Department
for Environment,
Food & Rural Affairs

Air Quality Information System Review Stakeholder Engagement Programme

Insights Report

October 2023

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This report represents the views of external stakeholders interviewed as part of the Air Quality Information System review and is independent of government policy.

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Executive summary

This report outlines insights from a programme of stakeholder engagement undertaken by the Department for Environment, Food and Rural Affairs (Defra) air quality and industrial emission team during August and September 2023 to support the Air Quality Information System (AQIS) review.

Over a seven-week period Defra, with support from the UK Health Security Agency, conducted 21 semi-structured interviews with members of the public and representatives from charities, campaign groups, community organisations and local authorities with the aim of learning directly from individuals and organisation who either:

- have first-hand experience communicating messages about air quality directly to communities,
- represent communities that may be disproportionately impacted by air pollution.

Several insights were identified relevant to the AQIS review:

1. **Urgency of the health message**
    - The health impacts of air pollution are not widely understood outside of campaigning spaces or expert spheres, making the benefits of air quality interventions difficult to communicate to the wider public.
2. **Production of resources**
    - Government can support local organisations to spread air quality information by creating centralised resources that are easy to understand and scientifically sound.
    - Visual tools that are easily shareable on social media would be particularly useful.
    - Some organisations like to produce their own resources so would benefit from accessible raw data and editable media packs.
3. **Racial and socioeconomic inequalities in the air quality conversation**
    - Black and ethnic minority communities and individuals from lower socio-economic backgrounds are under-represented in air quality discussions and decision making.
    - Air quality information should be made accessible to people for whom English is a second language and information providers should consider and address cultural barriers to engagement.
4. **Connecting and engaging with communities**
    - There can be no one size fits all approach to engagement – different groups and communities may need different information provided in different formats.
    - Framing of air quality information should be sensitive to the lived reality of audiences – messaging should avoid pointing the finger of blame at individuals.
5. **Empowering people in communities**

- Government, local authorities and experts should partner with trusted figures in communities to champion air quality.
- Community members should be empowered to develop their own solutions rather than subjected to a generic top-down approach.

6. **Barriers to behaviour change**
    - Costs and lack of public transport infrastructure pose real barriers for individuals trying to reduce their own contribution to air pollution.
    - Air quality is becoming an increasingly politically divisive issue meaning the public receive mixed political messaging on air quality.

Background

In 2021 the Department for Environment, Food and Rural Affairs (Defra), with support from the UK Health Security Agency (UKHSA), launched the Air Quality Information System (AQIS) review as part of the government's commitment to improve the provision of air quality information to the public following the inquest into the death of Ella Adoo Kissi-Debrah.

The AQIS review is led by an external steering group tasked with examining the strengths and limitations of the air quality information that the public receives. The steering group are ultimately responsible for making a series of recommendations for improvement. To help inform these recommendations, Defra carried out a programme of stakeholder engagement in summer 2023 with the aim of learning lessons from organisations and individuals with existing experience developing and disseminating air quality information at a local or community level. The AQIS steering group were particularly keen to hear from representatives of seldom heard groups and those that are disproportionally impacted by poor air quality.

This projected aimed to explore:

- Reported awareness of air quality and air quality information sources at a community level.
- Examples of approaches that have been effective in raising awareness about air quality.
- What resources are currently being used by organisations and individuals to improve awareness about air quality.
- What new resources organisations and individuals would find useful to raise awareness about air quality.
- What barriers individuals and communities face if they tried to change their behaviour for the benefit of air quality.

Methodology

This project was designed to allow Defra to learn from individuals and organisations linked to the communities most impacted by air pollution, or that are under-represented in air quality decision making.

21 semi-structured interviews with charities, campaign and activist groups, local authorities and individuals were conducted. Participants self-selected and were invited to participate using a combination of purposive and snowball sampling. This approach allowed us to reach individuals and groups with specific characteristics and relevant experience and gave us the opportunity to speak to people from outside our pre-existing contacts.

In order to recruit participants, we started by mapping the organisations with an existing relationship with the Defra air quality and industrial emissions team and analysed this list to identify gaps in representation and geographic location. This was followed up with desk-based research to find organisations representing groups that were under-represented on our stakeholder map.

A shortlist of new contacts as well as some existing connections with relevant expertise in air quality campaigning were contacted via email with information about the AQIS review and the aims of the stakeholder engagement and invited to participate in 45-minute video interviews. The invite was further disseminated through the Environment Agency's Air Quality Inequalities Network, and participants were encouraged to share the invitation or signpost to other relevant individuals.

