



**Author/Lead Officer of Report:** *Cat Arnold, Policy & Improvement Officer*

**Tel:** 34529

---

**Report of:** *Laraine Manley*  
**Report to:** *Cabinet*  
**Date of Decision:** *13 December 2017*  
**Subject:** *Clean Air Strategy*

Is this a Key Decision? If Yes, reason Key Decision:-	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
- Expenditure and/or savings over £500,000		<input type="checkbox"/>		
- Affects 2 or more Wards		<input type="checkbox"/>		
Which Cabinet Member Portfolio does this relate to? <i>Transport and Sustainability</i>				
Which Scrutiny and Policy Development Committee does this relate to? <i>Economic and Environmental Wellbeing</i>				
Has an Equality Impact Assessment (EIA) been undertaken?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
If YES, what EIA reference number has it been given? EIA121				
Does the report contain confidential or exempt information?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

**Purpose of Report:**

To present for approval a new Clean Air strategy for Sheffield, setting out how the Council and its partners intend to improve air quality in the City.

**Recommendations:**

1. That Cabinet approves the Clean Air Strategy attached to this report as a statement of the Council's strategic approach to air quality.
2. That Cabinet notes that the implementation of any of the proposed actions may be subject to further decision making in accordance with the Leader's Scheme of Delegation.

**Background Papers:**

Appendix 1: Clean Air Strategy

Appendix 2: Equality Impact Assessment

Lead Officer to complete:-		
1	I have consulted the relevant departments in respect of any relevant implications indicated on the Statutory and Council Policy Checklist, and comments have been incorporated / additional forms completed / EIA completed, where required.	Finance: <i>Paul Schofield</i>
		Legal: <i>Louise Bate</i>
		Equalities: <i>Annemarie Johnston</i>
<i>Legal, financial/commercial and equalities implications must be included within the report and the name of the officer consulted must be included above.</i>		
2	<b>EMT member who approved submission:</b>	<i>Laraine Manley</i>
3	<b>Cabinet Member consulted:</b>	<i>Cllr Jack Scott</i>
4	I confirm that all necessary approval has been obtained in respect of the implications indicated on the Statutory and Council Policy Checklist and that the report has been approved for submission to the Decision Maker by the EMT member indicated at 2. In addition, any additional forms have been completed and signed off as required at 1.	
	<b>Lead Officer Name:</b> <i>Tom Finnegan-Smith</i>	<b>Job Title:</b> <i>Head of Strategic Transport and Infrastructure</i>
	<b>Date: 01 December 2017</b>	

<b>1.</b>	<b>PROPOSAL</b>
1.1	<b>Introduction and context</b>
1.2	Clean Air is a fundamental right – all our lives depend on it. Unfortunately, we face a significant threat from air pollution. Unlike noxious coal-induced smogs of the past, however, it is often an invisible killer, and the threat comes predominantly from the vehicles we use to get around (particularly diesel ones) and the energy we use to power our industry.
1.3	Across the UK, air pollution is a public health emergency. It has been linked to strokes, heart attacks, cancer, asthma and dementia. Research shows that children exposed to air pollution have smaller lungs and negative health effects for their whole life. It is estimated that there are 500 early deaths a year in Sheffield linked to air pollution.
1.4	Government have delayed making any significant intervention on air quality but the UK has been breaking EU law on Nitrogen Dioxide (NO <sub>2</sub> ) gas since 2010. Levels in Sheffield reflect the national situation – we are in breach of EU limits which should have been met by 1st January 2010.
<b>1.5</b>	<b>The Air Quality Problem</b>
1.6	We collect data on air quality from both national government (DEFRA <sup>1</sup> ) and from our own monitoring stations.
1.7	Nitrogen Dioxide <sup>2</sup> (NO <sub>2</sub> gas) is currently of particular concern – and is the primary focus of this strategy – because, in common with many other parts of the UK, Sheffield is in breach of EU legal limits which should have been met by <b>1<sup>st</sup> January 2010</b> . DEFRA’s data indicates that Sheffield has roads where NO <sub>2</sub> level in 2017 exceeds the legal limit <sup>3</sup> . NO <sub>2</sub> level on these roads in 2017 is <b>53µg/m<sup>3</sup></b> . 40µg/m <sup>3</sup> is the legal limit.
1.8	Fine particulate matter dust (PM <sub>10</sub> or PM <sub>2.5</sub> ) is also an issue for Sheffield because, although the annual averages are significantly below the EU threshold, the <b>daily</b> average level is higher on more days per year at some locations than is acceptable by EU standards. Crucially, in addition, there is no safe limit for this pollutant.
1.9	The key transport corridors into and out of the city centre are of particular concern. In addition, the train station is an area of high pollution. This is primarily caused by diesel trains as well as taxis at the station.
1.10	Road transport accounts for 50% of the nitrogen oxides emissions, with a

<sup>1</sup> Department for Environment, Food and Rural Affairs

<sup>2</sup> Both NO<sub>x</sub> and NO<sub>2</sub> are referred to in this document. NO<sub>2</sub> is formed when NO<sub>x</sub> mixes with air. For the purposes of this strategy, the distinction between them is minimal.

