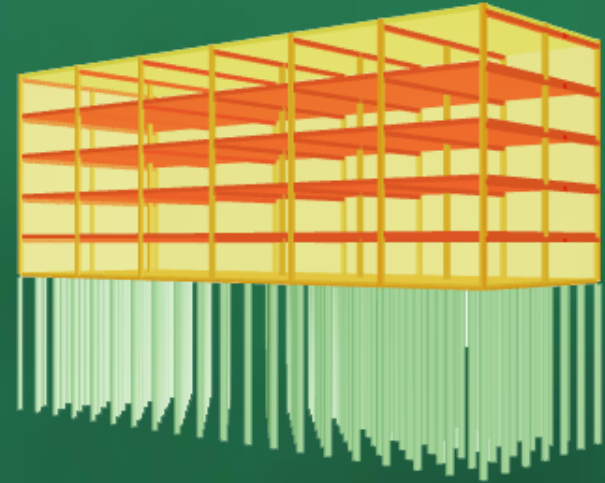


Using BIM for Automated Life Cycle Assessments

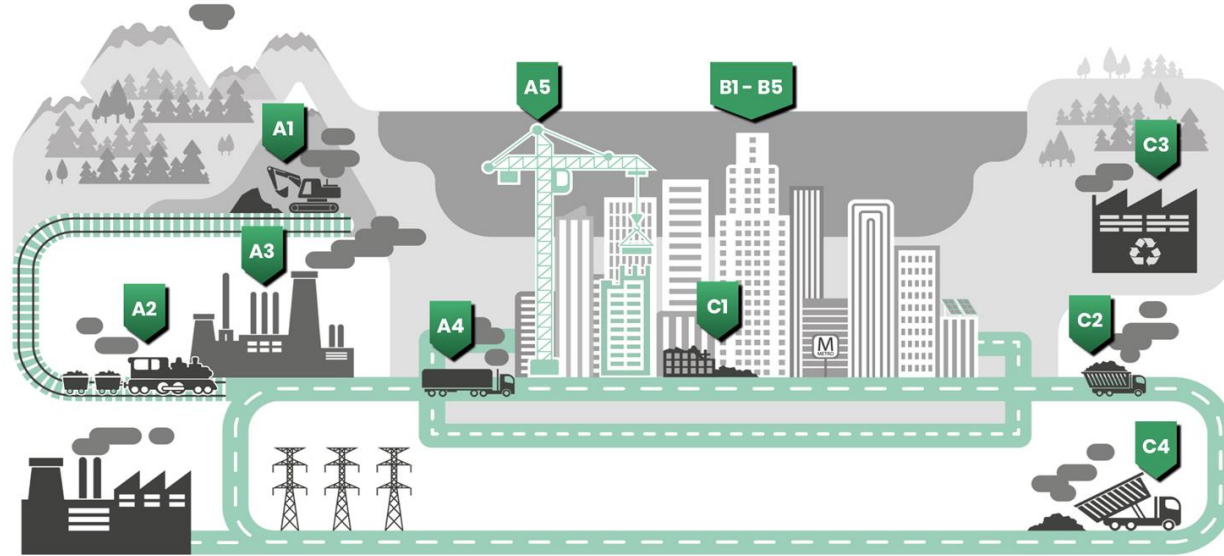
8 May 2023, Berlin



Péter Gyenge

Business Development Engineer (DACH region)