Interviews were conducted on Microsoft Teams. An interview guide was developed with a series of prompt questions relevant to the aims of the research, however conversations were adapted based on the participants' area of experience.

During each meeting verbal consent was obtained by the participants to include anonymised insights from the conversations in this report. A map illustrating geographic spread of participants and types of organisations that took part is available in appendix 1.

Summary notes have been collated by the Defra team and analysed to identify key themes.

Limitations of the approach

This is a piece of qualitative work, where participants have been purposively sampled in order to gain valuable and lesser heard perspectives. The sample is subject to self-selection bias and is largely comprised of people already actively engaged in air quality circles. While participants have reflected on their personal experience working with and within different communities, their experiences do not represent more widely the diversity of attitudes and experiences within heterogeneous communities.

Key themes

Awareness of air quality and air quality information sources

Several participants felt that amongst the communities they engaged with public awareness of air quality as an issue had improved in the last 5-10 years and suggested that many of the people they interact with have some understanding about the contributions of transport to air pollution. However public awareness about other sources

of emissions such as domestic combustion was felt to be low and stakeholders were particularly concerned that outside of expert and campaigning spaces, individuals do not always understand the links between air pollution and health outcomes. This was felt to reduce the importance of air quality as a day-to-day issue for many, as individuals aren't provided with a tangible reason to care about pollution.

Participants felt this is compounded by the lack of simple and accurate information signposted to communities about the behaviours that are harmful or beneficial to pollution levels. Stakeholders voiced concerns that the public is not being given a consistent message about actions they can take at an individual or community level to reduce pollution. Several participants sighted mixed messaging surrounding wood burning's impact on the environment and health compared to for example central heating, reflecting that they knew people who felt burning is the "eco-friendly" option.

Air quality and health

Stakeholders were concerned that healthcare professionals are often not educated about the impacts of air pollution and may not feel confident discussing air pollution and its link to symptoms and health outcomes with their patients. Many wanted to see new educational provisions for healthcare professionals including GPs, pharmacists and antenatal teams, focusing both on knowledge building, but also how to confidently conduct air quality conversations.

A few participants sign posted to examples of air pollution levels being added to patient data at Great Ormond Street Hospital and would like to see this more widely rolled out. However, we heard concerns that gypsy/traveller communities are often missing from healthcare datasets and more needs to be done to engage with socially excluded groups.

Ensuring that the individuals most at risk from air pollution receive appropriate health advice will require a multi-pronged approach – stakeholders recommended tailoring the mode of information provision to different target groups, for example some had found success utilising telephone calls and leaflets when engaging with older and/or digitally excluded adults, and using apps, text messaging and social media to engage younger and more technologically proficient individuals.

We consistently heard that the onus for learning about and acting on air pollution shouldn't fall exclusively on those who are more at risk. Participants recognised the need for nuance when communicating the health impacts of air pollution to help the public understand that different groups and communities are impacted in different ways. In particular it was felt that the link between race, socio-economic deprivation and air quality impacts needs to be made clearer to people. It was felt by many participants that a public awareness campaign focused on health might emotionally resonate with the public as well as increasing understanding.

Air quality data

We heard concern about how air quality data is currently presented and interpreted. Measurements and forecasts displayed on Defra's Daily Air Quality Index (DAQI) often displays air quality as green which stakeholders feared may cause individuals to assume that there is no issue with air pollution in the UK. There was also concern that air quality is displayed as uniform over large geographic areas even though people in urban areas are more likely to experience poor air quality than those in rural areas. Some stakeholders reported experiencing resistance to their air pollution messaging due to the way members of the public were interpreting the air quality forecast, using it to back up their opinion that air quality is not a problem where they live.

Participants agreed on the need for a simple, visual system of displaying air quality data that is widely accepted. This should incorporate well defined colour-coding and with clear symbols and icons to aid interpretation, and be presented at a fine enough resolution for the public to understand variations in local air quality conditions. Data should be normalised into the everyday experience, stakeholders pointed to the success of the pollen count being integrating into the weather forecast and suggested that air quality data might be better integrated alongside these.

Locally produced resources

Organisations signposted to a range of air quality resources that they had produced themselves. These included digital tools, toolkits, posters and flyers used as campaigning materials (aimed at encouraging behaviour change) or for broader education purposes.

