

## ECODESIGN Toolbox for the Development of Green Product Concepts – Applied examples from industry

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### 1. Abstract

This paper describes the results of a project carried out at the Institute for Engineering Design of the Vienna University of Technology. The project aimed at developing a systematic approach for sustainable product design and is called “ECODESIGN Toolbox for Green Product Concepts”. With application of the systematic approach innovative product concepts have been developed during this project in cooperation with research partners and partners from industry. The method is implemented on three different products: a digital voice recorder, a golf swing analyzer and an injection moulding machine and fulfils the specific needs of small and medium sized companies.

The methodology used in the project will be introduced and exemplary results from the three industry products will be shown in the paper. The project will be finished in June 2007.

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### 2. Introduction into Project

The project team consisted of the research partners ECODESIGN Research Group, Vienna University of Technology, Profactor Produktionsforschungs GmbH and KERP Competence Centre for Electronic and Environment and the following industry partners:

- Philips Dictation Systems (<http://www.dictation.philips.com>)
- ABATEC Electronic AG (<http://www.abatec-ag.com>)
- ENGEL Austria GmbH (<http://www.engel.at>)

The three product examples show a big variety in terms of functionality, complexity, environmental aspects, business model, target audience, etc. This presented a challenge for the development and application of the ECODESIGN Toolbox but at the same time guarantees the application to a wider range of products and industries. Within the project the method was developed and also implemented. One goal was to present an easy to use methodology which is flexible enough to be applicable for different kind of products, but not too broad which would make various aspects obsolete for most of the products.