

International Course for the Environmentally Sound Management of Lamp Waste

Course Programme



THE EN.LIGHTEN INITIATIVE

The United Nations Environment Programme (UNEP) / Global Environment Facility (GEF) en.lighten initiative seeks to promote and coordinate global efforts in the transition to energy efficient lighting. Its mandate is to accelerate the global commercialization and market transformation of efficient lighting technologies by providing technical and policy support to developing countries. In doing so, it aims to strengthen capacities among governments, private sector and civil society to lead successful lighting market transformation programmes. A target date for the global phase-out of incandescent lighting has been set for the end of 2016.

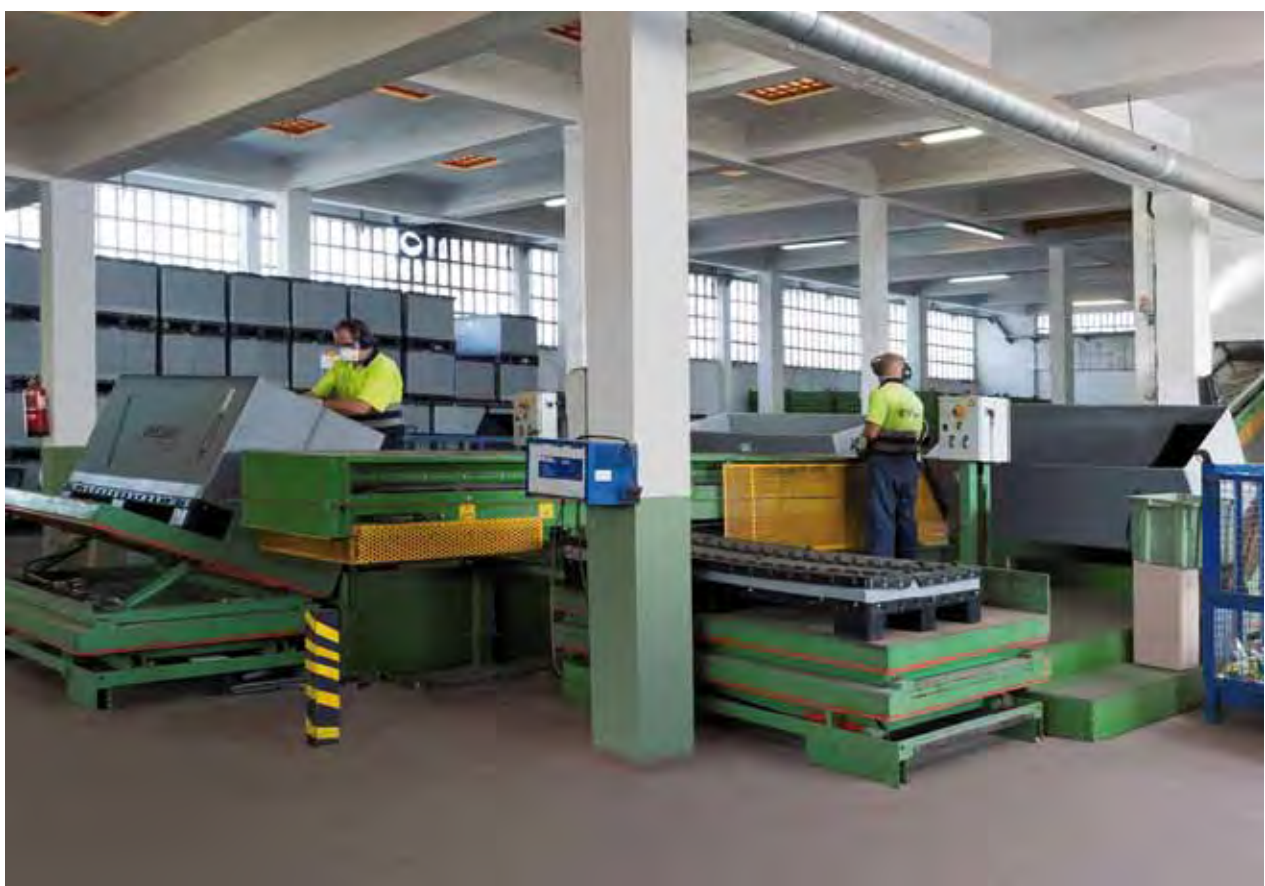
For more information about the UNEP/GEF en.lighten initiative please visit: www.enlighten-initiative.org

AMBILAMP

AMBILAMP is a private non-profit association of lamp producers and importers, created to meet the national obligations for the waste management of electrical and electronic devices. The main objectives of AMBILAMP are establishing, developing, managing and financing a national system for the collection, transportation and treatment of lamps residue in Spain. AMBILAMP also promotes studies and research aimed at minimizing residue from lamps and develops plans for environmental education through information campaigns.

