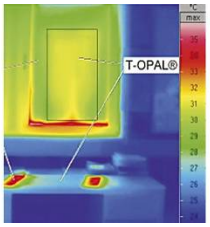
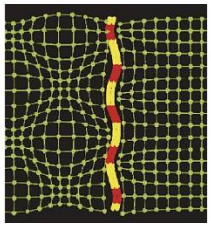
Carbon Footprint of Food packaging

- Commissioned by Stiftung Initiative Mehrweg (SIM), February 2018

Auf Wissen bauen



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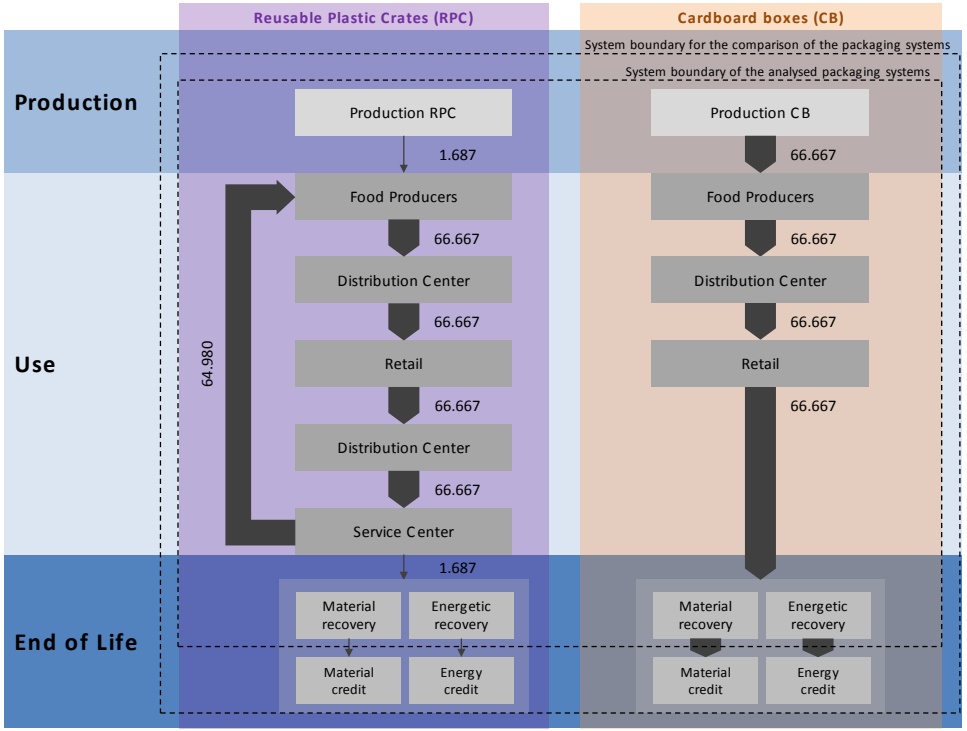
AGENDA

- Goal and Scope
- Results
- Summary

Goal and Scope

- Comparing the carbon footprint of fruit and vegetable transportation in single use cardboard boxes (CB) and reusable plastic containers (RPC) according to ISO 14040/44
- Based on actual transport distances in DE, ES, IT, NL und FR
- Background datasets used are European Average values
- Functional Unit (FU): Transporting 1,000 t of fruit and vegetables
- All results relate to the goal and scope of the underlying study



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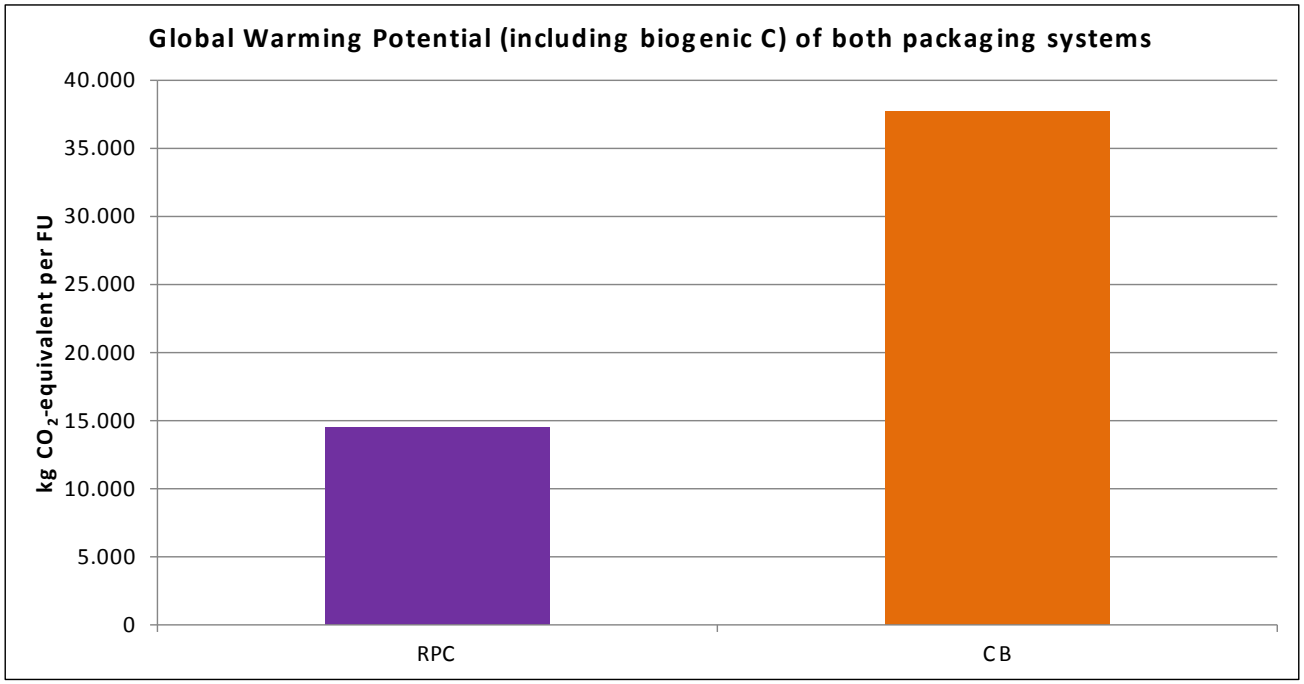
Results

