Development of Environmental Performance Indicators for ICT Products on the example of Personal Computer

Newsletter No. 1

Dear Sir or Madam:

Within the scope of the European Commission's proposal for a framework directive for setting eco-design requirements for energy-using products (EuP), mechanisms for rapid, efficient and participatory decision-making are required. One mechanism to address decision-makers in product design as well as in politics are environmental performance indicators.

The EPIC-ICT project is aimed at developing a method for environmental performance indicators for ICT products. In order to inform you about the project's objectives and structure, the current status of the project and of the method to be developed, and of past and upcoming events, we are pleased to send you this newsletter. Please do not hesitate to forward this Newsletter to colleagues and any other person you know who might be interested in this project theme.

We thank you for your attention and look forward to receiving your feedback. Please do not hesitate to contact us for further information.

Objectives, structure and partners

- **Objectives**
  Within the scope of the European Commission's proposal for a framework directive for setting eco-design requirements for energy-using products (EuP), mechanisms for rapid, efficient and participatory decision-making are required. One mechanism to address decision-makers in product design as well as in politics are environmental performance indicators.
  The objective of this project is to develop a method for environmental performance indicators for ICT (information and communication technology) products on the example of a personal computer (PC), based on a "life cycle thinking" approach. These indicators will be based on the assessment of environmental impacts caused by PCs and relate to measurable and understandable technical and physical units.
  Further information (www.epic-ict.org)

- **Structure**
  The project is funded by the European Commission under the Sixth Framework programme.
  Project duration: 18 months
  Project start: November 2004
  Further information

- **Project partners**
  In order to combine scientific soundness, practical applicability and public acceptance, the consortium consists of partners from industry and research: IKP (University of Stuttgart), Motorola GmbH, Philips CFT, Ambiente Italia srl, Dell Product Europe B.V. and PE Europe GmbH.

IKP Universität Stuttgart – Institut für Kunststoffprüfung und Kunststoffkunde

Motorola

Philips

Ambiente Italia

Dell

PE Europe GmbH

- **IKP** (University of Stuttgart) acts as the project manager for EPIC-ICT and carries out research on Life Cycle Analysis (LCA) and Life Cycle Engineering (LCE). Furthermore IKP is responsible for defining environmental indicators.
- Providing environmental assessment expertise on electronics and ensuring feasibility and practicability is **Motorola**'s task.
- **Philips** also supplies environmental assessment expertise on electronics, especially on supplied materials to the PC business.
- **Ambiente Italia** is responsible for the research on Life Cycle Assessment (LCA) and for the definition of indicators developed in EPIC-ICT.
- **Dell** provides required information on PC composition, availability of supply chain data and practical limitations of implementing LCA within the product development process.
- Last **PE Europe** ensures feasibility and practicability and supports the project with LCA / LCE software.

Current status of EPIC-ICT

- **The EPIC-ICT Method**
  The EPIC-ICT Method developed makes use of
  - QFD (Quality Function Deployment)
  - Full LCA
  - Generic Modules

  Further information

- **LCA of a PC**
  In order to integrate the environmental impacts consistently and scientifically well based, the methodology of Life Cycle Assessment (LCA) is applied. The product properties are derived from the technical specifications, the functions and components. In a first step results of a LCA of a simplified PC are calculated.
  Further information

- **QFD based methodology**
  Quality Function Deployment (QFD) is a method to define customer needs or requirements and translate them into technical characteristics in order to produce products that fulfil those needs. The QFD methodology is used to translate PC functionality and customer demands and PC components and life cycle properties into electronic specifics based on technical and physical units.
  Further information

- **Generic Modules**
  Generic Modules parameterized flexible and reliable partial LCA models of electronic parts and sub-assemblies with a minimum effort.
  Further information

- **Interactions with other EU projects**
  „Eco-design of Energy-using Products Methodology" (MEEUP)
  www.eupproject.org

- **Homepage**
  http://www.epic-ict.org

Events

- **EPIC-ICT Workshop No. 1**
  Presentation of the project at the CeBit in Hanover on the 15th of March 2005
  The first workshop of the EPIC-ICT project presented the expected impacts, first steps for a scientific definition of the method and involved stakeholders.
  Further information

- **Midterm Meeting**
  The Midterm meeting took place on 5th of July 2005 in Brussels.

- **Upcoming EPIC-ICT Workshop No. 2**
  The second workshop will take place in the beginning of 2006 in Brussels. For registration please contact the project coordinators.

Contact – Project coordination

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