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Challenges and insights from generating one of the first LCA for a large-scale production of paludiculture products

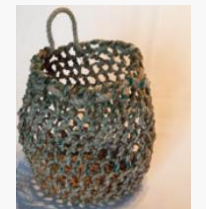
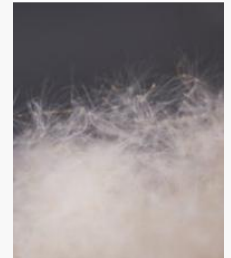
's-Hetogenbosch, 3rd September 2026, Dr. Clemens Kleinspehn



- 1| Why is a LCA crucial for Paludi-Products?
- 2| What are the easy steps?
- 3| Where are the challenges?

1 | Why is a LCA crucial for Paludi-Products?

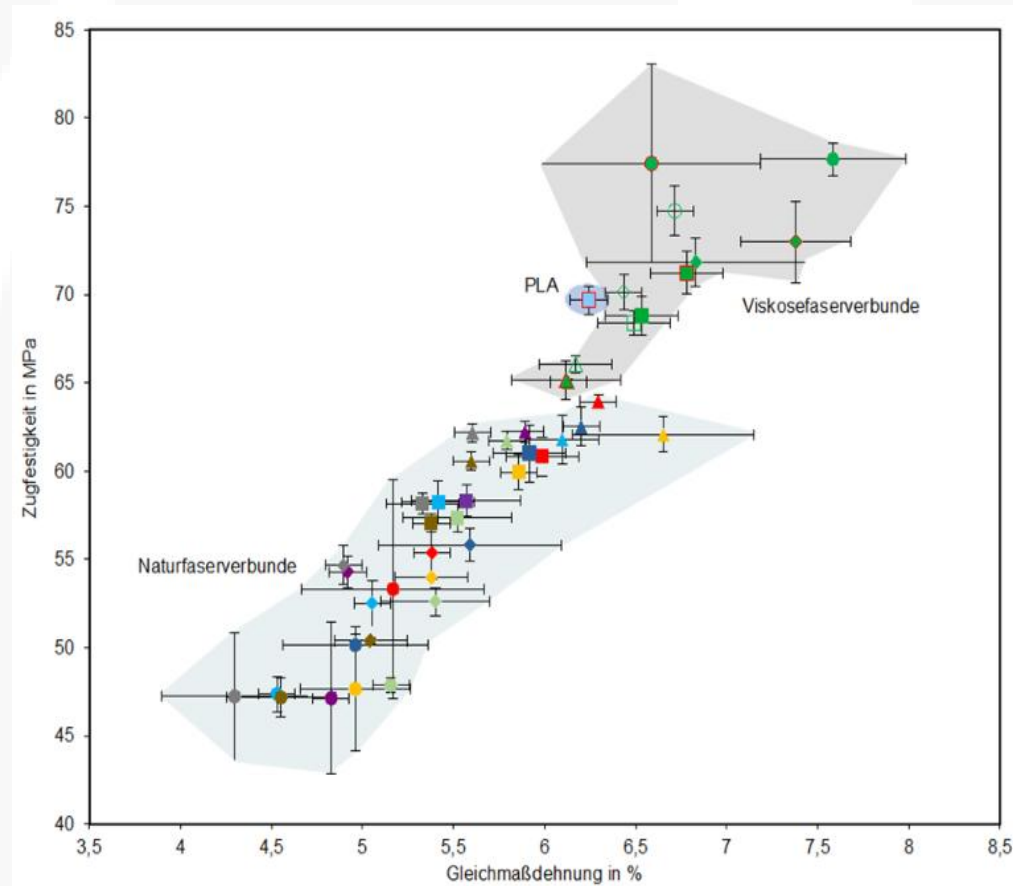
- Many creative Paludi products
- But are they competitive?



1 | Why is a LCA crucial for Paludi-Products?



