



## A2 Energy using products

### Consumption of electricity in an administrative building and how to reduce it by energy efficient procurement and change of consumption patterns

**Angelika Tisch**

**Researcher / Dr.-Ing.**

Research Unit Ecological Product Policy

IFZ

Schlögelgasse 2

8010, Graz

Austria

**Tel:** 0043-(0)316-813909-21

**Fax:** 0043-(0)316-810274

**e-mail:** [tisch@ifz.tugraz.at](mailto:tisch@ifz.tugraz.at)

**www:** [ifz.tugraz.at](http://ifz.tugraz.at)

**Organisation :** Inter-university research centre for technology, work and culture (IFZ)

**Short description:** The IFZ is located in Graz, Austria. It is an interdisciplinary research institute (25 researchers) dealing with issues of socially and environmentally sound technology design. In our work we attempt to improve the understanding of technology's role in society and develop new approaches to shape technological change.

## Executive Summary of your Abstract

Recently, we finished a study about the electricity consumption in two administrative buildings in Austria. In this study, we carried out extensive measurements with electricity consumption meters and held interviews with the employees. I am going to present the distribution of the annual electricity consumption over the individual product groups, possible steps to reduce the consumption and important activities to encourage the employees to change their consumption patterns.

## Abstract

Two years ago, the austrian programme "climate:active - energy efficient appliances" started. Funded by the ministry of environment, the programme supports public authorities and private companies in procuring energy efficient electronic and electric appliances in offices, particularly IKT and lighting. During the consultation of procurers and local authorities the demand for empirical data on the actual possible savings of energy efficient appliances and its efficient use in an average austrian administration became apparent. Therefore we started a study about the actual electricity consumption of electronic and electric appliances in two average administrative buildings in Austria and about possible steps towards a considerable reduction of the electricity consumption. During the study we measured the electricity consumption of every electronic and electric appliance and held interviews with the 140 employees of the two administrative buildings. I am going to present:

- how the annual electricity consumption of the building is divided over the individual product groups like e. g. pcs, notebooks, monitors, printers, lighting, slot machines, elevators.
- the most important steps to reduce the electricity consumption.

- the ecological and economical benefits of these steps as well as the most important activities to encourage the employers to change their consumption patterns.

## **Resumé**

Angelika Tisch studied technical environmental protection at the Technical University in Berlin (TUB). She completed her thesis in 2002 at the Institute of Process Engineering and worked at the TUB as a research scientist in the field of "Social-Ecological Research/Gender & Environment". Since April 2006, Angelika has been a scientist in the department of "Ecological Product Policy" at the Interuniversity Research Center for Technology, Work and Culture. Her main fields of activity are green procurement, product-service-systems, and methods for the ecological assessment of products.

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