



PROJECT AT-A-GLANCE

Lighting Market Transformation in Peru



GEOGRAPHICAL SCOPE

Latin America and the Caribbean

Peru



For more information, please visit:
www.united4efficiency.org

**TARGETED
PRODUCT**



**Lighting
GEF project
ID 4173**

STATUS **FINALIZED**

TEAM LEADERS

PARTNERS

STARTING DATE CLOSING DATE
JANUARY JULY
2013 2017

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Philips Lighting
National Lighting Test Center, China (NLTC)

OTHER EXECUTING PARTNER

Ministry of Energy and Mines (MEM)

TOTAL PROJECT COST



\$ 14.6
million

GEF grant and
co-financing

DONOR

Global Environment Facility (GEF)

IMPLEMENTING PARTNER

**United Nations Environment
Programme**



KEY ACHIEVEMENTS

From tackling current barriers and based on U4E Country Assessments, the reduction potential range in electricity consumption, monetary savings and GHG and air pollution emissions mitigation in Peru due to a market transformation to energy efficient lighting – compared with current values, with a Best MEPS Scenario (2016 levels) – is very significant by 2030:

Annual Savings are:



**1.1 TWh in annual
electricity savings**

(Avoided investment costs for
3 power plants of 100MW).



370,000 tonnes of CO2

avoided annually (equivalent to more
than 200,000 conventional cars).



**Over 170 million
USD savings** in annual
electricity costs.



THE CHALLENGE

Peru has been active in promoting efficient lighting from the mid-1990s. At present more than 50% of the household market possesses one or more Compact Florescent Lights (CFL(s)) but around 50 % of those CFLs are of low quality. Hence, there still is a quality issue with regard to CFLs in the domestic market in Peru. Furthermore, large quantities of Incandescent Lights (ILs) are still sold in the country and CFLs have yet to penetrate the rural areas in a meaningful manner and LED lamps are not yet readily available on the local market either.

Today therefore, the Peruvian lighting market is ready to shift from a voluntary approach to one embedded in an appropriate policy and institutional framework with adequate quality safeguards. Convincing key players including decision makers as well as the general public, of the benefits of energy saving lamp products is critical so as to capture all potential gains that this technology can offer. Such a goal can be achieved by removing barriers to energy efficient lighting creating an institutional/legal/financial/technical environment in Peru that is in favor of energy efficient lighting through the promotion of high-performance and environmentally sustainable new technologies such as LEDs, CFLs and the phase-out of inefficient ILs.

WHAT WE DO

The main purpose of the project is to reduce greenhouse gas emissions through the accelerated transformation of the lighting market in Peru through enhanced promotion and implementation of energy saving lamps (ESLs) and the phasing-out of incandescent lamp (ILs) imports and sales. The project supported Peru to face barriers and gaps related to a lack of technical knowledge on costs, benefits and the environmental aspects of lighting products; monitoring verification and enforcement systems; energy efficient lighting in buildings; regulations regarding sustainable management of lamp residues and consumer awareness of the benefits of energy saving lamps including LEDs. Additionally, the project sought to help the country to achieve the objectives of its National Plan on the Efficient Use of Energy by reducing energy consumption in the residential sector.

The project included the following components:

- A National Efficient Lighting Strategy including a proposal for minimum energy performance standards (MEPS), an environmentally sound management component, a road map for MEPS implementation and progress indicators and a national laboratory assessment report.
- A Recommendation report for laboratory improvement and the strengthening of testing capacities.
- Environmental Sound Management to enhance the environmental regulatory and operational framework to enable the sustainable collection, recycling and disposal of used lamps.
- A Guidebook and training programme on energy efficient lighting in buildings.
- The development of Case Studies on: i) outdoor efficient lighting programmes and (ii) mass distribution programmes of LED lamps for indoor lighting.



UN ENVIRONMENT'S ROLE



United for Efficiency provides developing and emerging economies through their in-house experts and specialized partners with tailored technical support to transform their markets by accelerating the adoption of energy-efficient lighting, appliances, and equipment. Currently it is present in more than 30 countries worldwide. Based on each country's circumstances, United for Efficiency works with any of the following products: lighting, refrigerators, room air conditioners, motors and transformers - 5 products that together consume over half of the world's electricity.

By following United for Efficiency's Integrated Policy Approach and covering crucial elements from the transformational pathway, such as Standards and Regulations; Labelling and Communication strategies; Financial Mechanisms; Monitoring, Verification and Enforcement; and Environmental Sound Management, countries achieve a lasting market transformation, allowing monetary savings on their utility bills, helping businesses thrive through greater productivity, enabling utilities to meet growing demand for electricity, and assist governments in reaching their economic and environmental ambitions. Such support is available at three levels: Global, Regional and National providing several tools and resources to support committed countries in their efforts, such as Policy Guides, multiple assessments (country level, street lighting, etc), regional policy roadmaps and harmonization process recommendations, development of training for policymakers and practitioners and National Action Plan implementation support.