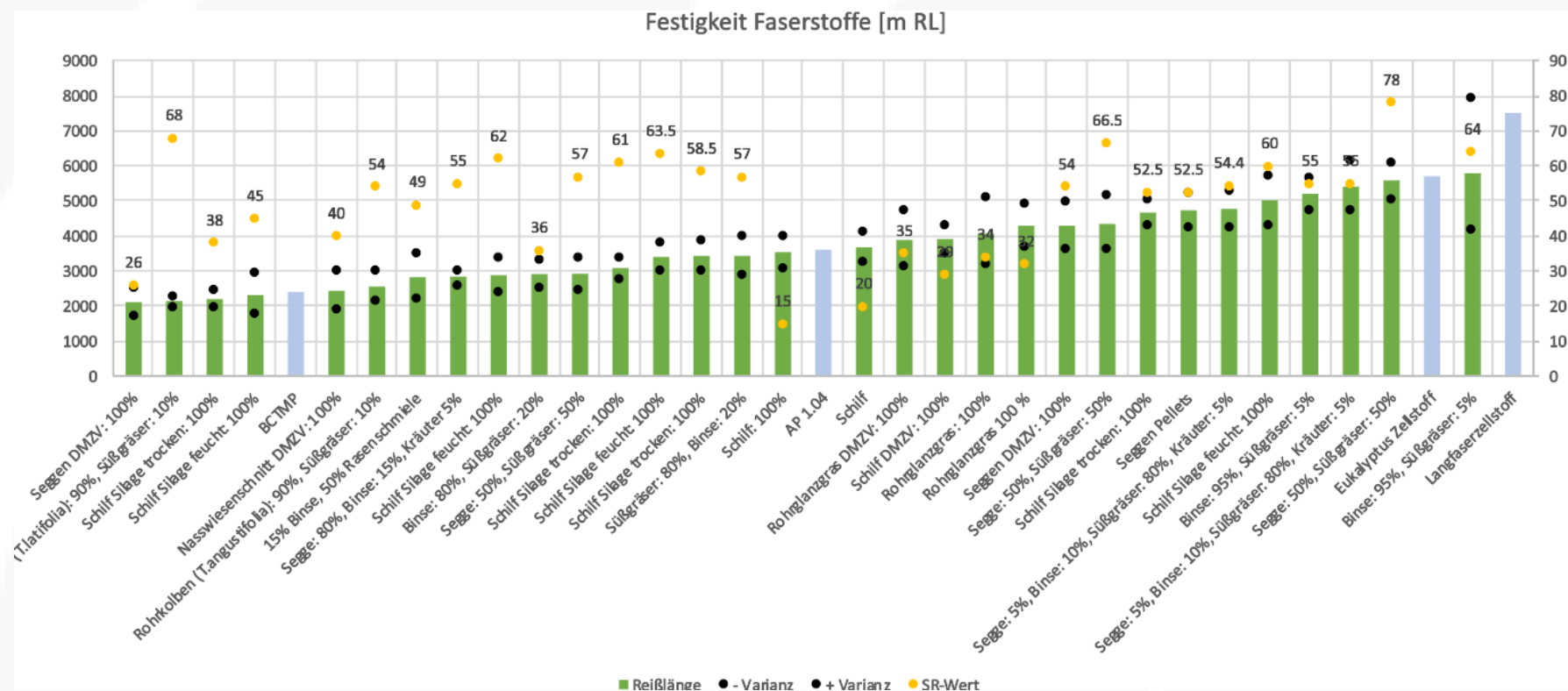
- Products can perform like competitors



1 | Why is a LCA crucial for Paludi-Products?

