



IAQM Early Careers Network Newsletter: Spring 2025

Welcome to the March 2025 edition of the IAQM Early Careers Network (ECN) Newsletter. We hope you have had a successful start to the year.

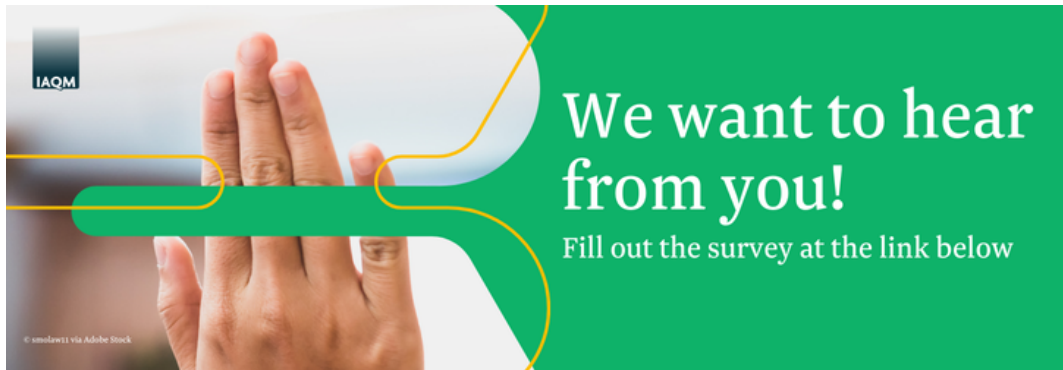
Since the start of the year, we have welcomed in our new subcommittee members Jekabs, Kit and Sophie who have taken to their new roles like ducks to water:

"I'm excited to get started and make my mark as a subcommittee member of the Early Careers Network, responsible for engagement with our members. I can't wait to increase connectivity between our members across early careers, to provide a platform for safe and open discussion about all things air quality with a push to increase collaboration between academia and consultancy!" – Sophie Brough

"I'm very pleased to become a subcommittee member of the Early Careers Network responsible over Contents and Topics. I'm especially keen to share and learn the latest knowledge on policy, guidance and news with others working and studying in the field of air quality. The collaborative and proactive atmosphere in the ECN subcommittee has been welcoming and a great experience so far." – Jekabs Jursins

"My role on the committee will be assisting in organising and running events. The subcommittee are brimming with ideas for early careers network members that will be fun and informative. I'm looking forward to seeing you at these events!" – Kit Benjamin

If you'd like a refresher on the rest of the Subcommittee you'll find this at the end of the newsletter. We are excited to share with you what we have planned in the near future, and we hope that we can build on our work from the previous years to make the ECN even bigger and better for all its members. Please keep your eyes peeled for further announcements and events and reach out to Amy at communities@the-ies.org with any ideas or anything you would like to see from the ECN.



We want to hear from you!

This survey supports the Early Careers Network Steering Group in continuing to providing tailored events and opportunities. If you would like to raise any questions or share feedback outside of the survey, please get in touch with Amy at communities@the-ies.org.

[Complete the survey](#)

Upcoming Events



Artificial Intelligence in Air Quality

IAQM Early Careers Network members are invited to join a webinar on [Artificial Intelligence in Air Quality](#) on 9th April 14:30-16:00 BST. The event is free for ECN members, and a recording will be uploaded to the [IES YouTube channel](#).

The webinar will be chaired by ECN subcommittee member Jekabs Jursins, and will include the following talks:

- **Jamie Clayton, Associate Director at Ricardo and IAQM Committee member**, providing a follow-up to his article [Air Quality and Artificial Intelligence: Swinging the IAQM into Action](#) (pdf), (published in October 2024).
- **Adam Taylor, CEO of ARM Environments and Chair of the BESA IAQ Group**, providing an overview of a project which deployed an AI-driven recommender platform to translate the data from Indoor Environmental quality sensors installed in 3 offices into actionable insights.
- **Tiffany Cheung, ECN Member**, presenting a case study on AI use in her role. Her talk will provide an insight into a machine learning model to quickly predict nitrogen dioxide (NO₂) concentrations at roadside locations in London, leveraging publicly available data.

The event will culminate with a Q&A – we encourage attendees to make the most of this opportunity to learn from experts and peers alike.

[Register](#)



Save the date - Dialogue Between Disciplines

The IES is proud to present the second Dialogue Between Disciplines (DBD) conference, which will work to actively build on the conversations and outcomes of last year's inaugural event. The conference is dedicated to fostering collaboration and knowledge-sharing between environmental professionals from across specialisms and sectors. We invite environmental scientists, practitioners, policy makers, engineers, and social scientists from across specialisms to come together in a shared mission to find sustainable solutions to the triple crisis of climate change, biodiversity loss, and pollution, with the aim of championing solutions and practical action. We'd love to see ECN members there on the day!

Dialogue Between Disciplines will be taking place on 23rd June at Woburn House, London.

