



Broxtowe
Borough
COUNCIL

Improving the Air We Breathe



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Introduction

The aim of this document is to report on new measures which Broxtowe Borough Council (the Council) can undertake to further improve the air quality within the borough.

An Air Quality Task and Finish Group was created, which included officers from a variety of departments within the Council to ensure that there was a broad range of knowledge. This resulted in an action plan comprising of a variety of suitable measures which would contribute to an improvement in air quality. The measures are outlined in Table 2.1 of this report.

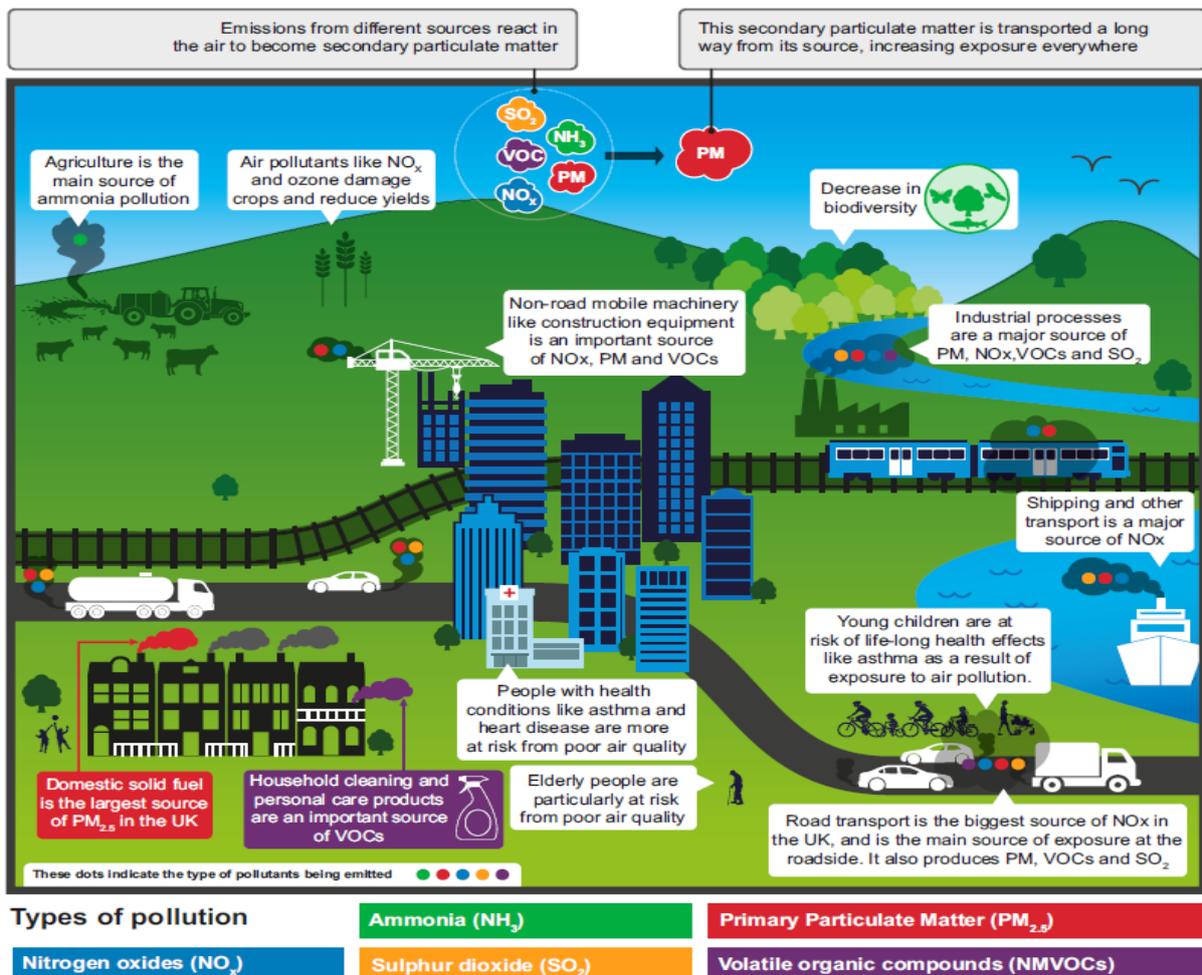
As well as new measures, this report also provides an overview of all the actions that the Council is undertaking to improve air quality within the borough. This report is supplementary to the Annual Status Report (ASR), which is the main air quality report submitted to central government. The ASR details all the measures that are being taken to improve air quality in the borough by the Council along with Nottinghamshire County Council and other partner agencies. The ASR is updated annually and has to be approved by the Department for Environment, Food and Rural Affairs (DEFRA). The action plan in this report will also be updated annually.

1. Air Quality in Our Area

What is Air Pollution and where does it come from?

