



DEVELOPMENT OF A MONITORING AND EVALUATION FRAMEWORK FOR THE LOCAL AIR QUALITY GRANT SCHEME

Proposal

For: Department for Environment, Food and Rural Affairs

Ref. RDE146 Project_30435

Ricardo ref. ED17574

Issue: 1

8/12/2022

Customer:

DEFRA

Customer reference:

RDE146 Project_30435

Contact:

Julia Pittman, Gemini Building, Fermi Avenue, Harwell,
Didcot, OX11 0QR, UK

T: +44 (0) 1235 753147

E: julia.pitman@ricardo.com

salesupportteam.ee@ricardo.com

Confidentiality, copyright and reproduction:

This proposal is submitted by Ricardo Energy & Environment in response to the invitation to tender issued by DEFRA dated 14/11/22 (ref: RDE146 Project_30435).

It may not be used for any other purposes, reproduced in whole or in part, nor passed to any organisation or person without the specific permission in writing of the Commercial Manager, Ricardo Energy & Environment.

Ricardo ref:

ED17574

Author:

Guy Hitchcock, Julia Pittman, Brais Louro

Approved by:

Beth Conlan

Signed



Date:

8/12/2022

Ricardo Energy & Environment, a trading name of Ricardo-AEA Ltd. Ricardo-AEA Ltd is legal entity within the Ricardo Group of companies. Services are provided by members of the Ricardo Group ('Ricardo').

Registered Office: Shoreham Technical Centre, Old Shoreham Road, Shoreham-by-Sea, West Sussex, BN43 5FG, UK

Ricardo is certified to ISO9001, ISO14001, ISO27001 and ISO45001.

Ricardo, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to as the 'Ricardo Group'. The Ricardo Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Ricardo Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Research, Development and Evidence Framework

PROPOSAL

Contractor's Name: Ricardo Energy and Environment

Project title: Development of a Monitoring and Evaluation Framework for the Local Air Quality Grant Scheme

Call off Reference: RDE146 Project_30435

Sub-Lot Number: 3.4

Date: 3rd November 2022

1. APPROACH AND METHODOLOGY

1.1 UNDERSTANDING OF THE REQUIREMENTS

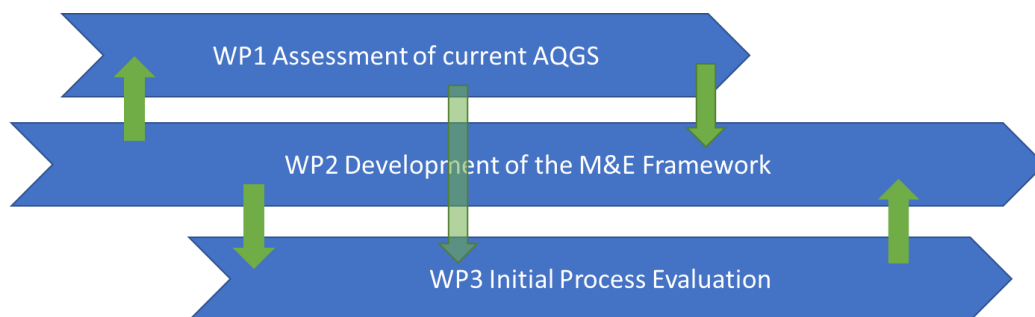
DEFRA's Air Quality Grant Scheme (AQGS) provides funding to local authorities (LAs) to support action and measures to improve air quality at the local level. The scheme has been run since 1997 and supported a range of project types covering infrastructure development, behaviour change, awareness campaigning, monitoring/modelling research and policy development. Project types also vary focus by emission source (e.g. cars, HGVs, trains, biomass, industry, etc.) and by pollutant (NO₂ and/or PM).

As a result, the impacts of these projects on air quality can be varied and assessing these is not straight forward; therefore, the aim of this project is to develop a monitoring and evaluation (M&E) framework, provide suggestions as to how the management and reporting processes of the programme could be improved, and identify whether and how the impact of the programme could be increased going forward.

The tender specification has set out three main packages of work that need to be delivered:

- WP1 – an assessment of what the AQGS has delivered since 2018, considering the scope and distribution of projects funded and the potential impact that these projects have had.
- WP2 – the development of an M&E framework to be used for programme evaluation over the next 3 years based on a sound Theory of Change (ToC) and considering process, impact and value for money evaluation.
- WP3 – an initial process evaluation that engages with local authorities to assess the possible improvements to the application, reporting and evaluation of the grants by LAs.

All three work packages are closely related and will influence each other. The M&E framework (WP2) will sit at the core of the work as it will define how the overall evaluation approach will be delivered going forward. The framework could help inform the questions that need to be asked in WPs 1 and 3, and also be informed by the outcome of these WPs. This said, the review of the current programme's achievements as reported so far (WP1) will also provide feedback into the framework and also help identify issues in reporting to be explored further in WP3. These interlinkages are illustrated at a high-level in the diagram below.



Since the work packages are closely linked, and to ensure delivery within the requested timescales, there will need to be parallel working across the work packages. In order to enable this, Ricardo will work closely with Defra and its partners the Air Quality Management Resource Centre at the University of the West of England (AQMRC) and MEL Research to ensure every stakeholder is engaged effectively throughout the project, and co-ordinate all the necessary inputs to deliver high-quality outputs in a timely fashion. The Ricardo led team brings excellent sector expertise combined with survey, communication and social research expertise. Together, our team offers a depth of knowledge to successfully deliver this project.

Below we have set out how we will deliver each of these work packages, the risks and challenges with delivery, how these will be overcome and the details of how they will interact with each other.

1.2 DELIVERY OF WORK PACKAGE 1 – ASSESSMENT OF AQGS

This first work package will assess what the AQGS has delivered over the last 3 years, since 2018, to help inform the development of the M&E framework. The assessment will be carried out through a structured review and analysis of progress and final reports for AQGS projects being delivered since 2018, along with the original applications. Based on the information provided in table 2 in the specification this review would cover up to 44 final reports, 69 progress reports and the 113 original applications.

The key areas that this assessment will cover are:

1. The types, geographical spread and funding of projects supported (questions 1 and 2 in the specification)

2. Assessment of outputs generated by the projects, and whether these were delivered on time, within the budget and in line with the original application (questions 3 and 5 in the specification)
3. High level understanding of impacts considering both project and programme level impact, and how these have been assessed (questions 4 and 6 in the specification)
4. Process and quality of reporting comparing the actual reporting against the requirements and the quality check list (question 7 in the specification, plus the check list evaluation)

The assessment will use a blend of quantitative (mainly for areas 1 and 2) and encoding/scoring (mainly for areas 3 and 4) approaches for the majority of the review and analysis. Although some more qualitative inference may also be used for some questions, for example for question 3a 'What factors have impeded or facilitated delivery of outputs and how does this vary across different project types?'.

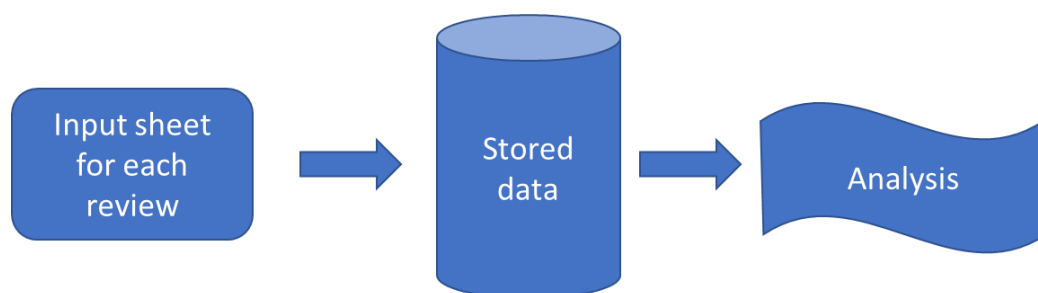
The key tasks for delivering this work package are described below.

1.2.1 Development of the assessment framework

The first step in assessing the progress reports and final reports will be the development of a formal assessment framework that can be used consistently by all the reviewers across the team. For each of the 4 assessment areas set out above we will clearly define a set of evaluation questions. The starting point for this will be the questions provided in the brief along with the final report checklist. However, this will be reviewed alongside the steps 1 and 2 (on scoping and ToC) for the M&E framework in WP2, including a review of the application requirements (ITAs) and reporting templates. This will help identify if additional questions need to be included or indeed if some questions are unlikely to have evidence within the final and progress reports (an initial review of the templates provided suggest this may be the case for a few questions), as well as more precisely defining the form of the questions. For example, the categorisation of projects by type should reflect that also being used for the ToC, also the high-level impacts will need to reflect the ToC and the priority evaluation questions.

Once the evaluation questions have been defined, we will consider how they can be quantified directly, such as level of funding, or encoded/scored, such as level of evaluation activity carried out. Our expectation is that questions areas 1 and 2 will be largely directly quantifiable, whereas those in areas 3 and 4 will need encoding to allow effective analysis. In addition, where appropriate some qualitative learnings may also be drawn from the reports

Once the questions and quantification and encoding system have been defined the framework will be transferred to a spreadsheet tool that the reviewers can use to assess the reports and collect the information in a consistent fashion. The aim will be to develop a data input sheet which can be used when reviewing each report and then this will be submitted to a common database that stores all the data, on which the analysis can be performed. This is illustrated in the figure below.



An initial sample of reports will be used to test both the encoding framework and the spreadsheet tool.

1.2.2 Review of final and progress reports against framework

The review work will be shared between the Ricardo and AQMRC with a combined team of 6 reviewers. Both organisations have significant experience of working with local authorities, LAQM and air quality projects so will have good insight into the types of projects and data being presented in the reports. This experience will help ensure that the reports are reviewed effectively, and the sharing of the task between the two teams will also allow for the rapid assessment of a significant number of reports. In addition, quality control checks will be applied to ensure consistent application of the review methodology is met.

Ricardo has previously worked with a number of local authorities both on developing the AQGS projects and on their delivery. Where Ricardo has been directly involved in any of the projects being assessed the review work will be carried out by the AQMRC team to avoid any conflict of interest or bias. We will also aim to focus one set

of reviewers on the final reports and one on the progress reports to help improve efficiency. It is also our expectation that more of the questions will have evidence presented in the final reports, compared to the progress reports, and so a fuller evaluation can be done for these projects.

Based on the specification it is expected that up to 113 progress and final reports will need to be reviewed through this task. Based on this we have costed our assessment on 100 reports assuming that some will not be available.

The variation in the reports is likely to be significant in terms of the information included and the quality of the reporting. The level of completeness of the reporting will be one of the aspects considered under the area 4 assessment, along with an identification of what areas of reporting have been most difficult for LAs to complete. The level of completeness will also be considered in the encoding system used, for example being able to encode information as fully or partially complete as well as encoding the information itself. It may also be necessary to differentiate between evidence based on the progress reports against the more complete evidence in final reports.

1.2.3 Analysis and feedback to M&E framework

The review task will collate a database of quantified and encoded data for each of the projects from the final or progress report. This will all be stored in a central spreadsheet database which can then be used for analysis.

The analysis will be performed to provide answers to each of the defined questions from across the whole sample of reports reviewed, as well as segmenting this by project type. The information generated from this analysis will feed into WP2 steps 4 (on data requirements) and step 5 (on overall evaluation design). The outcome of the analysis on process (area 4 questions) will also inform WP3 in terms of areas to explore further through the LA survey and follow up interviews.

1.2.4 Outputs of WP1

The collated data from the reports in the spreadsheet tool will be exported to provide the data files requested in the specification in terms of documenting the review, and the assessment against Defra's quality check list. A work package report will also be provided setting out the details of the analysis framework and tools used, the analysis results themselves and the key learnings to feed into WP 2 and 3.

1.3 DELIVERY OF WORK PACKAGE 2 – THE M&E FRAMEWORK

Work package 2 (WP2) will develop a robust **monitoring and evaluation (M&E) framework** in line with the HMT Magenta Book Guidance¹, building on the project team's in-depth knowledge of local air quality management (including the AQGS itself) and the review and analysis of the progress reports (WP1) as to the inputs, processes and activities, outputs, outcomes and impacts of the AQGS grant-funded projects. This M&E framework will be designed to ensure that useful evidence is collected over three years to underpin a future process, impact and value-for-money evaluation of the AQGS.

Six, interconnected steps are proposed to produce this robust M&E framework, which are outlined below and further described in the following sections:

1. Reviewing and scoping of the M&E framework
2. Establishing Theory(ies) of Change of AQGS and AQGS-funded projects
3. Developing and prioritising the evaluation questions
4. Identification of data requirements
5. Evaluation design
6. Implementation plan

1.3.1 Step 1: Reviewing and scoping of the M&E framework

As noted, the first step will be to draw on the AQGS management and grant documentation (e.g., ITAs, etc.) and the review and analysis undertaken under WP1. A rapid review of literature will be carried out to identify relevant precedent on evaluating air quality programmes and interventions, especially in the UK (such as the Health Effects Institute (2016), "Causal Inference Methods for Estimating Long-Term Health Effects of Air Quality Regulations"; Public Health England (2019) for which Ricardo carried out the evidence review, "Review of interventions to

¹ HMT Magenta Book. URL: <https://www.gov.uk/government/publications/the-magenta-book>

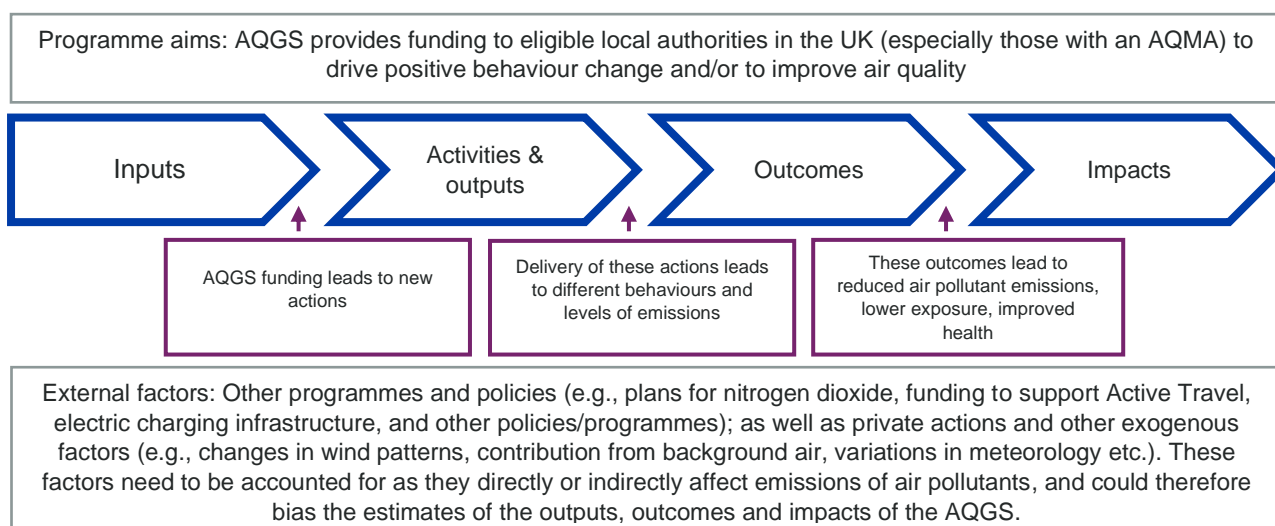
improve outdoor air quality and public health”; and others²). This will be complemented by the project team’s expert knowledge and experience of developing M&E frameworks in line with the HMT Magenta Book, technical knowledge on different types of interventions related to air quality, and input from stakeholders within Defra and other government and local stakeholders (e.g. beneficiaries of the grant scheme), especially to identify a longlist of evaluation goals, questions, priorities and boundaries.