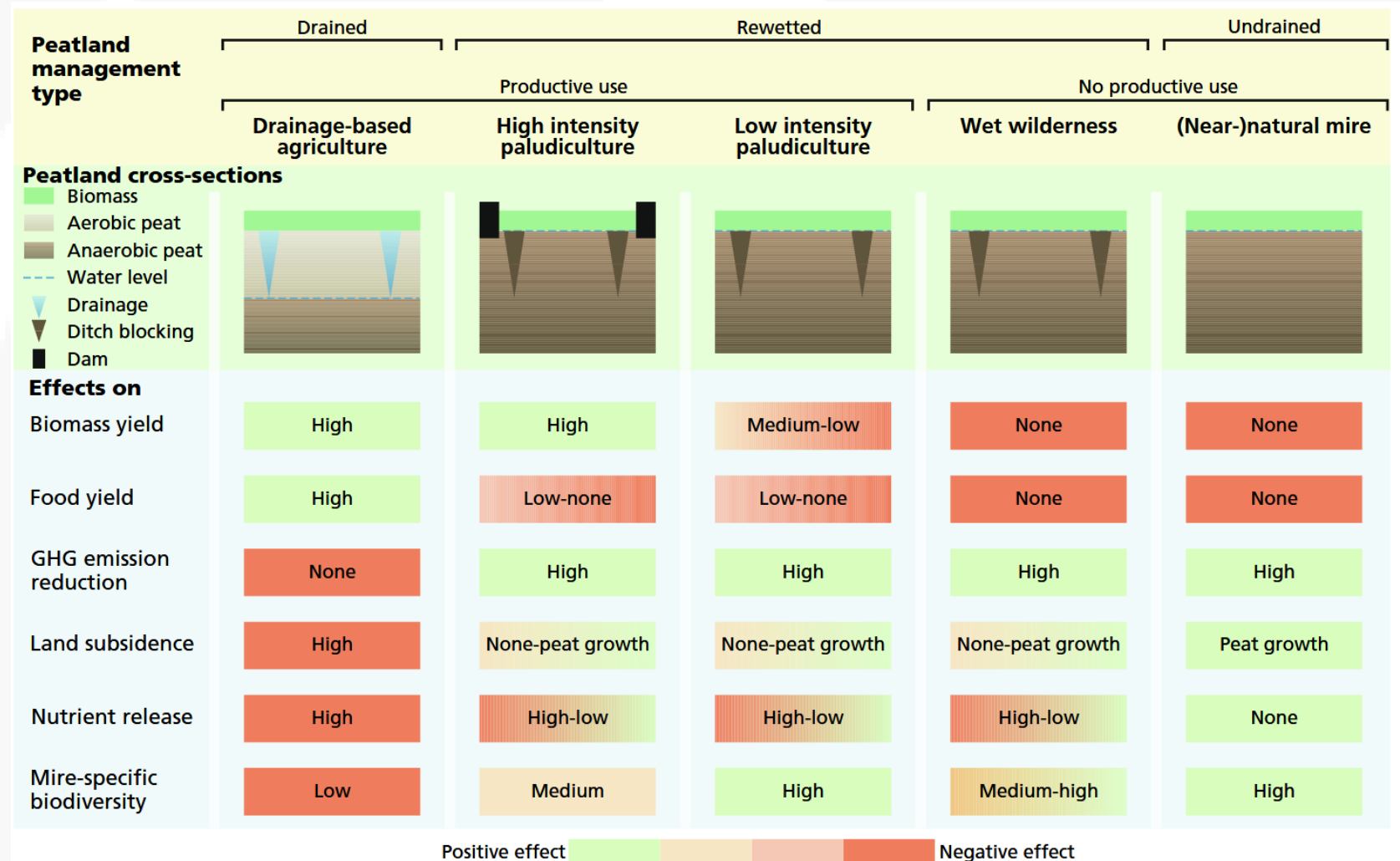


- Products can perform like competitors



1 | Why is a LCA crucial for Paludi-Products?

- Competitive edge is the ecological impact



2 | What are the easy steps?

- Life cycle stages of Otto package



Production A

Use B

Grave C

- Many steps are identical

ecoinvent

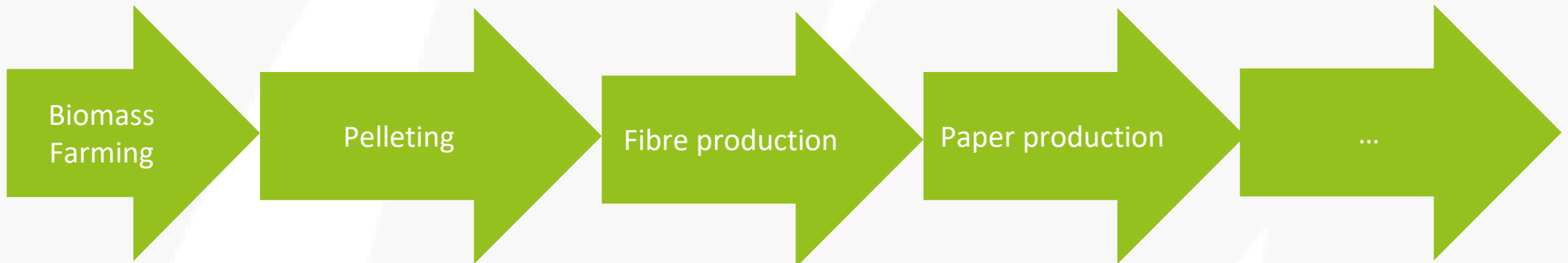
sphera

3 | What are the challenges?



