Quick-check lighting refurbishment: OUTDOOR PARKING

The main task of parking illumination is to ensure safety for the users of the parking lot - both on foot and in vehicles. It is important to avoid blinding the drivers and pedestrians on nearby streets.

In outdoor parking, the same technologies are used as for street lighting. The widespread application of LEDs in street lighting has resulted in a decrease in the price of the technologies and a large variety of quality products to choose from.

This quick-check supports companies and institutions in the first steps towards refurbishing lighting systems for parking lots. It helps assess whether lighting refurbishment could be carried out economically and whether "energy performance contracting" might be a suitable option. The quick-check was developed in the context of the European "Streetlight-EPC" project.

OK & KO criteria for lighting refurbishment with EPC:

Positive / negative factors	YES (OK criteria)	NO (KO criteria)
Lamps/installations are operational, but in bad condition		
Lamps/installations are older than 10 years		
"Phasing out" lamps installed (High Pressure Sodium, High Pressure Mercury lamps)		
More than 20 lighting points to be renovated		
The average annual maintenance costs are over 15 Euro per lighting point		
Operating time is above 3600 hours/year or Operating time is on average at least 10 hours/day		
There is no light reduction during the night		

If most of the answers are positive, the "Data Collection Sheet" on the next page can be completed.

What is EPC?

Energy Performance Contracting (EPC) is a contractual agreement between a beneficiary (e.g. a municipality) and a provider of an energy efficiency improvement measure, a so-called "Energy Service Company" (ESCO). The ESCO finances and implements energy efficiency investments - for example the refurbishment of a street lighting system to LED technology or the refurbishment of indoor lighting systems. The annual energy savings are used to cover the investment and capital costs. After the end of the contract, the client benefits from the energy and cost savings.

EU-Project Streetlight-EPC

A project funded by the Intelligent Energy Europe Programme was launched in 2014 with the objective of triggering the market uptake of EPC through lighting refurbishment projects. The project, called "Streetlight-EPC", creates demand and supply for EPC projects in 9 regions through regional EPC facilitation services. These services provide comprehensive support to both lighting operators, such as municipalities or companies, and ESCOs. The project team includes 9 regional agencies/organisations, which provide the EPC facilitation services, 9 municipalities and a European network.

Further information: www.streetlight-epc.eu

LIGHTING REFURBISHMENT OUTDOOR PARKING – DATA COLLECTION SHEET

To allow a first assessment of whether EPC is a suitable option in your case, the following data needs to be collected.

	Unit	Your lighting system
Type of project		
What kind of outdoor lighting? (parking, logistic area, etc.)		
Age of lighting installation		
Year of last comprehensive refurbishment		
How are the surroundings lit? (well-lit/dimly lit/not lit)		
Number of lighting points	Number	
Most frequent lamp type*		
Estimate number of lamps of this type		
Second most frequent lamp type*		
Estimate number of lamps of this type		
Illuminated surface area	m^2	
Typical distance between lighting points		
Condition of light poles/support structures (optional)	good/bad	
Total installed capacity of the project	kW	
Total annual electricity consumption of the project	kWh/year	
Total annual electricity costs (specify including or excluding all non-refundable taxes)	Euro/kWh	
Total annual maintenance costs or annual maintenance cost per lamp	Euro/year	
Typical operation time [from-to on how many days/week] or total operating hours/year	from-to / hours/year	
Periods of dimming/switch-off		
Any problems with the present lighting system?		
Special requirements for the lighting system? (e.g. concerning security, brightness, colour rendering, light pollution)		
Municipality/company/institution		
Name of contact person		
e-mail		
telephone		

*HPM: High Pressure Mercury lamps; HPS: High Pressure Sodium lamps; LPS: Low Pressure Sodium lamps; MHL: Metal Halide Discharge lamps; CFL: Compact Fluorescent lamps; FL: Fluorescent lamps; LED: Light-Emitting-Diodes

These data can be discussed with an EPC facilitation service (if available in the respective country) to provide guidance on the next steps. Otherwise. municipalities, companies or institutions can work directly with ESCOs or specialised service providers.