UNITED FOR EFFICIENCY IN BOLIVIA

PROJECT AT-A-GLANCE

Delivering the transition to energy efficient lighting

GEOGRAPHICAL SCOPE

Latin America and the Caribbean

Bolivia

STATUS ACTIVE

STARTING DATE
APRIL 2021

CLOSING DATE
MAY 2024

IMPLEMENTING PARTNER

United Nations Environment Programme

PARTNERS

Ministry of Hidrocarbons and Energy, Ministry of Environment and Water, Municipality of La Paz, Signify (previously Philips Lighting), National Lighting Test Center (NLTC), China, ECONOLER

TEAM LEADERS

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TOTAL PROJECT COST

$13.5 million

GEF grant and co-financing

DONOR

Global Environment Facility (GEF)

TARGETED PRODUCT

Lighting GEF project ID 5299

KEY PROJECT OBJECTIVES

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

Annual Savings:

120,000 tonnes of CO₂ avoided annually (equivalent to 71,000 cars)

Over 15 million US$ savings in annual electricity costs

180 GW on annual electricity savings (Avoided investment costs for 2 power plants of 20 MW each)
WHAT WE DO

United for Efficiency (U4E) team of experts and partners, following the U4E Integrated Policy Approach, provides technical assistance to Bolivia through the development of a national efficient lighting policy, regulations and practical innovative interventions to ensure a successful energy-efficient lighting market transition, thereby reducing national electricity consumption and related greenhouse gas and air pollution emissions.

The Project’s objectives are to:

• Develop a National Efficient Lighting Strategy to promote the rapid transition to efficient lighting products and controls.
• Develop a national efficient lighting policy which contains a regulatory framework for minimum energy performance standard (MEPS) and labelling.
• Strengthen market monitoring procedures to ensure compliance with upcoming MEPS, including capacity building programmes for government authorities, customs administrations and testing laboratories.
• Adopt an environmentally sound management regulatory and operational framework to implement a waste lighting Collection and Recycling Service Organization (CRSO) scheme to ensure the sustainable end-of-life treatment of spent lamps.
• Develop sustainable public procurement technical recommendations for LEDs and controls based on international best practices.

THE CHALLENGE

Bolivia is the third-largest natural gas producer in mainland South America. Hydrocarbons are a critical element of Bolivia’s economy – accounting for 30 percent of total public sector revenue – particularly natural gas. The electrification rate of the National Electricity Basic System stands at 93.7% (2020), but the figure masks major disparities between urban and rural populations as access to electricity reaches only 80.4% of the rural population.

Despite the importance of energy efficiency and previous efforts to foster the adoption of more energy-efficient alternatives, certain barriers and gaps still hinder its deployment in Bolivia. Large scale replacement programmes of incandescent lamps by CFLs in the past, for example, contributed to energy savings and peak load demand reductions, but the country still lacks regulatory measurements that address the barriers and gaps in the lighting market to achieve a robust and sustainable transition to energy-efficient products. Replacement of conventional and obsolete lighting products by energy-efficient ones such as LED’s and controls is often stalled due to the higher initial capital cost, as well as lack of awareness and information for consumers.

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.