

A Stakeholders' Initiative for Promoting Eco-Design in France.

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Abstract

This paper describes how a local initiative to promote environmental management in the late 1990s evolved into a national and international programme for sustainable development through eco-design. The programme is financed by both public and private funds, at the local, regional and European level, while actors in the field are also from the public and the private sector, from both multinationals and SMEs.

Keywords

Sustainable development Eco-design, stakeholders' initiative

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France, like many other industrial nations, promotes innovation and new product development to sustain economic growth. Innovation also serves to protect the national industry from cost-competitive emerging countries. Moreover, the French State encourages environmental management within the framework of international agreements such as the Brundtland Report, the Rio Conference or the Kyoto Protocol.

Based on a local initiative to promote eco-design, this paper shows how local, regional and national actors collaborated to create a multi-stakeholder arrangement in favour of sustainable development.

We will start the paper by highlighting the issues of sustainable development, corporate social responsibility and how they relate to global governance. In a second part, we will discuss how eco-design can provide answers to both economic growth and sustainable development. And finally, we will describe how the initiative by the Chamber of Commerce of Saint-Etienne became a national action to promote environmental management

From corporate social responsibility to global governance

According to the UN, corporate social responsibility (CSR) explicitly refers to the obligation for firms to manage their operations in such a way to stimulate economic growth and reinforce competitiveness while maintaining environmental protection and promoting social

¹ Authors are presented in alphabetical order

responsibility. It therefore implies that the firm is responsible as an economic actor, a social actor and an ecological actor. CSR should consequently be considered as the managerial answer to global interests for sustainable development, by integrating the environmental and social dimensions in its strategy (Gabriel and Gabriel, 2004; Sharma 2001).

In the industrial sector in particular, companies are exposed to various national stakeholders and at the same time to trans-national actors. At the national level, they must deal with their employees, regulatory bodies and pressure groups while at the trans-national level, they also have to deal with some suppliers, buyers and shareholders. National firms must each find their own strategy to satisfy the needs and wants of these stakeholders, which can often be of conflicting nature. As such, they contribute to the emergence of the global governance paradigm.

Rules and regulations are defined by local, regional, national and even supranational public and private actors which all affect the local economy. These rules and regulations constitute what we consider to be the elements of global governance.

The stakeholder theory explains how groups or individuals affect the achievement of one organisation's objectives or how they can be affected by the achievement of another organisation's objectives (Freeman and et Reed 1983). Stakeholders can be customers (either firms or final consumers), suppliers, local or national authorities as well as NGOs. This means that an organisation should elaborate its corporate policy and strategy taking into account all its stakeholders albeit to various degrees. As a consequence, the organisation is said to contribute to the satisfaction of the general interest.

The ecological dimension of CSR has received interest both from scholars and corporations as a tool to achieve competitive advantages (Shrivastava 1995; Porter and van Der Linde, 1995). Examples of ecological actions are numerous: reducing plastics bags use, recycling industrial waste, reducing ecological disasters, such as oil spills, etc. Eco-design is a particular case of ecological action as it is usually proactive and considers the negative impact of products during the entire product life cycle, i.e. from cradle to grave.

Issues in eco-design

Eco-design is defined as a way to conceive a product in order to reduce the negative impacts on the environment during its production phase, transportation, usage and end of life-cycle process while at the same time develop a product with the same final use as the standard one. Some products can be ecologically sound at each level of the product life cycle, while others are limited to one or two levels.

A number of issues permeate eco-design: the first one is identifying technical ways to achieve more environmentally friendly products, the second one has to do with processes involved in developing eco-designed products, and the third one refers to how it affects relationships with its stakeholders, in particular to buyers and suppliers.

Until now, eco-design is more often considered as a constraint for the company rather than as a tool to achieve competitive advantage (Ambec S. and Lanoie P., 2007). While large multinationals – in particular large polluters – have both the technical and financial competences to identify more environmentally friendly ways to produce, SMEs usually lack those competences and therefore also lack a willingness to engage in eco-design.

