



Aspects of the quality improvement of energy-efficient lighting system in the Republic of Kazakhstan



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Abstract

The aim of this research is addressing issues of development of energy-efficient lighting market in Kazakhstan. Its objects are the existing testing facilities and quality system of lighting products; the issues of monitoring, optimization of lighting systems are considered, analysis provided. Steps to improve the energy-efficient lighting system and integrate it with the education system are proposed. Due to particular development of innovative technologies and international cooperation Kazakhstan's business was able to start production of LED lamps and other lighting equipment passing the transitional stage; however, at the same time the low-quality imported and local products are revealed in the local market. UNDP/GEF and the Government of Kazakhstan are implementing the project "Promotion of energy-efficient lighting in Kazakhstan" (hereinafter - Project) aimed to improve the current status of lighting, upgrade lighting technologies, introduce resource-saving technologies, evaluate the results such as energy savings and environmental benefits. The implementation of the "green scenario" of economic development requires not only "good governance", the successful functioning of the market, but also education, consistent with the priorities of its development. The Project established cooperation with scientists from the following Universities: Turan-Astana, Agrarian, Almaty Energy and Communication, resulting in preparing and publishing the two first national books: Manual on lighting audit and Textbook for lighting technicians - bachelors. The approach to improve the investigated market includes three steps: retrofitting testing laboratories by efficient equipment, creating a two-tier system for training lighting specialists in the leading Universities, using international experience, testing the introduced innovations at place, development of different types of training programs and manuals, related to monitoring and verification of GHG emission reductions in energy-efficient lighting, LED products quality assessment.

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