Why produce an Air Quality Action Plan?

Oxford City Council has a statutory duty to review and assess air quality against national air quality standards and objectives. If an air quality objective is not likely to be met an Air Quality Management Area (AQMA) must be declared for the relevant pollutant.

Oxford City Council has declared an AQMA covering the whole of Oxford, including a number of hot-spots where air quality fails to meet the annual mean objective for the pollutant nitrogen dioxide ($\text{NO}_2$).

Figure 1: Boundary of AQMA and Hot-Spot locations

Where a local authority has declared an AQMA it is required to develop an Air Quality Action Plan (AQAP) aimed at improving air quality within the area by reducing levels of the pollutant of concern.

This new draft AQAP proposes possible actions to improve the air quality in Oxford by considering an integrated approach taking account of the climate and air quality impacts of emissions.
What are the recent trends in Air Quality?

The chart below shows recent trends in air quality measured in central Oxford, a mixed picture, some improvements followed by recent increases.

![Figure 2: Trends in Air Quality in central Oxford](image)

What’s causing the problem?

Urban air pollution is a result of a complex mixture of emissions from a range of sources. Road transport is the main source of public exposure and is responsible for up to 70% of air pollution in urban areas.

In line with the national picture the major traffic emissions in Oxford are from diesel powered vehicles. Diesel cars are more popular than ever due to lower carbon dioxide ratings, but emission controls don’t work well in urban driving conditions where stop-start traffic is common. Emissions standards for new vehicles have been relied on to cut air pollution from road traffic, but they will not provide the emissions reductions
How serious is the problem?

"Poor air quality reduces the life expectancy of everyone in the UK by an average of seven to eight months and up to 35,000 people a year may die prematurely because of it. Air pollution also causes significant damage to ecosystems. Despite these facts, the UK is failing to meet a range of domestic and European targets to control air pollution." December 2010: Committee on the Medical Effects of Air Pollution (COMEAP)

Is the problem the same in all areas of the city?

Emissions and exposure depend upon location. For instance in central Oxford where bus traffic dominates, buses, coaches and heavy vehicles may contribute between 70-90% of vehicle generated emissions. In other streets with a mix of vehicle types, Cars, Taxis & Light Goods vehicles contribute over 70% of these emissions.

What can be done?

In line with Environmental Policy directives from the EU and UK Government, Oxford City Council has developed a Strategy to provide a framework for integrating programmes to reduce carbon and air pollution emissions across the city. The aim is to maximise the benefits of tackling emissions that contribute to climate and air pollution effects in an integrated and co-ordinated way.

The objective of the Air Quality Action Plan (AQAP) is to follow an integrated approach, to:

"Pursue the achievement of air quality standards and objectives across the city, and reduce carbon emission from transport activity"
What about targets and objectives?

A target for Carbon Dioxide (CO₂) emissions, along with Nitrogen Oxides\(^2\) (NO\(_x\)) and Particulate matter (PM) emissions, has been set, and reflects the city's Sustainability Strategy and the need to meet air quality objectives. These targets are based on emissions reductions from surface transport across the city and are as follows:

- a 35% reduction in transport CO₂ emissions from 2005 to 2020;
- a 50% reduction in transport NO\(_x\) and PM emissions from 2005 to 2020.

(NO\(_x\) refers to all Oxides of Nitrogen, including Nitric Oxide NO, and NO\(_2\))

In addition to these emission-based targets we also propose a concentration based air quality target for the AQAP in relation to the national air quality standards and objectives as follows:

- achieve annual mean Nitrogen Dioxide (NO\(_2\)) concentration levels of 45 µg/m\(^3\) by 2020 and 40 µg/m\(^3\) by 2025.

What are the main themes of the AQAP?

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<td>A city-wide sustainable travel strategy</td>
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<td>Support for the uptake of low and zero emission vehicles</td>
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<tr>
<td>Reducing freight emissions from Light Goods Vehicles and Heavy Goods Vehicles</td>
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<tr>
<td>Planning for sustainable transport</td>
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<td>Managing the Council's transport emissions</td>
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How does this link to other policies?

Core Strategy objective
"Promote a reduction in car use, minimise the impact of traffic, and encourage walking, cycling and the use of public transport."

Local Transport Plan (LTP) (5 out of 9 objectives support measures to reduce transport generated emissions)
- Reduce congestion
- Reduce carbon emissions from transport
- Improve air quality, reduce other environmental impacts and enhance the street environment
- Develop and increase the use of high quality, welcoming public transport
- Develop and increase cycling and walking for local journeys, recreation and health

Within these objectives in the LTP the key actions being pursued are:
- Promoting mode shift to low carbon transport through travel planning, behavioural change programmes and investment in supporting infrastructure;
- Supporting the uptake of low and zero emission vehicles mainly through supporting the relevant infrastructure such as electric vehicle (EV) charging points;
- Reducing bus emissions including an anti-idling policy and the bus Low Emission Zone (LEZ) in central Oxford;
- Managing emissions from the County's own transport activities.
Oxford Area Strategy (part of LTP)
The strategy seeks to support Oxford’s Community Strategy with regards to economic development and quality of life in the city. Within the Oxford Area strategy the key actions are:

- Park and ride and bus development - aiming to reduce car borne trips into and around the city;
- Improving rail services - to encourage greater rail access to the city by travellers;
- Traffic management schemes - to help reduce congestion and improve traffic flow;
- Walking and cycling strategies - improving the environment for walking and cycling, and encouraging greater use of these modes for travel to work and education;
- Reducing vehicles emissions - focused mainly on the bus LEZ, but also committing to exploring measures to reduce emissions from freight vehicles;
- Promoting travel choice - through travel planning and behavioural change programmes.

This range of policies and actions in the LTP supports the existing AQAP, provides the basis for measures in a new AQAP and contributes to the objective of reducing transport emissions.

We recommend that the AQAP is:

- an integrated air quality and low carbon transport plan for Oxford;
- adopted by both the City and County Councils;
- formally a part of the LTP Oxford area strategy;
- primarily delivered through the LTP with supporting policy and actions by the city
What Can You Do?

We would like to hear from you about what you think of the proposals and whether or not you consider there are other options that could contribute to improving the air quality in Oxford.

Electronic copies of the draft action plan, booklet and questionnaire are available on this link, under Air Quality Action Plan 2013 http://consultation.oxford.gov.uk

Please consider completing the on-line questionnaire by 17th September 2013.

Paper copies available at:
Customer Contact Centre,
St Aldate’s Chambers,
St Aldate’s, Oxford OX1 1DS

Electronic copies of the Local Transport Plan (LTP3) summary document produced by Oxfordshire County Council are available from:
http://www.oxfordshire.gov.uk/cms/public-site/local-transport-plan