Low Carbon Workspace

Stourbridge Automotives Ltd

received a Low Carbon Workspaces grant to install LED lighting and hand dryers, reducing their carbon footprint by

789 kg CO₂e / year*

...that's the weight of a Water Buffalo!*

Daniel Cope

Low Carbon Workspaces
Programme Manager

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www.lowcarbonworkspaces.co.uk



Delivered by:





^{*} Savings methodology on the reverse of this certificate

PRINT ME DOUBLE-SIDED AND PUT ME ON THE WALL!

How were lighting savings calculated?

The reduction in energy usage achieved through the project was calculated by multiplying the difference in wattage between the existing lighting and the replacement LED lighting by hours of operation, on an area by area basis. The energy saving was converted to a greenhouse gas emissions saving using the carbon conversion figure for UK grid supplied electricity, as published by the Government at the date of project installation (September, 2019).

Annual lighting electricity usage:

Pre-installation = 5,405 kWh

Post-installation = 2,457 kWh

Annual electricity saving = 2,947 kWh

Carbon saving:

Carbon conversion UK grid electricity (2019-20) = 0.25560 kg CO₂e / kWh

Annual saving = 753 kg CO₂e

How were hand dryer savings calculated?

The reduction in energy usage achieved through the project was found by calculating the reduced mass of paper towels sent to landfill, and the extra kWh of electricity used to power the hand dryers. The energy saving was converted to a greenhouse gas emissions saving using the carbon conversion figure for UK grid supplied electricity, and paper sent to landfill as published by the Government at the date of project installation (September, 2019).

Annual hand dryer electricity usage:

Pre-installation = 0 kWh

Post-installation = -11 kWh

Annual electricity saving = - 11 kWh

Paper towels not sent to landfill = 37 kg

Carbon saving:

Carbon conversion UK grid electricity (2019-20) = 0.25560 kg CO₂e / kWh

Carbon conversion UK paper to landfill (2019-20) = 1.04188 kg CO₂e / kg

Annual saving = $39 - 3 = 36 \text{ kg CO}_2\text{e}$

*A Water Buffalo typically weighs 725 kg!

The carbon conversion figure used to calculate carbon outputs for this project have been based upon the date of installation. For reference, our programme also requires us to apply 2017/18 BEIS CO_2e carbon conversion rates; $(0.35156 \times (2,947-11)) + (1.04188 * 37) = 1.071$ tonnes CO_2e . Whilst the methodology used should provide a realistic indication of the CO_2e reduction achieved through the stated project, the actual CO_2e reduction may differ due to variables such staff behaviour and equipment operating efficiency. Neither Ngage Solutions Ltd nor Buckinghamshire Business First can be held responsible for any actions taken or loss incurred based on the use of the information provided. This certificate is intended for use by the named organisation. It should not be distributed or copied, in part or in full, without prior written consent from Ngage Solutions Ltd