This longlist of goals, questions, priorities and boundaries of the M&E will be reviewed and structured into a draft proposal for the scope of the M&E framework that will inform the following steps.

1.3.2 Step 2: Establishing Theory(ies) of Change

It is proposed that a Theory of Change for the overarching AQGS programme is developed, which is underpinned by a selection of Theories of Change of the core types of projects funded by the AQGS programme. As noted, the AQGS funds projects focussed on infrastructure, behaviour change, campaigning, monitoring and/or modelling research, policy development and enforcement improvements. As part of the work under WP1, a typology of projects will be identified to develop a selection of project-level Theories of Change, which together contribute to the overarching programme’s Theory of Change. These will be used to characterise the impact pathway and identify the key drivers of outcomes and impacts from within the programme, as well as external factors of relevance (e.g., other public and/or private activities such as the roadside NO₂ plan related projects and other funding programmes for Active Travel, electric vehicle infrastructure, etc.), and how these might interact with AQGS-funded projects, their delivery, outputs, outcomes and impacts.

Figure 1-1 Illustration of an overarching Theory of Change



The Theory(ies) of Change will be discussed and agreed with experts within Defra and checked with a selection of local authority and other stakeholders. These will serve to confirm how different types of projects might contribute to objectives of the AQGS and which and how external activities might influence, overlap and/or amplify the impact and success of the AQGS. Such a structured map of inputs through to impacts (or impact pathway) will also provide a basis for the project team to identify a longlist of questions that the evaluation should seek to answer (Step 3) and the data requirements (Step 4) to evaluate the level of effectiveness or lack thereof of the AQGS.

1.3.3 Step 3: Developing and prioritising the evaluation questions

A longlist of questions will be developed based on Step 2, as this will help identify the key drivers or levers of impact and any knowledge gaps that would be necessary to understand how the AQGS-funded projects might

² Other relevant literature could include: Air Quality Group (2020). Assessing the Effectiveness of Interventions on Air Quality; Eunomia (2017). Air Quality Benefits of Active Travel: Final Report for Sustrans; Ellison et al. (2013). Five years of London’s low emission zone: Effects on vehicle fleet composition and air quality; Woodcock et al. (2014). Health effects of the London bicycle sharing system: health impact modelling study; Font, A., & Fuller, G. W. (2016). Did policies to abate atmospheric emissions from traffic have a positive effect in London?; Carslaw et al. (2012). A short-term intervention study—Impact of airport closure due to the eruption of Eyjafjallajökull on near-field air quality; and Holman et al. (2015). Review of the efficacy of low emission zones to improve urban air quality in European cities.

contribute to achieving the programme's and government's objectives (in line with the Table 2.2. "Evaluation questions and types of evaluation" from the HMT Magenta Book). A multi-criteria approach will be employed to shortlist. The criteria will include a qualitative assessment of the extent to which answering a particular question would be central to understand the process, impact and/or value-for-money of the programme, the relevance of the question, the feasibility of answering it, etc., to ensure that a practical set of key questions are identified and agreed to support an effective monitoring, reporting and evaluation design.

1.3.4 Step 4: Identification of data requirements

The agreed shortlist of questions in scope of the evaluation, combined with the Theory(ies) of Change will be used to develop a list of indicators that capture the information needs. This coupled with the identification of any evidence gaps would result in a list of data requirements from the monitoring and reporting (i.e., evidence collection) process and ensure that an evaluation of the AQGS is deliverable (in line with Section 4 of the UK Magenta Book). The list below outlines an illustration of data requirements and how these may be addressed, which will be investigated and tailored as part of the project, in collaboration with Defra and local authority stakeholders.

- Business-as-usual activity (**Baseline**) –characterised through surveys or other data collection/monitoring at project start
- AQGS grant funding and any other public and private funding by source (**Inputs**) –collected through payment-linked bi(monthly) and annual progress reports (AQGS reports), plus any financial data on over/underspend
- Scope in terms of activities funded e.g., infrastructure, behaviour change, campaigning, research, policy development and enforcement improvements (**Activity/ Output**) – AQGS reports
- Scope in terms of the sources of pollution, air pollutants or behaviours that are targeted (**Activity/ Output**) –AQGS reports
- Positive behaviours, air pollutant emissions and local quality of air (**Outcomes**) –AQGS reports and any other local monitoring and/or public statistics
- Critical review of the evidence base - including weaknesses and lessons learned - geographical, demographical, health and secondary effects against the baseline or counterfactual (**Impacts**) - AQGS reports and analysis
- Comparison of behaviours, air pollutant emissions and local air quality against baseline or counterfactual (**Impacts**) –AQGS reports and analysis

In addition to publicly available evidence, relevant literature and the AQGS reports, deep dives into specific and ideally representative projects will be explored for additional data collection if considered practical.

It is likely that local authorities might not be able to produce evidence for some of the outputs and outcomes (and thus, nor impacts). For example, when estimating the impact of an activity on air quality directly or indirectly of a programme, it is challenging to control for other confounding and external factors that might also contribute or affect air quality (i.e., determine or attribute a contribution to a particular driver of impact). Moreover, some of the activities only affect the quality of air locally over the longer term, and the changes might be too small to be detected. Therefore, the evaluation design methods (step 5) will consider and mitigate for these challenges and proxies can be used to quantify the potential changes in emissions to provide input to air quality models. These will be identified as part of Steps 1-3 and will be captured in how the data requirements will be defined, specific to the activity being funded.

Once the data requirements are refined, the project team will produce recommendations for standards, methods and approaches that could be implemented, following good practice whilst ensuring that the recommendations are practical and implementable at the local authority level. Stakeholder engagement will be used to test draft proposals.

1.3.5 Step 5: Evaluation design

Building on WP1 and the previous steps, methods and approaches will be proposed and confirmed with Defra and identified stakeholders to ensure that effective evaluations can be performed, in line with the HMT Magenta Book and the Defra Complexity Evaluation Framework³. It is proposed that a mix of flexible **research, theory-based and quasi-experimental methods** would be proposed to identify how the grant scheme is being implemented, what works well or less so, and how this could be improved (process evaluation); what outcomes

³ Defra Complexity Evaluation Framework. URL: <https://sciencesearch.defra.gov.uk/ProjectDetails?ProjectID=20401>

are delivered or facilitated by the AQGS and the extent to which these can be attributed to the scheme, as well as the additional impacts of the AQGS against the baseline or counterfactual (impact evaluation); and, finally, assess whether the grant programme is a good use of public resources by comparing the net social benefits with the public funds employed (value-for-money evaluation). The following Table outlines the methods and approaches that might be proposed, for refinement and discussion during early stages of the project.

Table 1-1 Illustration of evaluation methods

AQGS Theory of Change indicators or groups of indicators	Illustration of methods (in line with Section 3 of HMT Magenta Book)
Inputs	Performance monitoring (AQGS reports) and deep dives will be primarily employed as research methods to collect evidence of the inputs related to the AQGS and/or facilitated by the programme (e.g., any leveraged private or other public financing)
Processes, activities, and outputs	Interviews and a survey (e.g., WP3), performance monitoring (AQGS reports), rapid assessments, deep dives or case studies research methods will be employed to collect evidence effectively of the processes, activities and outputs related to AQGS-funded projects
Outcomes	Theory-based contribution analysis and qualitative comparative analysis methods might be employed building on evidence collected through self-assessment surveys, performance monitoring, and deep dives to establish the extent to which the projects/ AQGS contributed to an observed outcome or proxy as required (e.g., level of air pollutant emissions).
Impacts	Quasi-experimental methods (e.g., interrupted time series analysis and difference-in-differences and 'timing of events') can be employed to establish a baseline or counterfactual (e.g., hypothetically by developing a pre-implementation baseline with local authorities and/or by identifying similar local authorities where the considered implementations will not be implemented) and comparing the outcomes of the activity against the baseline (or counterfactual) for an assessment of the potential attributable impacts. We will adjust the method design based on: the type of the intervention, type of outcome/pollutant being targeted by the intervention, the spatial and temporal scale over which the activity is implemented, location of the measurement site (if any), potentially available data (direct or proxy), feasibility of the method, etc.
Value for money	Both social cost-effectiveness and cost-benefit analyses will be considered, depending on the availability of quantifiable evidence especially concerning the attributable social costs and benefits of the AQGS-funded projects in the short-term (e.g., air quality impacts, etc.), which could be monetised based on UK Green Book methods. To understand whether the grant programme is a good use of resource, it is proposed to estimate the ratio of net social benefits to public funds (which effectively would represent a metric of the social return for each public pound spent). If it is expected that evidence might be problematic, a Multi-Criteria and/or Qualitative Assessment approach could be developed for consideration.

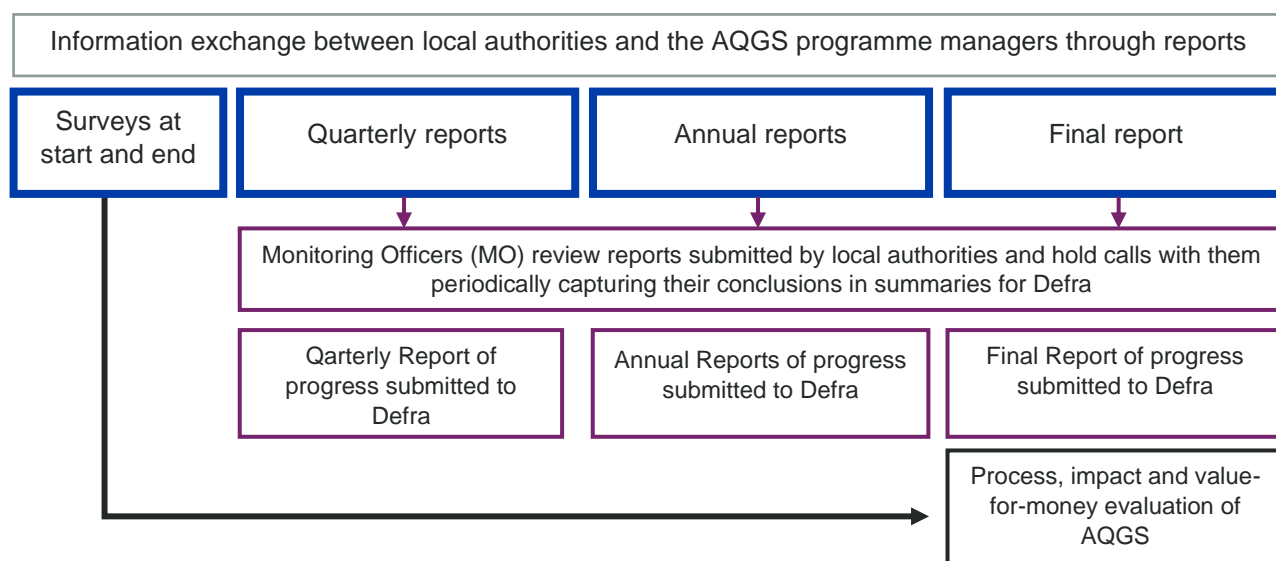
We also acknowledge the complexities associated with evaluating outcomes and impacts on behaviour change, air quality and/or improved health or other social and environmental implications, required for the value-for-money evaluation. Firstly, multiple external factors will affect these outcomes locally and nationally and it might be difficult to estimate an unbiased impact of an activity, controlling for these potentially confounding factors. Secondly, issues might arise with evidence-gathering/data collection. These complexities will be considered when developing appropriate, practical and tested methods for the evaluation.

1.3.6 Step 6: Implementation plan

The project will also produce a proposed implementation plan of the M&E framework. This will be a practical outline of how the framework can be taken forward, including the resources that may be required to take specific sets of M&E actions over a specific timetable with specific milestones (re: Section 5 of the UK Magenta Book).

These proposals will take into account any known or expected changes to the scope and scale of the AQGS. Recommendations for AQGS processes will also be considered, for example, including for monitoring and reporting requirements, approaches and processes e.g., the Figure below sets out a good practice monitoring and reporting process, which will be contrasted with the outputs of the review and analysis of progress reports under WP1.

Figure 1-2 Illustration of a proposed monitoring and reporting process (component of implementation plan)



1.3.7 Outputs of WP2

WP2 will culminate in the following deliverables:

- A **'WP2 progress report'** outlining the approach taken to develop the M&E framework
- A **'Final M&E framework report'** outlining the M&E goals and context, the theory(ies) of change, the evaluation questions, data/ evidence requirements, the proposed evaluation methods, and an implementation plan which includes a monitoring and reporting plan, timelines, milestones, resource requirements, and other components.
- A **Slide Pack** (PPT) presenting the M&E framework to communicate the evaluation approach within the UK government, its objectives and what is expected that might be delivered at the end of the process.

