

Environment & Energy Board

Date	12 July 2023
Report title	Air Quality Framework
Portfolio Lead	Cllr John Cotton Portfolio Holder for Environment, Energy and HS2
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Recommendation(s) for action or decision:

The Environment and Energy Board is recommended to:

- a) Endorse the draft Air Quality Framework for consultation with key stakeholders.
- b) Agree to pursue WMCA-wide air quality targets that exceed the nationally established targets.
- c) Approve the proposed next steps for finalising the framework and note the points around resourcing and governance.

1. Purpose

To review the draft WMCA Air Quality Framework, including the suggested measures contained within it. This Framework is due to be presented to the WMCA Board in October 2023. Ahead of that, we will be taking the Framework through a consultation process over the summer, followed by a graphical design process.

2. Background

2.1 An Air Quality Options Paper was taken to WMCA Board in February 2022 that outlined the challenges the region is facing in relation to air pollution. The options paper highlighted the inequality of exposure to poor air quality across the region and drew attention to the need to address pollution from particulate matter with more urgency. The options paper outlined 122 possible interventions that could be adopted to improve regional air quality, taken from the literature and work undertaken by Public Health England (now the UK Health Security Agency), but also recognised that a more detailed piece of work would be needed to develop these further, or to add any additional interventions. As a result, the Air Quality Framework has been produced. This document is not a strategy, but a review of all the measures possible to accelerate improvements to regional air quality.

Summary of the issues

2.2 There are a number of different air pollutants that affect the West Midlands and have implications for human and public health. The main ones are nitrogen dioxide (NO₂) and particulate matter (especially PM_{2.5}). Both of these have environmental, social and economic impacts for the region that have previously been set out in our Air Quality Options Paper.

2.3 Since the Air Quality Options Paper was produced, DEFRA have published the national air quality targets (following on from the Environment Act 2021) and the National Air Quality Strategy. The targets are as follows:

- NO₂ 40 µg m⁻³ [this is a retained target]
- PM_{2.5} 20 µg m⁻³ [new Env Act: 10 µg m⁻³ (by 2040)]

There have been questions about the level of ambition in these targets, which have predominantly been established to accommodate the challenges faced by London in reaching them. It would be feasible for the West Midlands to achieve these targets sooner and then reduce exposure even further. For context, the World Health Organisation Air Quality Guidelines (which are not legal limits) are as follows:

- NO₂ 10 µg m⁻³
- PM_{2.5} 5 µg m⁻³

2.4 To put this in context:

- The highest annual average PM_{2.5} concentrations in the West Midlands are modelled in central Birmingham, Coventry, Sandwell and Walsall.



- DEFRA provide air pollution estimates of pollution concentrations at 1km resolution. When averaged to ward level, these data show annual average PM_{2.5} levels in 72 of the 192 wards within the West Midlands exceed 10 µg m⁻³
- 1.2m people or ca. 40% of the West Midlands' population live in wards exceeding PM targets of 10 µg m⁻³.
- The least advantaged areas (highest IMD score) tend to have the worst air quality.

2.5 The constituent local authorities have been working to address this through measures identified in Air Quality Action Plans (as required by DEFRA) or, in the case of Solihull MBC, an Air Quality Strategy. The focus of these is largely the reduction of NO₂, which is produced (and can be reduced) locally. PM_{2.5} is different because it lives longer in the atmosphere and therefore spreads further geographically – this means that regional approaches may be more appropriate in addressing it.

Scope of the Framework

2.6 In terms of cost or time taken for deployment, nothing is off the table, but the means of assessing the implementation opportunities (described in the Methodology section below) has taken account of these factors in terms of likelihood of deployment. The main consideration in determining if a measure is in or out of scope is the principle of subsidiarity, i.e. is it the case that there is (or could be) added value from adopting a regional approach to delivery.

2.7 In terms of defining 'regional' we mean where a measure could be better delivered by more than one authority acting alone. This has meant that anything that is clearly within local remit to deliver has been excluded, likewise anything that would need a national intervention has also been removed.

2.8 There are some 'grey areas' in that, of course. Communications and behaviour change initiatives, for example, can be delivered by a local authority independently. However, from the work undertaken in developing the Framework, it has become clear that there are advantages in consistent messaging to business and the public and collaborating to deliver behaviour change programmes. There might also be instances where economies of scale make a difference for procurement, for example on the purchase of low-cost sensors.

