

## BRAUN advances in LED recycling through the EU-funded project cycLED



### **BRAUN Lighting Solutions - one step ahead ...**

Participation in the cycLED project allowed BRAUN to further improve the experience of the recycling of the components used in lighting manufacturing.

BRAUN continues to use the information attained in the course of the project in its day to day operations and manufacturing of the [products](#). Since disassembly and repair of the lighting systems take place on the daily basis, BRAUN also actively participates in the recycling of those materials. Therefore, the results of the project and the experience gained continue to optimize the recycling process of the components and the materials.

One of the important aspects for the company during the manufacturing remains the focus on [conserving the resources](#) by using only as much as needed.

### **The perspective of the project**

The energy-saving potential of LEDs is significant, and the importance of LED technology will increase vastly throughout the lighting industry in the upcoming years. LED-based products contain many resources such as indium, gallium, and other rare earth metals. Some of these substances are classified as critical raw materials. Therefore, it is important to optimize the number and the amount of resources used in production and to investigate the disassembly and the breakdown of LED products. The cycLED project focused on finding practical solutions. These solutions help industrial production in Europe to optimize resources and the life cycle of products as much as possible.

### **About the Project**

The EU-funded project [cycLED](#) (Cycling resources embedded in systems containing light-emitting diodes) aimed to optimize the efficiency of use and recycling of LEDs and the critical

metals they contain as well as to save the scarce metals used in the manufacturing of LEDs. The administration of the project went under the management of the FRAUNHOFER Institute IZM in Berlin with 12 additional research institutes and the participation of companies from European countries in the joint activities.

The project started in January 2012 in Brussels in the presence of the responsible EU Commissioner and lasted 43 months. The teams in the cycLED project concentrated on different tasks such as life cycle phases/production, manufacturing/assembly, disassembly/use, and recycling. In the course of the project, the presentation of the results happened at expert events and conferences.

#### **Goals of the cycLED project**

Some of the key points that have been investigated during the project:

- Optimizing the recycling of scarce metals from LED production
- Optimized reliability and lifetime of LED products
- Reduced resource consumption in production
- Technical solution for eco-innovations

The findings and the results are crucial to the lighting industry. They help in the advancement of the development and implementation of solutions in the product design of LED lighting systems, enable the adaptation of business models, and also overcome the obstacles that still exist in the use of LED technology in lighting in municipal, industrial, and private sectors.

BRAUN Lighting Solutions is the only German lighting manufacturer who participated in this EU project. We are pleased to be significantly involved in the innovation of

production processes as well as in the development of new designs of LED lighting for industrial and street lighting.

Read more about the summary and the results on [www.cyc-LED.eu](http://www.cyc-LED.eu).