Building LCAs follow the cradle-to-grave approach



A1 - A3 Product stage

A1 Raw material extraction
A2 Transport to manufacturing site
A3 Manufacturing

A4 - A5 Construction stage

A4 Transport to construction site
A5 Installation / Assembly

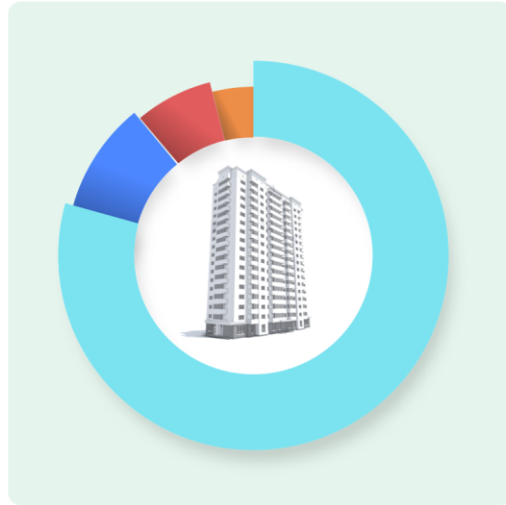
B1 - B5 Use stage

B1 Use
B2 Maintenance
B3 Repair
B4 Replacement
B5 Refurbishment

C1 - C4 End of life stage

C1 Deconstruction & demolition
C2 Transport
C3 Waste processing
C4 Disposal

LCAs show the full picture of environmental impacts



TOTAL
2031
ton CO₂e

ENVIRONMENTAL IMPACT INDICATORS

Global warming 2,03E6 kg CO₂e

Acidification 6,85E3 kg SO₂e

Eutrophication 1,39E3 kg PO₄e

Ozone depletion potential 9,82E-2 kg CFC11e

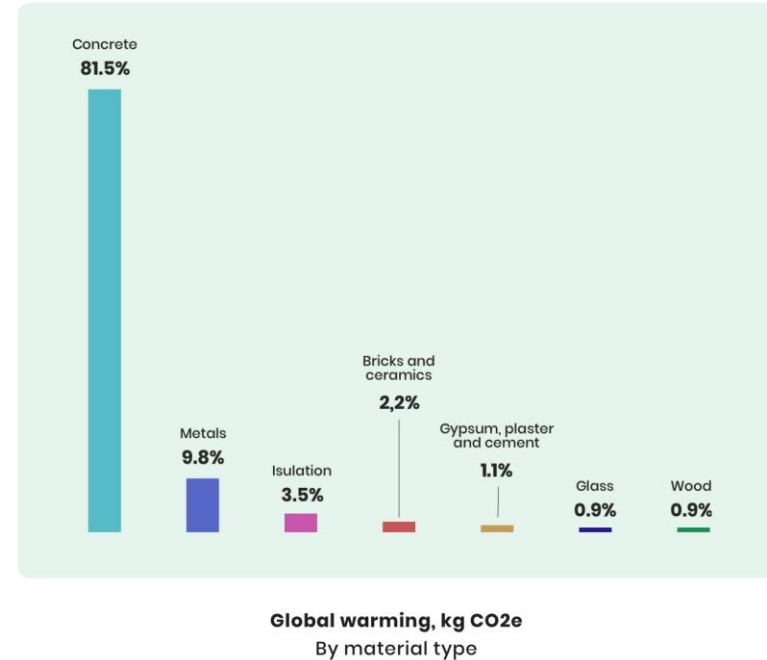
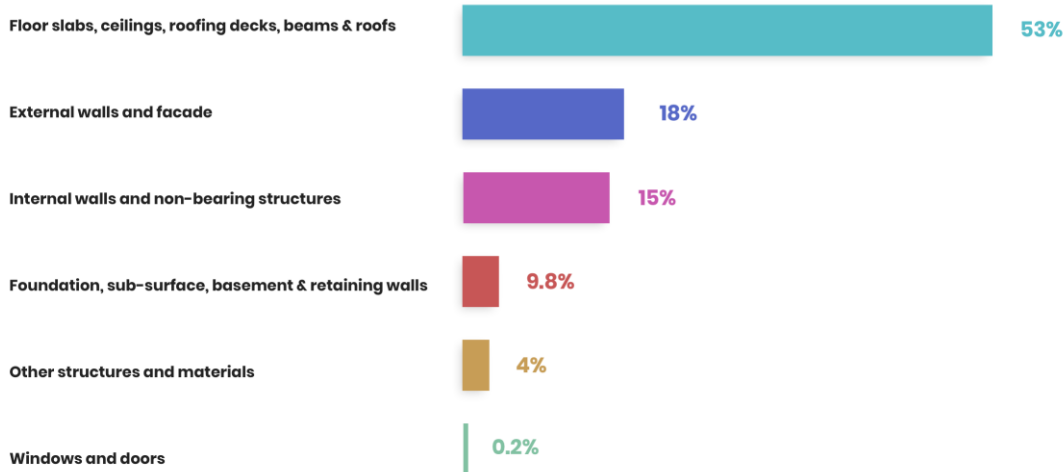
Formation of ozone of lower atmosphere 1,18E3 kg Ethenee

Non hazardous waste disposed 3,97E5 kg

Biogenic carbon storage 6,79E4 kg CO₂e bio

LCAs enable finding environmental hotspots

GLOBAL WARMING, KG CO2E BY BUILDING PART



BIM integrations enable combining necessary data

Building Data

- From building model
- Building parts
- Materials
- Quantities and units
- E.g.: 200 m² plasterboard as part of external walls