1.4 DELIVERY OF WORK PACKAGE 3 – AQGS PROCESS IMPROVEMENTS

The aim of work package 3 is to understand local authorities' experiences in relation to the AQGS process, in terms of applying for and reporting on the grants. The focus will be on these authorities who have applied for and received grants, but we would also propose to include a sample of those who have been unsuccessful and also some who have not applied. These latter groups will help in understanding the barriers to applying for the grant scheme.

Our proposed approach for delivery of this work package is a mixed methods approach, using an online survey sent to all local authority officers, with follow up qualitative interviews with around 25 recipients of the funding.

1.4.1 Quantitative survey:

We propose drafting an online survey to all applicants of the funding since 2018. We will draft 2 different versions of the survey – one to go to all those that have been successful with the funding, with a second version going to those who were unsuccessful. We will complement this with a shorter survey to a selection of authorities who have not applied for funding.

We would work with Defra to compile the contact details for those who have applied for grants over the last 3 years, but complement this with the local authorities contact details we have from our EMAQ+ programme. This will help us compile a full set of contacts covering all target groups. We will agree how best to approach the authorities with Defra and to ensure that we comply with GDPR requirements for the contacts that we and Defra hold, however, we would propose that the best response will be gained with a formal introduction/request from Defra to the local authority officers.

We anticipate that some officers will have left the authority or may find it hard to remember their application, particularly those who were unsuccessful. However, we do feel there is merit to understanding whether there are any common barriers/issues in the application process, funding requirements or other factors, that may have specifically resulted in some producing weaker applications, or not applying at all, compared to those that have

subsequently been unsuccessful. Furthermore, unsuccessful applicants may have experience of other AQ funding/projects that may be useful to understand, that could feed into the wider learning for this programme and future funding.

The main areas of exploration for the research will follow that set out in the specification. However, we will review this against the guidance in the Magenta Book and also the outcomes of the initial review and scoping step in WP2 and the learnings from WP1. An initial grouping of research questions is shown below:

Key research questions / applicant type	Successful applicants	Unsuccessful applicants	Non applicants
1). What improvements, if any, could be made to the AQGS applications and reporting processes?	✓	Application process only	N/A
2) What factors motivate local authorities to apply for funding via AQGS?	✓	✓	Framed in terms of barriers to applying
3) Are there barriers to evaluating local air quality interventions/projects?	✓	In general and not specific to AQGS	In general and not specific to AQGS
4) What other funding sources do local authorities draw upon to implement air quality projects?	✓	✓	✓
5) Were the project interventions implemented as intended? And if not what were the barriers to successful delivery?	✓	N/A	N/A

We would keep the questions consistent across the survey versions to allow for comparability. We will provide closed questions where possible, using our own experience of the AQGS and LAQM, as well as working closely with Defra, to determine what the response options could be, but provide 'other' boxes and some open-ended questions where required. Question routing will allow unsuccessful applicants to navigate the questionnaire and answer certain questions depending on their wider experiences of other air quality schemes that they have implemented outside of this funding stream.

At the end of the survey we will ask authorities whether they would be willing to take part in an interview should it be required.

1.4.2 Qualitative interviews with funding recipients

We would look to undertake an online (i.e. MS Teams) interviews with around 20-25 local authorities to explore some of the issues in more detail. The makeup of these LAs would be agreed with Defra, but our initial thoughts are that we would look for a spread of different types of recipients, which could potentially be by region, by size of grant received, or by type of scheme implemented, but could also include some who were unsuccessful. Again, it may be helpful for Defra to be a gatekeeper here and provide the initial introduction via email. Alternatively, we would invite those we wish to speak to via email initially, with subsequent follow ups via email and then a telephone call for non-respondents. We have put resource into doing this within our research team. A topic guide would be designed by our Project Lead for WP3, David Chong Ping, in conjunction with Ricardo and AQMRC to lever their experience with local authorities, as well review by Defra. The use of a topic guide will ensure a consistent approach is taken by the interview team.

All interviews would be conducted by senior members of the team who are familiar with the subject matter, using the topic guide. The researcher would familiarise themselves with the responses already provided by the LA from the online survey (where this has been completed) and along the funding application and final or progress reports (where these are available), to guide the conversation and probe specific areas where required.

All interviews would be transcribed and analysed by the Researchers using a thematic guide, and a session led by David Chong Ping would pull all the key themes together across each of the research questions.

1.4.3 Outputs of WP3

We will produce the outputs as laid out in the ITT, namely a written report, and a PowerPoint slide pack summary. The learnings from this WP will also feed into the final evaluation design work of WP2, specifically for the process evaluation component, as well as provide recommendations for improvements for the next round of the AQGS.

2. PROPOSED STAFF AND CONTRACTOR'S EXPERIENCE

Ricardo has teamed with MEL Research and the Air Quality Management Resource Centre of the University of the West of England (AQMRC) for the delivery of this project. This partnering provides the depth and breadth of experience across M&E development, market and social research and local authority air quality management needed for the successful delivery of this project. The combined resources also allow for parallel working across the WP's and peer-review and support between the partners. The experience of our team and key individuals is described below.

2.1 MONITORING AND EVALUATION EXPERIENCE

Our team has a wealth of experience and expertise in developing and implementing monitoring and process, impact and value-for-money evaluation frameworks in line with the UK Magenta and Green Books, for the UK government and other public and private institutions. This includes experience in designing frameworks (incl. Theory of Change, evaluation questions and approaches for process, impact and value-for-money evaluations, etc.), evaluation methods (such as focus groups, structured interviews, surveys, and rapid assessments) and providing insight that enables public sector bodies and charities to improve their service delivery. A selection of relevant experiences are highlighted below:

- A process evaluation of Electric Vehicles Smart Charge Point Regulations (UK Department for Business, Energy and Industrial Strategy - BEIS, 2022-Present). Ricardo is leading the design of a process evaluation framework and implementing this to deliver a rapid process evaluation for BEIS. This includes a range of stakeholder engagement and primary research methods in line with the UK Magenta Book.
- A process and impact evaluation for the Advanced Fuels Fund Programme (UK Department for Transport, 2022-Present). Ricardo has designed a process and impact evaluation framework and is leading the implementation over a three-year period for DfT. This includes the development of the Theory of Change, evaluation questions, method design, a monitoring and reporting approach, and an implementation plan in line with the UK Magenta Book. This builds on similar experiences in managing other programmes for DfT with similar roles.
- The development of a monitoring and evaluation framework for the Health Effects of Air Pollution programme being delivered by the philanthropic organisation Impact on Urban Health. Working with ICF Ricardo provided the technical insight on air pollution and evaluation data to support the framework. The work comprised reviewing existing projects, developing a ToC and key research questions and collating potential assessment data and indicators.
- The development of a monitoring and evaluation framework to support the preparation of the 2021-2027 LIFE Programme, a dedicated EU fund to support the environment and climate. Stakeholder engagement was undertaken with previous LIFE funding beneficiaries to incorporate their views into the development of the framework to ensure the reporting processes were also tailored to their requirements.

2.2 AIR QUALITY EXPERTISE

Both Ricardo and the AQMRC are well known for their expertise in local air quality management (LAQM) and technical support to local authorities in developing air quality management solutions. We have an intimate knowledge of the issues and challenges facing local authority efforts in tackling air quality exceedances, as well as direct experience of working with authorities on applying for and delivering air quality grants. A selection of relevant experience is set out below:

- EMAQ+ is a local authority air quality training programme that Ricardo has run for many years, building capacity with local authorities for meeting their legal duties in respect to local air quality management. As well as training the authorities this programme gives us exposure to the issues and challenges LA's are facing with LAQM. EMAQ also provides us a direct route to contact many local authorities for the WP3 engagement task.
- Air Quality Action plans and Clean Air Zone feasibility studies – Ricardo has worked with many local authorities on developing action plans, including Clean Air Zones, for the improvement of air quality. This has required the development and assessment of measures, from stakeholder engagement to detailed dispersion modelling and cost benefit analysis. Working with MEL we have also carried out formal public consultation using on-line survey and analysis techniques.
- A rapid evidence review on Air Quality Public Attitudes and Behaviour for the Scottish Government. A systematic approach was taken to source and identify relevant evidence, to extract the necessary

information and to synthesise this into a report for multidisciplinary stakeholders together with a series of 15 recommendations.

2.3 PROPOSED KEY STAFF

Details of the core team leading the work are provided below with full CVS for the core and support team in Appendix 2.

Julia Pitman	Principal Consultant (Ricardo)		
Project Manager and WP 1 lead	Main contact for Defra; team & financial management; delivery to time and budget, progress tracking, risk management, and leadership of WP 1 workstream		
Julia is an expert on air quality issues with extensive experience devising, running and appraising ambient air quality monitoring programs and networks; data interpretation and reporting; local air quality management; and understanding emissions sources She is an experienced Project Manager and has managed a wide range of projects for key UK Government departments, local authorities and private industry. She successfully delivers contracts to time and budget, as well as developing and maintaining strong relationships with a wide range of clients.			
Guy Hitchcock	Technical Director (Ricardo)		
Project Director	Overarching QA/QC sign off on all deliverables, alternative point of contact for Defra, input on LAQM context and LA engagement		
Over 25 years of experience on research and consulting on air quality, climate change and sustainable transport. Key areas of expertise include assessment of measures to reduce both air pollutant and greenhouse gas emissions, policy and programme evaluation and project and programme management. He has worked with many UK local authorities supporting them with local air quality management, including the development Air Quality Action Plans, Low Emission Strategies and Clean Air Zones, as well as supporting local authorities with Air Quality Grant Scheme applications and projects.			
Brais Louro	Principal Economist (Ricardo)		
WP2 and M&E lead	Overarching M&E technical lead for the project, and task-leadership for WP2, providing research methods (incl. interview and survey design) and evaluation expertise in line with UK Magenta Book.		
12 years' experience, providing technical leadership in ex-ante impact assessments and ex-post evaluations including process, impact and value-for-money evaluations, in line with UK Green and Magenta Books: Ex-post review of the Combined Heat & Power QA Programme (BEIS), M&E framework for the Advanced Fuels Fund Programme (DfT); Process evaluation for smart charging regulations (BEIS); Ex-ante socio-economic and environmental impact assessments of the revisions of multiple legislations (European Commission). Former Economic Advisor of Strategy at the UK's Department of Energy and Climate Change (now part of BEIS).			
Jo Barnes	Associate Professor (AQMRC)		
LAQM expert	Leadership of the AQMRC team providing technical input into WP1 for the review of final and progress reports and supporting the LA interviews in WP3		
Jo is an Associate Professor in Clean Air Research with 18 years' experience working in air quality management, policy and practice at a local, national, European and international level in the Air Quality Management Resource Centre at the University of the West of England, Bristol. She has worked with and on behalf of numerous local authorities, Defra and the Devolved Administrations of Scotland, Wales, Northern Ireland and Greater London, other Member States, the European Environment Agency and the European Commission to implement and develop air quality management policies and practices.			
David Chong Ping	Technical Director (MEL Research)		
WP3 lead	Leadership of WP3 providing market research expertise for survey design and delivery.		
David is a Certified Member of the Market Research Society, with over thirty-six years of business experience. His specialisms include Local Government research, evaluation and behavioural change insights and he works with a range of public sector and independent sector clients including Government, local authorities, third sector networks and umbrella organisations. David has experience in a wide range of environmental and transport research and evaluation projects, including Clean Air Zones, Low Emission Strategies, Air Quality Management Areas and Air Quality Action Plans.			

Full CVs of key staff and additional consultant support are provided in Appendix 2.

3. PROJECT MANAGEMENT

Ricardo recognises the value of strong project and risk management for effective delivery. This section describes how we will manage the work programme and work with Defra to deliver prompt and high-quality outputs. Our team members have complementary technical skills and proven management and delivery capability.

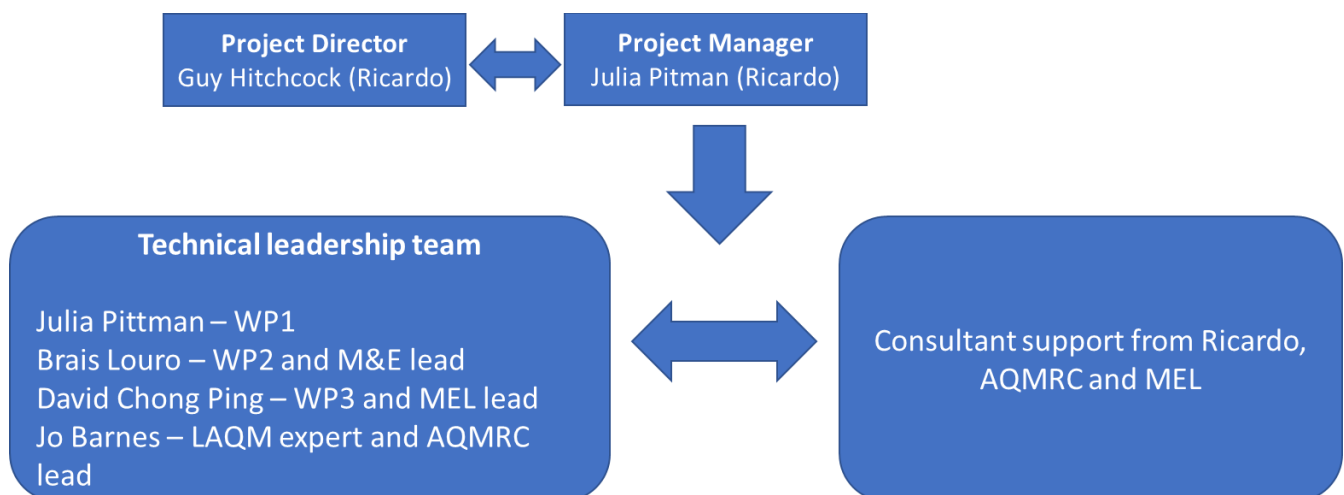
3.1 MANAGEMENT STRUCTURE

Project Manager: Julia Pittman. For this project we have chosen a project manager (PM) who can also contribute to the technical delivery, with knowledge of local air quality management and rapid evidence reviews. Julia has 16 years' experience and including a wide range of project management roles. With this project her responsibilities will include:

- Arrangement of an inception meeting on contract signature, and provision of an inception plan within the first week of the project.
- Set up and facilitate wider project meetings such as for the proposed steering group (see below) and the review presentations.
- Primary point of contact for Defra throughout the project, ensuring delivery of all aspects of the contract to time, quality and budget, and progress monitoring.
- Providing monthly updates on progress to Defra through virtual meetings and via email. These will detail progress with delivery, raise any concerns and indicate if any delays are expected.
- Ensuring regular communications with the project team, including identification of emerging delivery issues and risks, regular and systematic risk review and update of project risk register.
- Management of and communication with project partners in line with Ricardo's subcontract management policies.
- Direction of mitigation actions necessary to resolve any risks affecting the critical path or issues.
- Accountable to internal senior management on customer satisfaction and financial performance.