Whilst some organisations are highly resourced and primarily air quality focused, other stakeholders we spoke to found keeping up with the latest air quality news burdensome. Small organisations struggled to condense academic papers into bitesize messages. We heard a strong call for a central repository of resources that summarise the latest air quality science in a way that is scientifically sound, easy to understand, easily sharable and government endorsed. Investing in infographics, media packs and campaign materials could help stakeholders to disseminate a credible and consistent message on the ground.

Alongside this, raw data published in more accessible formats would be helpful for organisations that prefer to tailor materials to localised needs.

Engaging with communities on air pollution

Racial and socioeconomic inequalities in the air quality conversation

Participants reflected on the lack of diversity amongst the most visible environmental campaign groups; at the top of environmental organisations; and in government

expressing concern that some of the groups most impacted by air pollution are the least represented amongst decision makers. While we were told about many passionate individuals and organisations campaigning for cleaner air, systemic exclusion, along with lack of funding for grassroots community projects, and the under amplifying of diversity in campaigning spaces were identified as barriers to inclusion. This was thought by some to exacerbate a pervasive myth that “working class and non-white communities” aren’t interested in environmental issues, and consequently that air quality, activism and championing is “not for” everyone. Stakeholders were keen to see greater collaboration in decision making, improved access to resources for community groups and increased platforming of diverse voices to make the air quality sphere a more inclusive space.

Linked to this, some participants were critical of the framing of air quality messages that were felt to point the finger of blame at those with the least agency for change. Some participants were concerned that the language around the causes of pollution conflates polluting activities and morality and often focus on activities that the least affluent are least able to change – such as owning an older vehicle. More positive framing focused on little changes that everyone can make may be less alienating to people.

Further to this, we heard about the language and cultural barriers to engagement for some communities. This is especially the case for communities where English is not their first language, or communities where levels of literacy are low. Stakeholders were keen for air quality information to be produced in different languages relevant to the local population and for infographics or symbols that are not language specific to be developed.

Connecting and partnering with communities

Participants drew on their own experience working with and within a range of communities that may be disproportionately impacted by air pollution including, but not limited to, black and brown communities, areas of socio-economic deprivation, and gypsy/traveller communities and reflected on effective (and ineffective) modes of engagement. Barriers to accessing and engaging with information are manifold – lack of signposting, lack of trust in the source, language barriers, cultural barriers, scientific literacy, digital exclusion, time constraints and mental load were all sighted. The experiences shared suggest that there can be no one size fits all approach - reaching diverse communities will require a diverse communication strategy.

The hardest to reach groups and individuals may require direct/in-person engagement; with conversations framed in a way that highlights the relevance of air pollution to their lived experience.

Many participants highlighted the importance of messages coming from trusted members within the community and suggested that government, local authorities, charities and/or the scientific community may have a role partnering with and helping to upskill trusted opinion leaders. Partnerships may be formed with, for example, educators, health professionals, religious leaders or local figure heads and should where possible support

grassroots action – empowering communities both to steer the narrative on air quality and to come up with their own locally relevant solutions. To this end several stakeholders cautioned against government taking a generic top-down approach and only engaging with communities after policies, communications or campaigns have already been decided on, and to instead to embark on genuine co-design from the beginning.

Barriers to behaviour change

Social and material barriers

Participants discussed some of the barriers that make it harder for individuals to reduce polluting activity. The most frequent barriers mentioned were material barriers - costs (including costs of public transport or of changing vehicles) and lack of public transport infrastructure. However, social injustice was mentioned several times as a barrier to motivation – we heard that some communities that are highly exposed to air pollution feel they have contributed little to creating the problem, and yet are the ones being asked to make changes (rather than industry or government). Many participants highlighted that while individuals can take action to protect themselves and reduce personal contributions to air pollution - and better air quality information can support them in doing so – this needs to be accompanied by bigger systemic change and material support for communities to improve the quality of the air.

Divisiveness

Some stakeholders observed that air quality has become politically divisive over recent years and expressed concern that political discourse on air pollution does not necessarily align with the public health narrative. There was concern that this confuses the message being presented to the public and reduces the publics willingness to act. In some communities this effect is exacerbated by the spread of misinformation via social media channels which campaigners and policy makers should be conscious of.

Discussions about air quality policies such as clean air zones, low traffic neighbourhoods and ultra-low emission zones were identified as particularly sensitive. We heard from one organisation how framing activities using policy terms e.g. “clean air zone” generated increased hostility, whereas describing the same policy concept using neutral language generated greater support.

Going forwards stakeholders wanted to see a unified approach to air quality policy making and communication, with messages from government aligned with scientific evidence from credible sources.

