## **APPENDIX 1**

# BREATHE LONDON PROJECT CONSORTIUM AND ADVISORY COMMITTEES

# Breathe London Project Consortium and Advisory Committees

### **Project Consortium**

The technical and research partners that formed the project consortium each served a unique and instrumental role — from designing and operating the monitoring platforms, to evaluating the technology's performance and analysing data, to making the data understandable for the public.

The role of each partner is described here:

- **ACOEM Air Monitors** procured, installed and maintained the network of air quality monitors (AQMesh), and contributed to the development of the quality assurance and quality control (QA/QC) procedures for stationary and mobile monitoring, as well as for the air quality analysers that were specially adapted to operate inside the Google Street View cars.
- **Cambridge Environmental Research Consultants (CERC)** applied QA/QC to raw measurements, integrated the data with modelling to improve knowledge of London's air quality, and assessed the impact of policy interventions. Developed the project data platform and interactive Breathe London air quality map in order for the public to understand the data being collected and produced by the project.
- Environmental Defense Fund (EDF) supplied project management leadership, coordinated both scientific and non-technical activities, and provided a range of policy, communications, and data analysis expertise, including verification of methods and policy-relevant analyses.
- **Google Earth Outreach** provided two Google Street View cars equipped with air quality sensing equipment and supported four drivers as part of the mobile mapping project. Google also contributed cloud storage and computing technology, as well as data visualisation and mapping.
- Environmental Research Group (ERG) The ERG at Imperial College London (formerly at King's College London) designed the Wearables Study, collected and analysed more than 490 million measurements, and prepared the final report for the Greater London Authority (GLA) with recommendations on how to reduce children's exposure to air pollution.

- National Physical Laboratory (NPL) performed monitoring instrument checks and calibrations and provided a base for the mobile mapping component of the project. Conducted co-location and validation studies and exploratory data analysis, including the application of statistical/machine learning algorithms and spatiotemporal statistics, and audited methods.
- **University of Cambridge** synthesised, optimised, and interpreted measurements from the stationary and mobile network platforms, developed and tested novel network calibration techniques, and provided emission inventory insights.

## **Advisory Committees**

In addition to the Breathe London consortium of partners, the project leveraged the advice and expertise of a diverse group of leaders and experts from a range of organisations through both a Project Advisory Committee (PAC) and Scientific Advisory Group (SAG).

The Terms of Reference for the PAC and SAG can be found at the following links:

- 1. Project Advisory Committee (Breathe London Advisors)
- 2. <u>Scientific Advisory Group</u>

The two committees met separately to provide input and direction on the project. Representation spanned academia, NGOs, and medical professionals, with a focus on environmental, public health, and children's issues. The SAG comprised a group of experts that advised on scientific components of the project including the study design, analysis plans and results. The PAC provided input on study design, interpreted results, advised on leveraging other datasets, identified replicability opportunities and advised on the health implications of measured and modelled data. Collaboration with advisors guided the development of the project and brought additional expertise and perspectives, which complemented those of the project consortium.

The PAC was comprised of the following group of diverse leaders and experts:

#### Academia

<u>Stephen Holgate</u>, Medical Research Council Clinical Professor of Immunopharmacology, University of Southampton <u>Phil James</u>, Project Director, Urban Observatory / SenseMyStreet Project <u>Frank Kelly</u>, Professor of Environmental Health / Director, Environmental Research Group, Imperial College London <u>Audrey de Nazelle</u>, Senior Lecturer and Co-Deputy Director of the Centre for Environmental Policy at Imperial College London

#### **Ex-officio Members**

**Project Initiators** 

<u>Shirley Rodrigues</u>, GLA <u>Jane Burston</u>, Clean Air Fund <u>Joshua Alpert</u>, Director of Special Projects, C40 Cities

#### NGOs

#### Environment

<u>Shaun Spiers</u>, Executive Director, Green Alliance <u>Andrea Lee</u>, Senior Campaigner, Clean Air team, Client Earth <u>Chris Large</u>, Senior Partner, Global Action Plan <u>Polly Billington</u>, Director and <u>Jason Torrance</u>, Clean Air Cities Director, RE100 <u>Joss Garman</u>, UK Initiative Director, European Climate Foundation

#### Children

Alistair Harper, Head of Air Pollution and Rebecca Dallison, Campaign Manager, UNICEF-UK

#### Health

<u>Alison Cook</u>, Director of Policy & Communications, British Lung Foundation <u>Nicky Philpott</u>, Director, UK Health Alliance <u>Kieron Boyle</u>, CEO and <u>Rowena Estwick</u>, Partnerships Manager, Guy's and St Thomas' Hospital Charity