

MODERNIZATION OF STREET LIGHTING OF CITY KAUNAS, LITHUANIA

SECTOR - CITY STREET LIGHTING



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Kaunas with nearly 400 thousand inhabitants is the second city (after capital Vilnius) in the country. It is not only a city of old traditions, but also a large centre of business and industry. It can also lay claim to be a city of young people with over 35000 students studying at one of the seven universities here.

PARTNER

Kaunas city Municipality is the first partner of the European GreenLight Programme from Lithuania. Municipality is very active promoting and implementing energy efficient lighting in non-residential premises (street lighting, public buildings). Energy efficient lighting is one from priorities of energy Strategy of city Kaunas. Lighting has a substantial impact on the expenses for energy also on the environment, accounting for up to 40% of electricity used in public buildings. Best examples from this field have shown that between 30% and 50% of electricity used for lighting could be saved investing in energy efficient lighting systems. In most cases, such investments are not only profitable but they also maintain or improve lighting quality. This activity is very important for Kaunas city Municipality.



EXPERIENCE OF THE PARTNER

Partnership process

Kaunas city Municipality has big experience in promotion and modernization of existing lighting systems. Energy specialists of Municipality are in close cooperation with Lithuanian Energy Institute (The National Contact Point of the European Green Light Programme). Kaunas city has prepared and confirmed Kaunas city Master Plan. Modernization of existing lighting system in the public buildings, in the streets of city are between priorities of Master Plan up 2025.

The purpose of the project "Modernization of street lighting of city Kaunas, Lithuania" was to modernized existing street lighting systems. The main objectives of the project was:

- Increase efficiency of existing lighting systems.
- Reduction expenses for electricity.
- Reduction CO₂ emissions, saving energy.
- Demonstrate real solutions in practice.

This project is in line with strategic goals and requirements of Lithuanian National Energy Strategy, Master Plan of city Kaunas.

Technical data

In period 2002-2006 was changed 16 thous. street lighting illuminators (from 23 thous. installed). In new illuminators were installed new type sodium lamps. Were used 70, 100, 150 and 250W capacity lamps.

FINANCING OF THE PROJECT

Project was financed by the loan from World Bank and 20% of the project budget from Kaunas city Municipality.

BENEFITS OF THE PROJECT

Energy

- Reduced total capacity of installed lighting system from 5604 kW to 3014 kW (54%).
- Reduced capacity of illuminators from 240 W to 130 W (54% for every illuminator).
- Reduced annual electricity consumption for lighting from 20969 kWh to 11778 kWh (56%).
- Significant increased quality of lighting.

Economic benefits

Annual expenses for street lighting reduce from 4.8 mln. LTL to 2.7 mln. LTL (56%).

Environmental, social, other benefits

Modernization of Kaunas city street lighting significant reduced installed capacity of illuminators, reduced electricity consumption, ipso facto reduced CO₂, other emissions in electricity production.

Local companies performed implementation works of the project and in such a way was increased level of employment.

Implemented project will contribute to the public awareness in this area.

FURTHER INFORMATION

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