Methodology

2.9 In preparing the Air Quality Framework, all options outlined within the initial Air Quality Options Paper, and other key sources (such as from DEFRA), were considered at the outset. These were supplemented with additional options identified at the initial consultation stage of the Framework development with TfWM, constituent local authorities and partners such as WM-Air. Any options which were clearly outside of the Framework scope, or were unlikely to be in the future, were excluded from the long list. All options which may be at all feasible or within the scope of the Framework were carried forward.

2.10 There is a total of 156 measures identified in this Framework that could be taken to tackle air pollution across the region; 143 were taken forward to full appraisal following an initial assessment with consultees identified in Section 2.11 below.

They have been grouped into the following categories (although there is synergy between many of these):

- Engagement and behaviour change
- Domestic emissions and indoor air quality
- Transport
- Natural and built environment
- Commercial, industrial and agriculture
- Public health
- Planning, policy, governance and mechanisms for change
- Monitoring and digital
- Climate/net zero considerations

2.11 Each of the measures identified within these thematic groups has been assessed against the following criteria:

- Health outcomes, including direct improvement to human health and reducing health inequalities.
- Spatial impact, including whether a regional approach brings benefit.
- Alignment with local and national policy.
- Cost, implementation and timescales, assessing measures against feasibility, timescales and cost.
- Co-benefits – do the measures have any additional environmental or economic benefit?

2.12 The tables produced in each of the sections of the Framework (attached as an Appendix to this item) highlight the measures that deliver most effectively against the criteria identified. The entire list of measures is provided in a technical appendix to the Framework. Each of these summary tables gives:

- Where a particular measure ranked in the overall theme, as well as the score it was given against all the criteria
- The outcome that we would look to achieve through its implementation
- The potential approach to implementing it
- First implementation costs and indicative timescales
- Any constraints

This provides us with a valuable routemap to delivery, which has already begun in the case of some themes (see 2.12 below).

2.13 Extensive consultation has been involved in developing the Framework. These include: WMCA Directorates; WMCA panels/groups (e.g. Strategic Transport Officers Group and WM Environmental Protection Group); TfWM; Birmingham University/WM-Air team; constituent local authorities; non-constituent local authorities; external organisations (e.g. Asthma and Lung UK, Clean Air Justice Network, EarthSense); and the Greener Together Citizens' Panel. The intention is to consult more broadly over the summer, ahead of the final Framework being taken to the WMCA Board in autumn.

2.14 In terms of the measures, and delivery, there is no proposition here to change roles and responsibilities for local authorities. We have assumed that this work will continue as previously, although there may be opportunities to bring economies of

scale/ benefits from collaboration. In addition, we also assume that actions related to TfWM, and its governance and actions, will continue to be delivered through existing routes. Where it has become clear that the WMCA could add immediate value is through behaviour change/ awareness raising and scaling up of monitoring capability and data collection. Further, there are opportunities to support multistakeholder governance to facilitate collaboration on air quality (paragraph 2.17).

Progress to date

- 2.15 In parallel to producing the Air Quality Framework, we have secured funding from DEFRA to begin to collaborate on behaviour change projects, as well as on monitoring and data transparency. This project will be delivering the following:
- Installation of 30 low-cost sensors where there is modelled to be high population exposure to PM_{2.5}. These monitors will bring consistent data, currently lacking, across the WMCA.
 - Creation of a public facing regional air quality platform. The sensor data will feed into a centralised dashboard for the public to see near real time air quality data. The website will be a hub of educational and campaign resources, including toolkits on anti-idling campaigns, domestic combustion reduction campaigns and general awareness raising. We are also going to procure a solution that can accommodate existing sensors already deployed across the region.
 - Regional air quality awareness campaign. This project will begin by raising awareness and to start a regional conversation on air quality. There will be community engagement events (3 in each local authority) to provide information on why clean air is important.
 - Behaviour change campaigns in the local community. Design and implement a package of different types of projects to improve awareness of air quality in their communities and implement interventions to reduce exposure and pollution; this will use the outcomes from the awareness-raising activity.
 - Air quality literacy programme. We will use this project to develop training materials for politicians and organisations to understand the need for action.
 - Communications toolkit. Develop a communications toolkit to be used more broadly by all the local authorities across the region. It will include social media assets, communication materials and key messages that will be co-produced and shared with stakeholders to present a consistent message across the region.

