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UNITED FOR EFFICIENCY IN INDONESIA

PROJECT AT-A-GLANCE

Advancing Indonesia's Lighting Market to High Efficient Technologies (ADLIGHT)



GEOGRAPHICAL SCOPE

National project

Indonesia



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

TARGETED
PRODUCTS



GEF
project
ID 9083

STATUS ACTIVE

STARTING DATE CLOSING DATE
MAY 2020 MAY 2024

IMPLEMENTING PARTNER

Directorate General of New Renewable Energy and Energy Conservation (EBTKE) under the Ministry of Energy and Mineral Resources

PARTNERS

United Nations Development Programme (UNDP); United Nations Environment Programme (UNEP) – United for Efficiency (U4E)

TOTAL PROJECT COST



\$ 40.99 million
GEF grant and co-financing

TEAM LEADERS

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DONOR

Global Environment Facility (GEF)



KEY PROJECT OBJECTIVES

ADLIGHT (Advancing Indonesia's Lighting Market to High Efficient Technologies) aims to promote the increased deployment of high efficiency lighting technologies in Indonesia through the transformation of the national market, thereby reducing electricity demand and the related greenhouse gas (GHG) emissions.

Annual Savings in 2030:



Over **1.3 TWh** on annual electricity savings (avoided investment costs for 3 power plants of 100 MW)



Over **138 million USD** savings in annual electricity costs



1.1 million tonnes of CO₂ avoided annually (equivalent to more than 0.61 million cars)



THE CHALLENGE

Indonesia is heavily reliant on fossil fuels, which accounts for 71% of the country's energy mix, resulting in rising greenhouse gas emissions. With a population of over 250 million and an average growth rate of over 5.8%, Indonesia's energy demand is expected to increase by 7% annually. Lack of generation capacity has already resulted in frequent power cuts and brownouts and, limited access to electricity to certain sections of population.

Lighting accounts for 22.19 TWh (15%) of Indonesia's annual electricity consumption producing emissions of 17.03 mtCO₂. The geographic nature of Indonesia, consisting of 18,307 islands, means it is prone to porous borders and allows the local market (often unknowingly) to be confronted by imported low quality energy efficient lighting products. This relatively easy access to lower quality lighting products hampers consumer access to good quality LED products and without Minimum Energy Performance Standard (MEPS) being enforced, people are more likely to buy substandard lighting products and miss the benefits of the energy efficient LED products that are now widely available.

WHAT THE PROJECT DOES

United for Efficiency's (U4E) 's team of experts and partners, following the U4E Integrated Policy Approach, provides technical assistance to Indonesia 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 will seek to achieve concrete outcomes:

- Upgrade of the local lighting industry manufacturing capacity to design and produce high efficiency lighting systems.
- Adapted business transformation plans for existing local lighting manufacturers to shift from compact fluorescent lamps (CFLs) to light emitting diode (LED) lamps production.
- Capacity built for national financing institutions (banks) to evaluate and support lighting industry modernization projects.
- Implementation of Minimum Energy Performance Standards (MEPS) and energy labels for LED lamps in line with the ASEAN regional approach.
- Development of guidelines for public procurement of efficient lighting products (residential, commercial and outdoor).
- Defined regulatory mechanisms for efficient lighting monitoring, verification and enforcement, including testing standards.
- Capacity built for policymakers, enforcement and custom officials on market control procedures.
- Capacity built for lamp testing laboratory personnel on LED testing.
- Increased awareness of the benefits of innovative lighting technologies amongst consumers and key stakeholders.
- Pilot projects hosted by municipalities to accelerate LED lamp deployment in street lighting in context of sustainable cities.
- Implementation of innovative financial mechanisms to accelerate penetration of advanced lighting systems, including ESCO model.



UN ENVIRONMENT'S INTERVENTION



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 - five 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.), policy roadmaps and harmonization process recommendations, development of training for policymakers and practitioners and National action plan implementation support.