

# Life Cycle Thinking as an Integral Part of Entering a New Business Field

from PVC windows to sustainable wooden houses

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# Agenda

- Company and Transformation
- Driving Factors for Transformation
- Vision
- Methods and Guiding Questions
- Case Study and the Way Forward
- Summary

# Company and Transformation

- Bässler GmbH re-founded 1945 in Göppingen
- Employees: 30 (FTE)
- Annual turnover: 3 million €
- Main products:
  - PVC windows & doors
  - Sun protection
  - Carpentry work



*From PVC windows  
to  
sustainable wooden houses*



# Driving Factors for Transformation

- Personality driven:
  - Generation change in the management
  - Sense of responsibility as a business for local environment
  - Contribute to global sustainable development
- Context of change:
  - Traditional building and construction business not sufficient in the long run
  - Current status in the market: one of many
  - Contribute to 9, 11 and 12 of the 17 sustainable development goals of the UN



Source:  
<https://sdgs.un.org/goals>

- Societal trend towards more sustainability → Lead by example

# Vision



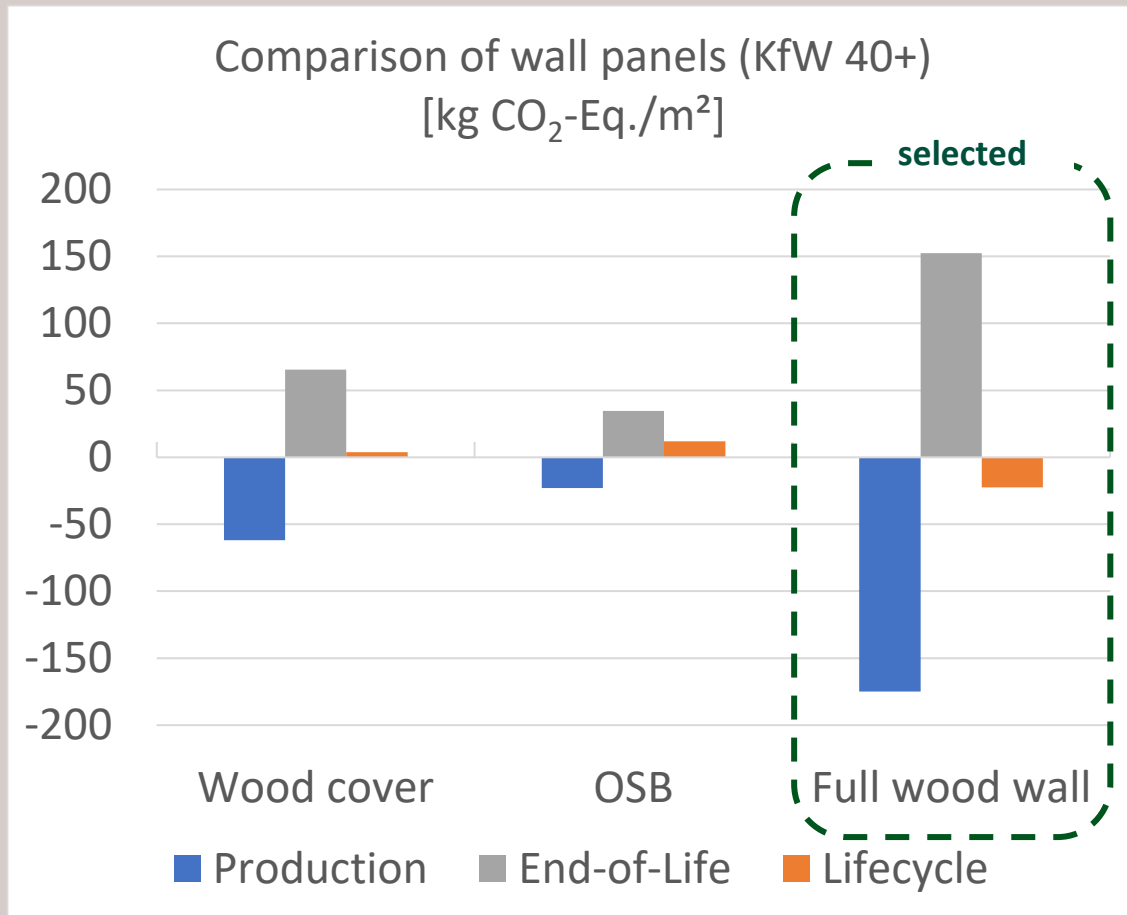
- Implementation of sustainable business model within a running business
- Set benchmark in a new market
  - Benchmark: positive overall life cycle impact of all products for the environment
  - New market: sustainable wooden houses for the local building sector (radius of 60 km)
- Free from plastics and harmful substances
- Recyclability
  - Longevity
  - Replaceability



# Methods and Guiding Questions

- Life cycle assessment (LCA):
  - Where does the wood come from?
  - What environmental impact is accumulated over the life cycle?
  - Where in the life cycle can the product be improved?
- Which substances are included in the building materials?
- How can „bad“ building materials be substituted?
- Which materials can be sourced locally?

# Case Study – Results



- Binding carbon in wood
- Choice of wood: no competing usage (e.g. bark beetle timber)
- Homogeneous solid wall construction: 100 % wood, no adhesives
- Modularity: design for re-use → longevity
- Use phase of entire system to be investigated
- Data source: ÖKOBAUDAT

# The Way Forward



*LOCAL (30 km)  
available wood*



*LOCAL (30 km)  
Supplychain*

+



*Advanced technology  
& robotics*



*High quality product*





# Summary

- Life cycle thinking as integral part for changing business field is possible for SME
- Early involvement in decision making helps to choose suitable technologies and processes
- Consistent alignment of business model according to life cycle thinking builds a good foundation for future sustainable business activities

# Thank you.

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