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Tobias Schwartz

**Designing Information Technology
for Sustainable Energy Use**

A Practice Centered Approach to Consumption Feedback
Technologies in Private Households and Work Environments

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As a reaction to the discussion on global warming, research in the field of Sustainable Interaction Design (SID) has started to explore the design of tools to support responsible energy consumption. Answering this question the book presents the results of an in-depth exploration of the practice of using interactive feedback systems by following a practice-centered research approach.

Tobias Schwartz conducted a series of extensive ethnographic studies based on the introduction of prototypes and design probes in several contexts, both in workplace environments and in private households, in order to observe how people understand, explain and incorporate feedback systems into their daily lives.

Schwartz analyzes and discusses the results of the studies, paying special attention to the social configuration of energy consumption. This exploration resulted in the description of several sophisticated methods used by people to organize their energy practices; and revealed how people make their consumption accountable and explainable with the help of interactive feedback systems. The observation of a self-developed consumption feedback system within a living lab setting led his work to provide rich descriptions of nine relevant and meaningful issues emerging from aspects of appropriating consumption feedback in real live environments. These issues show how consumption feedback systems support the creation of energy literacy and influence important values such as trust and identification. These issues provide the basis for a description of relevant elements to support a design rationale for designing ICT technologies supporting more sustainable lifestyles.