



# Case Study - Środa Wielkopolska

Modernization of **street and road** lighting infrastructure

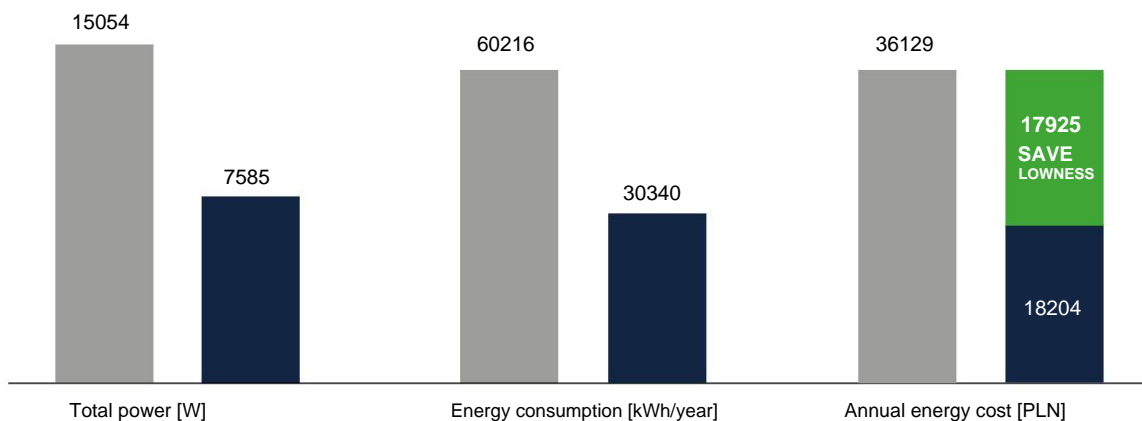
## ***We want to develop a network of intelligent lighting***



*We came to the conclusion that we need to invest in Środa Wielkopolska with modern lighting. It is a hybrid set, i.e. lamps and control. I think that the residents will be satisfied with this investment, if only for some reasons aesthetic, because it is not sodium lighting, which we have used before in previous years, it was LED lighting. Firstly, efficient, secondly it gives very nice, friendly light, and thirdly, measurable savings. We have to look at it in the perspective of a few or a dozen years, and these are already very measurable savings amounting to hundreds of thousands or even millions of zlotys.*

### **Piotr Mieloch**

Mayor of Środa Wielkopolska



FLUORUS LAMPS LED

# 50%

lower electricity bills



## **LED tiara**

**Modern road lamp**  
**CLUE CiTY ready**

HIGHWAYS / NATIONAL ROADS / CITY ROADS

# Case Study - Środa Wielkopolska

## Modernization of **street and road** lighting infrastructure

New, energy-saving LED light replaced less efficient sodium light on seven city arteries of Środa Wielkopolska. Thanks to the investment of the authorities of this commune, the CLUE CiTY system was implemented, consisting of over 170 modern Tiara LED road lamps and the technologically advanced integrated with them management system.

The lamps replaced those previously used fixtures equipped with sodium, mercury or metal halide light sources, which in comparison to today's technologies, they are energy-intensive and also they are characterized by low efficiency and tuple lifespan.

As a result, light is supplied in the optimal amount, only when needed. Beneficiaries

This investment is supported by both the commune authorities and themselves residents. The first ones, thanks to the very high energy efficiency of installed road lamps, additionally supported by a wireless system control, they save on electricity consumption and maintenance costs.

Residents gain light, which provides better light visibility and supports user safety

roads and adjacent sidewalks. They also have confidence that response time of service services is shortened to a minimum, because they are kept informed by intelligent system about the need for any intervention.

With ClueCity, there is a possibility increasing savings – through application by the lighting administrator, the desired reduction power in modernized fixtures, in specific hours with less traffic. E.g. power o one lighting class, from 11 p.m. to 5:00. This reduction is consistent with the recommendations of the standard PN-EN 13201 and is applicable, with due to reduced traffic volume during the hours nightlife. Having information about the lighting time of the luminaires lighting, which in Polish conditions, without night break, is on average 4150 hours, we will get energy consumption savings of 60.6%.

## Benefits of modernization for the City of Środa Wielkopolska:

- Reduction of energy consumption by approximately 50%. - real savings
- The power of the luminaires after modernization is 44.28% of the power of the existing luminaires.
- Possibility to install a power reduction system during hours with reduced road traffic.
- Possibility to control lighting as part of an intelligent network management system.
- Financing of investments from savings obtained during the duration of the contract.
- Reducing lighting maintenance costs.
- Modernization without the need for budget adjustments on the part of the commune in the ESCO formula.





## LED tiara

**A modern road lamp  
compatible with the CLUE City system**

HIGHWAYS / NATIONAL ROADS / CITY ROADS

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