

RBKC Life Cycle Carbon Emissions

Introduction

Waterman Transport & Development Ltd (WTD) has been instructed by Cranbrook Basements to provide advice in connection with the report produced by Eight Associates on behalf of the Royal Borough of Kensington and Chelsea (RBKC) regarding Life Cycle Carbon Emissions, which will be considered as part of the RBKC Basement Planning Policy.

The Life Cycle Carbon Emissions report dated February 2014 discusses extensions and subterranean developments in RBKC through the analysis of 16 case studies which include above ground extensions, single storey basements and double storey basements.

Transport Emissions

Reference 14 within the report is from Volvo Trucks Corporation document entitled Emissions from Volvo's Trucks (standard diesel fuel) dated 3rd November 2000. This document is used to calculate the fuel consumption of vehicles used during the construction works. The actual figure used in the calculations for the delivery vehicles were;

Lorries for waste removal empty 0.67 kg of CO₂eq/km
Lorries for waste removal full 0.78 kg of CO₂eq/km

The November 2000 document which is used for reference has since been updated in 2003, 2008 and again in 2010. The data used in the report is to Euro 3 legal requirement; Volvo stopped selling these Euro 3 trucks in 2006. Euro 4 trucks were sold between 2006 and 2009 and since 2009, Euro 5 trucks. Euro 6 trucks are also now being sold.

This proves that the calculations within the report are inaccurate and show a worse case than in reality. The CO₂ figures would be significantly less if calculated using the most recent data for a Euro 5 truck.

To reiterate this further, the Euro 3 truck emissions, as used in the report would not comply with the London Emission Zone regulations and therefore would not be in use within RBKC.

Electric Vehicles

Many big companies these days such as FedEx, Sainsbury's, Tesco and Royal Mail are highlighting their green credentials with the use of zero emission vehicles, otherwise known as electric vehicles.

A new vehicle called The Newton has been developed by commercial vehicle company Smith. The company explains;

'The Smith Newton is the world's largest all-electric commercial vehicle, designed for a wide range of on-base applications including food and parcel delivery, maintenance, aerial lift, moving personnel and troop transport.'

'Smith vehicles have minimal annual maintenance, can haul up to 16,000 lbs of cargo, and have a range of up to 100 miles on a single charge.'

Electric vehicles are the future, their availability and use will continue to grow and be used by more of the market leaders including construction companies, which, in the future could see their fleets moving away from the use of fossil fuels and operating on zero emissions providing a greener solution to above ground and subterranean developments.