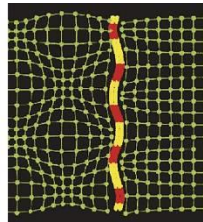
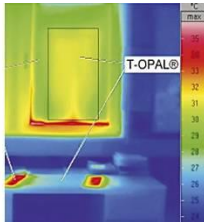


Challenges of LCA in a European context – Findings from the research projects OPEN HOUSE and EeBGuide

Gantner, J.; Lasvaux, S.; Lenz, K.; Böttge, J.; Homolka, S.

Auf Wissen bauen

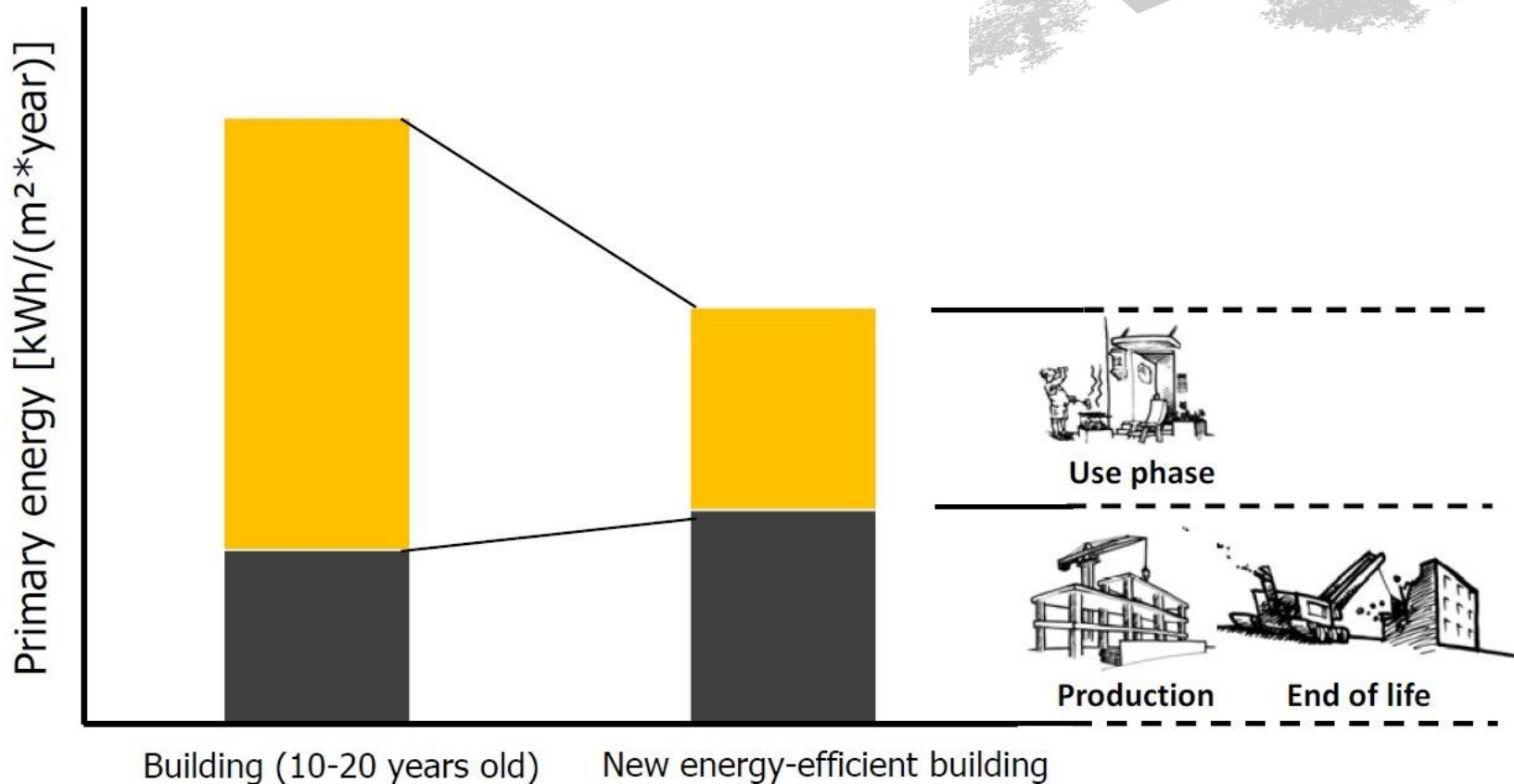


Agenda

- **Introduction**
- **Challenges of LCA in the future**
 - Inconsistency of current guidance documents and standards on LCA
 - Availability and inconsistency of LCA datasets and EPD
 - Inconsistency of current labelling schemes
 - Reference service life
 - National and European reference buildings
 - Surface calculation methodologies and national EPBD versions
- **Conclusion and Outlook**

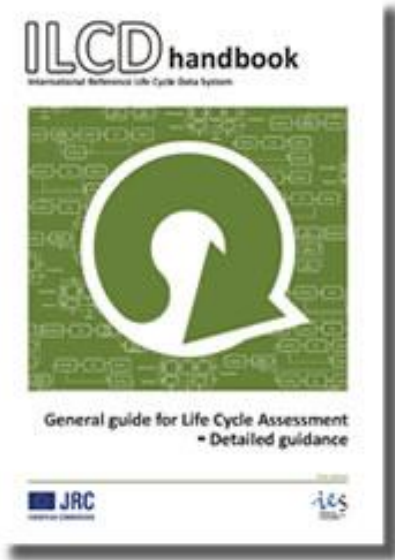
INTRODUCTION

Relevance of Lifecycle Analysis



CHALLENGES OF LCA IN THE FUTURE

Inconsistency of current guidance documents and standards on LCA



- Different LCIA methods for different impact categories
- Different LCIA hypotheses
- Different level of interest

Availability and inconsistency of LCA datasets and EPD



Institut Bauen
und Umwelt e.V.