Project Director: Guy Hitchcock is a technical director at Ricardo and Knowledge Leader for low emission cities. He has over 25 years of experience of working with local authorities on local air quality management activities, include development and delivery of AQGS projects. He has also worked on the development of an M&E framework for a third sector air pollution programme. Guy will be the alternative point of contact for client project officers, with oversight of delivery and responsibility for the commercial and financial aspects of the project and link to other related projects.

Technical Leadership will be provided by the core project team. For each work package we will allocate a technical lead as follows: Julia Pittman for WP1, Brais Louro an M&E technical lead at Ricardo for WP2 and David Chong Ping from MEL for WP3. The work package leaders will be complemented by Jo Barnes from the AQMRC a leading expert in LAQM and air quality evidence review work. A team of consultants from across Ricardo, AQMRC and MEL will provide further resource for delivery.



3.2 PROJECT STEERING GROUP

We would propose that a project steering group is set up to help provide oversight and input from the client side. This group should comprise key stakeholders from Defra plus 2 or 3 local authority representatives. This group would meet at the following points:

- the inception of the project to provide initial guidance and insights to the project team,
- as part of the stakeholder engagement step;
- for the interim presentation and review;
- for presentation review of the draft final report and M&E framework.

The Ricardo project manager would work with Defra to establish this steering group and then provide the management and facilitation of this group. Meetings of the steering group will be carried out virtually unless specifically agreed with Defra.

3.3 PROJECT PLAN AND RESOURCE MANAGEMENT

Our Project Plan (Gantt Chart and key milestones) is included in Appendix 1.

The project management team will use the Gantt chart as a key tool for managing this project. In addition, the PM will maintain a detailed project forecast, which includes time allocated to each team member for each task in each week of the project. This forecast, which has already been prepared, is the most important tool for monitoring staff availability and for keeping track of progress against expected progress and against budget.

Weekly resourcing and progress meetings will inform any required changes to the forecast. Ricardo has existing resource management systems in place that identify the tasks, deliverables and other responsibilities assigned to each member of the team, with time allocated in each week of the contract. This system is actively managed by the PM and Director and is fully accessible to all members of the team, allowing individuals and the project management team to view existing commitments of each person against each task (and other projects) so that staff workloads can be managed, tasks scheduled, and potential conflicts identified in advance. This allows us to smooth each person's workload over time and check that an individual has availability to work on certain tasks when needed. This is an essential tool that we will use for scheduling within Ricardo. Weekly team meetings will have a standing agenda item to discuss resourcing and ensure time is ring fenced for project delivery.

3.4 PROJECT RISKS

As part of our project management procedures, we will carry out a risk assessment of the project that will be used to ensure the project team is aware of the project risks and of the actions and behaviours required to mitigate these. An initial summary of risks and mitigation measures are outlined in Appendix 1 along with the project plan. This will be regularly reviewed and updated by the Project Manager, in discussion with the project team.


3.5 QUALITY ASSURANCE

Ricardo operates strong quality management systems to ensure that the quality of deliverables across all our work remains consistently high. Ricardo has an integrated ISO-certified management system covering quality, safety, health and environmental (QSHE) management across all operations (certified to ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 and ISO 27001:2013). The system is implemented through defined policies, processes and procedures and a dedicated, full-time QSHE Manager. Our ISO certifications are subject to internal and external audits and a detailed recertification every 3 years.

The project director will have overall responsibility for quality assurance, but will be supported by each of the work package leads for the work under their work package.

4. COST PROPOSAL

Task No.	Name	Framework grade	Day rate	No. of Days or part thereof	Cost
WP0	Guy Hitchcock	Director	£ 1,325	3.5	£ 4,638
WP0	Julia Pittman	Senior	£ 850	8	£ 6,800
WP0	Brais Louro	Senior	£ 850	5.5	£ 4,675
WP0	Jo Barnes	Senior	£ 850	2	£ 1,700
WP0	David Chong-Ping	Senior	£ 850	4	£ 3,400
WP0	Consultant support	Consultant	£ 650	3	£ 1,950
WP0	Junior Support	Junior	£ 550	6	£ 3,300
WP1	Guy Hitchcock	Director	£ 1,325	1	£ 1,325
WP1	Julia Pittman	Senior	£ 850	5	£ 4,250
WP1	Brais Louro	Senior	£ 850	2	£ 1,700
WP1	Jo Barnes	Senior	£ 850	10.5	£ 8,925
WP1	Consultant support	Consultant	£ 650	6	£ 3,900
WP1	Junior Support	Junior	£ 550	53	£ 29,150
WP2	Guy Hitchcock	Director	£ 1,325	2.5	£ 3,313
WP2	Brais Louro	Senior	£ 850	18	£ 15,300
WP2	Jo Barnes	Senior	£ 850	3	£ 2,550
WP2	David Chong-Ping	Senior	£ 850	2	£ 1,700
WP2	Consultant support	Consultant	£ 650	3	£ 1,950
WP2	Junior Support	Junior	£ 550	40	£ 22,000
WP3	Guy Hitchcock	Director	£ 1,325	1	£ 1,325
WP3	Julia Pittman	Senior	£ 850	0.5	£ 425
WP3	Brais Louro	Senior	£ 850	1	£ 850
WP3	Jo Barnes	Senior	£ 850	3.5	£ 2,975
WP3	David Chong-Ping	Senior	£ 850	12	£ 10,200
WP3	Senior support	Senior	£ 850	5.5	£ 4,675
WP3	Consultant support	Consultant	£ 650	9.5	£ 6,175
WP3	Junior Support	Junior	£ 550	7.5	£ 4,125
Total Staff Costs				£153,275	
Expenses (please detail type i.e. travel, accommodation etc.)		Survey delivery costs		£2,725	
Overall Costs				£156,000	
By signing this form <i>Ricardo Energy &Environment</i> agree to provide the services stated above for the cost set out in your Cost Proposal and in accordance with the Research, Development & Evidence Framework Conditions of Contract.					

Contractor Project Manager:	Linda Jackson
Signature:	
Date:	8 th December 2022

Note: WP0 is the Inception, management and final report task

Appendices

Appendix 1 Project Plan and Risk Register

MILESTONES

Deliverable no.	Task and deliverable	Completion date	Payment schedule
D1	Inception report and delivery plan	15th Jan	10%
D2	First interim presentation	30 th March	20%
D3	Draft WP1 report	30 th April	10%
D4	Draft M&E framework	30 th April	10%
D5	Final WP1 report	30 th May	10%
D6	Draft WP3 report	30 th May	10%
D7	Final M&E Framework	30 th June	10%
D8	Final WP3 report	30 th June	10%
D9	Final summary report	30 th June	10%

GANTT CHART

Task	Dec	Jan	Feb	Mar	Apr	May	Jun
WP 0 Inception and management							
Inception meeting							
Delivery plan		D1					
Progress reports		X	X	X	X	X	
Interim presentation				D2			
Final report							D9
WP1 Assessment of AQGS							
WP1.1 Assessment framework							
WP1.2 Review progress and final reports							
WP1.3 Analysis, reporting and feedback							
Draft WP1 report					D3		
Final WP1 report						D5	
WP2 Development of M&E Framework							
WP2.1 Review and Scoping							
WP2.2 ToC							
WP2.3 Evaluation questions							
WP2.4 Data and indicators							
WP2.5 Evaluation design							
Draft M& Framework					D4		
WP2.5 Implementation plan							
Final M&E framework							D7
WP3 AQGS process improvements							
WP3.1 Survey design							
WP3.2 Survey delivery and analysis							
Draft WP3 report						D6	
WP3.3 Structured interview							
WP3.4 Reporting and feedback							
Final WP3 report							D8

RISK REGISTER

Unmitigated risk	Mitigation Measures	Final risk	Owner
Staff availability issues due to COVID-19			
Medium	The majority of Ricardo staff have been vaccinated and current incidence of covid is low. Ricardo staff are now hybrid working which reduces the risk of transmission.	Low	JP
Staff availability issues due to absence or other project commitments			
Medium	PM will review staff availability weekly to organise cover for planned absence. Cover for key experts will minimise issues in case of unplanned absences. Our resource management system allows individuals to manage deployment months in advance so availability for work on this project can be actively managed.	Low	JP
Outputs delayed due to mismanagement			
Medium	We have a strong and clear team structure, management framework and associated processes for project management. We have selected a technical project manager, for efficiency, who has worked with the Technical Lead for many years. Our PM is supported by an experienced project director providing continuity and cover for unexpected absence, and a deputy for day-to-day support.	Low	JP/GH
Evaluation design and implementation plan (WP2) are not practical and fail due to the timeframe of the evaluation and/or evidence-gathering challenges			
Medium	Ricardo and partners will work closely with Defra, and other government and local stakeholders, especially the beneficiaries of the programme, to test the evaluation design and ensure that the proposed implementation plan is practical and realistic whilst it can meet the ambitions for delivering process, impact and value-for-money evaluation in due course.	Low/ Med	BL
Stakeholder engagement delays completion (WP3)			
Medium	Input from stakeholders anticipated to carry out an initial process evaluation. We will engage stakeholders as early as possible and, in collaboration with Defra, secure their commitment to participate in this exercise. Ricardo has good relationships with many Local Authorities and we understand their resource constraints. Our early planning will limit any burden on Local Authorities from this project.	Low	DC-P
Loss of data due to IT failure or malicious action			
Low	Processed datasets will be shared within the project team via shared network resources. Copies of datasets will be copied to Ricardo servers (with restricted access to the project team) and be subject to a daily backup on redundant servers to provide quick and complete recovery in case of IT failure.	Very Low	JP

Appendix 2 Curriculum Vitae

CORE LEADERSHIP TEAM



Dr Guy Hitchcock

Technical Director, Low Emission Cities
Ricardo Energy & Environment

Qualification(s)	Ph.D, The Open University, 1992 BSc Maths and Physics, Keele University, 1988
Nationality	British
Language(s)	English (Mother Tongue)

PROFILE

Dr Guy Hitchcock is a Technical Director at Ricardo Energy & Environment, working in the area of Low Emissions Cities, with over 25 years' experience of research and consulting on air quality, climate change and sustainable transport. He has worked in both consultancy and academia, providing technical advice to a wide range of clients in both the public and private sector. Key areas of expertise include assessment of measures to reduce both air pollutant and greenhouse gas emissions, policy and programme evaluation and project and programme management. He has worked with many UK local authorities supporting them with local air quality management and climate action, including the development Air Quality Action Plans, Low Emission Strategies and Clean Air Zones, as well as supporting local authorities with Air Quality Grant Scheme applications and projects. He has also worked with the UK Government on providing advice on air quality for local authorities.

KEY PROJECT EXPERIENCE

2022 – ongoing – Assessment of LEZ options for Warsaw: Funded through the Clean Air Fund the project is supporting the city of Warsaw in the assessment of potential Low Emission Zone options. The work will involve the air quality modelling of the options, along with a cost benefit analysis and assessment of business impacts.

2021-ongoing – Development of a Corporate Air Pollution reporting system: Funded by the Clean Air Fund and Impact on Urban Health this project is developing and implementing a scheme to allow business to reporting their air pollutant emissions along side the GHG emissions. A detailed method and guidance materials for emissions calculation is being developed alongside setting up a reporting scheme and engagement with business to establish the reporting approach in the sustainability practices.

2021-ongoing - Evaluation of Southampton's Clean Air Plan: Following on for the original feasibility work done for Southampton's Clean Air Plan, this study carried out an evaluation of the impact of air quality of progress made so far using updated ANPR and traffic data. The study indicated that Southampton was failing to meet limit values as originally predicted, with a slower than expected fleet turn over being the main reason. The work is continuing with further assessment of potential mitigation measures that could be implemented.

2020 - 2022 - Oxford Zero Emission Zone appraisal: Building on previous work for Oxford this project is carrying out a full scheme appraisal of the Zero Emission Zone prior to a final consultation and launch of the scheme. Guy is providing oversight of the work which covers full air quality modelling of the scheme, along with cost benefit analysis and a distributional analysis of social and economic impacts.

2021-2022 – Strengthening Clean Air Action Plans in three India cities: This project, funded by GIZ, reviewed the existing action plans of the 3 cities and developed recommendations on how they could be improved to support achievement of a 20-30% PM reduction target in line with the India NCAP requirements. The worked assessed the overall process of developing the plans, their likely impact on pollution levels and recommendations for improvement, along with capacity workshops with the cities.

2019-2021 – Development of an evaluation framework for Impact on Urban Health's Health Effects of Air Pollution programme.: Ricardo worked with ICF to develop the evaluation framework for the HEAP programme. Guy was the technical lead for the Ricardo's element of the work, supporting the development of the ToC and the data and indicators element of the framework. Ricardo also provided the air pollution technical knowledge to support the development of the framework.

