Greening Books

is a European project that improves **the environmental performance of publications** (books and magazines) from design to reading. It establishes criteria that allow analysis and comparison between different solutions or publications' design. This project helps to improve not only the **publishing** sector but also the **graphic arts** industry.

Greening Books is a European Commission co financed project through the LIFE+ programme, Environmental Policy and Governance (LIFE2009ENV/ES/000457).

More info **www.greeningbooks.eu**

Greening Books

has performed the life cycle assessment (LCA) of two kind of publications, a book and a magazine, in order to quantify the environmental impact that these products have along all their life cycle.

raw materials extraction (paper, inks) → design → printing → finishes → packaging → distribution → waste treatment / use (end of life)

The environmental impacts are due to the consumption of resources and the generation of waste and emissions to the environment.

A **standard book** printed in Europe represents:
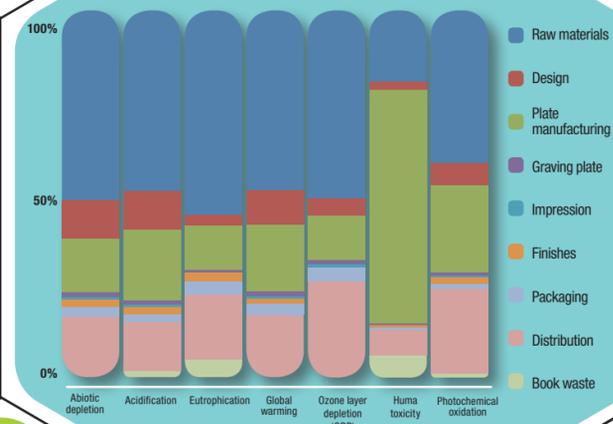
476 g CO_2 eq.
9,2 MJ eq. energy
6,8 l water"

A **magazine** represents:

298 g CO_2 eq.
9,8 MJ eq. energy
8 l water"

DISTRIBUTION OF ENVIRONMENTAL IMPACTS AMONG CATEGORIES AND LIFE STAGES

- Raw materials
- Design
- Plate manufacturing
- Graving plate
- Impression
- Finishes
- Packaging
- Distribution
- Book waste

100%
50%
0%

Abiotic depletion · Acidification · Eutrophication · Global warming · Ozone layer depletion (ODP) · Huma toxicity · Photochemical oxidation

LCA gives information on how each parameter of a publication contributes to its global environmental impact. Decisions in the design stage such as choosing the **page format** or using **recycled paper** can contribute to the **reduction of the environmental impact.** Introducing good environmental practices during other stages like **production** or **distribution** would minimize environmental impacts as well.

Greening Books

is also developing a set of **best environmental practices** to provide a more competitive and sustainable editorial product.

- All paper should have a system of sustainable forest management with a guaranteed provenence (e.g. FSC) or be recycled (certificates such as Blue Angel).

- All organisations involved in the production chain should incorporate management systems (ISO 14000 or EMAS) or best practices.

- Readers should be informed of environmental impacts: H_2O consumption, energy, CO_2 emissions, etc. (ecological backpack).

Greening Books

is going to finish the development of its **software tool** for generating the **eco-label** of publications at the end of 2012! The tool will allow **editors, designers and printers** of publications to generate the eco-label of their printed paper publications and to communicate to **readers** their environmental performance and improvements.

1rst leaflet: 28% of paper remains
2nd leaflet: a reduction of paper in 10,6% remains

greeningbooks

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