[More information on DBD](#)



Save the date - Routes to Clean Air

The Institute of Air Quality Management (IAQM) presents Routes to Clean Air (RTCA) 2025, its annual conference on topics relevant to air quality practitioners and associated professionals. This year's conference will take place over two days on 20th & 21st October at Woburn House, London. We held a successful ECN slot at RTCA 2024 and would love to have ECN members in attendance again this year.

[More information on RTCA](#)

Previous Events



IAQM

IAQM Early Careers Network Field Trip

Ricardo Emissions Testing Centre
Tuesday 28th January, 14:00 GMT

Field trip - Ricardo Shoreham emissions testing centre

IAQM Early Careers Network members visited Ricardo's emissions testing centre in Shoreham-by-Sea for an exclusive field trip on the 28th January 2025. This included a guided tour of the site, with demonstrations in the Vehicle Emissions Research Centre.

Testimonials from ECN attendees:

"The IAQM ECN day at Ricardo's Shoreham site provided a great opportunity to see real-world applications of concepts we discuss, such as hydrogen fuel cells for commercial ships and looking at chassis dynamometers for vehicle emissions testing. I left the day with practical context for my work as Air Quality Consultant". - Oliver Marshall, Ricardo

"The IAQM early careers field trip to the Ricardo Shoreham Emissions Testing facility was such a great opportunity to get out the office, do something different, and see a new area of the air quality world. It was really interesting to see how some of the data that I use every day in my job are generated in the very specialist testing facilities at Shoreham, including getting to see a live vehicle emission test.

It was also great to hear from Ricardo's specialists on a couple of really interesting areas of air quality, including emerging/alternative combustion fuels, and some really new research on vehicle brake and tyre wear emissions. Overall, a great day out the office and nice to meet some fellow early careers!"
– Sam Murphy, Hydrock, now Stantec

Industry Updates & Resources

The IAQM have issued an update on the guidance currently being worked on by a number of IAQM Working Groups. The updates include:

IAQM Guidance on Land-use Planning and Development Control

The current guidance is now eight years old and as such there are some elements of the document that are dated and the focus of air quality assessment is changing. A full review of the guidance is being carried out by an IAQM Working Group. The intent is to issue a fully revised guidance document (as opposed to an update) that takes account of issues raised by IAQM members. It is clear that a focus on emission reduction will be important but the aim is also for the assessment approaches to be updated where the science supports it, and to consider the full chain from emissions, concentrations and exposure to health effects (ecological effects are considered in a separate guidance document).

[Land-use Planning Guidance update \(pdf\)](#)

IAQM Guidance on the Assessment of Mineral Dust Impacts for Planning

The current guidance is now nine years old and as such there are some elements of the document that are dated and the focus of assessment is changing. A full review of the guidance is being carried out by an IAQM Working Group. The intent is to issue an updated guidance document still applying the same risk assessment concept, but that also takes account of the issues raised by members, and the legal and technological changes.

[Mineral Dust Guidance update \(pdf\)](#)

The drafting of the documents will take place over the next 4-5 months with the aim of getting an exposure draft to members for late summer 2025.

SEPA Odour Guidance January 2025 Update

In January, the Scottish Environmental Protection Agency ([SEPA](#)) [published new odour guidance](#) updating the previous 2010 guidance. Updates in the 2025 guidance include:

- Odour screening distances for planning, setting limits on the distance between sources of odour and sensitive receptors. Landfill sites have a screening distance of 2km, biowaste facilities 1.5km, farming 1km, food and drink 1km and waste treatment 0.5km;
- Updated methodologies for odour assessment have been included, providing more precise tools for evaluating and managing odour impacts
- Specific Odour Detection Thresholds (ODT) for key odorous compounds, allowing businesses to better assess the impact of their operations and the effectiveness of odour control measures;
- Hedonic tone, which measures how pleasant or unpleasant an odour is, has been retained and expanded; and
- New tools and best practices for managing and mitigating odours have been introduced, aimed at improving compliance and reducing odour-related issue.

Emissions Factors Toolkit V13

The [Emissions Factors Toolkit \(EFT\)](#) was updated in March 2025. The current version is EFT Version 13.0, which incorporates the following changes:

- Update of the Base Fleet Splits for all areas up until 2050:
 - The fleet composition projections included in the tool outside of London have been updated in line with the projections developed from the 2022 version of the National Atmospheric Emissions Inventory (NAEI) programme in March 2024. This used information provided by DfT in December 2023 on future

sales and activities of new petrol, diesel and electrically-powered cars and LGVs, combined with future forecasts in traffic (vehicle kilometres) including other vehicle types from DfT's National Transport Model.

- The default fleet assumptions and projections for London remain unchanged relative to those that were adopted in Version 12.1. These were provided by Transport for London (TfL), and are representative of London-specific policies, including the expansion of the Ultra Low Emission Zone (London-wide ULEZ) that took place in August 2023.

- Use of the COPERT v5.8 NOx, PM and Energy Consumption (used for CO₂) speed-based emissions factors, updated from COPERT v5.6, as taken from the European Environmental Agency (EEA) emission calculation tool.

- The methodology for calculating indirect CO_{2e} emissions associated with the charging of the batteries of electric and plug-in hybrid cars and LGVs remains consistent with previous EFT versions. The emission factors used in this methodology have been updated in line with the TAG Data Book 2024.