<sup>3</sup> NO<sub>2</sub> level on some Sheffield roads in 2017 is **53µg/m<sup>3</sup>**. 40µg/m<sup>3</sup> is the legal limit. DEFRA (2017) *UK plan for tackling roadside nitrogen dioxide concentrations*  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/633022/air-quality-plan-detail.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633022/air-quality-plan-detail.pdf)

	<p>further 35% from industrial sources and the rest coming from domestic and commercial buildings. Sheffield’s main polluting industrial process emissions are already tightly regulated, meaning that – although we cannot lose sight of this source of pollution– tackling the pollution caused by road traffic is the logical priority for improving air quality in the city. In addition, air pollution is very localised and the fact that people are in cars and other vehicles, walking along and living next to roads mean that the exposure of most people in their daily lives is to tailpipe emissions. The most significant source of transport pollution is emissions from diesel vehicles.</p>
1.11	<p>Some of Sheffield’s worst pollution hotspots are around schools. Research shows that children exposed to air pollution could be stuck with smaller lungs and negative health effects for life. Our vision is for children to have the best start in life, and this is being affected by their exposure to air pollution.</p>
1.12	<p>Finding solutions to improve Sheffield’s air quality is inherently connected with addressing other challenges the city faces (such as congestion and the need to help our population realise the health benefits of being more active), and grasping the opportunities it has to grow its economy and to embed its position as the Outdoor City on the edge of the Peak District.</p>
1.13	<p><b>How do we solve Sheffield’s air quality problem?</b></p>
1.14	<p>The Clean Air Strategy that is attached to this report as Appendix 1 sets out the following vision:</p> <p><i>We want the air in Sheffield to be safe to breathe, regardless of where people live, work or visit. We will work together to tackle the sources of air pollution and we will create a healthy, thriving city where many more journeys are made using active travel and low emission public transport.</i></p>
1.15	<p>Whilst the problem of air pollution, and nitrogen dioxide gas in particular, is a UK-wide issue that is facing many cities, we must identify solutions that work for people in Sheffield.</p>
1.16	<p>Our city is unique in its geography. We are a city of hills which needs to be considered when finding solutions to encourage active travel. In addition to our city centre, we have thriving neighbourhoods which have amenities that provide opportunities for people to do short active journeys locally, but need to have strong connections between them.</p>
1.17	<p>We have busy road arteries which, as has been shown above, are a source of a lot of the air pollution in the city. We need to find ways to help people move into and out of the city quickly and easily but in ways that support our clean air ambitions.</p>
1.18	<p>Solving the problem of air pollution splits into two categories:</p> <ol style="list-style-type: none"> <li>a. Tackling the sources of pollution and</li> <li>b. Creating a city where people choose public transport and active travel more often, thereby reducing emissions, improving people’s health and</li> </ol>

	making the city easier to move around (reducing congestion).
1.19	There are detailed actions included as part of the Clean Air Strategy that is attached to this report. Some of the actions are summarised here.
	<b>Tackling the sources of pollution</b>
1.20	<ul style="list-style-type: none"> <li>• We will carry out a local <b>Feasibility Study</b> to determine if a Clean Air Zone is required in Sheffield; what area of the city it would cover; and the extent it would need to involve charging certain vehicle types.</li> <li>• We have no intention to charge private car-users.</li> <li>• We believe the plans set out in this document are sufficient to tackle poor air quality arising from Sheffield’s taxi fleet without the need to consider charging.</li> <li>• The Study will actively consider and test the effect of charging the largest and most polluting vehicles such as buses, coaches, HGVs and OGVs, for driving through a Clean Air Zone.</li> </ul>
1.21	<ul style="list-style-type: none"> <li>• We will <b>consider the effects and impacts</b> on local residents, disadvantaged groups and businesses to ensure that we support everyone with the shifts we need to make better air for everyone.</li> </ul>
1.22	<ul style="list-style-type: none"> <li>• We will consult with the city to <b>better understand what people think</b> about the specific interventions we could implement to improve air quality. This will take place in early 2018.</li> </ul>
1.23	<ul style="list-style-type: none"> <li>• We will <b>work in partnership with the bus companies to improve the bus fleet and reduce emissions</b> through replacement low-emission buses or retrofitting vehicles with cleaner engine technology.</li> </ul>
1.24	<ul style="list-style-type: none"> <li>• We will <b>consult and work with the taxi operators</b> and other interested parties, to ensure we have the right standards in place, taking into account the wider implications of any changes that may be needed; <b>seek investment from Government</b> for a fund to help taxi operators/owners to improve their vehicles; and we will <b>take action to reduce idling of taxis</b>, particularly at the Sheffield Midland Station, which is the city’s worst air pollution hotspot.</li> </ul>
1.25	<ul style="list-style-type: none"> <li>• We will adopt a procurement approach that promotes the <b>use of lower emission vehicles</b> across our Sheffield City Council fleet.</li> </ul>
1.26	<ul style="list-style-type: none"> <li>• We will reinforce and strengthen our Sheffield Air Aware Campaign to help people to <b>choose lower emission vehicles</b>.</li> </ul>
1.27	<ul style="list-style-type: none"> <li>• We will consider, as part of our Feasibility Study and Clean Air consultation, specific schemes to <b>support people on lower incomes</b> to change to lower emission vehicles, particularly where their job or responsibilities require unavoidable and frequent use e.g. carers.</li> </ul>
1.28	<ul style="list-style-type: none"> <li>• We will roll out <b>Anti-Idling Zones around schools and other sensitive locations</b>.</li> </ul>

