

# **Designing uses of energy-using products through participatory scenarios.**

## ***Abstract for Sustainable Innovation 08 Conference***

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ISEU —which stands for ‘Integration of Standards, Ecodesign and Users in energy-using products’— is a research project that aims at getting a better understanding of how household energy-using products (EuP) are designed and used. Following the results of a previous research on the culture of energy of Belgian households, we have found that the material dimension (equipments) is currently dominating the other dimensions of knowledge, attitudes and practices. (The material dimension encompasses the possessed equipment, the kind of used energy, the envelope and the type of the building.) Therefore the ‘culture of energy’ is mainly carried with objects and infrastructures. Our main hypothesis states that the necessary change of culture of energy — for environmental and depletion reasons — could be brought by objects and, in particular, through the object/user interfaces. The way in which people get in rapport with energy consumption is indeed modified and induced by the appliances themselves, more than by any “awareness rising campaigns” that would target energy use reduction. How could EuP interfaces enhance all the dimensions of the culture of energy? If the “culture of energy” goes through the uses and objects, could objects embody the seeds of a relation between energy and users? How are the uses embodied into objects in this regard, and what are the links with the environment?

To study how the question of energy consumption modifies the construction of objects and user’s behaviour, we are studying the design and production phase of some EuPs. We have selected four product categories to make in-depth social and technical studies: the regulation of heating, domestic lighting, computers and washing machines. These objects offer indeed a wide variety of household equipment rate, potential reduction, variables accessible to the users both at the buying act and at the use phase, possible substitution, existence of environmental standards, rationales of use and the existence of trade-off in the design and the use phase. In a further step, we will work with a designer in order to elaborate different scenarios of use of the selected appliances. These scenarios will be developed with a participatory approach at the Autumn 2008. The paper will present the way we will link our research about the design and manufacture of appliances to the explorative phase of co-elaboration of scenarios of use.

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