

Environmental Supply Chain Management

There are increasing drivers pushing businesses to improve their environmental performance. These include government intervention in the form of legislation, increasing market demands for greener products, non-government organizations (NGOs) seeking more transparency in a company's environmental activities, increasing demands from institutional investors, expanding notions of Director liability, and the growing evidence of the impacts that the aspects of business have on the environment.

There are a number of measures an organization can take surrounding the supply chain to eliminate or mitigate the negative aspects of production and the use of its products. Energy use reduction, reducing or reusing packaging, changing raw materials or fuels, using equipment to control or reduce outputs harmful to the environment, increasing employee environmental training, finding alternate uses for "waste" materials other than disposal, and changing handling practices are all ways that a company can improve its environmental performance.

The ESCM pilot project is designed to assist companies by fostering continuous improvement through new methods of cost savings and a reduction in negative environmental outputs. This project is supported by Industry Canada, which is interested in enhancing the eco-efficiency of businesses.

For further information, please contact the Eco-Efficiency Centre.

Our Mission

The Eco-Efficiency Centre is a university based not-for-profit organization linking academia, government and industry, with the goal of improving the environmental and financial performance of small and medium-sized enterprises (SMEs), while providing new opportunities for education and research.

The Eco-Efficiency Centre

The Eco-Efficiency Centre is an educational and environmental management support centre for SMEs. The Centre works to enhance the efficiency of individual companies on the one hand, while encouraging cooperative efforts among businesses. We encourage companies to achieve better environmental and economic performance through eco-efficiency, pollution prevention, resource conservation, reuse, recycling, and good environmental management practices.

The Eco-Efficiency Centre model is a practical and efficient way to engage businesses in making environmental improvements on issues related to resource management, water quality and quantity, climate change and environmental health among others. The Eco-Efficiency Centre is an effective bridge between governments and the small business community in Nova Scotia. The Centre provides students with work experiences and serves as a point of contact between the business community and the university to foster applied research on eco-efficiency and industrial ecology.



Burnside Industrial Park
2 Vidito Drive
Dartmouth, NS B3B 1P9
(902) 461-6704
www.dal.ca/eco-burnside

Environmental Supply Chain Management (ESCM) Pilot Project



The Eco-Efficiency Centre
is a project of
Dalhousie University



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Environmental Supply Chain Management (ESCM) Pilot Project

The Environmental Supply Chain Management (ESCM) pilot project focuses on greenhouse gas (GHG) emissions and solid waste reductions along the manufacturing supply chain. The project is designed to investigate the opportunities for small and medium size enterprises to reduce their environmental impacts, specifically GHG emissions and solid wastes, and fiscal costs associated with the activities in their supply chain. The study is also concerned with identifying symbiotic opportunities among groups of suppliers and/or manufacturers to further reduce burdens and costs. The study will provide a unique opportunity to view the supply chain and the opportunities that exist for further improvement.

Three proactive companies that have shown an interest in reducing their environmental impact and investigating the cost savings associated will be selected to participate in the ESCM pilot project. These companies will participate in educational workshops where the linkages between the supply chain and GHG emissions and solid waste will be explored.

Following the initial introductory meeting, meetings with individual companies and select suppliers will be held to explore the nature of the problems, sources, and potential strategies that can be employed to reduce or mitigate those problems.

Environmental reviews of the participating suppliers will be undertaken. The emphasis will be on initiatives to reduce GHG emissions and solid waste. Quantification of the benefits and costs that would result from adopting appropriate strategies will be evaluated. Identification of collective actions by manufacturers and/or suppliers will be explored with the intention of locating symbiotic strategies.

SUPPLY CHAINS

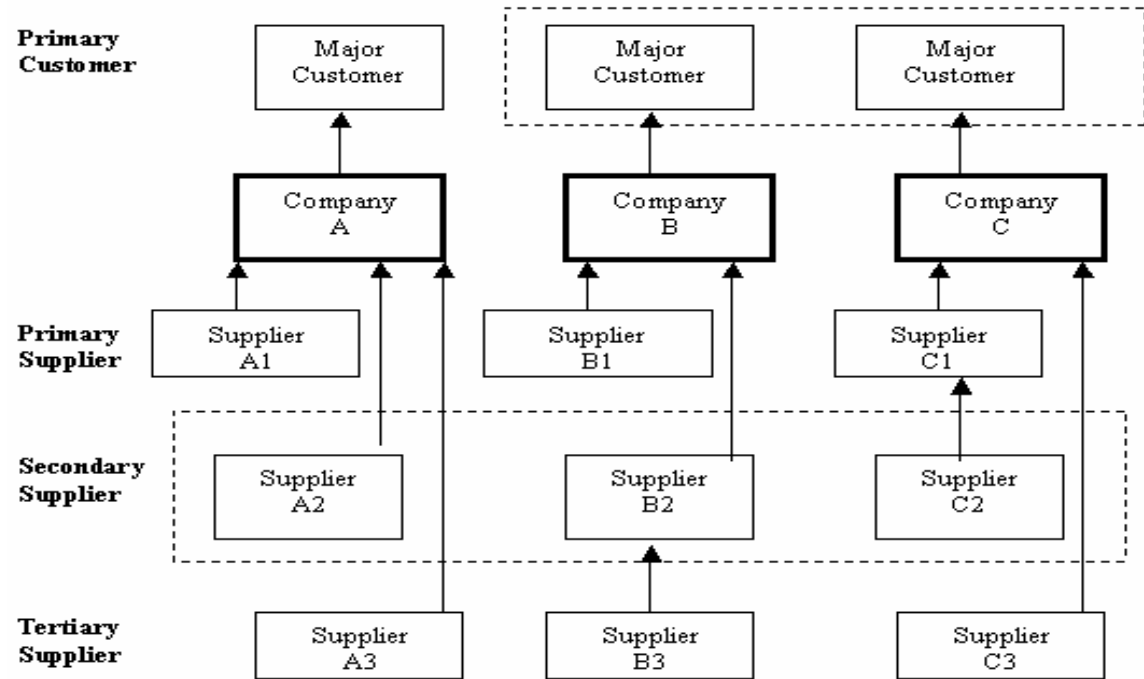


Figure 1. Scope of the supply chains of companies A, B and C.

A final half-day workshop will be held to describe the results of the project, identify opportunities and foster continual action by participating companies.

Through out the project, the Eco-Efficiency Centre will be involved in project monitoring to assist companies and overcome potential obstacles that may arise. At the projects conclusion a final report will be produced for Industry Canada. The report will outline the strategy employed, a summary of the initial workshops, quantification of benefits and costs of possible actions taken within the supply chain, identification of potential collective action and a summary of the final workshop.

Survey of Large Companies in Nova Scotia

A survey of large companies in Nova Scotia will serve to put the efforts of the SMEs into context. This survey is designed with the senior purchasing official of the organization in mind. The survey will assess whether environmental aspects play any role in choices of suppliers or products, and if so, how environmental aspects are addressed by the company. A supplementary report will be created using the responses to the survey.