Conclusion

Through this programme of stakeholder engagement we have heard from a number of organisations and individuals that are working on the ground to raise awareness about air pollution. These insights will contribute to the body of evidence supporting the AQIS review. Some of the main asks that we have heard from participants include:

- More support for health care professionals and better public information about the link between air pollution and health.
- Provision of centrally managed easy to understand, scientifically sound and sharable resources.
- Consideration of different languages and cultural perspectives when producing materials.
- Recognising inequalities in the air quality narrative and platforming seldom heard voices.
- Empowering communities to co-create solutions to air pollution.

Appendix

Participants

Participant type and geographic spread are illustrated in figure 1 below.

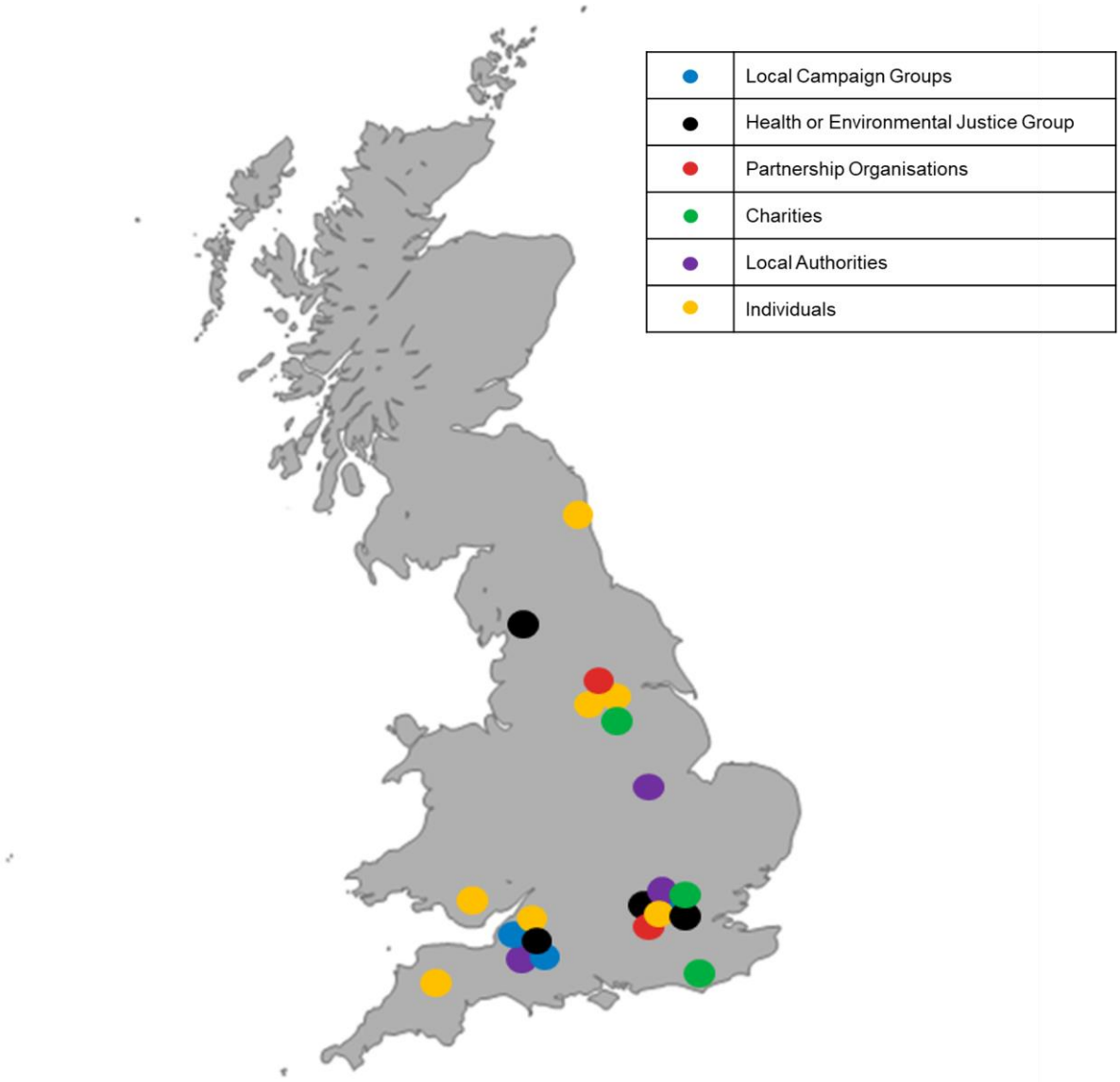

Figure 1: Participant type and location.