Optimising air quality and health benefits associated with a low-emission transport and mobility revolution in the UK

Contact us: info@transition-air.org.uk
Visit us: www.transition-air.org.uk
Follow us: @TRANSITION_Air

Dr Suzanne Bartington (Lead); Dr James Levine (Innovation Network Manager)
Policy Context

‘Climate change is the most pressing environmental challenge of our time’

Rt Hon Grant Shapps MP
Secretary of State for Transport (DfT, 2020)
Key Questions

• How will changes in mobility impact indoor and outdoor air quality?

• How do citizens adapt and respond (choices)?

• What research and innovation is required to deliver solutions (technology)?

• How can policymakers optimise the benefits and mitigate unintended consequences (policy)?
Network Objectives

• Inform implementation of the UK Government Clean Air strategy, Future of Mobility and Road to Zero strategies and Transport Decarbonisation Plan

• Mobilise and transfer existing knowledge from the UK transport stakeholder community, Clean Air programme activities and policymakers

• Establish a framework for generating new knowledge, tools and technologies needed to achieve transformational change in UK land transport
Network Themes

- Characterising Emerging Air Quality Challenges & Risks
- Understanding Transport Choices and Behaviours
- Supporting Industry LED Research and Innovation
- Co-Creating a Framework for Policy Solutions
Network Team

- University of Birmingham
  Dr Suzanne Bartington, Dr James Levine, Dr Stuart Hillmansen, Professor William Bloss, Professor Francis Pope, Jennifer Knight

- University of Sheffield
  Professor Martin Mayfield, Dr Said Munir

- University of Bath
  Professor Sam Akehurst

- Coventry University
  Dr Huw Davies

- University of Surrey
  Professor Nigel

- UCL Energy Institute
  Dr Ian Hamilton

- Public Health England
  Charlotte Landeg-Cox

- University of Oxford
  Dr Felix Leach, Kayla Schulte

- University of Leeds
  Dr Karl Ropkins

- University of York
  Dr Sarah Moller
Network Partners

aimsun. | national express | URBAN DESIGN GROUP | Cambustion | OXFORD STRATEGY | OXFORDSHIRE COUNTY COUNCIL | British Lung Foundation | Coventry City Council

HS2 | cenex | ORR | CREATE streets | First | apertum | transport initiatives

Zemo Partnership | global action plan | RED KITE management consulting | Sheffield City Council | DustScan AQ | oxford bus company | UK: 100 | Oxford City Council

Clean Air Programme | UKRI | UK Research and Innovation | Met Office | UNIVERSITY OF BIRMINGHAM
Network Activities

- Network Summit Events
- Knowledge Mobilisation & Exchange
- Challenges & Solutions Workshops
- Public Outreach Activities
- Discovery & Innovation Studies
- Clean Air Programme Links (SPF)
Network Activities

Network Summit Events

Knowledge Mobilisation & Exchange

Challenges & Solutions Workshops

Public Outreach Activities

Discovery & Innovation Studies

Clean Air Programme Links (SPF)

Identifying emerging indoor and outdoor air quality challenges and risks associated with transport decarbonisation

www.transition-air.org.uk/publications
Network Activities

Network Apprentice role
Jason Taylor
Oxford City & Oxfordshire County Councils

UK-100 International Net Zero Local Leadership Climate Ambition Summit
Clean air policy session (July 2021)

Briefing note series (longlist)
- Exposure via different transport modes
- Barriers to active travel and modal shift
- Planning for clean air and public health
- Taxi licensing and implications for AQ and health
- Road and rail freight
- Priority non-exhaust emissions
- EV charging
- E-bikes and E-scooters
- Bus shelter design and placement
- Rail emissions
- Tram emissions
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Exploring inter-dependencies and trade-offs via a whole system approach.

Planning White Paper: How can we clean the air in Britain’s towns and cities?

https://youtu.be/booFFaorsmo
www.ukcleanair.org/category/blog
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Clean Air Day Webinars ‘20/21

- Clean Air for All - COVID-19, Clean Air and Mobility
- What do we know about in-vehicle air quality?
## Network Activities

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### Event Details:

**6pm Tues 12th October**

`An evening of online debate`

*Vehicle Microplastics - a Global Challenge for People and the Planet*

**UN Climate Change Conference (COP26)**

- Green Zone Exhibition Proposal
- Hydrogen fuel cell technology

What do we know about in-vehicle air quality?
Network Activities

Network Summit Events

Knowledge Mobilisation & Exchange

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Discovery & Innovation Studies

Clean Air Programme Links (SPF)

First round of D&I Fund (2021)

Dr Fiona Crawford | UWE
Characterising Changing Travel Patterns in the COVID-19 Era

Nick Molden | Emissions Analytics Ltd
Measuring Exposure in Different Transport Modes

Gordon Allison | DustScan Ltd
Progressing Real-Time Source Identification

Jon Tivey | First Bus
Impact and Effects of Non-Exhaust Emissions on Human Health and the Environment

Dr Fabrizio Bonatesta | OBU
Minimising Public Exposure at the Roadside

www.transition-air.org.uk/research
Network Activities

**Network Summit Events**

**Knowledge Mobilisation & Exchange**

- Monthly ‘networks catchup’
- Joint workshop with BioAirNet planned for 18 Jan 2022

**Challenges & Solutions Workshops**

**Public Outreach Activities**

- Second round of D&I Fund may support jointly-funded projects

**Discovery & Innovation Studies**

**Clean Air Programme Links (SPF)**