- 2020-2021 Suffolk Climate Emergency Plan (Suffolk Climate Change Partnership):** This project is developing sector pathways to carbon neutrality by 2030 in Suffolk and detailing options for an action plan. Along side this a programme of key stakeholder engagement is being carried out to validate the action plan and build a community for delivery.
- 2017 - 2021: Clean Air Zone Feasibility studies:** Guy is the technical lead for 8 cities developing plans for Clean Air Zones in line with the UK Governments National Air Quality plan. The studies are carrying a detailed assessment of Clear Air Zone (Low Emission Zone) options for the cities working with key city stakeholders and co-ordinating a range of technical consultancy inputs. The assessments will carry out a detailed air quality assessment and support the building of a business case for implementation of the scheme
- 2015 – 2016 Study on Urban Accessibility (European Commission):** This study is funded by DG MOVE and seeks to gain a better understanding of urban accessibility issues across Europe. In particular the study is looking at metrics to measure accessibility, the data required for these metrics, the role of congestion in urban accessibility and measures to improve accessibility. The work is based on literature review, data collection and modelling, and stakeholder engagement.
- 2015 – 2016 Development of a Low Emission Strategy for Southampton (Southampton City Council):** This project developed and supported the implementation of a low emission strategy (LES) for Southampton. The work involved significant stakeholder engagement and assessment of measures to reduce emissions from transport. The assessment covered emissions and air quality assessment, and cost benefit analysis.
- 2014 - 2015, Development of Speed-Emission-Energy Curves for Ultra Low Emission Vehicles (UK Department for Transport):** Th aim of this project is to develop new speed-emission-energy curves for low emission vehicles such as hybrid vehicles for use in vehicle emission modelling. Work involves review of existing emission data for these new technologies, simulation of data where little exists and generation of the curves. My role is to provide technical and management support to the project to ensure good quality delivery.
- 2014 - 2018, European Urban Transport Roadmaps to 2030 (European Commission):** This major European project is supporting the development of sustainable urban transport policies in cities across Europe. The work focuses on the development of an internet based tool to support city authorities to select and assess sustainable transport measures for their cities. It will also develop sustainable urban transport policy roadmaps through the 2030 at the European level.
- 2013 - 2014, South Oxford Low Emission Strategy study (South Oxfordshire District Council):** This study is work with a more rural local authority which is experiencing air quality problems in smaller towns. The work will explore with local stakeholder's potential measures to reduce vehicle emissions, evaluate these measures in terms of emission, costs and benefits and develop a low emission strategy for the district.

CAREER HISTORY

2013-present, Associate/Technical Director, Ricardo Energy & Environment

2011 - 2013, Director, Sustainable Transport Solutions Ltd

2008 - 2011, Head of the Centre for Energy and the Environment, University of Exeter

2004-2008, Managing partner, Quantock Energy & Environment

1998-2004, Associate, Transport & Travel Research Ltd

1997-1998, Principal Consultant, Transport & Travel Research Ltd

1996-1997, Project Manager, Energy Efficiency Department, ETSU/AEA Technology

1992-1996, Consultant/Senior Consultant, Strategic Studies, ETSU/AEA Technology

1991-1992, Energy Analyst, Energy Economics and Statistics, Building Research Establishment:

Julia Pittman

Principal Consultant

Ricardo Energy & Environment

Qualification(s) *MSc Environmental Management, University of Surrey, UK 2001*

BSc Environmental Science, Plymouth University, UK 1999

Nationality *British*

Language(s) *English (Mother Tongue)*



Profile

Julia Pittman is a Principal Consultant with 17 years' experience in the environmental field specialising in air quality, emissions and climate change. Julia has extensive experience in assessing Local Authority Air Quality Action plans both for Defra and for other European Cities. Julia currently manages SR3 services supporting the evaluation, implementation and further development of air quality and emissions policies for the European Commission under the DG Environment Framework helping them to assess member states progress in meeting the Ambient Air Quality Directives. Julia is an experienced framework manager having previously managed the DG Grow framework on behalf of TRL. She is an expert on air quality issues with extensive experience devising, running and appraising ambient air quality monitoring programs and networks; data interpretation and reporting; local air quality management; and understanding emissions sources.

Julia is an experienced Project Manager and has managed a wide range of projects for key UK and Government departments, local authorities and private industry. She successfully delivers contracts to time and budget, as well as developing and maintaining strong relationships with a wide range of clients.

Key Skills

- + 15 years' project management experience working in the environmental sector
- + Subcontractor management and management of multi-disciplinary teams
- + Very strong budgeting and cost control skills
- + Customer management, delivering projects on time to a good quality and meeting the customers needs.
- + Expert knowledge of ambient air monitoring programmes and air quality data interpretation

Selection of Project Experience

2021	Pan-European City Rating and Ranking on Urban Mobility for Liveable Cities (Transport and Environment)
2020- 2021	Project Manager SR3 Services supporting the evaluation, implementation and further development of air quality and emissions policies (European Commission)
2020- 2021	Project Manager, Pollution Release Transfer Register and Sulphur in liquid fuels (Defra)
2020	Technical Researcher, Targeted feasibility study of measures to deliver NO ₂ concentration compliance in Hafodyrynys (Caerphilly Borough Council)
2019	Technical Director Grenfell Tower post-fire AQ Monitoring report (PHE)
2019	Technical Director, Pollution Control Devices- Testing Methods For In Service Vehicles (Department for Transport)
2017	Technical Director, Appraisal of LAQM review and assessment reports and action plans (Defra)

Brais Louro

Principal Economist

Ricardo Energy & Environment



Qualification(s) *MSc Economics, London School of Economics, 2011*
BA Economics and Mathematics, Connecticut College, 2009
Study abroad in Economics, University of Oxford, 2007

Nationality *Spanish*

Language(s) *English (Fluent), Spanish (Mother tongue), Portuguese (Intermediate), French (Basic)*

Profile

Brais is a principal economist and researcher with 12 years of professional experience in public policy, socio-economic and environmental impact analysis and evaluation. He has worked as a senior economist in UK and international public institutions for over five years (e.g., the UK Department of Energy and Climate Change, Public Health England and the European Bank for Reconstruction and Development), and over four years in Economic Advisory at Deloitte. He joined Ricardo Energy & Environment in 2020.

Brais has an excellent command and expertise of economic, social and environmental appraisal methods, including ex-ante assessments and ex-post evaluations in line with the UK Green and Magenta Books. He has extensive experience in providing strategic direction, technical leadership and quality assurance to projects involving impact analysis and evaluation of public policy and programmes for the UK government and the European Commission (see a selection of examples below). In addition, he has experience in the design and implementation of evidence reviews and surveys, as well as the analysis and development of recommendations for policies and programmes.

Brais is also an experienced team, stakeholder, and project manager both in public and private sector settings and has managed public policy programmes at the national level in the UK, led Programme Management Offices and coordinated decision-making Boards and stakeholder groups, particularly in the UK Government.

Selection of recent project experiences

- 2022-Present, Process evaluation of smart charging regulations (UK Department for Business, Energy and Industrial Strategy or BEIS). Role: Director/ Evaluation lead, delivering process evaluation based on the UK Magenta Book.
- 2022-Present, Advanced Fuels Fund Programme (UK Department for Transport). Role: Monitoring and Evaluation lead, delivering process and impact Monitoring, Reporting and Evaluation framework based on the UK Magenta Book.
- 2022-Present, Ex-post review of the Combined Heat and Power Quality Assurance Programme and Associated Fiscal Benefits (BEIS). Role: Economics/ evaluation lead, delivering a process, impact and value for money evaluation, employing techniques aligned with the UK Magenta Book.
- 2020-Present, More than five ex-ante socio-economic and environmental impact assessments of the revisions of environmental legislation, including on industrial emissions, wastewater, chemicals, cosmetic products (European Commission). Role: Economics / Impact Assessment lead.
- 2021, Analysis of the investment landscape for climate change mitigation, barriers and policy options to increase investment in low-carbon technologies and infrastructure, including related to heat supply, electricity and household and commercial energy efficiency (BEIS). Role: Economics lead, delivering impact and value for money analysis in line with UK Green Book.

Career History

- 2020-Present, Principal Economist, Ricardo, UK/Spain
- 2021-2022, Associate Professor, Economics, Charles III University of Madrid Madrid, Spain
- 2018-2020, Senior Manager/Economist, Deloitte, Spain
- 2013-2018, Senior Manager/Economist, UK Civil Service (incl. in the Department of Energy and Climate Change-G7, Public Health England-G6 and the Department for Education-G6), UK
- 2011-2013, Assistant Manager/ Economist, Deloitte, UK
- 2010, European Commission Trainee, EBRD, UK
- 2009-2010, Analyst, Sun Mountain International, Ecuador

Jo Barnes

Senior Research Fellow, Air Quality Management Resource Centre

University of the West of England, Bristol



Qualification(s) *PhD, Air Quality Management, UWE Bristol, 2014*

Nationality *British*

Language(s) *English (Mother Tongue)*

Profile

Jo has extensive research experience in air quality management, policy and practice at local, national, European and international levels. Since 2008, she has been employed in the Air Quality Management Resource Centre, University of the West of England, Bristol, where she also completed her PhD. She has worked with and on behalf of numerous local authorities, Defra and the Devolved Administrations, other Member States, the EEA and the European Commission. Jo's main research interest is urban air pollution, particularly road traffic-related, helping to understand and raise awareness of the health and environmental justice issues relating to local air pollution. Jo is currently leading on stakeholder engagement research on the CADTIME project in Delhi to inform development of mitigation actions, and undertook citizen engagement analysis to develop bottom-up policy implementation on the EU ClairCity project. She has advised an Environment Agency/Defra initiative to redesign the UK's air quality monitoring network, and is currently supporting the Environment Agency, in collaboration with Defra and Public Health England, on air quality and inequalities research.

Key Skills/Areas of Technical Expertise

- + 17 years' experience working in air quality management research, 13 at UWE Bristol
- + Designing and conducting rapid evidence reviews on air quality policies, attitudes and behaviours.
- + Designing and conducting online and in-person surveys using Qualtrics for use with expert and non-expert audiences.
- + Using Delphi methodologies to scope scenarios with expert and non-expert groups.
- + Preparing and facilitating workshops and focus groups.
- + Using R and GIS to analyse air quality inequalities and environmental justice issues.
- + Leading and coordinating international multi-disciplinary research projects and teams.
- + Publications list: <https://uwe-repository.worktribe.com/person/434556/jo-barnes/outputs>

Selection of Project Experience

2020	Cleaner Air for Scotland - Air Quality Public Attitudes & Behaviour Review
2018 - 2020	Supervision of Environment Agency Secondment (AQ Monitoring Network Redesign) (Environment Agency)
2017- 2018	Qualitative assessment of links between exposure to noise and air pollution and socioeconomic status (European Environment Agency)
2016- 2022	Clean Air for Delhi Through Interventions, Mitigations and Engagement
2016 - 2017	An economic analysis of the cost effectiveness of local authority activities to reduce exposure to air pollution from road traffic (NICE)
2015 - 2020	ClairCity (Citizen Led Air pollution Reduction in Cities) (Horizon 2020)
2012 - 2015	MOT: Motoring and car Ownership Trends in the UK (EPSRC)
2008 - 2010	LAQM - Review and Assessment (Defra)

Career History

2016-Present	Senior Research Fellow, UWE Bristol
2012- 2016	Research Fellow, UWE Bristol
2008 - 2012	Research Associate, UWE Bristol
2004 - 2008	Research Associate, Cornwall College

David Chong Ping, Technical Operations Director, MEL



David is a Board Director and Certified Member of the Market Research Society, with over thirty-six years of business experience. He joined M·E·L Research in October 2012 and now heads up the IT and Technical Department, covering the Data Services and Coding teams, Information Security and IT Solutions.

His specialisms include Local Government research, evaluation and behavioural change insights and he works with a range of public sector and independent sector clients including Government, local authorities, social housing providers, environment, waste and recycling, police and the criminal justice system, health and wellbeing, third sector networks and umbrella organisations.

David has experience in a wide range of environmental and transport research and evaluation projects, including Clean Air Zones, Low Emission Strategies, Air Quality Management Areas and Air Quality Action Plans, the West Midlands future of Air Transport consultation, Thames Water Utilities Odour Emissions customer engagement, Community Flood Resilience Projects, Littering from vehicles, Garden Towns and Healthy New Towns public engagement. On the transport front, he has worked on workplace travel plans, safer routes to school consultations, traffic calming consultations, red routes consultations, Highways planning and maintenance, public transport and bus stop surveys, unmet demand Taxi consultations, London Car Parking Zones (CPZs) and Low Traffic Neighbourhoods (LTNs).

More widely, David has been involved in a broad range of behavioural change environmental focused evaluations, including the (prior) Department of Energy and Climate Change (DECC) small-scale Smart Meter Behaviour Change Trials, British Gas Energy Trust Healthy Homes Fund Programme Evaluation – 43 UK-wide interventions as part of an £11.1m support fund, evaluation of a number of Groundwork Trust Green Doctor initiatives in London, North Wales, Derbyshire, Cheshire, Lancashire and Merseyside, Leeds, Greater Manchester, Bolton, Bury, Oldham and Rochdale and Cumbria and the North East.

He has extensive knowledge of both quantitative and qualitative methodologies, including face-to-face (CAPI), postal, telephone (CATI) and online (CAWI) surveys, running deliberative workshops, focus groups and conducting semi-structured, in-depth interviews. He also advises our behavioural insights team using his experience of MINDSPACE, the Behaviour Change Wheel and COM-B in the evaluation of health and wellbeing, physical activity, fuel poverty and environmental sustainability research projects.

Relevant Qualifications

- 2002 Market Research Society Advanced Certificate in Social and Market Research
- 2003 Chartered Institute of Marketing, Advanced Certificate in Marketing
- 2022 Certified Member of the Market Research Society (CMRS)

Membership of Professional Organisations

David is a Market Research Society (MRS) and Association of Qualitative Researchers (AR) trained practitioner and keeps up to date through his memberships of the Social Research Association (SRA) and Behavioural Science and Public Health Network (BSPHN).

Prior relevant experience

1998-2012 Research by Design

David had over thirteen years' experience working for Research by Design and worked on a wide range of both public and private sector projects. He was responsible for:

- Identifying new business opportunities to drive development, long term growth and improved profitability consistent with the strategy of the organization.
- Designing research studies, making effective use of research methodologies and IT
- Planning and managing research project, from the development of the research proposal through to implementation and communication of results and recommendations

- Managing existing relationships with clients in agreed market sectors and identifying new business opportunities

Clients included Ofwat, Consumer Council for Water, British Chambers of Commerce, Federation of Small Businesses, National Express Group, NEC Group, Birmingham International Airport, Institute of Biomedical Science, Acorns Childrens Hospice Trust, Royal Institution of Chartered Surveyors, Webbs Garden Centres, Business Improvement Districts, Local Authorities.

