APPENDIX 7

BREATHE LONDON ANALYSES USING EMISSION RATIOS
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Breathe London Analyses using Emission Ratios

The following documents discuss the evaluations using the relationship of CO\textsubscript{2} measurements to those of NO\textsubscript{x} and other health-impacting pollutants. These analyses help improve both our understanding of London air quality and the modelling tools used to assess it.

7A  **CERC Pollutant:CO\textsubscript{2} Ratio Analysis**
This report provides a summary of the work done by CERC to compare ratios calculated from the mobile measurements with those calculated from the emissions inventory used in Breathe London modelling. It describes the assessment methodology, results from the comparison and potential explanations for discrepancies.

7B  **Report on the use of Emission Ratios using CO\textsubscript{2} Measurements**
This document describes the work by University of Cambridge to look at emission indices from Breathe London stationary data. It summarizes potential future work on emission ratios with both mobile and stationary data.

12  **Evaluation of Central London’s Ultra Low Emission Zone (ULEZ) on air pollution\textsuperscript{1}**
This document outlines the evaluation of Breathe London and regulatory network data to understand the ULEZ impact across London. These evaluations include a comparison of NO\textsubscript{x}:CO\textsubscript{2} ratios before and after the ULEZ was implemented.

13  **Mobile Hyperlocal Insights\textsuperscript{1}**
This document describes a summary of insights and the corresponding analysis from the data collected during the mobile monitoring campaign. This includes a discussion of pollutant:CO\textsubscript{2} emission ratios (pollutants include NO\textsubscript{x}, NO\textsubscript{2}, NO, and PM\textsubscript{2.5}) at high spatial resolution (road-segment level) with key insights and use cases.

\textsuperscript{1} This report is currently being adapted for publication in a scientific journal and will be available in due course. An embargoed version of the report can be shared with interested researchers upon request globalcleanair@edg.org.