

To: Scrutiny Committee
Date: 6 October 2021
Report of: Head of Corporate Strategy
Title of Report: Annual Air Quality Status Report 2020

Summary and recommendations	
Purpose of report:	Provide overview of the Annual Air Quality Status Report
Key decision:	No
Cabinet Member with responsibility:	Councillor Tom Hayes, Deputy Leader; Cabinet Member for Green Transport and Zero Carbon Oxford
Corporate Priority:	None
Policy Framework:	None
Recommendation(s): That the Committee resolves to:	
1. Note the report.	

Appendices	
Appendix 1	Air Quality Annual Status Report 2020

Introduction and background

1. Oxford City Council has a statutory duty to submit an Air Quality Annual Status Report to Defra annually to report on air quality in the preceding calendar year. The reports are published on the Council's website annually.
2. The report provides an overview of all monitoring data for the year and provides an update against air quality actions set out in the councils recent Air Quality Action Plan 2021-2025.

Report findings

3. The Annual Status Report 2020 outlines the result of air quality monitoring undertaken across the city of Oxford in 2020. Data for a full year of monitoring is required in order to report on the annual mean and Oxford City Council annually

publishes all air quality data on its [website](#) as well as on <https://oxfordshire.air-quality.info/>;

4. Oxford City Council currently operates an air quality monitoring network that consist of a total of 74 sites. 71 sites use passive monitoring (diffusion tubes) and three sites using automatic (continuous) monitoring;
5. Of the 71 sites that use diffusion tubes, 4 locations correspond to new monitoring sites (New Inn St, St Michaels St, Market St, Blackbird Leys), and the remaining 67 sites are sites where air quality had already been monitored in the previous year;
6. Results from the air quality monitoring conducted during 2020 indicate substantial decreases (between 14-45% depending on the location) of Nitrogen Dioxide (NO₂) levels in all the monitoring locations in the city. In 2020, Oxford city witnessed average reductions of NO₂ and Particulates (PM₁₀ and PM_{2.5}) in the city of Oxford of 29%, 19% and 22% respectively;
7. The monitoring location with the highest annual mean for NO₂ in 2020 was DT55 - St. Clements Street/The Plain, with a value of 36 µgm⁻³. This is a value which is 10% below the current limit value for this pollutant (40 µgm⁻³) , and represents a decrease of 32% of the NO₂ levels at this location, when compared with data from the previous year (53 µgm⁻³);
8. For the first time since air quality monitoring started in Oxford, the city was fully compliant with all (short and long term) UK air quality objectives as well as with WHO recommended guidelines for NO₂, PM₁₀, and PM_{2.5}. Hence, no air quality hotspot was identified in 2020 for these pollutants;
9. The level of air pollution reductions observed over the above period have to do with significant changes in traffic emissions. The successive lockdown restrictions that were caused by the COVID-19 pandemic, ended up significantly affecting traffic levels and were imposed on the city of Oxford and its residents throughout 2020;
10. Under the recently adopted Air Quality Action Plan (AQAP) 2021-2025, Oxford made the commitment to adopt its own (much more stringent) annual mean local target for NO₂, and which is set at 30 µgm⁻³. The monitoring results obtained in 2020, show that only 4 locations (out of the 74) were in breach of this new local target. Those locations were: Hollow Way Road, St Clements, High Street and Cutteslowe Roundabout;
11. Despite the clear positive impacts of the successive lockdown restrictions on traffic levels and air pollution in 2020, the fact is that there is still no evidence of a threshold for health effects from air pollution and so local authorities should always seek to lower population-level exposure and reduce everyone's exposure to air pollution.
12. Continued action is therefore still needed to reduce our emissions from transport, homes and industry. We need to ensure that air quality levels continue to reduce significantly throughout the city, and that Oxford's air is not just cleaner, but safer to breathe.
13. Oxford City Council, and Oxfordshire County Council continue to work together on the delivery of a Zero Emission Zone (ZEZ) in Oxford city centre, and a ZEZ pilot is expected to launch on February 2022. The ZEZ aims to tackle Oxford's air pollution and protect the health of everyone who lives in, works in and visits the city.