RICARDO JUNIOR SUPPORT TEAM



Charlotte Day (she/her)

Senior Consultant

Energy & Environment

Qualifications	MChem (With a Year Abroad), University of York, 2018
Nationality	British
Languages	English (Mother Tongue), German (Basic)

PROFILE

Charlotte is a Senior Air Quality Consultant in the Evidence and Policy Business Unit, specialising in dispersion modelling studies on emissions to air from road and industrial sources. Charlotte has experience in the preparation of Low Emissions Strategies, Air Quality Strategies and Air Quality Action Plans for UK local authorities and international cities, including contributing to stakeholder consultation events designed to identify opportunities for low emission transport measures and facilitate action planning. Charlotte is experienced in assessing the air quality impacts of road sources on protected habitat sites, having completed numerous air quality Habitats Regulations Assessments (HRAs) and regularly leading stakeholder consultation with the client and Natural England as part of the HRA process. Charlotte's recent work includes helping to deliver three projects in India for the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), with a focus on city Clean Air Action Plans (CAAPs) as well as a project for the Asian Development Bank (ADB) preparing CAAPs / roadmaps for developing CAAPs, for seven cities across Asia.

KEY SKILLS

- Ability to produce high quality technical reports, with excellent attention to detail
- Atmospheric dispersion modelling using RapidAIR and ADMS
- Analysis, interpretation and visualisation of data in GIS and Excel
- Strong presentation, communication, and interpersonal skills
- Experience delivering workshops, webinars and training seminars
- Chemistry background, with a focus on atmospheric chemistry

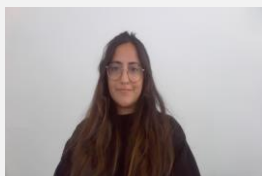
KEY PROJECT EXPERIENCE

- **September 2022 – present, Design, constitute and operate a Community of Practice (CoP) for air quality improvement in Indian cities (GIZ)**
The overall aim of this project is to create a virtual collaboration space (a CoP) that allows representatives from the three cities (Surat, Nagpur, and Pune), as well as colleagues from other NCAP cities, to come together and share ideas, experiences and observations, and to improve their understanding of effective approaches for improving air quality and getting actions off the ground.
- **March 2022 – present, Strengthening Knowledge and Actions for Air Quality Improvement (Asian Development Bank (ADB))**
ADB is implementing a regional knowledge and support technical assistance (KSTA) on Strengthening Knowledge and Actions for Air Quality Improvement. The overarching aim of the KSTA is to prepare city level Clean Air Action Plans (CAAPs) or Roadmaps for developing CAAPs, for seven cities in Asia: La Trinidad, Erdenet, Faridpur, Ho Chi Minh City, Vinh Yen, Peshawar, and Sialkot.
- **May 2019 – present, Environmental Management Training for Local Authority Officers**
Charlotte is a trainer for Ricardo Energy & Environment's accredited EMAQ+ training programme, which offers practical advice and guidance to Local Authority enforcement officers. She has delivered live seminars, as well as preparing and filming a number of webinars for the training programme.

- June 2020 – May 2022, Strengthening Clean Air Action Plans in three Indian cities (GIZ)**
 The project reviewed the existing CAAPs of three cities in India: Nagpur, Pune, and Surat, and developed recommendations on how they could be improved to support the achievement of a 20-30% reduction in particulate matter in line with the India National Clean Air Plan (NCAP) requirements. The work assessed the overall process of developing the plans, their likely impact on pollution levels and recommendations for improvement, along with technical training and capacity building workshops with the cities.
- November 2020 – October 2021, Triangular Cooperation Air Quality Improvement Project (GIZ)**
 Ricardo Energy & Environment supported the project by developing a Community of Practice (CoP) between cities in India, Mexico, and Europe. Examples of best practice in air quality management were shared with the cities of Cuttack and Bhubaneswar in India, developing guidelines and recommendations for strengthening the cities' CAAPs and providing technical solutions for two identified measures for the improvement of emissions from transport sources. Support was also provided to the cities of León, Salamanca, Celaya and Irapuato in Mexico.
- January 2020 – October 2021, SR3 Monitoring Regime Assessment, European Commission**
 This project involved the analysis and evaluation of information submitted by EU Member States to the European Commission. Charlotte has led assessments of numerous EU Member States' responses to infringement proceedings, and determining the likelihood of future compliance based on measures suggested.
- June 2020 – March 2021, South Bucks Air Quality Actions Feasibility Study (AQAFS) (Chiltern and South Bucks Councils)**
 The Air Quality Actions Feasibility Study (AQAFS) for Iwer, South Bucks considered the potential for air quality measures to be introduced in Iwer, and the wider South Bucks district, to reduce emissions of nitrogen dioxide (NO₂), with the aim of addressing the elevated concentrations along Iwer High Street.
- March 2020 – September 2020, Oxford Zero Emission Zone (ZEZ) AQIA (Oxford City Council)**
 This Air Quality Impact Assessment (AQIA) provided an atmospheric dispersion modelling study for nitrogen dioxide in the heart of the Oxford city centre area. The study used both annual and hourly model outputs to determine the impact of the implementation of a Zero Emission Zone (ZEZ) on the air quality within an area referred to as the ZEZ Red Zone.
- January 2020 – June 2020, Cullompton Low Emission Strategy (LES) (Mid Devon District Council)**
 The LES presented a package of measures designed to achieve a long-term, sustainable transition to a low emission future for the District, reflecting the priority emission sources and key sensitivities, resulting in benefits for air quality and climate change.
- November 2019 – August 2020, Fareham Borough Local Plan 2036 HRA (Fareham Borough Council)**
 Charlotte was part of a cross-practice team providing an assessment of the air quality impacts on sensitive habitats for the development associated with the FBLP 2036.
- October 2019 – December 2019, Oxford Source Apportionment Study (Oxford City Council)**
 A source apportionment exercise was required to identify the percentage source contributions of emission sources in the city in order to inform Oxford's AQAP.

CAREER HISTORY

- January 2022 – Present, Senior Consultant, Ricardo Energy & Environment**
- July 2020 – Present, Consultant, Ricardo Energy & Environment**
- November 2018 – July 2020, Analyst Consultant, Ricardo Energy & Environment**
- June 2018 – November 2018, Microtricity Advisor, Ecotricity**
- August 2017 – April 2018, Undergraduate Research Intern, Victoria University of Wellington (VUW)**



Melissa Nikkhah-Eshghi (She/Her/Hers)

Air Quality – Analyst Consultant

Energy and Environment

Qualification(s)	BSc (Hons) – Chemistry with year in industry Ph.D. Candidate – Thesis Pending
-------------------------	--

Nationality	British
--------------------	---------

Language(s)	English (Mother Tongue) Spanish (Basic) Farsi (Fluent)
--------------------	--

PROFILE

Melissa is an Analyst Consultant within the Air Quality Modelling and Assessment Team, within the Evidence & Policy Practice. She has recently joined the Ricardo team, from the University of Glasgow, where she is in the thesis pending stage for a PhD in atmospheric science, giving her four years of practical experience in the air quality field. Her research included mobile-monitoring campaigns to determine the abundance of BC in Glasgow, chemical characterisation, and source apportionment of PM_{2.5} samples from the UK. Throughout her PhD project, she became familiar with producing and processing large datasets, making useful interpretations by observing trends and producing scientific reports and presentations to communicate the results.

KEY SKILLS

- Knowledge base of analytical chemistry, with a focus on atmospheric/environmental science
- Analysis, interpretation, and visualisation of large data sets
- Ability to use Open Air R Package
- ADMS and Rapid Air modelling
- Computer literate in Microsoft Office and GIS software
- Good presentation skills
- Articulate communication in written and verbal formats
- Enthusiasm about mitigating the detrimental effects of air pollution

KEY PROJECT EXPERIENCE

• October 2022 – Present, Office for Environmental Protection Air Pollutant Factsheets

The Office for Environmental Protection (OEP) were provided with an independent view of air pollution challenges in England and Northern Ireland. Melissa extensively reviewed literature to produce factsheets and risk assessments detailing the impact of air pollutants on both the natural environment and public health.

• November 2022 – Present, Air Quality Action Plan Chipping Norton and Witney

Two Air Quality Action Plans will be produced for the Witney AQMA and one for the Chipping Norton AQMA in compliance with Technical Guidance. Melissa is currently conducting a review of existing West Oxfordshire Council policies and assessing whether the PM_{2.5} concentrations will be in line with the UK's new PM_{2.5} reduction targets and target concentrations.

• October 2022 – Present, Scottish Air Quality Forecasting

Melissa is a member of the forecasting team for the Scottish air quality forecast which includes a 3-day outlook with information summaries for each forecast, as well as the daily twitter forecast. The duties include producing daily Air Quality Data Forecasts for Scottish Government through checking and assessing model outputs, the latest metrological data, air quality data, satellite images and air mass trajectories.

• October 2022 – Present, GIZ Community of Practice India

The GIZ Community of Practice Project is led by GIZ and supported by Ricardo Energy & Environment. The project focuses on creating a Community of Practice where exchanges of experience can help stakeholders from cities that are non-attaining of the National Clean Air Programme reduction targets and National Ambient Air Quality Standards. The Community of Practice aims to create a virtual space for collaboration so stakeholders can exchange good practices, learn new concepts, methodologies and tools related to air quality, which can in turn improve implementation of clean air action plans. Melissa has written reports for each task of the project, created content for workshops which centre around air quality management.

August 2022 – Present, GSK Odour Survey

Melissa undertakes a weekly odour survey for GSK, in Irvine Scotland. The purpose of the survey is to distinguish between GSK industrial emission odours and other emission odours in the area and highlight any concerns to the customer.

- **August 2022 – Present, Hammersmith and Fulham AQ Modelling Project**

Pollutant concentrations in Hammersmith and Fulham were modelled using NO₂ diffusion tube data, meteorological data and traffic counts, for the air quality sensor locations. The modelled concentrations were then compared to measured sensor concentrations. Melissa utilised her GIS skills and built her experience in using ADMS for AQ modelling.

- **June 2022 – October 2022, C40 Delhi Air Quality**

Melissa analysed and interpreted data from Delhi, to determine air pollutant hotspots and trends. Data analysis was completed using the Open Air R package, where various visualisation plots were produced, alongside the use of a statistical tool, CUSUM analysis, which was utilised to depict the effect of various air pollution interventions implemented within Delhi. Melissa was involved in client meetings, where she presented results. Melissa also wrote reports for the different work packages.

- **July 2022 – Present, Daily Data Checks and Data Ratification (Hydrocarbon Network)**

Melissa is a part of the daily checks and ratification team for the hydrocarbon network, which includes checking GC calibrations, sample signals and making necessary adjustments to peak integrations. The purpose of this is to ensure the data is submitted to a high standard with accurate scaling, processing, and removal/correction of faulty data.

CAREER HISTORY

- **2022 – Present, Analyst Consultant, Ricardo Energy and Environment**

Since beginning her role in June 2022, Melissa has helped deliver a range of projects, whilst developing her skills in GIS and R. As well as the key project experience previously listed, she has been involved in short to medium term tasks within other business areas, which have helped her build a wider understanding of the business.

- **2018 – 2019, Laboratory Demonstrator, University of Glasgow**
- **2017 – 2022, Ph.D. Candidate, University of Glasgow**
- **2015 – 2016, Industrial Placement Year Student, AWE plc.**

Jack Dubey

Analyst Consultant

Ricardo Energy & Environment

Qualifications *MSc International Public Policy, University College London, 2018*
BA Economics with International Study, University of Exeter 2014
Economics, Rutgers University (Study Abroad), 2012-2013

Nationality *British*

Language *English (Mother Tongue)*



Profile

Jack Dubey has been an Analyst Consultant in the Policy, Strategy and Economics Practice in Ricardo Energy and Environment since January 2020. Jack is an Economics graduate and more recently completed his MSc in International Public Policy at University College London. Throughout both degrees he was able to undertake modules on environmental policy and climate change, writing papers on the effectiveness of India's recent climate policy (with a focus on the PAT scheme), and the environmental impact of recent and future economic growth in Brazil.

Before joining Ricardo he gained 1.5 years of professional experience in environmental campaigning at UK100 Cities Network, supporting campaigns relating to improving air quality in UK cities, increasing investment in local energy projects, and raising aware of sustainable finance in UK parliament. He has worked alongside local and national government, corporates and NGO's to effectively influence local, regional and national UK environmental policy. Previous to this, he interned at economic think tank Fondazione Giacomo Brodolini, focussing on reducing unemployment in EU labour markets, and concentrating more specifically on reskilling and training programmes.

Key Skills

- + Experience researching national and international environmental policy.
- + Effective communicator with experience of speaking to large audiences of senior stakeholders.
- + Time management and organisational skills with experience of supporting the delivery of high profile workshops, conferences and summits.
- + Project management experience.
- + Qualitative and quantitative research skills.

Selection of Project Experience

2020 (ongoing), Clean Air Zone Health Impact Assessment, Newcastle-under-Lyme Borough Council, Stoke-on-Trent City Council and Staffordshire County Council

2020 (ongoing), Support for the preparation of the LIFE Programme 2021-2027, European Commission DG ENV

2020 (ongoing), Technical assessment of transport fuel quality parameters, European commission, DG CLIMA

2020 (ongoing), Chinese Industry Review, Asian Development Bank

2020 (ongoing), Clean Air Zone Health Impact Assessment & Cost Benefit Analysis, Caerphilly County Borough Council

Career History

2018 – 2019, Campaigns Assistant, UK100 Cities Network, London, UK

Supported campaigns to improve air quality in UK cities, increasing investment in local energy projects, and raising aware of sustainable finance in UK parliament. Worked alongside local and national government, corporates and NGO's to effectively influence local, regional and national UK environmental policy. In this role

he also wrote research and policy briefings for politicians and industry experts on Clean Air Zones and the UK Environment Bill.