1.29	<ul style="list-style-type: none"> <li>We will continue to actively, assertively and consistently <b>lobby government</b> to reverse its decision to abandon plans to electrify the Midland Mainline.</li> </ul>
1.30	<ul style="list-style-type: none"> <li>We will raise awareness of the importance of using <b>authorised 'smokeless' fuel</b> in wood-burning stoves.</li> </ul>
1.31	<ul style="list-style-type: none"> <li>We will <b>continue to work with Highways England to deliver solutions to M1 emissions.</b></li> </ul>
1.32	<ul style="list-style-type: none"> <li>We will <b>build the ambition of clean air</b> into our approaches to transport, economy, housing, planning and health and wellbeing.</li> </ul>
	<b>Helping people choose public transport and active travel</b>
1.33	<ul style="list-style-type: none"> <li>We will commission a <b>Clean Air Community Champion Scheme</b> where volunteers can pledge to make simple changes that will make Sheffield's air cleaner and help the people in their community to do the same.</li> </ul>
1.34	<ul style="list-style-type: none"> <li>We will establish a <b>20mph speed limit</b> across the city centre.</li> </ul>
1.35	<ul style="list-style-type: none"> <li>As part of the Transport Strategy, we will <b>set out a clear delivery plan to encourage further uptake of cycling and walking across the city.</b></li> </ul>
1.36	<ul style="list-style-type: none"> <li>We will <b>support the introduction of the first dockless bike scheme to Sheffield</b> to make it easier for people to choose cycling to get around.</li> </ul>
1.37	<ul style="list-style-type: none"> <li>We will develop a <b>new parking strategy, which will reflect our aims to manage parking demand and incentivise lower emission forms of travel.</b></li> </ul>
1.38	<ul style="list-style-type: none"> <li>We will secure the <b>maintenance and refurbishment of the existing Supertram</b> system over the next year and explore <b>the longer-term feasibility of extending the network.</b></li> </ul>
<b>2.</b>	<b>HOW DOES THIS DECISION CONTRIBUTE?</b>
2.1	This Clean Air strategy contributes to the Sheffield City Council Corporate Plan ambition for thriving neighbourhoods and communities, including our commitment to focus on "tackling air pollution by working with partners, local businesses and the general public to address traffic-related emissions".
<b>3.</b>	<b>HAS THERE BEEN ANY CONSULTATION?</b>
3.1	<p>We carried out a consultation on vehicle idling in Sheffield from July to August 2017. Over 1000 people responded to it, with the majority of the respondents in Sheffield agreeing that children and those vulnerable to the effects of air pollution should be protected from the sources of air pollution.</p> <p>We will consult with the city to better understand what people think about the specific interventions we could implement to improve air quality. This will take place in early 2018.</p>