Actions to Improve Air Quality

14. Oxford's new Air Quality Action Plan 2021-2025 (AQAP) focuses on measures the City Council has the ability to address, but includes measures that we can influence, or work in partnership with others to deliver. Effective action require co-operation from all sectors including transport, construction, business and commerce, and daily choices made by every single transport user. Oxford's AQAP recognises that the City Council cannot act in isolation in order to deliver a comprehensive package of measures without engagement and delivery from a wide range of stakeholders.
15. The following are actions that Oxford City Council has taken over the last reporting year (from July 2020 to June 2021) to improve air quality in the city despite the impact of the COVID-19 pandemic in disrupting plans. The list below is presented in chronological order:
 - I. Agreed, in July 2020 and together with Oxfordshire County Council, for work to be accelerated, where feasible, on Connecting Oxford, the Zero Emission Zone and the wider sustainable and active travel programme.
 - II. Announced in September 2020, the winning primary school for the school banner competition to raise awareness of air pollution. Schools across Oxford were invited in March 2020 to take part in a competition, organised by the City Council and Oxford Friends of the Earth to create a banner raising awareness about the effects of air pollution, and to promote sustainable transport on the school run. The competition is part of the City Council's STOP (Schools Tackling Oxford's Air Pollution) project which aims to raise awareness of the main sources and health effects of air pollution emissions among the school community ([link to press release](#));
 - III. Supported Oxfordshire County Council's successful delivery of the new Street Tag app in October 2020. The app forms part of County Council's active travel plans to increase exercise and improve air quality in Oxfordshire. Street Tag is aimed at children, parents' schools, leisure venues and community groups. It will also involve the use of outdoor spaces and school staff. ([link to press release](#));
 - IV. Organised and hosted Oxford's first youth climate summit in November 2020. The meeting has supported participating young people to learn more about climate breakdown and its impacts on the Global South, explore the topic of lobbying for change and inform the council's plans on climate action. The development of a youth climate summit was one of Oxford City Council's commitments, made as a result of 2019's Citizens Assembly on Climate Change ([link to press release](#));
 - V. Supported the delivery of the 3rd edition of Oxford's EV summit in December 2020. The 2020 panel line up was focused on UK Charging Infrastructure, International Charging Infrastructure, Original Equipment Manufacturers (OEMs), Two Wheels, Investment, Electric Buses, Sustainability and Research. The event was delivered remotely due to the COVID-19 pandemic, and was hosted by Oxford University at the Said Business School ([link to website](#)).

- VI. Developed and delivered a [new Air Quality Action Plan](#) for the City of Oxford, which was approved at cabinet meeting in January 2021. The new AQAP outlines the complete list of 30 actions that will be delivered by the City and its partners to improve air quality in Oxford City from 2021 to 2025. It also voluntarily sets a new lower target for NO₂, one which is tighter than the Government's own. ([link to press release](#));
- VII. Organised and delivered, in February 2021, several online show and tell sessions to try to understand city centre businesses' needs, to help them adapt to the Zero Emission Zone Pilot which will be launched in August. These activities are part of on-going work with Futuregov on user research to build a qualitative understanding of businesses operations and the challenges they experience to reduce their emissions following a user-centred design process. This project forms part of the £122,500 from DEFRA Air Quality Fund that was secured specifically to work with businesses in the city centre on how to adopt zero emission delivery and servicing solutions for their business ([link to press release](#));
- VIII. Secured in March 2021 £162,500 from the Department for Environment, Food, and Rural Affairs (DEFRA) Air Quality Fund for the delivery of a new Air Quality community website to help raise awareness of air pollution across Oxfordshire, working in partnership with neighbouring district councils - Cherwell, West Oxfordshire, South Oxfordshire and Vale of White Horse, along with Oxfordshire County Council. ([link to press release](#));
- IX. Secured in March 2021 £45,000 from the Department for Environment, Food, and Rural Affairs (DEFRA) Air Quality Fund for the delivery of a citywide behaviour change campaign that will draw attention to the importance of the domestic combustion sector and how it contributes to air pollution levels in Oxford. ([link to press release](#));
- X. Introduced in March 2021 the first purpose built, fully integrated electric refuse collection vehicle (eRCV) on the streets of Oxford, providing emission free waste collection services across the city. The vehicle is the latest in its 339-strong fleet to be converted to electric, thanks to funding from [Energy Superhub Oxford](#). The project is helping Oxford Direct Services (ODS) to convert 25% of its fleet to electric by 2023. It is already well on its way to meeting this target, with 51 electric vehicles in operation and a further eight vehicles on order. ([link to press release](#));
- XI. Saw in March 2021 the approval by City and County Council's cabinets of the final proposal for a [ZEZ pilot](#) in Oxford City centre, which will now start in February 2022. The ZEZ pilot will be based on a road user charging scheme where Zero emission vehicles will be able to drive in the zone free of charge. The work was developed in partnership with the Local Transport Authority – Oxfordshire County Council. Throughout 2020/2021, both councils have also continued to develop work towards the expansion of the ZEZ to the entire city, which is expected to occur in full by 2030 ([link to press release](#));
- XII. In March 2021, supported in principle Oxfordshire County Council's trial of new Low Traffic Neighbourhoods (LTNs) within the Cowley area in Oxford and worked with the transport authority to improve their implementation. A Low Traffic Neighbourhood is an area where through traffic is prevented by the use of "traffic filters" which can be either planters or bollards, so that