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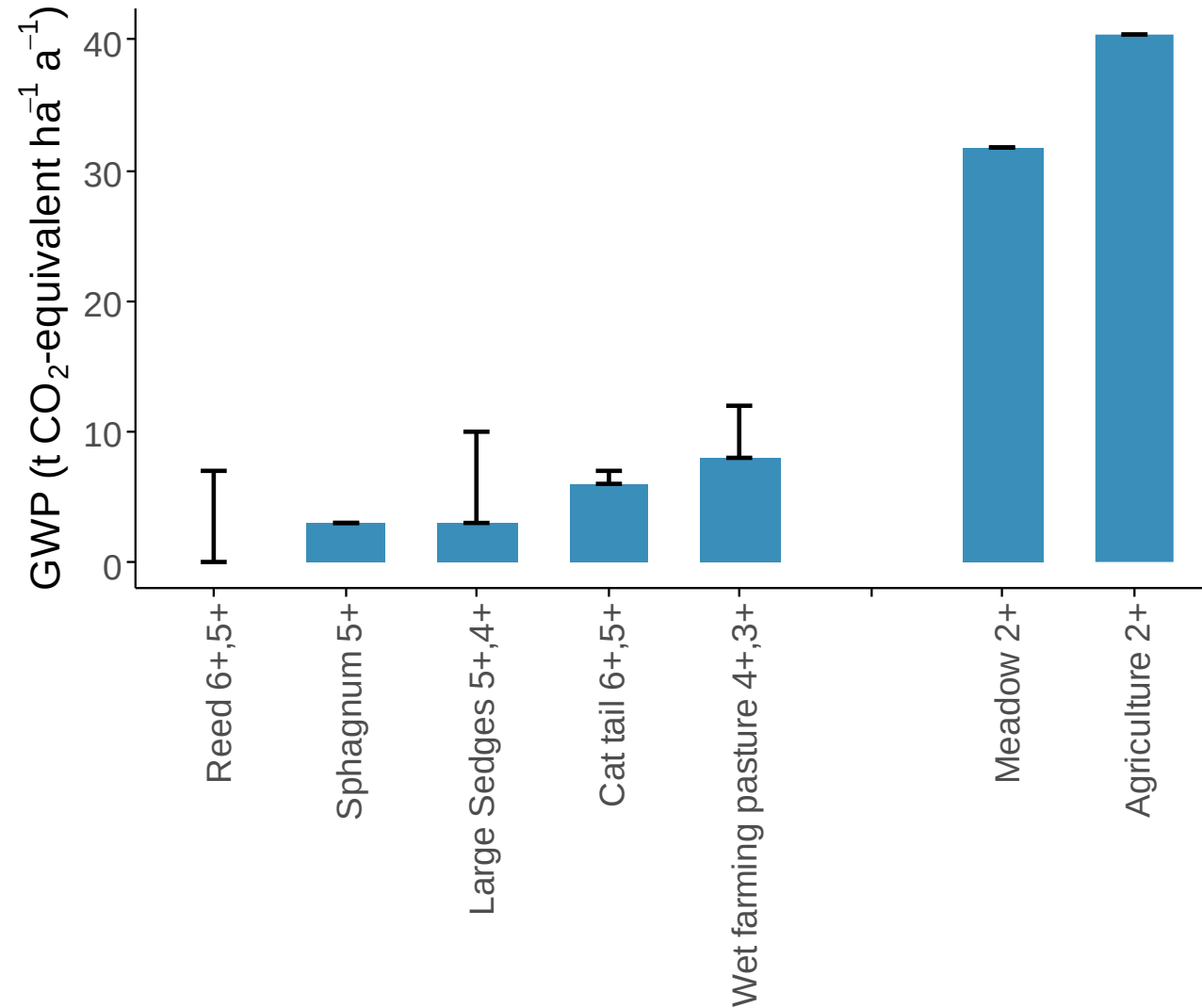
- Interesting part
is before the first
paper



3 | What are the challenges?



