

2b Other environmental calculation methods

Short summary of characteristics

A variety of other calculation methods exist that in simple ways illustrate the consequences for the environment of actions for example, *The Ecological Footprint*, *Ecological Rucksack* and *Environmental Space*.

- a) *The Ecological Footprint* is a resource management tool that measures how much land and water area a human population requires to produce the resources it consumes and to absorb its wastes, taking into account prevailing technology.
- b) *The Ecological Rucksack* calculates the total quantity (in kg) of the natural material that is disturbed in its natural setting and thus considered the total input in order to generate a product - counted from the cradle to the point when the product is ready for use - minus the weight (in kg) of the product itself.
- c) *Environmental Space* can be used as a tool to illustrate how much "environmental space" we have if all people have the same right to equitable shares of water, food, air, land and other resources within the carrying capacity of the earth. It underlines that there are limits to which we can exploit the Earth's resources.

Stage that the tool is used

These kinds of calculation tools can be used both in the designing process, to evaluate and choose between different alternatives, or in the evaluation of different solutions.

Output from the tool

These tools provide information on how much our way of living actually cost and the consequences for the environment. They illustrate the real price of goods and services, where full life cycle costs are incorporated. For example, full social and environmental costs at each stage of the life cycle from extraction through production and consumption to disposal should be internalised into prices.

Experiences of use

The tools have been used in different ways. Often they have been used in relation to start public debate, for example, in local work with Agenda 21 projects. In Scandinavian Municipalities they have been used to illustrate the "Ecological footprint" as a departure for discussions on strategies to implement further environmental strategies.