Next steps

- 2.16 The Framework identifies the measures that could be delivered straight away (in Section 7.0). Some of these could be put in place quickly, with minimum cost, whilst others might need more detailed consultation and policy change. The DEFRA Air Quality grant secured in March 2023 will support the implementation of some of these, especially in relation to behaviour change and establishment of a low-cost sensor network, and availability of data to support decision-making across the region.

- 2.15 During the consultation process with stakeholders, an action plan will be developed, comprised of priority measures from the Framework for delivery. This action plan will be overseen by an Air Quality Framework Delivery Group (paragraph 2.17). The delivery of these measures will be dependent on resourcing and business cases and subject to the WMCA Board approval. The action plan will be presented to the WMCA Board in autumn along with the final Framework.
- 2.16 In order to drive the delivery of measures in the Framework forward, we have secured initial funding from DEFRA to put in place an Air Quality Lead. This role will work across all the constituent local authorities to support roll out of a low-cost sensor network and implementation of behaviour change programmes. To deliver on the action plan (identified in 2.15), as well as attracting additional funding for ongoing delivery across WMCA area, a dedicated Air Quality Programme Lead would be required.
- 2.17 To ensure that the Framework is delivering for the whole WMCA, we will establish a Air Quality Framework Delivery Group. This is something that has been flagged in conversations with constituent local authority partners as a helpful route to continue coordination. This will also facilitate engagement with air quality partners (as identified in the Environment Act, 2021) as well as bringing additional expertise on board to support different air quality issues that are common to all partners. The Framework Delivery Group membership would comprise the 7 constituent local authorities as well as other relevant partners with a focus on public health, environment, research and innovation.
- 2.18 The measures identified in the Framework are comprehensive, and we do not expect them to become out of date in the short-term. However, we would expect to build in a review process every five years to ensure that they are still supporting regional ambition to reduce air pollution in total, and inequality of exposure overall. We would also want to make sure that the Framework is taking account of innovations in technology, as well as national policy. Annual progress reports on the Framework delivery will be brought to the Environment and Energy Board.

Questions for the Environment and Energy Board

- 2.19 As part of this next stage of the Framework development, and in addition to any general feedback on the Framework in its current form, we would like the Environment and Energy Board to consider the following at the 12th July meeting:
- Is the right level of detail provided in the Framework?
 - Is the structure of the Framework helpful?
 - Are there any case studies that you would like to have included from your local authority area?
 - Is there more information required at the outset to provide context?
 - Are there any measures that we have not included?

3. Financial Implications

There are no immediate financial implications within this paper, as any costs associated with the wider consultation will be covered from existing budgets.

Once the wider consultation is complete, the final Air Quality Framework will be brought to WMCA Board for approval later this year. This will contain financials asks for approval as some of the recommended measures will require further funding to be sought and agreed.

4. Legal Implications

There are no legal implications as a result of this paper. Any legal implications will be considered on a project-by-project basis.

5. Equalities Implications

Having clean air to breathe should be enjoyed by all communities across the West Midlands. The current picture indicates that this is not the case, with many communities suffering from poor air quality that leads to harmful impacts on health and other social and economic outcomes. The aim of this Regional Air Quality Framework is to complement the work already happening in local authorities to address poor air quality across the region, but also to accelerate action in areas that have a regional dimension, especially around particulates.

6. Inclusive Growth Implications

This report links to a number of the WMCA's eight inclusive growth priorities, which are identified as 'a catalyst for improved and sustained outcomes for people place, co-designed with partners and beneficiaries'. The Air Quality Framework will support outcomes around:

- reduction of health inequalities;
- improving understanding, awareness and knowledge of environmental issues;
- supporting the principle of powerful communities through providing support to deliver change and create better places; and,
- equality (reducing the numbers of people living in deprivation).

7. Geographical Area of Report's Implications

The Air Quality Framework covers all constituent local authorities. There is also potential to collaborate with non-constituent authorities on some of the communications tools and messaging being developed through the Framework.

8. Other Implications

None.

9. Schedule of Background Papers

Appendix 1: Draft West Midlands Air Quality Framework