morass', and 'culture', for 'cultivation'. Paludiculture refers to all agricultural and forestry use of wet peatlands.

**VISION:** Germany's peatlands will be transformed cooperatively

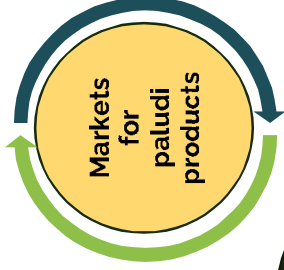


**We have identified 17 potential paludi clusters in Northern Germany.** Within these, farmers can cooperate to create regional shared infrastructure. Depending on the cluster, different value chains can be established.



**MARKET POTENTIAL:** Paludiculture addresses Billion-Euro markets

**We estimate the market size for paludi products at > €3 billion in Germany alone.**



**OUR LAUNCH MARKET**

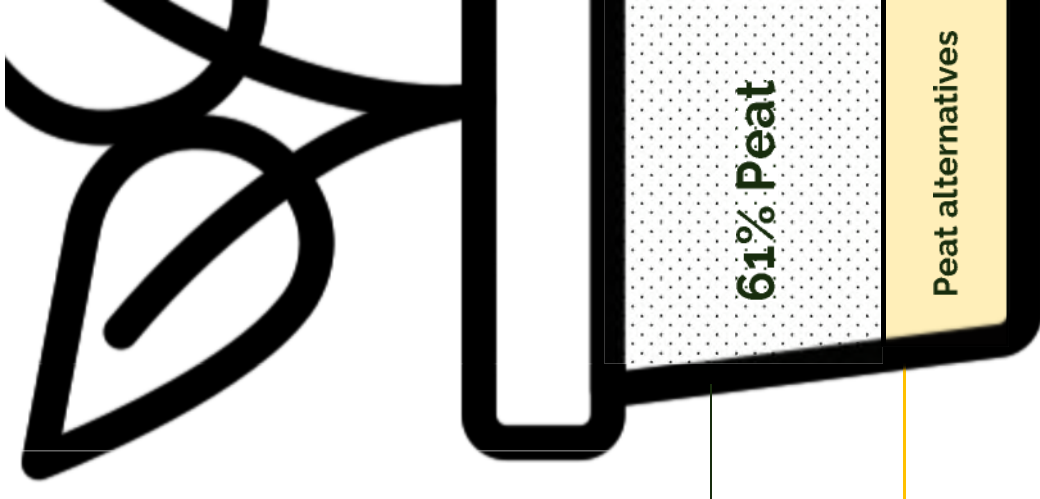
**START MARKET:** The soil industry needs sustainable alternatives

**The soil industry is dependent on peat, which is harmful to the climate.**

Carbon from peat oxidises with oxygen to form CO<sub>2</sub>. That is why the German government is pushing for **peat to be phased out by 2026** for consumer gardening and by **2030** for professional use. The retail industry is also exerting pressure.

In 2022, products from the **German soil industry consisted to 61% of peat**. Peat extraction permits in Germany are expiring.

**Established peat alternatives are becoming scarcer and more expensive** and can only partially replace peat.



**SOLUTION:** Sphagnum moss reduces the dependency on peat

**Sphagnum moss is the most suitable peat alternative.**



Sphagnum moss has the **most similar properties to peat** compared to all established peat alternatives and can replace or supplement it.



Sphagnum moss can be **produced locally on rewetted peatlands** and reduces the requirement to transport substitutes over long distances.