- residents can enjoy a quieter neighbourhood and feel safer when they walk, cycle or go by wheelchair. ([link to press release](#));
- XIII. Supported Oxfordshire County Council's trial in March 2021 of various experimental school streets schemes with the aim to improve road safety to help boost cycling and walking and improve air quality. The schemes made use of temporary barriers, some signs and a few volunteers, to close the road outside a school to motor vehicles for a short period of time either side of the start and end of the school day. Anyone walking or cycling can pass through the barriers, while drivers are advised of alternative routes. Emergency vehicles, blue badge holders and anyone who lives within the School Street are also allowed through. ([link to press release](#));
- XIV. Presented Oxford's first Action Plan for bringing about a net zero carbon city by 2040 or earlier in March 2021 — ten whole years ahead of the Government's national legal target. The Net Zero Oxford Action Plan sets out the actions the City Council will be taking directly, as well as those in which it is seeking to partner with others. It references how it will engage residents, businesses and other organisations to eliminate Oxford's contributions to climate change, and how it will use its influence with Government. The Action Plan is accompanied by the Council's new Carbon Management Plan that sets out how it will achieve zero carbon emissions across its estate and operations by 2030 or earlier. The Plan feeds into the conclusion of a new Sustainability Strategy set to take place in 2021. ([link to press release](#));
- XV. Initiated the development of Oxford's first Urban Tree Strategy in March 2021, which will be created to maximise the benefits trees have on the local environment and communities. The new strategy will also play a part in helping the city reduce air pollution levels and achieve net zero carbon by 2040. ([link to press release](#))
- XVI. Submitted to DEFRA, in April 2021, the final report of a DEFRA funded air quality project involving the testing of low cost innovative Air Quality sensors to map air pollution and human exposure in Oxford. This project was delivered in partnership with local group [Ox-Air](#) ([link to press release](#));
- XVII. Started a pilot project in June 2021 to test and demonstrate the effectiveness of e-cargo bikes for deliveries in Oxford's covered market and to support and expedite their uptake ([link to press release](#))
- XVIII. Developed , in June 2021, a green recovery plan with measures for the city and that included the delivery of: Pedestrianisation trials at St Michaels and George Streets; Allowing for parking at Oxford's five park and rides to be free throughout August; Introducing a one way pedestrian flow system in Oxford city to help maintain social distancing; Installed 130 new bike parking at the park and rides and in the city centre; Freed up pavement space and created designated rest areas to keep pedestrians moving in the city centre's busy and narrow streets.

Monitoring and Assessment

16. Under the Environment Act 1995, local authorities have the duty to produce an air quality annual status report, and to submit it to DEFRA for appraisal. The annual submission of this report is key to report progress of all the air quality measures that are expected to be deliver by the city's Air Quality Action Plan and to assess

their impact. This will allow the AQAP to be further developed and ensure transparency and accountability.

17. This AQ ASR will be shared by the City Council with the largest number of citizens and hence it is important for the report to be given the most robust scrutiny through the Council's scrutiny function.

Environmental Impact

18. This AQ ASR reports on the progress of all the city's air quality measures and targets which were developed in the city's AQAP by Oxford City Council and its partners to reduce emissions from a range of the Council's programmes that are designed to reduce impacts on climate and air pollution.

Equalities Impact

19. Air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are often the less affluent areas. Poor air quality affects people in different groups differently. Minority groups and low income households might be disproportionately impacted by poor air quality.
20. Older people have around twice the level of risk of hospitalisation and death associated with poor air quality and babies and children are also particularly vulnerable. People with pre-existing asthma or chronic obstructive pulmonary disease (COPD) are very vulnerable to air pollution. Similarly, obese people (children in particular) are also at risk.
21. While nationally levels of air pollution are often highest in areas of deprivation, this same pattern is not seen in Oxford, mainly due to the majority of these areas being located away from high levels of traffic, such as estates. However there are high levels of air pollution on routes used by children and in areas with high levels of young people, such as the city centre which has a large student population.
22. This Air Quality Annual Status Report informs on Oxford City Council's progress in the delivery of the range of air quality measures set out in our recent Air Quality Action Plan 2021-2025, and which are meant to reduce air pollution levels across the whole city, contributing to reduce health inequalities.

Report author	Pedro Abreu
Job title	Air Quality Officer
Service area or department	Environmental Sustainability
Telephone	01865 249811
e-mail	pabreu@oxford.gov.uk