Environmental Data

- From One Click LCA database
- Contains environmental information for > 130 k construction products
- Generic, industry average data and manufacturer-specific data
- E.g. 1.5 kg CO₂e per m² product

One Click LCA supports >15 BIM integrations



More Information

<https://www.oneclicklca.com/support/faq-and-guidance/documentation/integrations/>

<https://oneclicklca.zendesk.com/hc/en-us/sections/360004321480-Supported-Integrations>

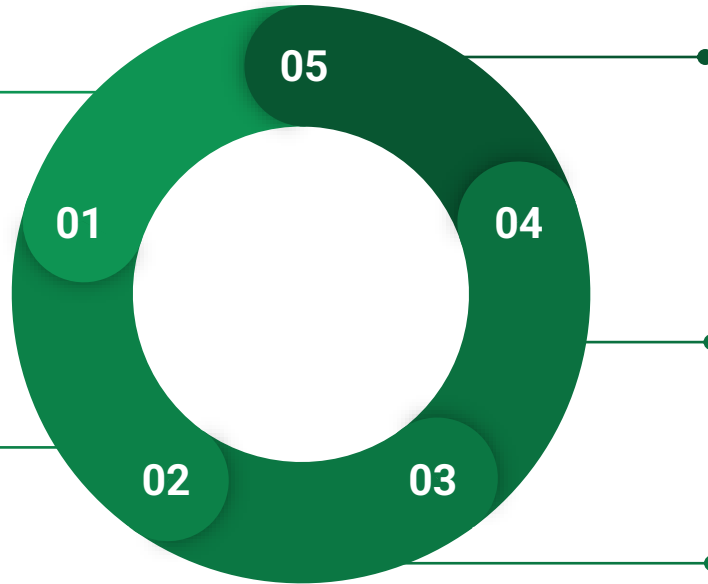
Advantages of One Click LCA's BIM integrations

Time Saving

No manual input of materials and quantities.

Early Feedback on CO₂ Hotspots

The quick generation of first LCA results helps you identify hotspots in early project phases.



Automatic Mapping

Assigns materials e.g. from a Revit model to datapoints from the One Click LCA database.

Certification-compliant mapping

Only datapoints that are allowed for a certain certification (e.g. DGNB) will be used for the mapping.

Bidirectionality

Export carbon emission data from One Click LCA to your building model.

The world's leading LCA software for buildings and construction products

PRODUCTS



BUILDINGS



INFRASTRUCTURE



GHG ACCOUNTING



OPERATION



Secure



MEMBER OF



#1
Worldwide

Global
Data

130
Countries

15+
Integrations

130+
Employees

20+
Years

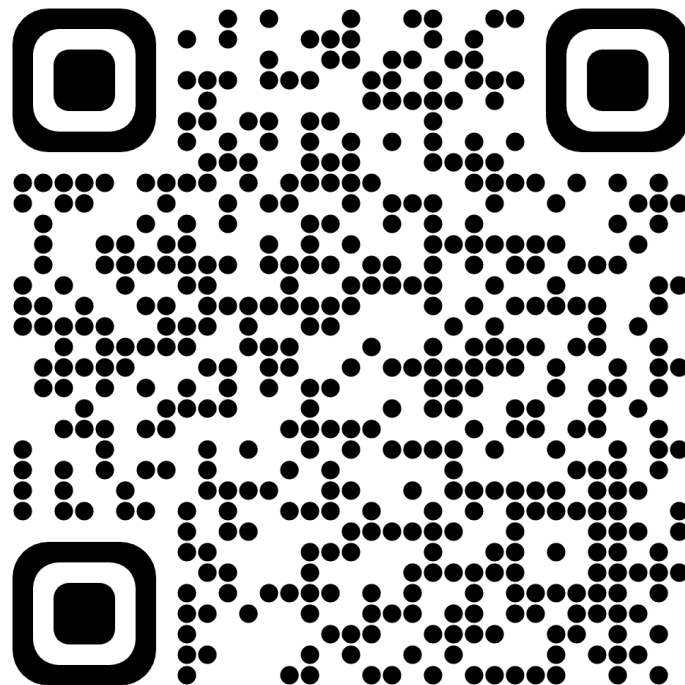


Péter Gyenge

peter.gyenge@oneclicklca.com

+49 152 0463 8795

If you would like to get to know our software for building LCA better, please book an appointment for a free software demo here:



We are looking forward to
getting in touch with you.