

ENVIRONMENTAL DECLARATION

The Working Group WG3 of the ICDLI (International Committee of Decorative Laminates Industry) Technical Commission, which is the working group dealing with environmental matters, has elaborated a document summing up the results of a study on the life cycle of HPL. This study was run out by an authoritative Dutch Institute in order to assess the HPL impact on the environment. The document, written in form of an environmental declaration, will be distributed in its original English version and in the Italian translation at the beginning of 1999. Here below we report some paragraphs in advance.

1) What is LCA?

LCA - Life Cycle Assessment - is a systematic way based on ISO 14000 standards to evaluate the environmental impact of products or activities by following a so-called "cradle-to-grave" approach.

This approach implies the identification and quantification of emissions and material and energy consumption which affect the environment at all stages of the entire product life cycle.

It means that LCA consists of all the processes related to the functioning of a product, from the extraction of raw material through the production, use and reuse and disposal of all final waste.

2) When to use LCA?

- When a single company or an association want to compare the environmental impacts of different products with the same function (final application)
- To identify the most dominant and critical stage in a product life cycle

- To indicate strategically the direction of a product development

3) Who did LCA?

European producers of HPL represented by ICDLI (International Committee of Decorative Laminates Industry) have undertaken an accurate and large study for the first time on a common scientific basis in order to establish the influence of HPL on the environment. Producers from 9 European countries, representing up to 70 % of the total European market, have contributed to this study. The work was conducted by INTRON BV (The Netherlands), a well-known independent institute for the quality assessment for the building industry.

4) Goal definition and scope

- **PURPOSE:** ICDLI has identified the most typical application of HPL in a worktop in its entire life
- **SUBJECT:** The subject of an LCA is always defined in a so-called "functional unit", which is the unit for which data are collected and the environmental profile is calculated.

ICDLI identified the following basic functional unit covering its entire life cycle (cradle to grave):

1 m² of high pressure decorative elements consisting of high pressure decorative laminate of 1.0 mm thickness HGS grade according to EN 438-1 and 38 mm chipboard backed with kraft paper, functioning in a long life indoor use application

Here we reported the introductory chapters only but in the official document about to be published, the paragraphs concerning the analysis and interpretation of results on LCA will follow. Anyway, the conclusions

of the study show extremely positive aspects, for instance:

Abiotic depletion

Responsible treatment of HPL elements after their long life (by thermal recovery) reduces the impact of abiotic resources (natural gas, coal, oil, etc.) by 68%

Biotic depletion

Lifetime of HPL being longer than cultivated forests need to grow, there is no influence on biotic depletion.

Greenhouse effect

Compared to other materials (aluminium, steel) employed as an alternative to HPL, it results to have less impact.

Depletion of the ozone layer

HPL has no impact on the ozone layer over its whole life.

Energy consumption

On account of its high calorific value, HPL is ideal for thermal recovery.

Waste

By thermal recovery the weight of waste is reduced by 59%. The remaining 41% of its weight is household-like waste.