



## PROJECT AT-A-GLANCE

Promotion of energy efficient lighting in Kazakhstan



For more information, please visit:  
[www.united4efficiency.org](http://www.united4efficiency.org)

### GEOGRAPHICAL SCOPE

National project

Kazakhstan



**TARGETED  
PRODUCT**



**Lighting  
GEF project  
ID 00080414**

STATUS **CLOSED**

STARTING DATE CLOSING DATE  
**JUNE 2012 MAY 2017**

### TEAM LEADERS

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### IMPLEMENTING PARTNER

**United Nations Development Programme**



### TOTAL PROJECT COST

**\$ 32 million**

### DONOR

**Global Environmental Facility**

### PARTNER

**Ministry for Investments and  
Development of the Republic of  
Kazakhstan**

## KEY ACHIEVEMENTS TO DATE

The project can present numerous achievements and impacts, for the benefit of Kazakhstan and the whole planet.

*Lifetime energy savings and avoided emissions from implementation of demonstration projects:*

**53,009 MWh**

**49,486 tonnes of CO<sub>2</sub>**

The market shift has resulted in drop of electricity consumption from about 7.2 TWh per year in 2012 to about 2.3 TWh per year by the end of 2015. The total cumulative electricity savings over 2013-15 reached 10.75 TWh. The electricity savings give a total reduction of **at least 10.75 million tonnes of CO<sub>2</sub> emissions for the same period.**

**10.75 million tonnes of CO<sub>2</sub>**

Policy-wise there were adopted **seven mandatory standards** on specific lighting technology and applications, including LEDs, new requirements for minimum light efficiency of LED lamps, as well as **new performance requirements for all lighting procured by state agencies** for both buildings and street lighting were set, national building codes were revised in the lighting section, and five testing laboratories were equipped with the needed equipment.

**7 mandatory standards**

**new performance requirements**

Across the country the project has **prevented the uncontained disposal of 9.67 million fluorescent lamps.**

**9.67 million fluorescent lamps**



### THE CHALLENGE

In Kazakhstan lighting constitutes about 13 % of total electricity consumption or nearly 10 TWh per year and this figure is expected to increase by 2015.

With a population of 16 million, Kazakhstan consumes about twice as much electricity per capita of any other country in Central Asia, and about 3.5 times more than the average of other developing countries worldwide. As in other countries, lighting is a major contributor to electricity consumption in buildings in Kazakhstan.

The Ministry for Investments and Development of Kazakhstan and UNDP-GEF Project "Promotion of Energy-Efficient Lighting in Kazakhstan" within the program of power industry development and for the purpose of country progress are implementing tasks on energy conservation and energy efficiency increase in order to solve energy, environmental, and economical problems in all the sectors.

### WHAT WE DO

United for Efficiency Center of Excellence team of experts, following the U4E Integrated Policy Approach, provide technical assistance to Kazakhstan in order to achieve the promotion, demonstration, deployment, and transfer of innovative low-carbon technologies, particularly high efficiency and usage-controlling lighting technologies.

The objective of the full-sized UNDP-GEF project is to achieve energy savings and avoided GHG emissions via transformation of the lighting market in Kazakhstan towards greater energy efficiency, while ensuring product quality and cost-effectiveness, as well as safe disposition of spent mercury-containing lamps.

The Project will seek to achieve concrete objective, such as:

- Development of energy efficient lighting standards and gradual phase-out of the inefficient lighting equipment used before;
- Increased accessibility and market share of energy efficient lighting across various geographic and demographic sectors
- Increased familiarity among diverse stakeholders with energy efficient lighting and associated issues
- Increased investor confidence, design and administrative capacity, and market share of energy efficient lighting as a result of demonstration projects
- Disposition of spent mercury-containing lamps.



### 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.