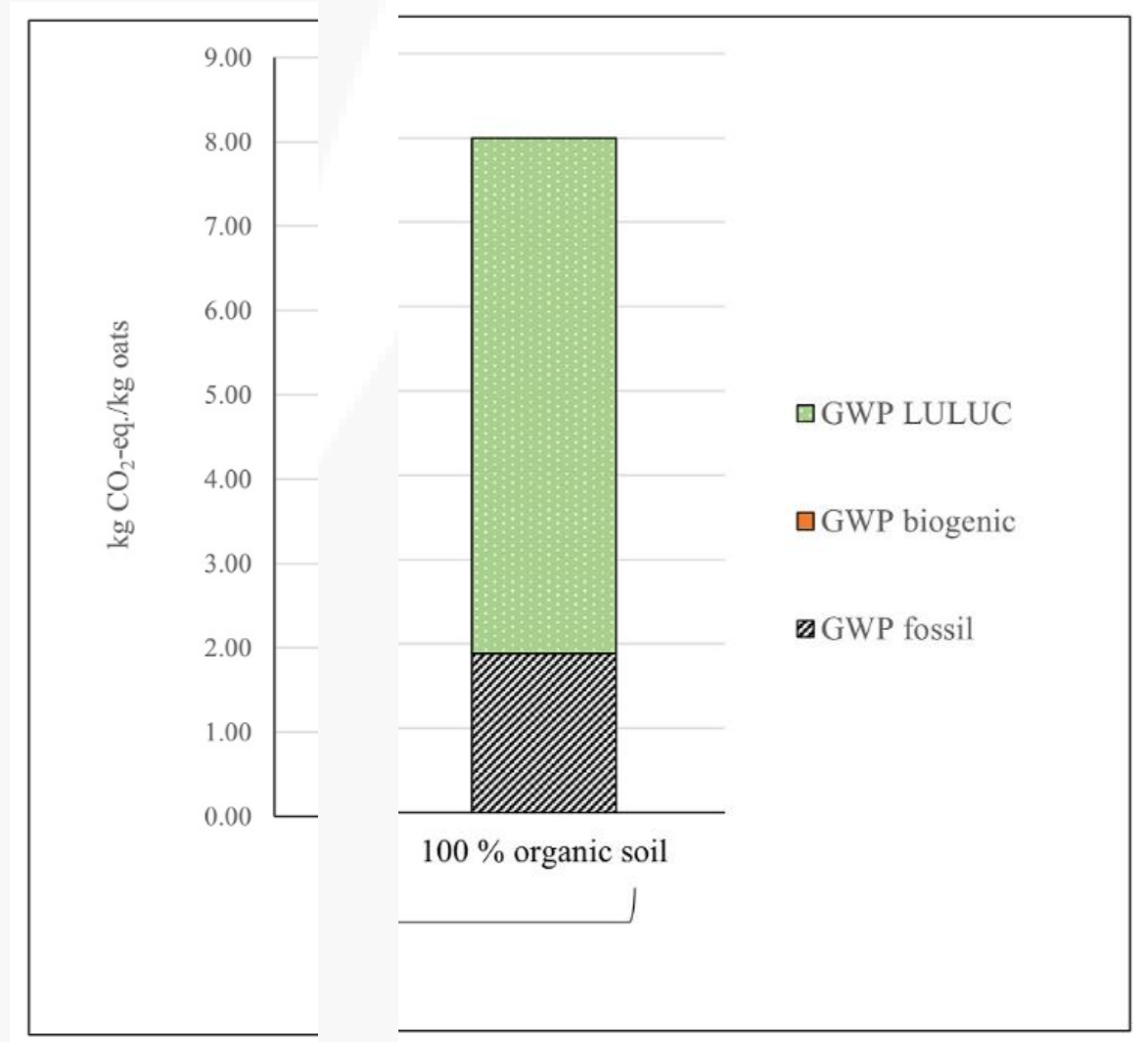
- Lion share happens before production in the Land use change



3 | What are the challenges?



- Lion share happens before production in the Land use change



3 | What are the challenges?

- Life cycle stages of Otto package



- Not included in LCAs

3 | What are the challenges?

- LCA of Otto package
- Includes GHG, Energy and Water Impact
- Qualitative Biodiversity Impact





Gefördert durch:



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für Ernährung
und Landwirtschaft



aufgrund eines Beschlusses
des Deutschen Bundestages

Thank you very much for your attention

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