- Still very few construction products available
- No consistency between different systems
- Different methodologies and system boundaries

Inconsistency of current labelling schemes



DGNB®

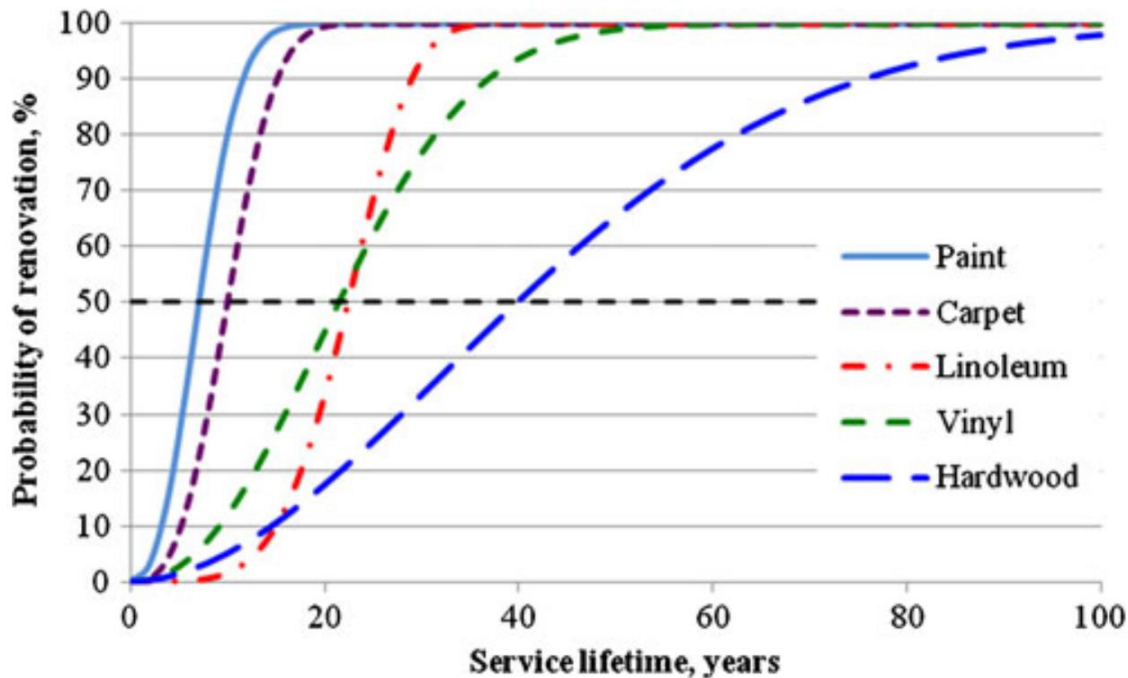
Deutsche Gesellschaft für Nachhaltiges Bauen e.V.
German Sustainable Building Council



breeam

- Different calculation rules for building LCA (e.g. system boundaries)
- Different focus on impact categories and methodologies
- Cut-off requirements

Reference service life



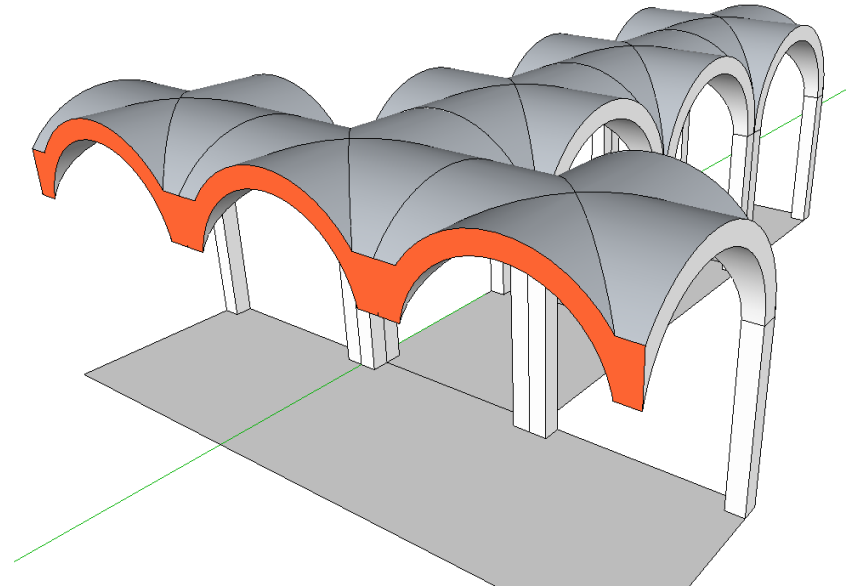
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- Choice of reference service life has a big influence on LCA results
- Different approaches (average theoretical service lifes vs. measured statistical results)

National and European reference buildings



Surface calculation methodologies and national EPBD versions



CONCLUSION AND OUTLOOK

Conclusion

- Life cycle thinking idea is very important for future developments and improvements
- Huge need for standardization and harmonization on a European level
- National standards (e.g. measuring code for surfaces) can be a huge market barrier in and for Europe
- A lot of activities are already undertaken towards a harmonization of standards and guidelines, but there are still different tendencies. Legislative Top Down approaches vs. industry developed established standards

Outlook

A lot of things to do to get to ...

Outlook – LCA happy world



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