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## **ECO-CONCEPT PROGRAM: HOW TO TRANSFORM SMES' STRATEGY INTO A LIFE CYCLE MANAGED STRATEGY**

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### **ABSTRACT**

Because the information on Life Cycle Strategy (LCS) for Small and Medium Enterprise (SME) is an important topic in environmental protection in Europe, Ecoeff and the Seine-Saint-Denis CCI<sup>1</sup> created the Eco-concept program. That program enables SMEs managers to get information on several themes, such as ecodesign, LCA tools, strategy, communication and eco-innovation. Moreover, the program shows these managers how to implement LCS management into their business. Results show that a lot can be done and that the program is an opportunity for managers to rethink their business.

### **INTRODUCTION**

Depletion of resources and pressure on ecosystems are key stakes. Moreover, that pressure on environment and resources is increasing. As the World summit on sustainable development (WSSD) pointed it in Johannesburg (2002), it is vital to change the way that societies produce and consume. To achieve that, the WSSDs "Plan of Implementation" seeks to increase the eco-efficiency of goods and services and calls for a better accountability of environmental damages with appropriate tools. According to the last European SME Performance Review (2012), SMEs are the backbone of the European Economy with some 20.7 million firms accounting for more than 98 per cent of all enterprises. To build a more sustainable society, it is crucial that life cycle management becomes a key element in SMEs strategies. That is why the Eco-concept program was created. It postulates that local action and close support on thematic subjects provides a better eco-efficiency. It is a one year partnership between Ecoeff and the Seine-Saint-Denis Chamber of commerce and industry (CCI) which enables selected SMEs to optimize their products and services and transform their strategies into a life cycle management oriented strategy. The program is financed by the Département of Seine-Saint-Denis, the ADEME (Environment and energy management agency), the DIRECCTE (Regional office for business, competition, consumption, work and employment), and Europe with the European Regional Development Fund (ERDF). To reach a final state where the

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activity of these SMEs is more sustainable, the eco-concept program promotes environmental friendly management tools via several training courses for SMEs' managers. There were no conditions regarding the main activity of these SMEs to attend that program. On the contrary, the more the panel was heterogeneous, the better it was, as the goal was to impact all sectors of entrepreneurship. That program followed a 3 step path with 3 different objectives. The first step was a phase of evaluation (i). It was followed by a phase of information (ii) and concluded by a phase of realization (iii). That paper ends with a small discussion on the results of the program (iv).

## **SELECTION AND PREDIAGNOSIS**

Seine-Saint-Denis is a geographic area where there are more than 54000 SMEs. Therefore, a selection was necessary to achieve the goal of the Eco-concept program. The first idea of the Seine-Saint-Denis CCI was to focus its selection on SMEs who are related to industry or who produces services for industry. Indeed, these were the biggest sectors where environmental cost could have been cut. However, during the selection process some SMEs without link with industry sector showed their interest for Eco-concept. Because organizers wished better diffusion of environmental management tools, that heterogeneity was finally a blessing for the program. A 24 SMEs group has been selected to optimize their products and services in different activities sectors such as mechanical industry, food, textile, transport, communication, electrical car rental and sale, surface treatment, etc. Each general manager was able to evaluate its SME regarding ecodesign. That pre-diagnosis was realized with the methodology of the national eco-design center of Saint-Etienne, France. It enabled managers to pinpoint various opportunities of eco-management in their business. It was a preliminary, although necessary, step for Ecoeff.

## **THEMATIC MEETINGS**

First, managers followed formal meetings on themes linked to eco-management. The Eco-concept program tried to develop a large panel of subjects, providing solutions and tools for every managers. All these meetings were designed to give SMEs managers an overall perspective on life cycle sustainability management. Ecoeff worked on a 2 axis approach:

- What are the specific tools of Life Cycle Assessment (LCA)?
- How to use management tools to perform Life Cycle Management (LCM) solutions?

Among these, several themes were developed, such as ecodesign, LCA tools, strategy, communication and eco-innovation.

