

Project Snapshot

Company: Industrial Design Consultancy
Business:

Project: Developing the LCA (Life Cycle Assessment) Calculator, a free online tool that can help companies assess the environmental impacts of their products

Creative Industries

Environmental pressures from legislation? No problem for the new LCA calculator

Legislation pressures are only part of the reason that companies are viewing sustainable product design as a key strategic issue. Cost savings, CSR (Corporate and Social Responsibility) and becoming a market leader are, amongst others, some of the biggest deciding factors for businesses going green. There is considerable demand for cheaper products and services from businesses, but companies need to consider whether it is environmentally, economically and socially sustainable. As the demand grows for this knowledge, IDC are now in a position to not only develop innovative products, but sustainable, profitable and socially responsible products as well.

Industrial Design Consultants, IDC, who identified a sustainable knowledge gap, have jumped ahead of the game by taking on a Knowledge Transfer Partnership (KTP) project with London South Bank University (LSBU). Associate Luke Robbins is using his degree in Industrial Design to develop a methodology and tools that will enable IDC to design and develop more sustainable products that will not only benefit the company but also their clients and the wider community. "It will make the company more commercially effective as sustainable design is now such a major concern for all product developers," says Luke. "We needed a product that was sustainable but also commercially applicable. A product

that would guide our clients through the vast, daunting and often conflicting array of information available, and which would enable them to produce products with improved commercial, environmental and social impact. With a KTP our vision was achieved," added Stephen Knowles, Managing Director at IDC.

The first stage of Luke's project, after evaluating what was already on the market, was to consider the entire life cycle of a product by creating the benchmarking tool, the LCA (Life Cycle Assessment) Calculator, a free online tool that can help companies assess the environmental impacts of their products. This tool provides a full understanding of the energy inputs during manufacturing and the carbon output during the products lifetime. The knowledge derived from the LCA calculator is then used to make decisions on how to improve products for reduced environmental impacts, as well as producing goods that cost less to manufacture. "It has started a set of changes that is integrating sustainable design into the IDC design process. Not only is it adding a new set of commercial services it is actually changing the way in which the designers approach problems and new projects," says Luke.

But this tool is not only used to benefit external companies, it has now been integrated into IDC as a key assessment tool for their own products with Luke's design manual. One of the manual's key features is the Design Compass, which can be used to prioritise various aspects (such as economic, social and environmental) of a particular product. "As a result of Luke's project, IDC is

Centre for Knowledge Transfer

now a leader in the field of sustainable product design consultancy," states Stephen.

Dr Deborah Andrews, expert in product design from LSBU brought her experience in sustainable development, design and life cycle assessment to IDC which complimented the knowledge already held at the company. Deborah comments, "These tools have helped generate valuable high profile publicity for IDC. The product has featured in print and on-line newspapers, trade journals and on an international webcast as part of the World Industrial Design Day; it will also be in a US Design Book." The University has also gained a great deal from this project, including presenting two technical conference papers to students and staff at LSBU, and two conferences discussing bridging the gap between the theory and application of sustainable design and engineering. "I gained valuable real world experience, defining and developing sustainable design strategies," reflects Deborah.

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