2017 – 2018, MSc International Public Policy, University College London, UK

Undertook a one year MSc program in International Public Policy at UCL. Modules included Energy & Climate Policy, Public Policy Economics and Analysis, and Foreign Policy Analysis. My dissertation examined the effect of the EU's 'Common Security and Defence Policy' on the aims and objectives of NATO.

2017 Sales Consultant, Choosewell Health Insurance, Melbourne, Australia

Discussed current health insurance coverage with prospective clients and supported sales staff as they sold private health insurance plans.

2016, Client Services Assistant, One Financial Markets, London, UK

Assisted with client queries regarding trades and technical issues, and set correct spreads and commission profiles to client accounts. Answered queries from prospective clients regarding company policy.

2015, Research Policy Intern, Fondazione Giacomo Brodolini, Brussels, Belgium

Supported the preparation of research projects, and conducted employment and social policy research. Edited and proofread a high number of documents and reports delivered predominately to the European Commission. Networked and attended events at EU institutions.

2010 – 2014, BA Economics with International Study, University of Exeter, Exeter

Read Economics at the University of Exeter, graduating with a First Class Degree. Modules studied included Microeconomics, Macroeconomics, Econometrics, and Policy Issues in the Global Economy.

2012 – 2013, Economics, Rutgers University, New Jersey, United States

Participated in a year long study abroad program at Rutgers University. Modules taken included Money & Banking, Law & Economics, and International Balance Payments.

Ferdinand Turral

Junior Economist

Ricardo Energy & Environment



Qualification(s) *MSc, Vrije Universiteit Amsterdam, 2020
BSc, The University of Leeds, 2018*

Nationality *British*

Language(s) *English (Mother Tongue)*

Ferdinand is a junior economist in the Sustainable Transport team at Ricardo. Ferdinand has a BSc in Economics and an MSc in Development Economics. At Ricardo, Ferdinand has worked on impact assessments for the European Commission and has experience with the theory of change, working on policy development for the US Environmental Defence Fund where he researched, developed and analysed various global market interventions regarding zero-emission electric vehicles (including their impact on air quality).

More generally, Ferdinand has carried out multiple comprehensive literature reviews, worked with multi-criteria analysis tools, and worked closely with the economics team. Further, he has also managed a major stakeholder consultation for the European Commission, acting as the lead in over 30 interviews. In addition to leading interviews, Ferdinand managed the 70 stakeholders across four partners and took responsibility for the collation of all stakeholder information.

SELECTION OF PROJECT EXPERIENCE

September 2022 – Present, Malta Climate Risk and Vulnerability

Ricardo's climate science and economics teams are measuring and projecting the economic impacts of climate change in Malta. Ferdinand's role has been to pull together the econometric outputs and create data visualisations for the Maltese government. Ferdinand has also spent time reviewing the current climate science literature to find relationships between the economic sectors and changes in climate which requires complex critical thinking.

September 2022 – Present, Environmental Defence Fund – Zero emission MHDV landscape assessment

EDF has commissioned Ricardo to conduct a landscape assessment for the zero emission medium and heavy-duty freight landscape across leading global geographies. Ferdinand has mapped the global zero emission manufacturers and their models as well as the industry's tier 1 suppliers and accompanying infrastructure. He has written a chapter analysing the global data on zero emission MHDVs. Further, he has contributed to the impact assessment and developed interventions relating to the theory of change.

February 2022 – Present, DG MOVE: impact assessment of MDMS and CBA of MMTIS

Contributing to stakeholder interviews, desk research and data inputs. Ferdinand managed the 70 stakeholders across 3 partners and led 20+ interviews for the stakeholder consultation. Ferdinand also helped analyse the impact assessment (stakeholder outputs) and wrote a section of the report.

CAREER HISTORY

February 2022 - Present, Junior economist, Ricardo Energy and Environment

This role involves carrying out technical analysis and research, stakeholder consultations, and report writing primarily for projects undertaken by the Sustainable Transport team.

June 2021 – February 2021, Risk Management Consultant, Smart Currency Business

Analysing markets, company reports, companies house data, and press documents to generate a case for new clients. Sale and consulting of foreign exchange hedging strategies to corporate directors



Nela Foukalová

Junior Consultant

Qualification(s)	BA International Economic Relations, University of Economics Prague, 2018
	MA Business and Economics (Hons), University of Zurich, 2021
Nationality	Czech
Language(s)	Czech (Mother Tongue), English (C2), French (B2)

Profile

Nela is an Analyst Consultant in economics, with expertise in environmental and climate change economics. She holds a BA in International Economic Relations and MA in Business and Economics with a focus on econometrics applied in policy analysis. She has experience in the analysis of impacts and design of policies such as the EU ETS, using econometric techniques. This is complemented by experience in research in policy development and report writing.

Key project experience

- 2021-2022 Study assessing the application of free allocation of emission allowances in Phase 3 of the EU ETS (European Commission). Role: Econometric analysis, report writing.
- 2021-2022 Competitiveness assessment and mix allocation analysis under the Mexican Emissions Trading System (ETS). Role: International trade and competitiveness analysis.

Career history

- 08/2022 – present, Analyst Consultant – Economist, Ricardo Energy & Environment, UK
- 10/2021 – 02/2022, Policy Analyst Trainee, European Parliament, Belgium
- 03/2021 – 06/2021, Sustainability Multi-disciplinary challenge, Rootlinks, Switzerland
- 08/2017 – 01/2018, Financial Planning & Analysis Intern, Cardinal Health, Switzerland

UWE SENIOR SUPPORT TEAM

Margarida Sardo

Senior Research Fellow, Science Communication Unit and Air Quality Management Resource Centre

University of the West of England, Bristol

Qualification(s) *PhD Environmental Toxicology (2008)*

Nationality *Portuguese*

Language(s) *Portuguese (Native), English*



Profile

Margarida has a First degree in Biology, Masters in Ecology, PhD in Environmental Toxicology, Post-Doctoral Research in Science Communication. Margarida is a trained scientist with over 13 years of experience in evaluating and delivering science communication projects. She has worked as an external evaluator for several projects including the Horizon 2020 funded ClairCity Project and WeCount, the EU Researchers' Night, Royal Institution Christmas Lectures, Wellcome Trust at the Latitude Festival, and the AHRC/ESRC Connected Communities project. Margarida has extensive experience of working in large as well as small-scale project evaluation, developing monitoring and evaluation kits and working with partners across Europe to implement those tools. Margarida led the Monitoring and Evaluation work package for the Horizon 2020 WeCount citizen science and public engagement project, providing training and support to teams across Europe. Margarida is currently a Co-I on a citizen science and co-creation project (HOMEs) in which participatory methods are used to engage citizens, and bottom-up citizen engagement is used to inform the development of new policies and industry briefs. In HOMEs, Margarida leads the evaluation of the project.

Key Skills/Areas of Technical Expertise

- + 13 years' experience working in science communication, public engagement and citizen science
- + Extensive experience in evaluation methods such as surveys, interviews, observations and informal feedback tools.
- + Qualitative and quantitative methodologies and data analysis
- + Project Coordination and report writing
- + Citizen engagement, recruitment and support
- + Publications list: <https://people.uwe.ac.uk/person/margaridasardo>

Selection of Project Experience

2021 - 2023 Project Evaluator, HOMEs under the microscope: Citizen-led characterisation Of airborne micropLastic sources (UKRI)
2019 – 2021 Work-package Lead, WeCount – Citizens Observing Urban Transport (Horizon 2020)
2017 – 2019 Project Evaluator, Integrating Upstream Decision-Making and Human Health Outcomes into Citizen Engagement I-NUDGE (Wellcome Trust).
2017 – 2019 Project Coordinator and Principal Investigator, Evaluation of The Royal Institution's Christmas Lectures (Royal Institution)
2015 - 2020 Project Evaluator, ClairCity (Citizen Led Air pollution Reduction in Cities) (Horizon 2020)

Career History

2017 - present: Senior Research Fellow, UWE Bristol.
2013 - 2017: Research Fellow in Science Communication, UWE Bristol.
2012: Research Associate, Science Communication Unit, UWE Bristol.
2010 - 2011: Research Fellow, Science Communication Unit, UWE Bristol.
2009 - 2010: Post-Doctoral Research Fellow, Science Communication Unit, UWE Bristol.
2004: Research Assistant, Institute of Environment and Life, University of Coimbra, Portugal.

Ben Williams

Research Fellow, Air Quality Management Resource Centre
University of the West of England, Bristol

Qualification(s) *PhD Dust Dispersion and Environmental Forensics (2015)*

Nationality *British*

Language(s) *Welsh (Native), English (Native)*



Profile

Ben has 14 years of experience in environmental sampling, analysis and apportionment of air pollution, across consultancy, regulatory and academic spheres. He has worked on research projects for national and international research councils, private organisations as PI, Co-I and PDRA and is co-lead of UWE's Biospheric Microplastics Research Cluster. He was Project Manager on UPSTREAM, a Wellcome Trust funded project investigating impacts of the built environment on health and economy and engagement with local communities on the same topic (Our City Our Health). Ben has also undertaken an investigation into the user needs of the scientific and professional air quality community for the development of a future air quality monitoring network, using surveys and workshops during an 18-month Secondment to the Environment Agency. Ben also contributed to the WeCount citizen Science and public engagement project, providing citizen support and hosting data workshops with citizens. Ben is PI on a citizen science and co-creation project (Home Co-Lab) in which participatory methods are used to engage citizens, and bottom-up citizen engagement is used to inform the development of new policies and industry briefs. He has also worked on NERC funded bioaerosols measurement and modelling projects and has recently, with support of other partners, developed a large multi-sensor network of low-cost and reference air quality analysers across the north of Bristol, to support the development of co-location studies.

Key Skills/Areas of Technical Expertise

- + 14 years' experience working in air quality in monitoring, measurement, policy and citizen engagement
- + User needs studies, systematic reviews, rapid evidence analyses and statistical analysis
- + Survey development for use with expert and non-expert participants
- + Project Coordination and report writing
- + Citizen engagement, recruitment and support
- + Workshop development, hosting and summarising

Selection of Project Experience

2021 - 2023 HOMEs under the microscope: Citizen-led characterisation Of airborne micropLastic sources (UKRI)
2019 – 2021 WeCount – Citizens Observing Urban Transport (Horizon 2020)
2018 - 2020 Environment Agency Secondment (AQ Monitoring Network Redesign) (EA)
2017 – 2019 Integrating Upstream Decision-Making and Human Health Outcomes into Citizen Engagement I-NUDGE (Wellcome Trust).
2016 - 2017 An economic analysis of the cost effectiveness of local authority activities to reduce exposure to air pollution from road traffic (NICE)
2015 - 2020 ClairCity (Citizen Led Air pollution Reduction in Cities) (Horizon 2020)
2015 – 2019 Moving health and sustainability upstream into strategic urban development decision-making (Wellcome Trust)

Career History

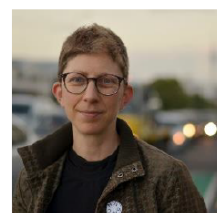
2021 - 2022: Senior Research Fellow: AQMRC, University of the West of England
2018 - 2021: Research Fellow: AQMRC, University of the West of England
2014 - 2018: Research Associate, AQMRC, University of the West of England
2007 - 2014: Environmental Forensic Scientist DustScan Ltd
2007 - 2009: Knowledge Transfer Partnership Associate, University of Portsmouth and Grondon Waste Management Ltd

UWE CONSULTANT SUPPORT TEAM



Dr TAMARA BOZOVIC

**MSc (Swiss Federal Institute of Technology)
PhD (Auckland University of Technology)**



EMPLOYMENT & EXPERIENCE:

2022-present: Research Fellow in Transport Studies, Centre for Transport and Society, University of the West of England.

2021-2022: Strategic Advisor, Stellar Projects Ltd, Auckland

2019-2020: Research Analyst, Auckland University of Technology, Strategy Lab

2016-2018: Principal Transport Planner, NZ Transport Agency (System Design)

2014-2016: Senior transport planning consultant, Buenos Aires, Argentina

2012-2014: Active Modes lead, Citec SA, Morges, Switzerland

2011-2012: Senior transport planner (bike sharing), PubliBike SA, Switzerland

2006-2011: Senior network planner / PT for Lausanne's public transport authority (Transports Publics de la Region Lausannoise SA), Lausanne, Switzerland

2004-2006: Graduate transport engineer, Citec SA, Geneva, Switzerland

DOB/ NATIONALITY: EDUCATION:

28/12/1978, Swiss

2004, Swiss Federal Institute of Technology: MSc: Civil engineering (transport planning)

2018-2021, Auckland University of Technology: PhD: Non-walkability in the car-centric city, considering experiences of disabled and non-disabled people; objective measures; and professionals' views

FURTHER PROFESSIONAL TRAINING:

Data analysis: R language coding courses - machine learning (DataCamp, 2019), text mining, sentiment analysis, natural language processing (DataCamp, 2020), web-based applications (DataCamp, 2021)

Urban systems: Design After Design workshop (Hobart, 2018), Human-Centered Design course (+Acumen and IDEO.org, 2018), Study trip in Vancouver, Seattle, Portland and San Francisco: best practice in land use, urban design and transport systems integration and retrofit (2017), SmartCities course (The Open University, 2016)

Bicycle Policy Audit (BYPAD) auditor certification (FGM AMOR, Austria, 2013)

EMME modelling course (INRO, Stockholm, 2010)

SELECTED PROJECT EXPERIENCE:

West of England E-scooter Trial - Investigator, monitoring and evaluation, developing policy insights from ride data, crash data, and surveys (secondary data and methodology and coordination for primary data collection)

Tactical transformation of Queen Street, Central Auckland's main activity hub - Lead investigator (methodology, data gathering, analysis, reporting)

PhD research (Doctoral Scholarship, Auckland University of Technology) - "Non-walkability in the car-centric city" examining the barriers to walking for disabled and non-disabled people, the adequacy of local guidelines and Healthy Streets for identifying those barriers, and the (dis)agreements between professionals of different disciplines in charge of delivering walkable environments. Theoretical model

development and empiric research in Tamaki Makaurau Auckland, Aotearoa New Zealand.