Eco-design implies reconsidering how the different departments work together and how the various competences should collaborate. This can only be achieved if the company undergoes an environmental audit. While this audit is based on technical knowledge, the willingness to shift to more ecologically sound processes is usually dependent on the manager's commitment to protecting the environment.

There is a common perception that eco-design is more costly than standard product development, although some authors have found the opposite result (cf. Ambec S. and Lanoie P., 2007). As long as this perception holds, it will be difficult to convince companies to change their processes. Evidence suggests that the increase in eco-designed products is tributary from buyer demand, regulatory environment, competitive pressure, technical knowledge and manager orientation.

Eco-design has effects on relationships with suppliers and buyers. Suppliers will be asked to inform their customers on the environmental impact of the raw materials or semi-finished goods they provide and on how they are transported. They can also be asked to modify their process in order to reduce the environmental impact. Eco-design can also derive from buyers' demands for more environmentally friendly products, thereby affecting, on one hand, the purchasing process and, on the other hand, the information transmitted to the buyer.

It is expected that the production of more environmentally product will increase both due to stricter regulations and a higher demand for these products. The main issue for most companies is therefore to identify how eco-design can be included in their corporate strategy while at the same time maintaining a competitive advantage.

Example of a French initiative

The Chamber of Commerce of Saint-Etienne – a city located some 60 km south-west of Lyon, in the Rhône-Alpes region – initiated a programme of ecological management for its members as early as 1998. Given its strong industrial base, the main concern in the area was one of pollution as well as waste management. As international, European and national guidelines were outlined over the following years, the Saint-Etienne programme grew in scope to include a global approach to ecologically sound production processes. This led to the development of a specific methodology to audit a company's capacity to engage in eco-design, an initiative sponsored jointly by the Chamber of Commerce of Saint-Etienne, the Rhône-Alpes region and the ADEME, the national agency for environment and energy conservation. The purpose of the eco-design diagnostic is to identify areas most likely to be improved from an ecological standpoint. A standard checklist is applied to raw materials, production processes, logistics, usage and end of life-cycle, for a total of 110 criteria. Each criterion is then rated at 1, for entirely included in the process, 5, for partly included, 10 for not at all included and 0, for not applicable. The sums of the ratings for each of the five areas are then shown graphically, thereby clearly distinguishing which area can be improved on. A series of recommendations is then offered to the company.

After having performed over 100 such diagnostics for companies located in various regions of France, the Saint-Etienne "Eco-design diagnostic tool" became the standard tool used by all Chambers of Commerce in France. While some companies indeed adapted their processes to the recommendations, others are more reluctant to act for fear of increased costs and thus a decrease in competitiveness. As mentioned earlier, there does not seem to be a consensus on the economic impact of eco-design – or any managerial action engaged to reduce the impact of industrial production on the environment. Yet, eco-design can be considered as (i) a pre-

emptive action to stricter regulation on the environment, (ii) a tool for innovation, (iii) a tool for differentiation in addition to decreasing the negative impact on the environment.

The Chamber of Commerce of Saint-Etienne has therefore taken the initiative of launching a nation-wide research project with the objective of developing an economic diagnostic tool based on best practices in eco-design. This research project is being lead by academic researchers in the field of management and industrial engineering and sponsored by private and public funding.

Additional contacts were established with Canadian manufacturers and academic researchers in order to perform a comparative study. A common questionnaire has been established for both countries and will be administered to a sample of companies actively engaged in eco-design.

As a result of these activities, the Chamber of Commerce of Saint-Etienne has recently been designated as a national cluster for environmental management. Such designation involves more public funding at the regional, national and European levels. It will also allow the organisation to further develop its expertise in assisting companies to engage in activities of sustainable development, which in turn will confirm its national leadership position. As evidence, informal associations of major French corporations have mandated the cluster to stimulate reflective actions on innovation and eco-design.

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