

A Feasibility Study of Replacing High Pressure Mercury Vapor and Sodium Vapor Lamp Street Lighting Bulbs with LEDs in Turkish Republic of Northern Cyprus

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Abstract : Feasibility of an Energy Audit program is the main aim of this paper. LEDs are used to replace Sodium Vapor lamps and High Pressured Mercury Vapor lamps that are currently used for the street lighting system in Turkish Republic of Northern Cyprus. 44% of the fossil fuels imported into Turkish Republic of Northern Cyprus are used for electricity generation which makes the reduction in the consumption of electricity very important. This project will save as much as 40,206,210 kWh on site annually and 121,837,000 kWh can be saved from source. The economic environmental and fossil fuels saving of this project is also evaluated.

Keywords : energy conservation management, LEDs, sodium vapor, high pressure mercury vapor, life cycle costing

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