

Feedback on LCA communication at Steelcase



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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:

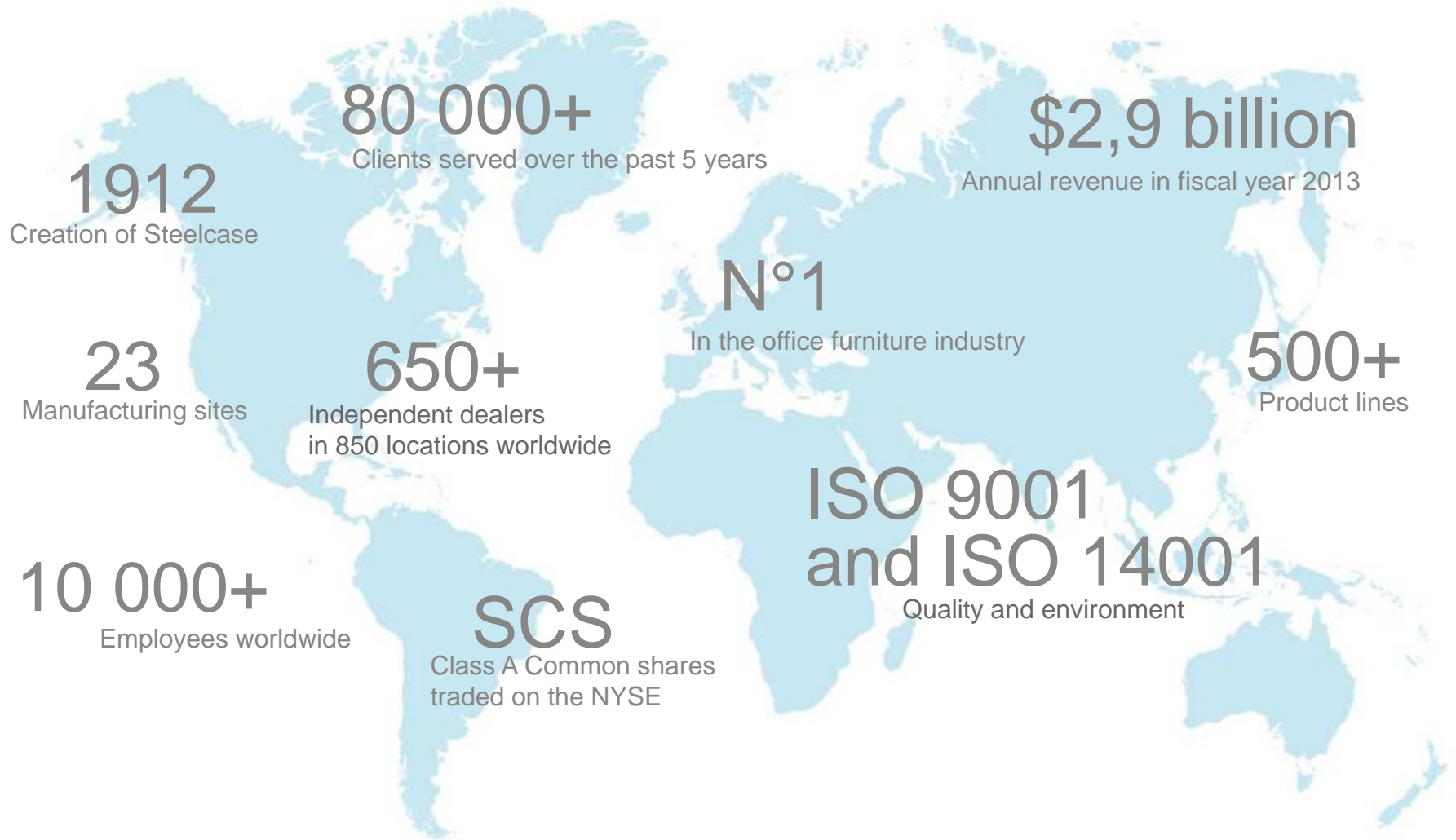
- desks
- chairs
- storages
- performance tools
- space partitioning systems

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



Steelcase

Facts and figures



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:

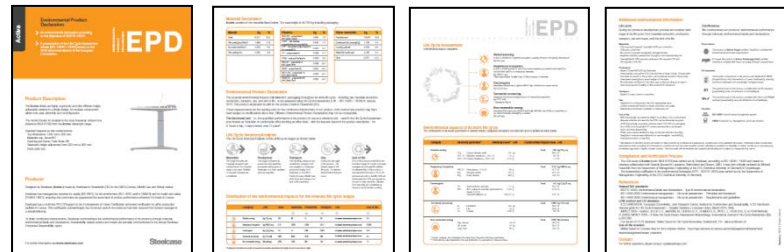
Environmental objectives & scenarios analyses (70 to 90% of the impacts of our products occur at the Materials & Production phases)

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)



Prix Entreprises & Environnement EDITION 2004



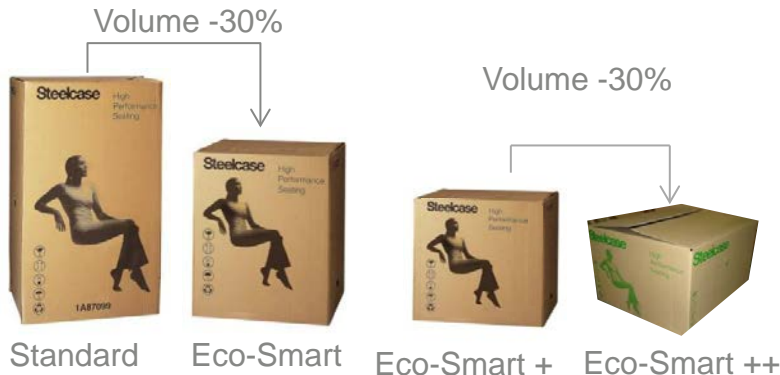
'Fusion' desk: optimized disassembly & material consumption, 1 type of plastic (PP) instead of 3



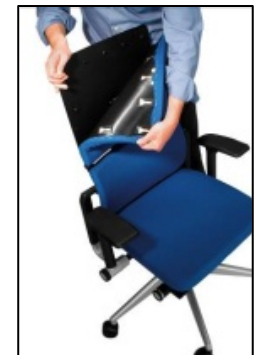
'No PVC' strategy (ex: -70% CO₂-eq. emissions on storage tambour doors)

'Think' chair: optimized disassembly & material consumption

Packaging volume reduction



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' misunderstanding (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