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## The Profitability of Eco design: An Economic Analysis

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Eco design is an increasingly common practice in business, but a fundamental question remains for which no precise answer has yet been provided: Is Eco design profitable?

A 2008 exploratory study sought to answer this question with a sample of 30 companies from France and Quebec. Six years later, The Pôle Eco-conception (France) and Institut de Développement de produit (Canada) thought it was time to take another look at the situation, widen the sample size to obtain more robust statistical results, and try to understand what makes a given Eco design approach more profitable than another one.

The European Network of Eco design Centres (ENEC), share our experiences, knowledge, and best practice on all aspects of Eco design to ensure more companies can make Eco design happen. In 2014, our partner Pôle Eco-Conception initiated the second stage of its study to assess the Cost- Benefit Analysis of Eco design. Here, ENEC partners share our experiences of conducting the study in parallel, in each of our regions.

Why? Investing in Eco design products is a major strategic shift for most companies. Understandably, people and organisations fear changes if tangible advantages are not clearly evident. European countries have different company cultures, national markets, political and social developments and policy landscapes. By taking a unified approach to this study, we anticipated results that prove Eco design is consistently good business, regardless of these diverse circumstances and conditions throughout Europe.

The hypothesis is that the greater the intensity of the Eco design approach and the better the company's overall management, the more profitable the company would be. The main results of this new study are set out below.

The survey was conducted between March 15 and October 1, 2013. Data were collected from a total of 119 companies: 49 in France, 26 in other European Union countries and 44 in Quebec.

Most of the companies that practice Eco design are in manufacturing (62% of the sample), catering to either consumers (b2c) or other businesses (b2b).

A large proportion base their practices on an environmental standard and use a formal methodological tool, such as life cycle analysis, in their Eco design approach.

On average, the responding companies try to reduce the environmental impact associated with four stages (out of six) in the product life cycle. These efforts translate into five main environmental benefits: replacement of hazardous materials, reduced use of materials, increased recyclability of products at the end of their life cycle, reduced energy consumption per unit of output and reduced  ${\rm CO_2}$  emissions.

Importantly, in 45% of our case examples Eco design increases company profits. For 51% the impact is neutral. We see increases as high as 12% in profit margin. In addition, a large majority of respondents said that an Eco design approach had provided them with benefits other than financial. For example, 86% of companies see brand enhancements, 46% see increases in staff motivation and 41% identify improvements in relationships with customers. All this was achieved at the same cost or slightly higher cost of product development.