### *Tools of LCA*

SMEs are not well aware of what can be done to create sustainable products or create them in a sustainable way. Therefore, it was important to begin thematic meetings with ecodesign and LCA tools to teach SMEs what are the possibilities to get on the way of LCS management. The first meeting was intended to present standards of ecodesign, how to evaluate its SME environmental impact and what the tools to achieve successfully a LCA are. First, Ecoeff presented what was the French law and what were the ISO standards (AFNOR, 2009), underlining the importance of standardization in life cycle management. Although that normalization is a cornerstone for LCS management, it was also important for Ecoeff to present the key steps and tools of ecodesign (Schiesser, 2011 and 2012). Finally, to ensure a

more vivid meeting, Ecoeff used simplified software (ADEME, 2011) to realize a simple LCA on a case study.

#### *Using management tools to perform LCS management (LCSM)*

Environmental protection and LCM is often seen as brake on growth rather than opportunities for SMEs. To inverse that point of view, Ecoeff succeeded to adapt strategy and business model tools to implement life cycle sustainability management. The aim of Ecoeff was to rely on its LCM expertise to pinpoint LCSM opportunities for SMEs, using the Blue Ocean Strategy (BOS) (Mauborgne and Kim, 2004) or the Business Model Generation (BMG) (Osterwalder et al., 2010) canvas. Each company used the BOS tools to discover new market and positioning itself versus competitors. The BMG tools were used by to find new partnerships and eco-innovation opportunities.

Ecoeff also worked with SMEs on environmental communication. Good communication adds value to a LCSM process, it was therefore necessary to underline traps of environmental communication. In fact, it is an element which can turn a LCSA action into a business opportunity, which is really important for SMEs. Using its experience and advice from the ADEME (2012), Ecoeff presented what the rules of success were. The aim was to avoid greenwashing and prove that a good message can enhance LCS management.

Finally, Ecoeff also worked on eco-innovation to help these SMEs. Concerning that meeting, Ecoeff used basic creativity exercises (de Bono, 2008) and presented existing business models based on eco-innovation. The aim was to help SMEs to have new opportunities with new ideas such as biomimicry, upcycling or principles of the blue economy (Pauli, 2010).

### **INDIVIDUAL SUPPORT**

For the last part of the Eco-concept program, the Seine-Saint-Denis CCI planned an individual one-day support, provided by Ecoeff, for each SME manager. The goal was to help and guide SMEs who try to improve their products and services. That support was based on environmental impact reduction, improvement of brand image, cost optimization, increase market share and answer to customers' exigencies. The deliverables were: a simplified life cycle assessment, sustainable procurement or communication. The simplified life cycle assessment was realized in a short time support by realizing data collection and modeling on simplified software for LCA during the first half-day on site. The second half-day on site, results were presented to the general manager for further action. At the end of the Eco-concept program, each of the 24 SMEs was able to focus on their action on life cycle sustainability management, they were also able to foresee what can be done in their business and finally they were helped to launch their first life cycle assessment. Moreover, companies were able to use simplified LCA tools during their product and service development.

### **DISCUSSION AND CONCLUSION**

Sustainable procurement and communication deliverable were written after the first half-day on site. It permitted to visit the company, to collect data on each phase of product life cycle, from raw materials (information on suppliers), transport and logistics schemes (mean of transport, distances, etc.), production process (kind of material and energy used) to end of life. First work for a textile company highlighted environmental benefits of reusable product versus disposable version for main utilization cases and designate hotspot redesign. Second



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work for a mechanical industry allowed the firm to develop a specific data for steel tube cold stretching, a kind of non-existing data in actual databases. Another action for a SME in car industry underlines a default in corporate communication. In fact there was good behavior in LCS management but it was not explained to clients and SME members. Profits of the action were actually underestimated. Finally, because the group of SMEs was heterogeneous, the training session organized by Ecoeff enables some SMEs to create partnerships based on recycling or upcycling.

Even if the eco-concept program is a good way to teach LCSM to SMEs, it is albeit interesting but insufficient. In fact, every visit on site for each SME was limited because of time. One day is not sufficient enough to conduct a true LCA or to implement LCSM tools. Therefore the action of Ecoeff was not complete enough and needed more steps to really fulfill LCSM principles in SMEs strategy. Moreover, there was not a long-time support to evaluate the environmental profits of a change in SMEs strategy. Finally, the partnership between the Seine-Saint-Denis CCI and Ecoeff remains an interested process and method for SMEs managers. Indeed, the same kind of partnership will be conducted with other CCI for the same goal.

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