

Greater Manchester's Outline Business Case to tackle Nitrogen Dioxide Exceedances at the Roadside

Executive Summary



Salford City Council



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1. Why is Greater Manchester producing this plan?

- 1.1 Poor air quality is the largest environmental risk to the public's health. Taking action to improve air quality is crucial to improve the health of the general population. Whilst air quality has been generally improving over time, particular pollutants remain a serious concern in many urban areas including across Greater Manchester.
- 1.2 Long-term exposure to elevated levels of Nitrogen Dioxide (NO₂) and microscopic particles of matter suspended in the air we breathe, may contribute to the development of cardiovascular or respiratory disease and may reduce life expectancy¹. The youngest, the oldest, those living in areas of deprivation, and those with existing respiratory or cardiovascular disease are most likely to develop symptoms due to exposure to air pollution^{2,3}.
- 1.3 Public Health England estimates the health and social care costs across England due to exposure to air pollution will be £5.3 billion by 2035 for diseases where there is a strong association with air pollution, or £18.6 billion for all diseases with evidence of an association with air pollution⁴.
- 1.4 Taking action on air quality is not optional. The severe and long-lasting health implications of poor air quality mean that authorities need to act decisively and swiftly to reduce harmful air pollutants, and nitrogen oxides in particular.
- 1.5 Since 2010, the UK has been in breach of the legal limits of levels of NO₂ in major urban areas. The Air Quality Standards Regulations 2010 set legally binding limits for concentrations of major air pollutants that affect human health, including NO₂ and particulates, and require the Secretary of State to draw up and implement a national air quality plan so as to achieve the relevant limit within the 'shortest possible time'.
- 1.6 By 2015, compliance with the legal limits of levels of NO₂ had still not been achieved. The UK Government was held to be in breach of its legal obligations and was required to take action by the UK Supreme Court.⁵
- 1.7 In Greater Manchester, road transport is responsible for approximately 80% of roadside concentrations of NO₂, of which diesel vehicles are the largest source.
- 1.8 Eight Greater Manchester authorities were identified by the Government as having roads which are expected to continue to exceed the maximum legal limits of NO₂ in 2021. They were directed by Government to undertake feasibility studies to identify measures for reducing NO₂ concentrations to compliant levels in the 'shortest possible time'.

¹ Air Quality – A Briefing for Directors of Public Health (2017), <https://www.local.gov.uk/air-quality-briefing-directors-public-health>

² Air Quality – A Briefing for Directors of Public Health (2017), <https://www.local.gov.uk/air-quality-briefing-directors-public-health>

³ RCP and RCPCH London, Every breath we take lifelong impact of air pollution (2016),

<https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

⁴ <https://www.gov.uk/government/news/new-tool-calculates-nhs-and-social-care-costs-of-air-pollution>


⁵ *R (on the application of ClientEarth) (Appellant) v Secretary of State for the Environment, Food and Rural Affairs (Respondent)* [2015] UKSC 28 & [2013] UKSC 25.

- 1.9 These studies must produce a series of business cases for assessing and implementing the relevant measures to address the problem. The Government has allocated £255 million for Implementation Funding and £220 million to a Clean Air Fund to finance such measures nationally.
- 1.10 Local air quality modelling has indicated that without action, it is predicted that there will be 250 points of exceedance across 152 road links and in all ten local authority areas in 2021, including those not initially identified by the Government. The results of the Greater Manchester modelling have now been agreed by Government, meaning that all the exceedances of legal limits of NO₂ in all ten Greater Manchester local authority areas need to be addressed.
- 1.11 Greater Manchester has a longstanding track record in taking a balanced approach to policy development to promote sustainability, inclusion and growth. The ten Greater Manchester authorities have decided to work together to respond to this vital issue, demonstrating collective leadership, which is essential to help clean the air for our combined population of nearly three million residents.
- 1.12 Given that air pollution does not respect boundaries, and the problem cannot be remedied on a site-by-site or authority-by-authority basis, this coordinated approach is the most effective way to deal with a problem that affects all parts of Greater Manchester.
- 1.13 The ten authorities, supported by Transport for Greater Manchester, have now developed a draft package of coordinated and robust measures that complies with the highly prescriptive Government guidance for tackling NO₂ pollutants.
- 1.14 In accordance with Government guidance, the output of this work is set out here as an Outline Business Case (OBC), following the HM Treasury's Green Book guidance. This means it comprises five cases - Strategic, Economic, Financial, Commercial and Management - which are interdependent and must be considered as a whole.
- 1.15 To tackle the issue, Greater Manchester has undertaken a thorough transport, economic and air quality modelling appraisal of options. The OBC represents a major milestone on the journey to developing an interim Full Business Case, which we must submit to Government by the end of 2019.
- 1.16 Some of the reasons for the higher levels of NO₂ pollution across Greater Manchester are that vehicles using Greater Manchester's roads, particularly buses and taxis, are typically older than the national average. Additionally local traffic in some areas is moving more slowly than average.
- 1.17 Greater Manchester has also sought to develop interventions that align with our wider strategic goals and do not undermine the Greater Manchester Combined Authority's and ten local authorities' other statutory and legal duties. This approach will minimise the risk of significant unintended negative economic, social or environmental consequences.