Since its creation in 2005, AMBILAMP has collected for recycling through its more than 22,700 collection points distributed nationwide, more than 11,000 tons saving, fluorescent, discharge lamps and retrofit LED lamps, around 79 million units, avoiding the emission of over 900,000 tons of CO₂ into the atmosphere and providing a service with high satisfaction rates for all stakeholders.

For more information about AMBILAMP please visit: www.ambilamp.es



WASTE MANAGEMENT OF LIGHTING PRODUCTS: CLOSING THE LOOP

Since lamps contain complex electronic components and small amounts of hazardous substances such as mercury, the environmentally sound management of lighting products for the entire product lifecycle is required. This includes the proper disposal and adapted treatment of the spent lighting products at the end of life, following special techniques which prevent environmental contamination and health hazards. Therefore, it is necessary to promote the creation of sustainable national collection and recycling schemes for lighting products adapted to the unique circumstances of each country.



INTERNATIONAL ACADEMY FOR THE RECYCLING OF LIGHT

The Ambilamp International Academy for the Recycling of Light has been created by AMBILAMP in order to offer expertise and know-how for establishing an environmentally sound management system for spent lighting products in countries. At the request of the UNEP en.lighten initiative, and with the support of their private sector partners, AMBILAMP derives from the experience of the collection and recycling system for lighting products already existing in Spain, other European countries outside of the European Union.



INTERNATIONAL COURSE FOR THE ENVIRONMENTALLY SOUND MANAGEMENT OF LAMP WASTE

GENERAL OBJECTIVE

The course objective is to provide policy makers and technical experts in the field of waste management and lighting energy efficiency, with the necessary tools to establish a national scheme for the collection and recycling of spent lamps in their individual country.

SPECIFIC OBJECTIVES

- To train participants on the legal, technical, logistical, social and environmental issues related to the creation of a collection and recycling scheme for used lighting products.
- To present best practices, such as collection and recycling schemes designed and implemented by AMBILAMP in Spain.
- To promote and strengthen the commitment of the training course participants to establish collection and recycling schemes, for spent lamps in their home countries.

EXPECTED OUTCOMES

- Participants are strongly committed to promote and lead the design and implementation of an environmentally sound management schemes for spent lighting products in their home country.
- Participants have acquired the necessary technical and methodological knowledge for the establishment of an environmentally sound management scheme for used lighting products in their home countries.
- Participants have reviewed their current waste legislation (hazardous and non hazardous) and have identified the main gaps and requirements.
- Participants have identified the next steps –legislative for the establishment of a spent lamp collection and recycling scheme in their home countries.



COURSE METHODOLOGY

The course is based on a participatory and dynamic learning methodology, fostering an environment of exchange of knowledge between lecturer and participants. It has been oriented to put into practice the acquired knowledge.

To this end, the training programme includes the following components:

- Interactive and multimedia technical presentations by international lighting and waste management experts.
- Analysis, discussion and best practice sharing.
- Guided hands-on working sessions.
- Field visit at recycling plant and several collection points.

COURSE STRUCTURE

Day 1

Introduction

The opening session will provide an overview of basic concepts in lighting and energy efficiency. In addition, it will discuss why the environmentally sound management of lamps is an important issue and why countries that are transitioning to efficient lighting should establish collection and recycling schemes for spent lamps.

Legal Framework

This session will cover legal frameworks that have been developed under international conventions. Special emphasis will be placed on the European Union legislation and implementation in Member States. It will also address the legal situation in developing countries, that already have an environmentally sound management of spent lamp practices in place.

Day 2

Establishing an Environmentally Sound Management Scheme

This session will explore how an environmentally sound management scheme is organized based on the example of AMBILAMP. It will provide more details on financing of an environmentally sound management scheme the stakeholder involvement and compliance required for efficient operations.

Collection of Spent Lamps

During this session, participants will learn about existing options for collecting spent lighting products and how to develop lamp collection networks. It will also cover the important aspect of parallel flows and informal economy involvement, which is often an issue in developing countries.

Day 3

Transport and Treatment of Spent Lamps

This session will provide information about packaging, labelling and transportation of spent lamps. It will also address the final treatment and recycling of collected lamps.

Field Visit

Field visit will be organized to a recycling plant situated in Bilbao as well as to collection points to allow participants to witness the established infrastructure and apply the theoretical knowledge they received in the classroom, to real life facilities.

Day 4

Monitoring and Verification

In order to be able to calculate the quantities of collected lighting products and the impact of the collection and recycling scheme, it is important to have a solid monitoring and verification system. This session will concentrate on IT systems that need to be established for monitoring activities.

Communication and Awareness

One of the most important aspects of a successful collection and recycling scheme is end user participation and awareness about the necessity to dispose of lamps in an environmentally sound manner. This session, therefore, will consider how to establish communication plans and campaigns and the role that citizens need to play in this.

Day 5

Practical Exercise. National Plans Development

During this session, participants will be asked to draft their national plans for establishment of environmentally sound management systems for spent lighting products using the knowledge they have acquired during the week. Expert guidance and assistance will be provided to participants throughout the process.



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