- The emissions factors for PM non-exhaust emissions sources (i.e. from tyre and brake wear, and road abrasion) remain in line with v12.1 of the EFT, using information published in EMEP/EEA Emissions Inventory Guidebook 2019.

European Commission Ambient Air Quality Directive (2024/2881)

The European Commission adopted the recast [Ambient Air Quality Directive \(2024/2881\)](#) (AAQD) in October 2024, which supersedes the previous AAQD (Directive 2008/50/EC). The recast AAQD sets out more stringent limits for key pollutants such as PM, NO₂ and O₃. It also mandates the use of advanced monitoring techniques and a high-quality network of over 4,000 monitoring stations across the EU and emphasis the need to inform the public on air quality levels and the associated health risk. In addition, it includes provisions on justice that gives individuals affected by air pollution the right to seek compensation if EU air quality standards are exceeded.

UK Air Quality: policies, proposal and concerns

In March 2025, the [House of Commons Library released a research brief on UK air quality policies, proposal and concerns](#). This briefing gives an overview of the current outdoor air quality legal framework in the UK and each devolved administration; the changing governance and enforcement mechanisms following the UK's EU exit; forthcoming legislative changes and ongoing issues and concerns. The research brief also provides an overview on the historic trends of air quality and sources of air pollution to provide context to the changes in policy and governance.

Interesting Reads

Air pollution levels may be higher inside your home than outside - University of Birmingham

[A study undertaken by researchers at the University of Birmingham](#) where low-cost sensors and innovative techniques allowed researchers to discover that pollution levels in houses were higher and more variable than outdoor levels.

Impact of an urban city-wide Bradford clean air plan on health service use and nitrogen dioxide 24 months after implementation

[A study was published examining the health impact of the Bradford Clean Air Plan](#) (including its Clean Air Zone) in the first two years of its implementation, and found that the number of hospital visits linked to respiratory illnesses reduced by 25% compared to pre-COVID-19 levels.

A recent study has found that gas hobs can increase indoor air pollution higher than some of the UK's busiest roads

The study, conducted in November 2024, found that [levels of NO₂ from a gas hob increased in line with the amount of cooking time and the number of gas rings used](#). Even when slow cooking a meal using one ring, NO₂ levels more than doubled. PM_{2.5} was found to peak at >100µg/m³ on several occasions, and one volunteer experienced a peak PM_{2.5} of nearly 650µg/m³.

Only seven countries have been found to meet the WHO guidelines for PM_{2.5}...

...according to a [recent report including Australia, New Zealand, Estonia, Iceland and some small island states](#). Whilst five countries (Chad, India, Bangladesh, Pakistan and the Democratic Republic of the Congo) were found to have annual mean PM_{2.5} concentrations more than 10 times higher than the guideline of 5 µg/m³ in 2024.



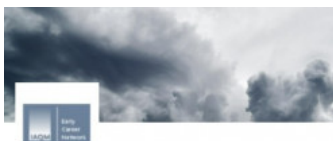
Have your say

There are a range of ways you can have your say and get involved. For example, we are always keen to receive feedback and suggestions on future topics.

If you wish to write a case study or blog about air quality, feel free to share it with us and we will highlight it in our next newsletter. It's a great chance to get your name out there in the air quality community!

Contact us at communities@the-ies.org.

Please also remember to fill out the feedback survey (more details in the first section of the newsletter!) before 22nd April 2025.



IAQM - Early Career Network

Listed group

Join us on LinkedIn

Please make sure to join our [LinkedIn group](#)! This is the place where we will be actively sharing content and promoting discussion on a wide range of topics. Here we can build our very own ECN air quality community.

As members, feel free to also post any questions or interesting pieces of information you may come across into the group.

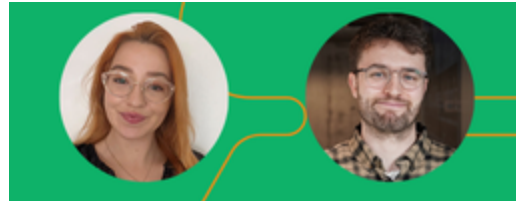
ECN Subcommittee 2025: who we are



Chair and Vice Chair

Davide Pascarella (Merton, Richmond and Wandsworth Council)

Mark Nichols (Ardent)



Events

Eleri Paterson Hughes (Ricardo)

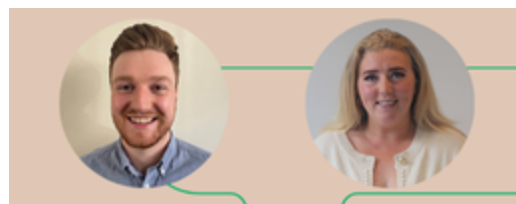
Kit Benjamin (Buro Happold)



Content and Topics

Isobel Ward (WSP)

Jekabs Jursins (Ricardo)



Engagement

Jack Richmond (Arup)

Sophie Brough (Arup)

We are also supported by Amy Bond, Communities and Memberships Officer at the IES. To get in touch with the IAQM ECN Subcommittee, please email Amy on communities@the-ies.org.

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