Feedback on LCA communication at Steelcase









Sébastien Zinck
Manager, Eco-design and LCA
szinck@steelcase.com
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Steelcase

Steelcase

Global leader in the office furniture industry.

Our brands offer a comprehensive portfolio of workplace products, furnishings and services, inspired by 100 years of insight gained serving the world's leading organizations.

Products ranges:

- desks
- chairs
- storages
- performance tools
- space partitioning systems

Office space planning expertise to support companies' needs (moving in/out, space reorganization,...)











Facts and figures

1912 Creation of Steelcase 80 000+

Clients served over the past 5 years

\$2,9 billion

Annual revenue in fiscal year 2013

23
Manufacturing sites

650+
Independent dealers
in 850 locations worldwide

Nº1

In the office furniture industry

500+
Product lines

10 000+

Employees worldwide

SCS
Class A Common shares traded on the NYSE

ISO 9001 and ISO 14001

Quality and environment



Our Eco-design approach

3 key strategic initiatives:

Materials Chemistry

19 criteria on human health and eco-system quality, supported by toxicity experts.

Life-cycle Assessment

An LCA measures the environmental impact of products along their life-cycle (extraction, production, transport, use, disposal).

Recycling & Reuse

Our products are designed for easy disassembly, recycling and reuse.
We offer furniture take-back services since 2007.





The LCA practice at Steelcase

Steelcase started to use LCAs in **2002** (1st in the office furniture industry)

Application of this expertise:

to support our eco-design approach:

Environmental objectives & scenarios analyses (70 to 90% of the impacts of our products occur at the Materials & Production phases)

ex: materials & processes choices, design for recycling/reuse, packaging, logistics...

- to support our environmental communications to the market:
- Environmental Product Declarations (EPDs)

More than 30 EPDs published since 2004









Quantitative and relevant claims on eco-designed products



Some achievements thanks to LCAs feedbacks

PP edges for table-tops (instead of PVC or ABS)
Expanded PP and PE for **packaging corners** (instead of EPS)







'Fusion' desk: optimized disassembly & material consumption, 1 type of plastic (PP) instead of 3



'**No PVC**' strategy (ex: -70% CO₂-eq. emissions on storage tambour doors)

'**Think**' chair: optimized disassembly & material consumption

Packaging volume reduction



Volume -30%

Eco-Smart + Eco-Smart ++

Design for disassembly (reuse and recycling)



Conditions for a relevant LCA communication

- > Apply the best available LCA practice:
- ISO standards, ILCD handbook, relevant databases and modeling methods, verify the uncertainties level, etc...
- → Steelcase only publish a couple of EPDs per year (ensure the right quality level)
- Use a relevant recognised LCA modeling software
- > Collect the maximum amount of specific input data
- Apply an external **critical review** of **high quality** ('No review, no communication') Ex: Prof. Michael Z. Hauschild (DTU) reviews most of Steelcase's LCAs studies N.B.: It is sometimes interesting to get critical reviews by other experts (fresh view)
- Trainings around LCAs and EPDs (ex: for marketing, R&D, sales, etc...)
- Make sure the **results interpretation** doesn't create misleading:
 Make sure of low enough uncertainties, relevant indicators choice & life-cycle stage focus, etc...
- ➤ Follow **rules** for environmental marketing claims Ex: FTC (Federal Trade Commission) in the USA ('Part 260')



LCA communication: some issues of concern

- > Development of **Product Category Rules (PCRs)** in various markets: sometimes several PCRs in the same industry field, but no real cohesion
- → complexity, cost, customers' misundertanding (several ≠ LCAs results per product)
- → **Real challenge** for global companies like Steelcase
- LEED v4 building certification LCA criteria:

Concerns about the number of LCAs studies requested

- i.e. ability to produce many LCAs studies with a relevant quality level
- → Will the progress around LCAs both tools- (data collection) and software (simplified LCAs) enable soon companies to quickly and more easily produce relevant LCAs?
- Greenwashing is possible with or without LCA

Focus on some indicators (ex: only CO₂-eq. emissions for agro-based materials) Focus on incomplete life-cycle view



thank you