Review of the contractual road maintenance framework for Waka Kotahi / New Zealand Transport Agency - Lead investigator for the qualitative insights from contractors and staff (methodology, analysis, reporting)

Auckland University of Technology Travel Plan – Lead investigator (methodology, data gathering, analysis, reporting)

Assessment of New Zealand urban state highways regarding pedestrian accessibility – Lead investigator (methodology, case study, potentials)

Critical assessment of multi-modal systems for the Councils of La Rioja, Venado Tuerto and Mercedes, Argentina - Lead investigator (strategic inputs regarding accessibility, efficiency, inclusion and transit operation).

Development in Bernex, Geneva (5,700 new residential units and 5,700 new jobs by 2030) – Lead for the accessibility and active modes networks concept

20 mph Town centre redesign, Gland, Switzerland – Consultant providing inputs regarding multi-modal amenity, accessibility and safety.

Bike-sharing schemes in Nyon, Fribourg, and Estavayer, Switzerland – in charge of master planning, demand analysis, offer scaling, and evaluation

Lausanne (Switzerland) 2014 Public Transport Master Plan – Lead for the development and assessment of scenarios and the successful sign-off process (Councils, operator's Board and urban area's decision-making body)

RECENT AND
RELEVANT
PUBLICATIONS:

Bozovic, T. (Accepted for publication, due 2022). Urban walkability and equity in the car - oriented city. In *Inclusive Cities*. Springer International Publishing.

Bozovic, T., Stewart, T., Hinckson, E., & Smith, M. (2021). *Clearing the path to transcend barriers to walking: Analysis of associations between perceptions and walking behaviour*. Transportation Research Part F: Traffic Psychology and Behaviour, 77, 197–208. <https://doi.org/10.1016/j.trf.2021.01.003>

Bozovic, T., Hinckson, E., Stewart, T., & Smith, M. (2021). *How to improve the walking realm in a car-oriented city? (Dis)agreements between professionals*. Transportation Research Part F: Traffic Psychology and Behaviour, 81, 490–507. <https://doi.org/10.1016/j.trf.2021.06.011>

Bozovic, T., Hinckson, E., & Smith, M. (2020). *Why do people walk? Role of the built environment and state of development of a social model of walkability*. Travel Behaviour and Society, 20, 181–191. <https://doi.org/10.1016/j.tbs.2020.03.010>

Bozovic, T., Hinckson, E., Stewart, T., & Smith, M. (Submitted for publication). *How street quality influences the walking experience: an inquiry into the perceptions of adults with diverse ages and disabilities*. Journal of Urbanism: International Research on Placemaking and Urban Sustainability, 3.11.21

UWE JUNIOR SUPPORT TEAM

Louis Brown

Graduate Researcher, Air Quality Management Resource Centre

University of the West of England, Bristol

Qualification(s) *PhD (Pending) Air Quality & Schools*
MSc Environmental Management
MA Documentary Practice

Nationality *British*

Language(s) *English (Native)*



Profile

Louis Brown is a PhD researcher in the field of air pollution and environmental management. He has spent the last four years conducting research towards his doctorate entitled 'An investigation of interventions for the reduction of traffic-related air pollution at schools in England'. The thesis comprises unique research components including a systematic review of interventions for the reduction of air pollution and potential child exposure at schools and the school commute, a geographical information system (GIS) to identify traffic-related pollution levels at UK schools, a stakeholder survey distributed to 27,000 UK schools, and dispersion modelling of a series of air pollution reduction interventions across selected school sites. Louis has a background in IT engineering prior to completion of his BA (hons) Media Studies, in which he specialised in new media technologies, and his MA Documentary Practice. This was followed by completion of his MSc Environmental Management in which he completed a dissertation on air pollution at schools in Bristol. Louis works well as part of a team or on his own initiative and has a broad and growing range of specialisms, with an ability to turn his hand swiftly to new concepts and practices.

Key Skills/Areas of Technical Expertise

- + Over 10 years of experience in environment management and science communication.
- + Systematic reviews, data wrangling, geographical information systems, statistical analysis.
- + Proficient in R studio, Python, HTML, and CSS.
- + Qualitative and quantitative analysis.
- + Survey development, distribution, and analysis with expert and non-expert participants.
- + Project coordination and report writing.
- + Workshop development and hosting.

Selection of Project Experience

2022 Guest Speaker. Chartered Institute of Highways & Transportation (CIHT) Exeter.
2021 Research Associate. WeCount – Citizens Observing Urban Transport.
2021 Research Associate. WeCount - Air pollution & inequality.

Career History

2022: Lecturer: WECA Clean Air Bootcamp, Air Quality Management Resource Centre, University of the West of England.
2021: Guest Lecturer: Analysing Environmental Change (undergraduate module), University of the West of England.
2011 - 2020: Editor: Earth, Atmospheric & Planetary Sciences, Cactus Global.

Publications

Brown, L., Barnes, J., and Hayes, E. (2021) Traffic-Related Air Pollution Reduction at UK Schools During the Covid-19 Lockdown. *Science of the Total Environment*. 780 (146651).

MEL RESEARCH SENIOR SUPPORT TEAM



Adam Knight Markiegi, Research Director

Adam joined M-E-L Research in 2017. He has worked in policy, research and consultancy for 20 years. Previous roles include Interim Head of Development at Birmingham St Mary's Hospice, Head of Operations at Policy in Practice and Senior Consultant at HouseMark.

Adam works with public, housing and third sector organisations on a daily basis.

Core Skills

- Drawing actionable insight from data
- Quantitative + qualitative research
- SROI
- Consultancy
- Training + facilitation
- Plain English

Relevant qualifications + training

- Social Value International Level 3 Advanced Practitioner (under assessment)
- Social Value International Level 1 Associate Practitioner (2020)
- Social Value and SROI Accredited Practitioner Training (2018 Social Value UK)
- How to Value Social Outcomes: A Masterclass (2019 Social Value UK)
- PRINCE2 Foundation and Practitioner (2017 Knowledge Academy)
- MSc (with distinction) Housing Research and Policy (2003–2006 University of Birmingham)

Membership of professional organisations

- Social Value UK
- UK Evaluation Society
- Housing Studies Association
- Chartered Institute of Housing

Sophi Ducie

Research and Evaluation Consultant



- BA (Hons) Environmental Sciences, Monash University, South Africa (2006)
- BA (Hons) Media and Communications, Monash University, South Africa (2006)
- MRS Advanced qualification in Market & Social Research Practices (2016)
- MRS Introduction into Behavioural Economics (2017)
- Biffa Award Programme Evaluation, 2021
- Ricardo East London Waste Authority Waste Strategy development, 2021
- SWECO Liverpool CAZ consultation, 2021
- Herefordshire Waste Consultation, 2020
- WRAP Moving in Greater Manchester, 2018
- New Forest District Council Waste & Recycling survey, 2019
- London TriFocal resident survey, Resource London, 2018
- WRAP Recycle for Wales campaign, 2017
- London Borough of Ealing Residents Recycling Consultation, 2016
- Cheshire West and Chester: Waste & Recycling user insight survey, 2014
- Braintree District Council: DCLG Recycling Rewards Incentive Engagement Flat campaign, 2011
- Participation monitoring and HWRC surveys (numerous)

- Sophi has 12 years of experience in the waste and environment sector. She is passionate about designing and delivering fit for purpose evaluations and research programmes. She is experienced in using both qualitative and quantitative approaches.

Key skills and expertise:

- Experienced researcher with a history of working in the social research field.
- Oversees the Environment and Waste sector and undertakes both qualitative and quantitative engagement, behaviour change and communications research and provides robust fit for purpose monitoring and evaluation consultancy.
- Experienced in engaging with a range of stakeholders
- CACI Insite specialist; using Geographical Information Systems to provide further insight into client requirements and needs on various projects.
- Holds a host of experience in managing and delivering observational research, programme evaluations, doorstep behaviour change engagement campaigns and resident consultations.
- Facilitates and moderates focus groups and undertakes semi-structured in-depth interviews for a wide range of our public sector clients including stakeholders, service users, the public, specific communities and groups, with a particular expertise in behaviour change and communications research.

MEL RESEARCH CONSULTANT SUPPORT TEAM



Bronwyn Vermaat, Research Manager



Bronwyn is a Research Manager at MEL Research, recently joining from Vanson Bourne, a research agency specialising in B2B research in the technology industry. She has approaching four years of experiencing managing bespoke quantitative research studies, from inception through to analysis and reporting, with a talent for harnessing quantitative research methods to provide actionable data which addresses clients' research objectives.

Bronwyn's interest in social research began during her undergraduate degree, in which she took a particular interest in understanding the mechanisms by which decision making power operates in democratic societies. She studied topics including the politics of food, the history of medicine, contemporary political thought and the politics of human rights, gaining a good understanding of various social issues. Her key interest was in understanding how societies can work to ensure they are equitable and that decisions made within them are beneficial to all. This led her to write her dissertation on the representation of minority group interests in European democracies, and the role civil society groups play in advancing these interests.

Building on the knowledge she developed on a range of social and political issues during her undergraduate degree, Bronwyn later studied a short course in Research Methodology and Design at the University of Amsterdam to develop her primary research skills and equip her with the skills to embark on a career in research. She has since also achieved the Market Research Society Advanced Certificate to further build on these skills.

Her first involvement in professional research came as an undergraduate, working as a data entry and fieldwork assistant on a project aiming to improve cyclist safety in London, a topic she later furthered her interest in by conducting research on the cyclist experience as part of her qualification in Research Methodology and Design. In her most recent role at Vanson Bourne, she was responsible for managing studies of varying size, from 100 to 9,000+ respondents. She has designed and run bespoke studies to address varying research objectives and needs – including assessing the level of need in B2B marketplaces for specific technology solutions, understanding the perception of brands or of technology issues among potential buyers, investigating satisfaction with technology solutions and analysing how technologies are best implemented to benefit organisations' workforces. She also has a wealth of experience running projects which track trends in these topics over numerous years. She has managed research projects to understand employee and management needs in hybrid workplaces, investigations into the accessibility of Environmental, Social and Governance (ESG) data, and research into the importance of Corporate Social Responsibility (CSR) credentials to technology buyers.

Qualifications

- 2020 Market Research Society Advanced Certificate in Market and Social Research
- 2018 Short Course: Research Methodology and Design, University of Amsterdam
- 2017 Short Course: Women in India: Perspectives and Challenges, Christ University Bangalore
- 2016 BA (Hons) History and International Relations with Study Abroad (2.1), University of Exeter



Key Skills

Bronwyn has a successful track record across all stages of the research process, proficient in questionnaire design, fieldwork management, analysis and presentation of results. Her particular interest is in analysing and presenting data. She enjoys searching for narratives within datasets, to present findings that are both engaging and directly relevant to clients' objectives. She has undertaken training run by the MRS on Creative Writing for Researchers to enhance her skills in this area

Relevant experience

- **February 2022 – Present Research Manager at MEL Research**

Bronwyn has recently joined the team at MEL Research, bringing her experience of running end-to-end research projects and utilising quantitative methodologies to address a range of research objectives, as well as in depth knowledge of the Technology sector.

- **2018 – 2022 Research Manager at Vanson Bourne**

At Vanson Bourne, Bronwyn was responsible for running B2B research studies in the technology sector, progressing up from Research Executive to Research Manager. Utilising her quantitative research skills she helped clients understand awareness and perceptions of their brands, the requirements for technology solutions in the B2B marketplace, the and a range of other strategic questions. She wrote numerous whitepapers and reports, and led webinars to help clients promote research findings and establish themselves as thought leaders in the marketplace

- **2015 – 2016 Data entry and fieldwork assistant at TRL**

Bronwyn's first experience of professional research was as a data entry clerk and fieldwork assistant at the Transport Research Laboratory in her university holidays. She worked on a project for TFL to understand ways to improve cyclist safety in London, sparking an interest in understanding ways to improve transportation, as well as an interest in research more generally.



Michael Deeming, Assistant Data Services Manager

Michael joined M·E·L in January 2022, having worked in the market research industry for almost two decades. He started his career as a telephone interviewer, progressed to various roles within the research team, before joining the data services team in 2006.

He has expertise in various software packages including Merlin, SPSS and Conformat. During his career he has worked on projects across a variety of sectors including business-to-business, customer experience, public sector, and employee experience. He has experience of working on large scale tracking projects and projects with multiple methodologies such as online, telephone and face-to-face.

Michael's main responsibilities include programming our surveys in SNAP and Forsta (previously Conformat), data quality, data analysis, and producing outputs.

Relevant experience

2017 - 2020 BMG Research, Data Services Assistant Manager

Took ownership and delivered on large, complex, and high revenue projects, ensuring accuracy and timely delivery of script and outputs.

Deputised for the Data Services Manager (DSM) in their absence, ensuring appropriate allocation of projects and resource to deliver scripts and outputs accurately and within deadlines; lead daily DS meetings and liaised with other departments as required.

Supported the DSM with the development of DS processes and procedures in line with department objectives.

Worked alongside the DSM in mentoring and training other members of DS or the company.

Day to day management of the Data Processing Team to ensure projects were completed on time and to requirements, allocation of projects and resource.

2006 - 2017 BMG Research, Data Services Exec / Senior Data Services Exe

2003 - 2006 BMG Research, Telephone Researcher / Research Assistant

MEL RESEARCH CONSULTANT SUPPORT TEAM



Belle Linford: Research Assistant



Belle joined M-E-L Research in October 2022 on a year long placement as a part of her undergraduate degree at Aston University. Belle is working as a Research Assistant, developing her knowledge and skills across all elements of the research process. She is studying towards a BSc in Sociology and Social Policy and is in her third year. She has a keen interest and understanding of health policy and welfare and wants to pursue a career in social research

Qualifications

- Sept 2019-present: BSc Sociology and Social Policy, Aston University (predicted grade: First class)

Key Skills

- Advanced Research Methods
- Advanced Social Theory
- Welfare States & Welfare Changes
- Embodiment and Feminist Theory

Relevant experience

- Oct 2019-present Student representative, Aston College of Business and Social Sciences
Collected feedback from peers regarding teaching and coursework and communicated this feedback with the Sociology and Policy Staff Student Committee during termly meetings.



T: +44 (0) 1235 75 3000

E: enquiry@ricardo.com

W: ee.ricardo.com