2. The proposal

2.1 Greater Manchester is proposing the following package of measures that delivers compliance in the shortest possible time, at the lowest cost, least risk and with the least negative impacts. They are:

- A charging Clean Air Zone which will target the most polluting commercial vehicles including older heavy goods vehicles, buses, coaches, taxis and private hire vehicles from the summer of 2021, and older polluting light goods vehicles from 2023. It has been assumed at OBC stage that the Clean Air Zone Charge would be £7.50 per day for taxis, private hire vehicles and light goods vehicles and £100 per day for heavy goods vehicles, buses and coaches. Vehicles subjected to the charge who do not pay would be issued with a Penalty Charge Notice and would be required to pay both that and the original charge.

	Buses, coaches and HGVs	£100 (from 2021)
	Taxis and private hire vehicles	£7.50 (from 2021)
	Vans and minibuses	£7.50 (from 2023)

- A Clean Freight Fund to provide financial support for the upgrade of light and heavy goods vehicles, minibuses and coaches, which will be targeted to support small local businesses, sole traders and the voluntary sector, registered in Greater Manchester. Initial work suggests that circa £59m Government funding will be required to support this fund.
- A Clean Taxi Fund, to support the upgrade of non-compliant Greater Manchester Licensed taxi and private hire vehicles. Initial work suggests that circa £28m Government funding will be required to support this fund.
- A Clean Bus Fund to provide, where possible, the retrofit of older engine standards to the less polluting Euro VI standard for those buses registered to run services across Greater Manchester. Initial work suggests that circa £30m Government funding will be required to support this fund.
- A fund to complete the upgrade of local authority owned vehicles to compliant engine standards. Initial work suggests that circa £21m Government funding will be required to support this fund.
- At least £25m investment in an additional 600 Electric Vehicle charging points.
- A dedicated programme of support and advice for businesses and communities to help them plan more sustainable and less polluting types of travel, including cycling and walking and public transport as part of their operating patterns and lifestyles.
- The potential establishment of Financial Conduct Authority regulated loans for those taking advantage of the Clean Vehicle Funds to support the management of near-term vehicle change costs and promote the longer-term savings that low emission vehicles can offer over time.

- 2.2 With full Government funding of the package of measures identified, our modelling anticipates that Greater Manchester will achieve compliance with the legal limits for NO₂ in 2024.
- 2.3 It is important to understand that the proposals outlined in the OBC are based upon the implementation of **all** measures identified. Should any of the measures not be funded, then Greater Manchester would be unable to meet the expected 2024 date of compliance.
- 2.4 Given the scale of the air pollution challenge, the impact of our proposals on residents will be positive; they will experience improved air quality and related health benefits. The measures will also contribute to wider policies to improve the performance of the Greater Manchester road network. Under the proposed measures residents would benefit from investment in Electric Vehicle charging infrastructure and promotion, programmes to support sustainable journeys, and from a newer, cleaner bus and taxi fleet.
- 2.5 The plan set out here does recognise that, if not managed as part of an overall programme, costs of complying with the Air Quality Standards Regulations would fall largely on businesses, sole traders and the public sector. This is a crucial consideration and has shaped the proposals for significant financial support to businesses to upgrade non-compliant vehicles. These proposals will now become the subject of intensive engagement and refinement with the business community to ensure that they support change in a manner that both promotes cost-effective operations and meets the primary objectives of reducing NO₂ emissions.

Euro 6 engine (2013 onwards)		Buses, coaches and HGVs
Diesel Euro 6 (2015 onwards) Petrol Euro 4 (2005 onwards)		Taxis and private hire vehicles
Euro 6 (2016 onwards)		Vans and minibuses

- 2.6 The proposals set out in this OBC present the best solution to addressing the reduction of NO₂ levels in the ‘shortest possible time’”, based on the evidence available to date. They will be refined through further work that is programmed to develop a more detailed understanding of the possible impact of the proposals on a range of groups, including low income workers, key business sectors such as retail and leisure, transport and distribution, and on small local businesses. More detailed engagement with Highways England is also required to ensure compliance across the Greater Manchester motorway network. A programme of research, analysis, public and stakeholder engagement and a thorough integrated impact assessment has commenced and will continue throughout 2019.

3. Financial Implications

- 3.1 The Greater Manchester authorities do not have the funding available to support the additional expenditure needed to address the NO₂ challenge. Therefore, the Government is required to fully fund all aspects of the Clean Air Plan including any shortfall in the operating costs.
- 3.2 In developing the OBC, it has been assumed that the Government's Implementation and Clean Air Fund will provide funding for all costs relating to the Clean Air Programme's implementation, and that the Government will underwrite any net operational deficit, as may be necessary, over the life of the Programme until compliance is achieved.
- 3.3 There is a considerable amount of uncertainty in the assumptions around revenue generation, given the relatively new nature of such policies in the UK. Therefore, the Clean Air Zone charge, penalties and forecasts included in the financial model as set out in the OBC are indicative at this stage. In common with other aspects in this OBC, they will be refined and informed by the forward work programme to the end of 2019.

4. Conclusion

- 4.1 Greater Manchester is taking a collaborative and collective approach to meet the Government's requirement to produce a feasibility study, identifying the measures that will deliver compliance with legal NO₂ limits in the shortest possible time. This approach will also provide wider benefits for the future sustainable growth, public health and local transport objectives set out in the Greater Manchester Strategy⁶.
- 4.2 The proposed measures and the supporting transport, economic and air quality modelling need to be further developed. This along with the planned engagement will inform the detailed design of the measures and will help to refine the proposals.
- 4.3 This will enable the development of an interim Full Business Case for further consideration by Greater Manchester Combined Authority and constituent local authorities, prior to submission to Government by the end of 2019.

⁶ <https://www.greatermanchester-ca.gov.uk/ourpeopleourplace>