

Carbon Report 2018/19 — Street Lighting



Overview The Council has committed to reducing its emissions, with the Council Plan Priority 2— Planning and Delivery for a Low Carbon Future. The Council Programme to deliver is the Green Prospectus, and within this there are actions to reduce emissions through Carbon Management. The two current targets are:

• 45% by 2021

'at least 50%' by 2025

(baseline year 2009/10).

Progress

In 2014 the Council began a phased upgrade programme of all street lighting in the Borough to LED technology, following the publication of a new strategy in 2012.

Over 11,000 units have now been fitted with LEDs as part of the first stages of the replacement programme. This equates to approximately 43% of the inventory, against a national average of 40%.

Energy consumption has reduced from 12,246,157 kWh in 2014/15 to 8,109,158 kWh in 2018/19, a decrease of 33%.

The Street Lighting Team are responsible for the design, maintenance and operation of approximately 23,500 street lights, 2,600 illuminated signs and 1,700 illuminated bollards across the borough.

Future emissions

The replacement of a further 10,000 street lights with LEDs is due to be completed in 2019, resulting in a reduction in carbon emissions in excess of 500tonnes.

In the longer term, opportunities to further reduce emissions are limited.

The adoption of new LED technology is delivering a 50% reduction in energy use, but this is a one off gain, with a step change unlikely in the medium term future. In addition to the increased efficiency, the individual bulbs have a lifespan of up to 20years so it is unlikely that a new technology will be available and economically viable before the end of the units lifespan.

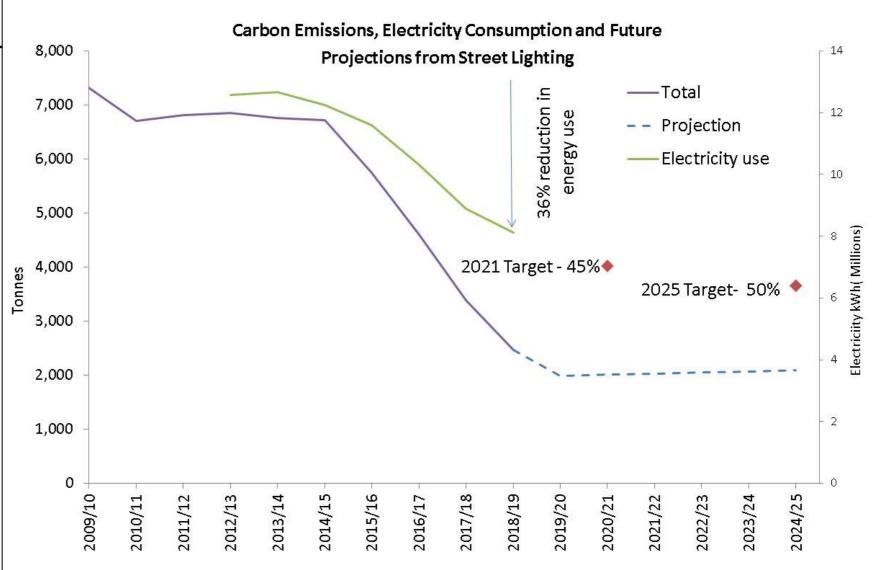
Options to further reduce emissions from street lighting will most likely through the sourcing of electricity generated renewably.

Total Carbon Emissions 2018/19

2472tonnes

down 27% on previous year

down 66% on baseline year 2009/10



External influences

Nationally, since 2009 there has been a 40% reduction in the quantity of carbon emitted per unit of electrical energy generated due to increasing use of renewable energies and the phasing out of coal fired power stations.

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