The soil industry can **process Sphagnum moss with existing infrastructure.**



**BUSINESS MODEL:** We produce and trade Sphagnum moss

**Sphagnum moss is the raw material for climate-friendly soils for the production of plants.**

## VALUE CHAIN PLANT PRODUCTION

**Professional substrates**  
for plants, tree nurseries  
& forestry

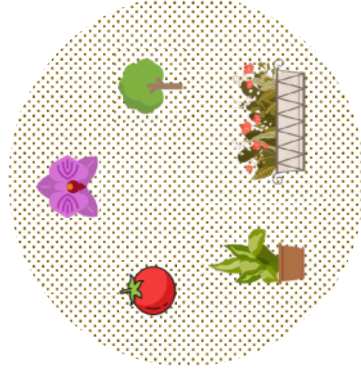
ZukunftMoor  
**cultivates**  
Sphagnum moss



ZukunftMoor  
**trades**  
Sphagnum moss



Soil producers  
**produce**  
soils



**Hobby soil** for  
ornamental & useful  
plants in the home

## SPHAGNUM MOSS MARKET: We address a Billion-Euro market



Germany's **largest soil producers confirm the need and the superior properties** of sphagnum moss compared to other peat alternatives.



So far, sphagnum moss is only cultivated in scientific trial plots (< 10 hectares). **There is no relevant market supply.**



**We are establishing large-scale Sphagnum moss production** to generate economies of scale and provide sufficient biomass for purchase guarantees.



## SALES POTENTIAL OF SPHAGNUM MOSS 2021\*



**TREND:** Due to growing demand for vegetables and ornamental plants, the **global substrate demand is expected to increase fivefold by 2050.\*\***

\* Based on production statistics 2021 (IVG e.V. 2022), if Sphagnum moss replaces white peat by 100% and black peat by 50% at a price of 80€/m<sup>3</sup>.

\*\* Blok et. al. 2020. „Growing media for food and quality of life in the period 2020-2050.“ Acta horticulturae. in press.

**SPHAGNUM AT SCALE:** Innovative techniques enable profitability

Previous Sphagnum moss cultivation was carried out on small plots, emphasizing scientific research. **Our focus is on scale and profitability.**



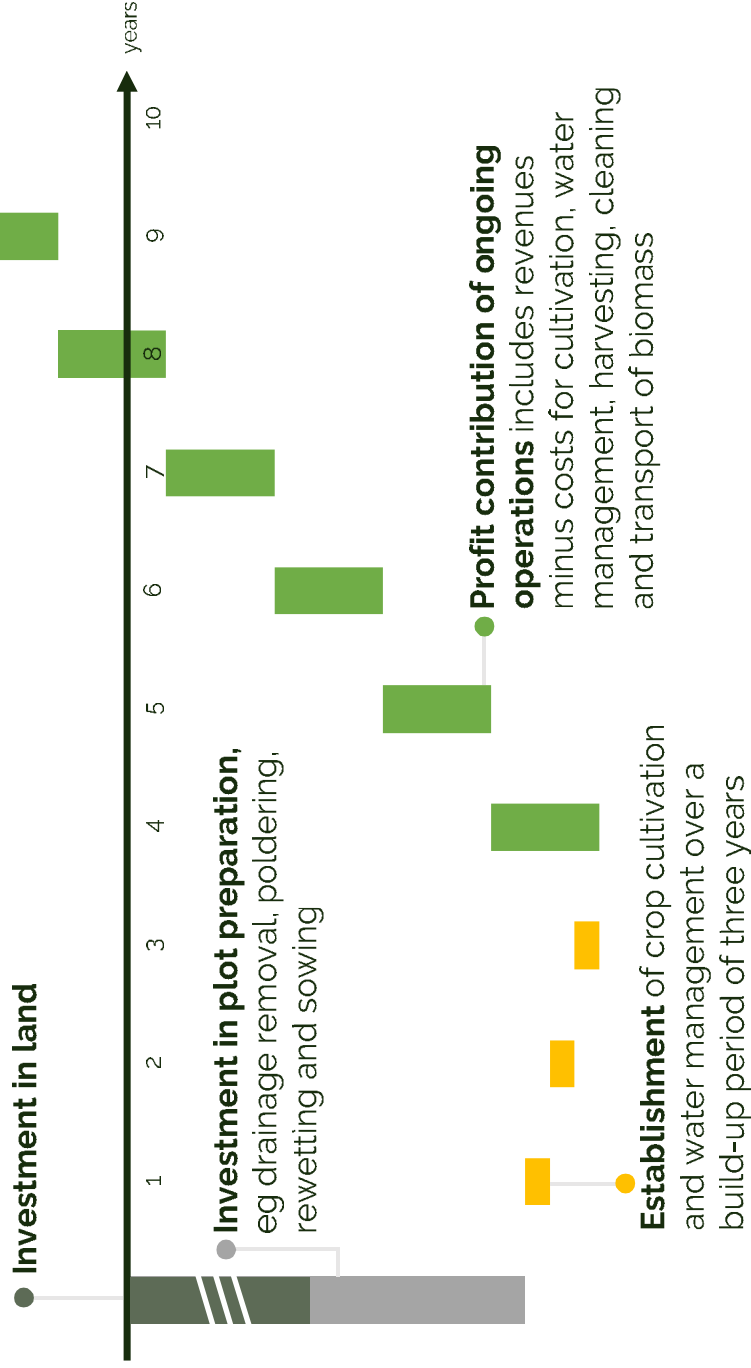
We increase the arable production area with **newly developed machinery**. Our objectives are cultivation efficiency and optimized harvesting.