<b>4.</b>	<b>RISK ANALYSIS AND IMPLICATIONS OF THE DECISION</b>
4.1	<u>Equality of Opportunity Implications</u>
4.1.1	<p>A full Equalities Impact Assessment is attached as Appendix 2. Overall, the Clean Air Strategy is expected to have a positive impact on the health and economic outcomes of everyone in the city. It should have a particularly positive impact the very young and the very old, those with disabilities and long-term health conditions and their carers, and pregnant women.</p> <p>It is possible that, depending on the outcome of the Clean Air Zone feasibility study, there may be some financial impacts on people on lower incomes and those in minority ethnic communities that need to be recognised and mitigated where possible. We will work closely with communities who may be affected by the changes in the strategy to ensure that we support everyone with the shifts we need to make better air for everyone.</p>
4.2	<u>Financial and Commercial Implications</u>
4.2.1	<p>There are no direct financial implications arising from this report as it presents a strategic approach to clean air rather than seeking authorisation for specific projects. As detailed operational plans are developed, each initiative within the strategy will be costed and will be brought for approval as appropriate. The detailed financial implications of those proposals will be set out in the relevant report which will be considered in the context of the funding available at the time.</p>
4.3	<u>Legal Implications</u>
4.3.1	<p>Under Part IV of the Environment Act 1995, Local Authorities are required to have regard to any national strategy on clean air which is published by the Secretary of State; and to review and assess air quality in their areas and to report against objectives for specified pollutants of concern, to the Department for Environment, Food and Rural Affairs (DEFRA).</p> <p>The Environment Act 1995 (Feasibility Study for Nitrogen Dioxide Compliance) Air Quality Direction 2017 set outs the obligation for Sheffield City Council to carry out a Feasibility Study in relation to tackling roadside nitrogen dioxide concentrations.</p> <p>Action to manage and improve air quality is required by European Union (EU) legislation. The Ambient Air Quality and Cleaner Air for Europe Directive (2008/50/EC) sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health including fine particulate matter (PM10 and PM2.5) dust and nitrogen dioxide (NO2) gas.</p> <p>Sheffield City Council declared an Air Quality Management Area (AQMA) across</p>

	<p>the whole of the urban area of the City for Nitrogen Dioxide (NO<sub>2</sub>) gas and Particulate Matter (PM<sub>10</sub>) dust in March 2010. This declaration was based on the evidence reported in the formal Detailed Assessment (2008) and Updating and Screening Assessment (2009) reports respectively, to DEFRA, showing areas of Sheffield where these pollutants are likely to breach national and EU legislation.</p> <p>This meant that the Council was required to produce an Air Quality Action Plan to cover the period (up) to 2015, with the aim of improving Nitrogen Dioxide (NO<sub>2</sub>) gas and fine Particulate Matter PM<sub>10</sub> levels, such that the annual limit of 40µg.m<sup>-3</sup> for NO<sub>2</sub> and the daily limit of 50µg.m<sup>-3</sup> for PM<sub>10</sub> (which is not to be exceeded more than 35 times a year) do not continue to be breached.</p> <p>Not achieving the air quality targets nationally means not complying with EU law and consequently, this is a risk for the Council. There is the potential for the UK government to be fined if EU limit values are exceeded. Potentially the fines which can be imposed are significant. The reserve powers in the Localism Act to passport EU fines to local authorities and public bodies (where they have failed to take action when they could) is significant and helps to highlight the need for a clear line of sight between EU obligations and Local Authority responsibilities to improve air quality and provide clarity on the role local authorities play. The government however, can only pass the fines on if they can show that a local authority has not taken appropriate steps to comply with EU law.</p> <p>Failing to do so, would mean SCC is in breach of the above legislation.</p>
4.3.2	<p>There are no other legal implications for the Council arising from this report. Where appropriate, further approvals or consents may need to be obtained in order to develop and implement specific proposals contained within the Strategy.</p> <p>Where the proposal relates to a licensing function such approval will need to be obtained from the relevant Council committee and in certain circumstances external approval may be required, for example from the Traffic Commissioner.</p> <p>Where further approvals are required in accordance with the Leader's Scheme of Delegations, implementation of the proposal in question will be subject to further decision making and the legal implications will be considered fully at that time.</p>
<b>5.</b>	<b>ALTERNATIVE OPTIONS CONSIDERED</b>
5.1	<p>1) The do-nothing option: based on Defra's analysis, even if technological improvements lead to acceptable air quality levels by 2025 (the earliest possible point according to Defra), that could have led to 4000 early deaths in Sheffield in addition to a significant cost to the city's economy over the next</p>

	<p>four years. Further, a rapid take-up of electric and better petrol cars by that point which might improve the air quality situation will still not address the congestion and obesity challenges which will be likely to have become worse without appropriate intervention. Therefore the do-nothing option is not a feasible option, either legally (in terms of becoming compliant with statutory limits) or in terms of realising health and economic benefits for Sheffielders.</p>
<b>6.</b>	<b>REASONS FOR RECOMMENDATIONS</b>
6.1	<p>Across the UK, air pollution is a public health emergency. It has been linked to strokes, heart attacks, cancer, asthma and dementia. Research shows that children exposed to air pollution have smaller lungs and negative health effects for their whole life. It is estimated that there are 500 early deaths a year in Sheffield linked to air pollution. This Clean Air Strategy sets out an approach to the problem which will tackle the sources of air pollution quickly and will help people to choose public transport and active travel, making Sheffield a healthy thriving city with clean air for everyone.</p>

This page is intentionally left blank