

# What is 'Eco-Benchmark' and how it was developed?

## Benchmarking

- of LCA-based environmental impacts
- of consumer products, services, and consumption patterns

## Support sustainable consumption with reliable illustrative information

In the 2002 United Nations World Summit on Sustainable Development, science-based approaches like Life Cycle Assessment were proposed as a basis for consumer information tools. LCA has been recognized also in the EU in the context of Integrated Product Policy as providing the best framework for assessing the potential environmental impacts of products currently available.

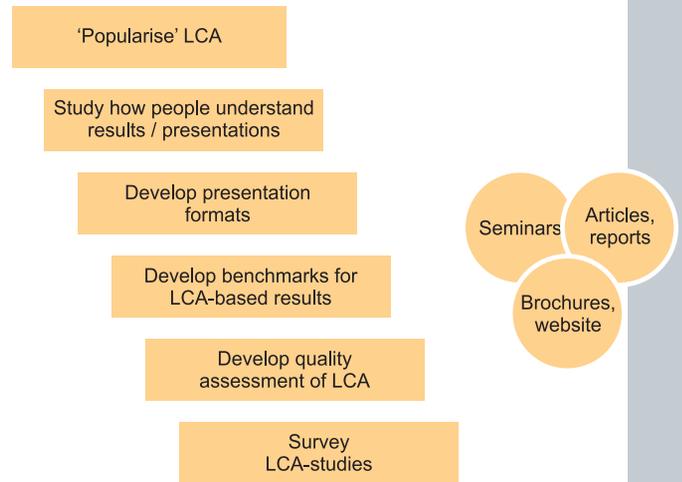
Although LCA could provide information that environmentally conscious consumers need, the forms in which it has been provided have been highly inaccessible. Published LCA reports tend to be extremely technical, featuring long lists of environmental pollutants and abounding with technical terms.

## Developing Eco-Benchmark

Four Finnish research institutes designed in 2003 a three-year project to develop 'eco-benchmarks', i.e. illustrative presentation formats and benchmarks for presenting LCA-based information. Several important tasks were identified for realizing an understandable, reliable and well-known tool.

The core assumption was that LCA results would be easier to understand if they were linked to a familiar frame of reference, and compared to an everyday object. Therefore LCA-studies of consumer products were surveyed and their suitability for the benchmark was assessed. The presentation format and figure were designed, and both the whole idea and the benchmarking alternatives were tested both in consumer focus groups as well as in seminars with various stakeholders. The final format was developed on the basis of the various alternatives and the feedback.

Brochures, a tv-program, a press release, seminars, a website and scientific publications were produced in order to make the Eco-Benchmark well-known among environmental educators of consumers, product policy experts in administration, and the research community.



## Potential users of the benchmarking

Eco-Benchmark can be used when informing citizens on the environmental impacts of products and consumption patterns. However, we consider environmental educators as the primary target group – offering the Eco-Benchmark directly to consumers in a situation in which the number of published LCA studies is low might raise false expectations. But LCA activities are expected to increase rapidly in coming years.

The benchmarking method will also help manufacturers and retailers to provide information about the environmental impacts of their products.

The illustration of product environmental impacts can also be valuable for the development and justification of policy instruments in the field of integrated product policy



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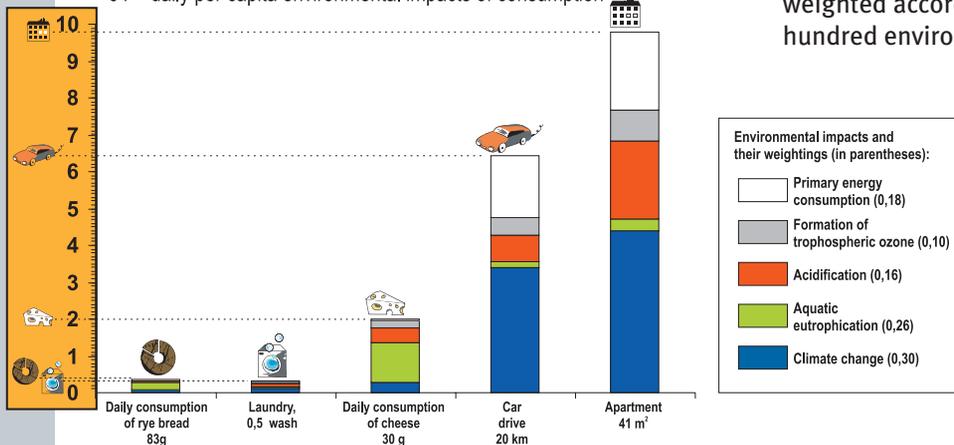


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## Basic elements of Eco-Benchmark

- Eco-Benchmark takes into account five important environmental impacts, which are weighted according to their importance (please note that each product also has other important environmental effects).
- The scale is based on the per capita daily total environmental impacts of Finland, which are set at 100.
- In addition, five products are placed on the Eco-Benchmark (ruler), serving as additional benchmarks alongside the scale itself.

100 = daily per capita environmental impacts of Finland  
64 = daily per capita environmental impacts of consumption



## Some further explanations

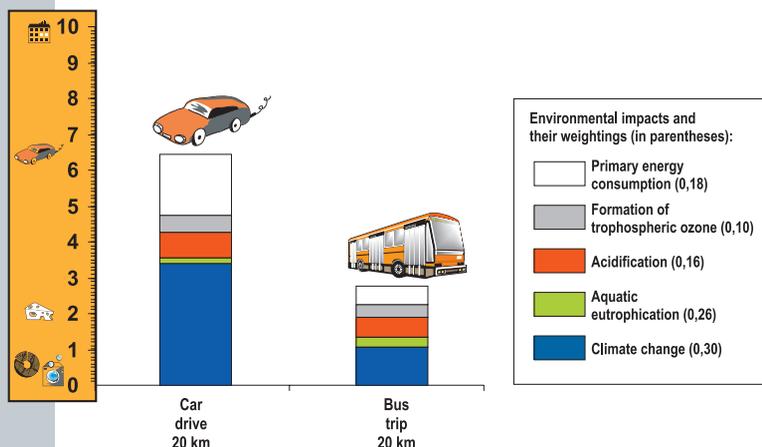
- The total daily environmental impacts per person (=scale) are calculated on the basis of the annual emissions and energy consumption in Finland. For example, eutrophication effects have been calculated on the basis of the annual emissions of nutrients from industry, agriculture and human settlements.
- Because a large share of Finland's emissions and energy consumption are caused by the production of export products, and imported products cause emissions which are not included in these calculations, we used the input-output method to estimate private consumption, which amounts to about 64 % of Finland's environmental impacts.
- The environmental impacts have been weighted according to the views of almost a hundred environmental experts in Finland.

In the figure, next to the actual Eco-Benchmark, you can see the various environmental impacts of the benchmark products. Typical daily use of Finnish consumers served as the basis for the impact calculation. The same figure type can be used to show the environmental impacts of any product for which an LCA has been conducted.

## Using Eco-Benchmark

Comparing the environmental impacts of a car trip and a bus trip serves as an example of using the benchmark presentation.

100 = daily per capita environmental impacts  
64 = daily per capita environmental impacts of consumption



The figure shows that a car trip and a bus trip are both 'products' that are very significant in comparison to other products. It also shows that there is a large difference between these alternatives. A conclusion can be easily drawn: This is certainly a choice that counts.

Interested in using the method, developing a similar project in your country, or studying the methodology in more detail?

Please visit

[www.environment.fi/eco-benchmark](http://www.environment.fi/eco-benchmark)