



## **Providing for an environmentally friendly image throughout a product's life cycle**

by Stavros Damianidis \*, June 2009

Environmentally conscious citizens have increased in population within modern societies; nowadays environmental stresses are considered in terms of everyday life. Being pioneers in this field, Europeans, mainly from northern European countries, have already set a short case history, by, for instance, having realised large scale recycling schemes or having strongly introduced the use of renewable energy sources in the total energy production mix. An uprising questioning within the general frame of environmental protection focuses on the impact of everyday use products.

This issue has gradually become a part of our daily consciousness, regardless of the product itself, being either a cell phone or a wash detergent, having either short- or long-term use. When we make use of any product, our thought focuses solely on the use. Still, a deeper retrospect reveals numerous hidden aspects: A cell phone, for example, consists of several parts, for the production of which a significant amount of energy has been consumed; the operation of the device itself consumes energy as well; its disposal at the end of its life cycle also claims energy, along with necessity for implementing the best available technique, so as to minimise the respective environmental burden.

By comprehending the mere fact that industrial design has to address an environmentally friendly outcome during the whole product life cycle, an integrated upgrade of our social structures is in demand. Sustainable development anticipates the change or adoption of consumption standards anyhow. The European Union has already taken a leading part in this course by elaborating the Integrated Product Policy (IPP) framework Directive. The introduction of IPP at policy and institutional level, succeeded by its implementation in production and commerce in the future, comprise both an EU task and an environmental challenge. Large European industrial groups have openly expressed their request for the European Union to suggest and promote a worldwide frame on this issue. The realisation of such a scheme cannot be evaluated in the short-term, thus it requires mid- and long-term implementations, based on solid grounds and broadcasted gradually. A similar philosophy has been guiding the implementation of the Integrated Pollution Prevention and Control (IPPC) Directive, having acquired the local character of each country's demands and specifications.

Nowadays, a significant proportion of consumers pays attention solely to product pricing, given the unpromising financial situation, and disregards the environmental impacts of product production, use and disposal. In a short time though, producers shall be required to extend their environmentally friendly product design to provide for the whole product life cycle. Pioneering businesspeople have to promote their



investments soon, whereas the state ought to impose taxation or elaborate restrictive measures to products that do not fulfil the requirements in question.

An example of a potential IPP implementation comprises a cell phone manufacturer, which provided for an integrated evaluation of the environmental performance of its products throughout their whole life cycle, basing its research on tools referring to the cell phone life cycle. Even though the development of cell phones has resulted in a minimum functional size and more environmentally friendly batteries, their production and disposal is more massive than ever before. In this aspect, even a small change within the production lines can contribute significantly to the mitigation of the respective environmental impacts. Cell phones are given as a representative example of an everyday use item. Several other products, with more substantial environmental impacts, could undergo a similar evaluation; it lies on the producer to provide for the minimisation of the environmental burden; it lies on the consumer to strengthen the demand for integrated life-cycle environmentally friendly products.

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