- When using RPC, around 15 t of CO2-eq. are emitted
- When using CB, over 37 t of CO2-eq. are emitted
- ➢ The use of RPC results in 60% lower greenhouse gas emissions to provide the same transport performance compared to CB



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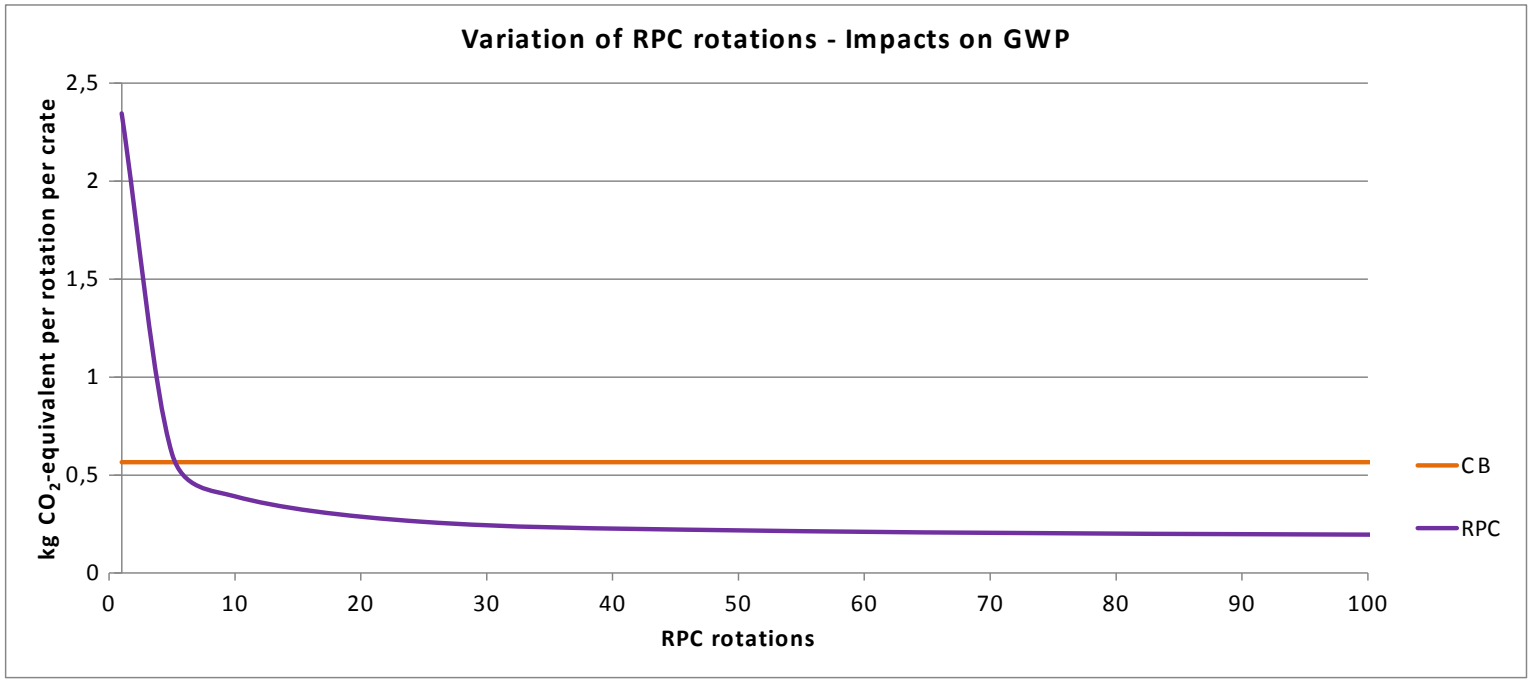
Results

- RPC become more advantageous as the number of rotations (reuse) increases
- After the 6th rotation, RPC have lower greenhouse gas emissions than CB per rotation



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Summary

- RPC create considerably lower greenhouse gas emissions than CB when providing the same transport performance
- The greenhouse gas emissions of RPC per rotation are lower than those of CB
  - In practice, RPC are used for over 50 rotations
- Further information is available in the study „*Carbon Footprint von Verpackungssystemen für Obst- und Gemüsetransporte in Europa*“ (english version pending), for which a critical review according to the requirements of ISO 14040/44 was carried out

Contact information

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