

The Philips logo is displayed in a white rounded rectangle on a dark blue background. The word "PHILIPS" is written in a bold, blue, sans-serif font.

Case study

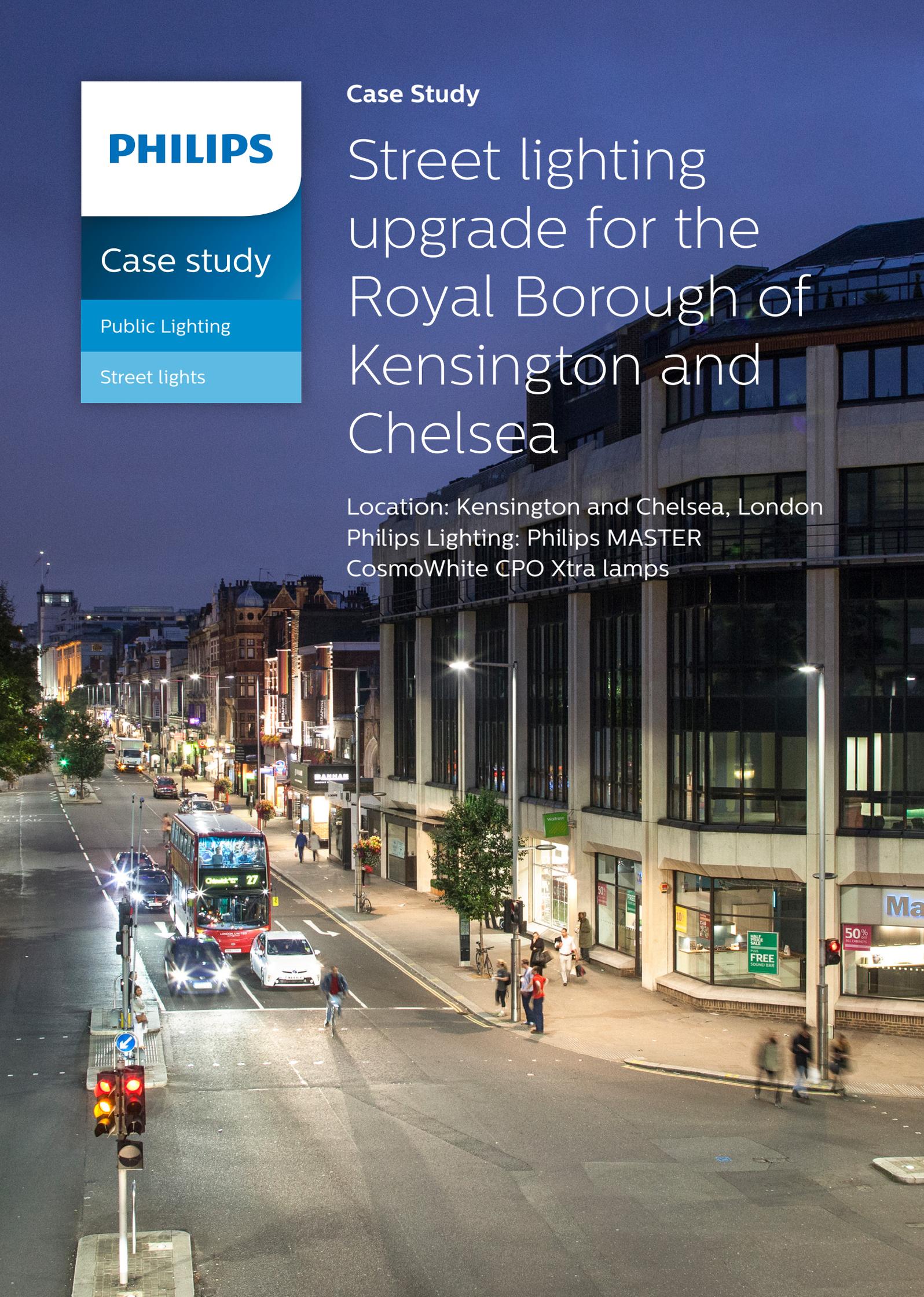
Public Lighting

Street lights

Case Study

Street lighting upgrade for the Royal Borough of Kensington and Chelsea

Location: Kensington and Chelsea, London
Philips Lighting: Philips MASTER
CosmoWhite CPO Xtra lamps





Fast Facts

Customer
Royal Borough of Kensington and Chelsea

Location
Kensington and Chelsea, London

Philips Products
Philips MASTER CosmoWhite CPO Xtra lamps



Background

As part of its wide-ranging Climate Change Programme, the Royal Borough of Kensington and Chelsea have completed a phased programme to upgrade its street lighting. The project has involved the use of bespoke gear trays to enable existing lanterns, including Heritage designs, to be retained while taking advantage of the enhanced performance of Philips MASTER CosmoWhite CPO Xtra lamps.

The project will result in annual cost savings of over £70,000, resulting from reduced energy consumption and lower payments under the Carbon Reduction Commitment (CRC), relating to levels of carbon emissions.

The Right Lighting

In 2008 the Royal Borough of Kensington and Chelsea adopted a Climate Change Strategy that aims to reduce carbon emissions by 40% by March 2020, compared to a 2007/2008 baseline level. A key element of the programme involved upgrading & renovation of the existing street lighting luminaires that were run on inefficient systems, compared to today's existing HID technologies.

Phase 1 of the project was to convert existing Heritage lanterns on residential roads, upgrading them from 70W Philips CDO TT lamps with electromagnetic control gear to use 60W MASTER CosmoWhite lamps with electronic control gear. The CPO TW CosmoWhite lamp was used in the early stages of this phase, switching to the CPO TT lamp when it was launched in November 2012. The new ES/GES capped Cosmopolis lamps allowed Kensington and Chelsea to reduce the material costs and benefit from a reduced project install period, payback period was also greatly reduced as a consequence of this.

To enable the existing lanterns to be retained, Philips Lighting designed bespoke gear trays to convert them for use with the 60W CosmoWhite lamps.

In all, over 4,500 lanterns have been upgraded, resulting in an annual saving of nearly £59,000 on combined energy and carbon costs. The lanterns have also been fitted with DALI programmable drivers which will enable control via a Central Management System at a later date for even greater energy savings.

Phase 2 of the project has focused on major roads in the Borough such as Kings Road, Kensington High Street and Sloane Street. Here, 580 existing lanterns from various manufacturers have been upgraded from 250W high pressure sodium lamps to 210W CPO TT MASTER CosmoWhite Xtra lamps. Again, Philips Lighting produced bespoke gear trays to suit the existing luminaires and enable them to make use of this higher efficiency light source system.

This second phase of the programme will save nearly £16,000 per annum on energy and carbon costs.



The two phases of the project have significantly reduced carbon emissions, making a considerable contribution to the 26% reduction in carbon emissions achieved by the Borough since 2008.

In addition to reducing energy consumption and carbon emissions, the Royal Borough of Kensington and Chelsea will benefit from lower maintenance costs associated with re-lamping.

For example, the original 70W Philips CDO TT lamps replaced in Phase 1 of the project typically needed to be replaced after two years. In contrast, the new MASTER CosmoWhite CPO TT Xtra lamps have a service life of up to six years (@ 90% survival).

The MASTER CosmoWhite CPO TT Xtra range with ES & GES caps are based on proven technology of ceramic metal halide tubular

lamp that provide an efficient and pleasant white light, that is an excellent alternative to current standard mercury-vapour, high pressure sodium and ceramic solutions. As a result the Borough's residents will benefit from a white light that is far more efficient and less costly to maintain, compared to the previous lighting.



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