

## **Elaboration of a database on quantity and disposal of gas discharge lamps and mercury containing lamps**

### **Contracting authority:**

Federal Environmental Agency (FKZ 363 01 381)

### **Implementation:**

Knut Sander, Ökopol GmbH, Institute for Environmental Strategies,  
Hamburg

### **Cooperation partner:**

INTECUS GmbH Waste Management and Environment-Integrating  
Management

### **Duration:**

2011

### **Subject and aims**

With the next stages of the "light bulb phase-out" consumers will increasingly switch to compact fluorescent lamps (part of the gas discharge lamps) containing mercury. Depending on the level of use of these lamps, they will be returned as waste with a corresponding time delay. Due to their mercury content it is needed to collect the waste lamps entirely and intact, if possible, so that they may be disposed of properly.

Aim of the project is, to first determine the quantities of gas discharge lamps respectively mercury containing lamps placed on the market, and based on that, to estimate the theoretical amount of lamps returned as waste. Furthermore the amount of mercury used in the lamps will be determined. From this data, the amount of waste by the year 2030 –separated into different subgroups of gas discharge lamps- as well as the mercury load will be estimated.

Subsequently different recovery scenarios and their effect on mercury mass flows will be developed, having regard to the reference figure and the theoretical amount of returned waste lamps. Experiences in other European countries are considered as well.

### **Contact:**

Knut Sander

[sander@oekopol.de](mailto:sander@oekopol.de)