



Project Enköping

Location
Philips Lighting

Enköping municipality
ClearWay with control system Dynadimmer F2

PHILIPS



"The LED luminaires have very long life cycles which means it is important to collaborate with a reliable company that will stay on the market. This is also true for the municipalities as they have a commitment to the tax payers. Philips is a good partner and provides excellent support."

Kjell-Ove Karlsson, project coordinator for Vattenfall Service AB, Lighting



Enköping municipality reduces energy consumption by 348 000 kWh/year



Facts

Client

Enköping municipality

Contractor

Vattenfall Services Nordic AB

Location

Residential area in Enköping municipality

Philips lighting solution

ClearWay BGP303 LED 35/740 Dynadimmer F2,
ClearWay BGP303 LED 23/740 Dynadimmer F2

Project realization

3000 units ClearWay in 2013 and 2014

Photography: Annelie Sundin

Background

Enköping municipality has previously used mercury lighting of 80 and 125W for all types of streets and roads. Several years ago a major fraction of the road- and street lighting was replaced by high-pressure sodium lighting of 50W and later the HPL luminaires in the agglomerations were replaced by metal halide lighting of 35, 50 or 70W. What remains to be upgraded is approximately 3000 mercury luminaires in residential streets as well as walkways and cycle paths. The municipality has decided to exchange metal halide lighting of 35W for LED luminaires.

Challenge

"Enköping municipality wanted reliable and good-quality lighting. At the same time they were looking for an energy efficient, economical and environmentally friendly lighting solution. These last few years LED technology has made huge advances. The low wattages mean great cuts in energy consumption while the luminaire efficacy remains the same as in conventional light sources. Philips has a very good product in the LED luminaire ClearWay. ClearWay LED23 consumes 27W in undimmed mode and with night-time dimming the total power consumption adds up to 20W. Enköping municipality was looking to cut their energy consumption by 29W per luminaire by installing LED instead of metal halides. Through educational initiatives both politicians and officials in the municipality were convinced that LED lighting was the ultimate lighting solution - financially and environmentally", says Kjell-Ove Karlsson, project coordinator at Vattenfall Service AB, Lighting.

Lighting solution

We issued a request to several major lighting suppliers and Philips turned out to have the best product for the price requested. LED luminaire ClearWay has a good performance and a low energy consumption. By opting for energy efficient lighting solutions you recover the cost of investment in a relatively short time, says Kjell-Ove Karlsson. During 2013 and 2014 Enköping municipality will install a total of 3000 LED luminaires, namely ClearWay in combination with the control system Dynadimmer F2. So far approximately 500 luminaires with night-time dimming have been installed. At around 9 PM lights are dimmed down to 70% and at midnight they're reduced down to 50%. Come 4 AM lights are increased back up to 70% and from 6 AM they're 100% fully lit. The control system Dynadimmer F2 gives Enköping municipality a 32% increase in energy saving.

Advantages

By replacing the 3000 remaining HPL luminaires with LED lighting and night dimming instead of metal halide lighting Enköping municipality will reduce the installed power by 87 kW. Since the light is on 4000 hours/year the municipality reduces the total energy consumption by 348 000 kWh/year.

All parties are very satisfied. The luminaires were easy to install, the citizens find that LED gives good light and Enköping municipality will reduce their energy- and maintenance costs, says Kjell-Ove Karlsson.



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