Brightcon 2026

Collaboration: Mixing Tools, Data & People

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Managing Complex Data in Organisational LCA



Søren Løkke (presenter) & Timen Boeve

Aalborg University / Life Cycle Sustainability Research group

Poster Spotlight: Thursday · 11:47-11:49

Data Governance Challenges and Lessons from Climate Impact Accounting at Aalborg University

How do you measure the climate impact of an organisation that does not have a unified data infrastructure?

→ The quality of an LCA depends heavily on the availability, quality, and interpretation of data.

→ In large organisations, relevant data are often distributed across multiple organisational units, external partners, and individual employees.

Different Data systems, Definitions, Formats, Reporting periods, Responsible persons

One organisational climate assessment.

Reality is Messy

Relevant data were distributed throughout the organisation

Data type	Typical data holder
Energy use	Campus Service Organisation
Building information	Campus Service Organisation
Water consumption	Campus Service Organisation
Refrigerant leakage	Laboratory units
Financial data	Finance department
Flight data	Travel agency (CWT)
Procurement data	Suppliers and procurement systems

Data Lives With People

→ A recurring finding was that critical organisational knowledge was often embedded in individual people rather than formal systems:

- Understanding financial datasets
- Understanding flight booking records
- Understanding historical reporting changes
- Understanding data limitations

→ When key people became unavailable, important knowledge temporarily disappeared.

Key lesson:

Finding the right data holder is often more important than finding the dataset.

Data ≠ Information

Obtaining data is only the first step.

A meaningful organisational LCA requires dialogue with ***data holders*** and ***data users*** to ***understand***:

- What the numbers represent
- How they were generated
- Why they changed over time
- Whether they are suitable for LCA purposes

What Worked?

Capacity Building

Data providers were supported in understanding:

- what data were needed,
- why they were needed,
- how they would be used,
- what specific formats were required,
- and how their contribution affected the results.

Result: Better communication, improved data quality, and faster data collection. → ***Policy impact?***

Main Message

Good Organisational LCA Requires an Organisational Data System ***and*** Requires *and Develops* Organisational Understanding of impact pathways (from activity to impact at whole-system level):

Reliable organisational climate assessments require more than a technically robust LCA model:

✓ Stakeholder engagement ✓ Data traceability ✓ Long-term data continuity

✓ Knowledge sharing ✓ Organisational learning

The quality of an organisational LCA depends as much on people and relationships as on methods and models.

Practical Take-Aways:

- ✓ Engage early with data holders
- ✓ Adapt to 'local' language; speak with, not to!
- ✓ Build understanding, not just data requests
- ✓ Document knowledge, not only numbers
- ✓ Develop long-term organisational data networks
- ✓ Design systems that survive staff turnover

PhD-thesis download: Boeve, T.M., 2025. CLIMATE IMPACT-ACCOUNTING FOR AALBORG UNIVERSITY. Aalborg University. https://doi.org/10.54337/aau819586888

Timen Boeve @

Søren Løkke @

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