

Brightcon 2026

Collaboration: Mixing Tools, Data & People

September 21–25, 2026

Aalborg University



Lost in Reconstruction: A workshop on reproducibility in Life cycle assessment

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23rd September · 5:05 PM · C.104 / HyHyve Workshop room

Discussing LCA model reproducibility with play ! (Perhaps the only non-screen workshop!!)

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Learning with Play – Reproducibility challenges in LCA

- Non screen interactive workshop
- Workshop structure - 25 minute hands on exercise and a 20-minute plenary discussion
- Work in groups
- One person in each group download the Brickit app.
- Open the app and scan the lego pieces on the table.
- Based on the app suggestions pick a design using around 10 -15 pieces (max 20 pieces).



Learning with play

- Define the pieces on paper.
- Build a model using the pieces.
- Define how you built the model in words.
- Take a picture of your model.
- Now dis-integrate the model and put it in the bag with the instructions.
- Exchange the bag and notes between groups.
- Try to rebuild the model using the notes.



Were you able to reproduce the model?

- Were the pieces defined correctly?
- Was the instructions easy to interpret?
- Were there any errors in the description? e.g. vague instructions, incorrect counts of bricks
- Did you make in any assumptions about the model?
- Does the product or its functionality change if you “ignore the colour differences”
- Was there a factor that assisted you when you took up this exercise?



Open Discussion

- **Do we actually want full reproducibility?**
Openness exposes the assumptions we've kept comfortably hidden. Is the field ready for that?
- **Does open-source solve reproducibility — or just relocate it?**
Brightway, openLCA — now anyone can rerun your model. But does anyone check if the data and assumptions still hold?
- **Is reproducibility a technical problem or a training problem?**
Most drift isn't malicious — it's a modeling choice nobody documented. Is that a tooling gap, or an education gap?



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