We improve Sphagnum moss yield with year-round and **intelligent water management**.



**UNIT ECONOMICS: €6.000 profit contribution per hectare**

## SCHEMATIC SPHAGNUM MOSS CULTIVATION PER HECTARE



## UNIT ECONOMICS PER HECTARE

- + €12,000 sales per year.**
- €6,000 costs** annually from the time of the first harvest including personnel and machinery costs
- = €6,000 profit contribution**

The profit contribution is significantly higher than can be achieved by conventional farming on drained peatlands.

Note: Rounded values for illustration purposes.



**ECOPRENEURSHIP:** We combine profitability & impact

# Profit margin: 50%

The profit contribution of €6,000 per ha **is significantly higher than what can be achieved by conventional farming on drained peatlands**, such as with grass silage (€500), milk production (€1,400) and silage maize (€1,500).

# CO<sub>2e</sub> avoidance: 40 t per hectare p.a.

With each cultivated hectare, we avoid greenhouse gas emissions through rewetting and peat substitution<sup>1</sup>. To store the same amount of CO<sub>2e</sub>, **3,200 trees would be required**.

\* Carbon Impact based on scientific evidence, we model a minimum avoidance of 40 tons of CO<sub>2e</sub> per hectare and year due to:

- 1) Paludiculture conversion of grassland avoids 20 tons of CO<sub>2e</sub> per hectare and year.
- 2) One hectare of Sphagnum moss cultivation replaces ~150 m<sup>3</sup> of peat thereby avoids ~20 t/yr CO<sub>2e</sub>.

**TEAM:** We combine entrepreneurship, agriculture and politics

## FOUNDING TEAM ZUKUNFTMOOR

LUCAS  
GERRITS



MD

Many years of experience in **politics and management consultancy.**

#Politics  
#Communication  
#Partnerships

JULIA  
KASPER



MD

**Founder and entrepreneur** in the wood industry with a background in a family business.

#BusinessCase  
#Fundraising  
#Legal&Finance

PAUL  
WALDERSEE



MD

**Practical experience** and studies of organic and conventional **agriculture.**

#LandScouting  
#Production  
#PaludlFarm

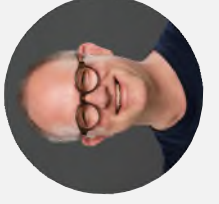
FLORIAN  
FORSTMANN



**Serial entrepreneur, mentor and angel investor,** a.o. founder of the myToys Group.

#BusinessCase  
#Scaling  
#Initiator

DR. NIKO  
WAESCHE



Experience as **executive and investor,** a.o. Executive Partner at IBM.

#Land  
#Communication  
#Initiator

## PARTNER



**LET'S GO:** Join us to drive the peatland transformation



**Long-term return on invested capital** through the development of paludal farms with Sphagnum moss as the starting product.



**Measurable impact on climate and environmental protection** through rewetting and substitution of fossil-based with renewable raw materials.



**Kick-starting the regional transformation of agriculture** with sustainable and meaningful impact on the people and economic structures in peatland regions.

**Questions:** Thank you for your attention!



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