Air pollution is generally defined as any type of particulate (dust) or gaseous substance (e.g. Oxides of Nitrogen (NO)) that is emitted into the atmosphere due to the combustion of fuels such as coal, oil, gas, petrol, diesel and the burning of wood or natural gas from domestic central heating boilers or power stations. When these fuels are combusted, they are emitted into the atmosphere.

The sources of air pollutants and their effects.



Source – Clean Air Strategy 2019, DEFRA

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf

Air Quality in the Borough of Broxtowe

The main air quality issue within the Borough is due to the main trunk roads, the M1 and A52, which are heavily used, particularly by commuters. Residential properties are situated alongside both roads.

The main pollutants of concern within the Borough are Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀ and PM_{2.5}). PM₁₀ are particles that are 10 microns to 2.5 microns in size, and PM_{2.5} are particles that are 2.5 microns or less.

The Council has 43 Nitrogen Dioxide diffusion tube monitoring sites throughout the Borough. See Appendix A for the monitoring sites in 2019. The 2019 NO₂ results show that the pollution levels are below the National Air Quality Objective (NAQO) of 40µg/m³ for all of the monitoring locations throughout the Borough. Although the objectives are being met, it is very important to continue to make improvements as poor air quality is a public health concern.

In respect of particulates, the modelled background level provided by Defra for the Borough of Broxtowe indicated levels between 8µg/m³ and 11µg/m³ for 2019, with the annual mean for 2019 being 9.73µg/m³. The World Health Organisation (WHO) guideline level for PM_{2.5} is 10µg/m³.

However, research has shown that there can be harm to health at concentrations of Particulate Matter and Nitrogen Dioxide below the current EU and UK limit values. Therefore, the Council is working towards reducing the NO₂ and PM levels further by taking the measures shown in Table 2.1.

2. Actions to improve Air Quality

Following the meetings of the Task and Finish Group, 30 new measures have been identified to further improve the air quality within the borough. The new measures are displayed in Table 2.1 of this report. Table 2.1 also includes previous measures that are currently being implemented or are on-going from the 2020 Annual Status Report.

It is proposed that the measures will be reviewed and reported to members on a regular basis in order that the progress made can be monitored.

Although the measures in the tables below are allocated to officers within the Council to undertake, the public can also become involved in improving air quality. Appendix B of this report details how the public can get involved.

Table 2.1 – New Measures and Progress on Current Measures to Improve Air Quality

Measure	Measure	Responsible Officer	Target Date	Comments
1	To investigate providing Supplementary Planning Guidance or a Supplementary Planning Document relating to 'Air Quality and Emissions Mitigation Guidance for Developers'	Planning Policy Department – Planning Policy Team Leader	2023	<p>Possible measures could involve:</p> <ul style="list-style-type: none"> • Supplementing Part 1 of Policy 20 of the Local Plan to provide further guidance on what reasonable steps are required in order to encourage the use of public transport. • Supplementing Part 2 of Policy 20 of the Local Plan to say what would constitute a “significant deterioration” in air quality • Supplementing Part 3 Policy 20 of the Local Plan to set a ratio of Electric Vehicle Charging Points to new dwellings. • Promoting Travel Choices – Encouraging developers to provide occupants with ‘travel packs’ regarding public transport, walking and cycling to all new built homes.
2	To contribute to Nottinghamshire Air Quality Strategy (NAQS)	NCC/NCiC/ Borough and District councils	Complete in 2019 2020 2020	<ul style="list-style-type: none"> • Strategy reviewed and rewritten; and the draft was approved at the Nottinghamshire County and City Health & Wellbeing Board in 2019. • The NAQS will be published online in 2020. • The finished format of the NAQS will be published and sent to all Nottinghamshire Councils to be endorsed by their portfolio holders in 2020.
3	To promote the Nottinghamshire Air Quality Strategy	Public Protection – Environmental Health Technical Officer	On-going	<ul style="list-style-type: none"> • The NAQS will be promoted on BBCs website once it has been endorsed by portfolio holders in 2020.
4	Inspection of Permitted Processes	Public Protection – Environmental Health Technical Officer	On-going	<ul style="list-style-type: none"> • Annual inspections of permitted processes were undertaken; all permitted processes were risk rated with the higher risk processes incurring a higher annual subscription fee. The risk rating did not change in 2019, and all permitted processes were fully compliant.
5	To ensure that all Permitted Processes (where feasible) continue to be rated as 'low environmental risk'	Public Protection – Environmental Health Technical Officer	On-going	<ul style="list-style-type: none"> • Progress will be updated as appropriate.

Measure	Measure	Responsible Officer	Target Date	Comments
6	To inspect Crushers that are used within the Borough on demolition sites when notifications are received to ensure compliance with the process permit and ensure good housekeeping is being maintained	Public Protection – Environmental Health Technical Officer	On-going	<ul style="list-style-type: none"> Progress will be updated as appropriate.
7	To ensure that all Dust Management Plans are reviewed and approved during the planning application stage	Public Protection – Environmental Protection Officers	On-going	<ul style="list-style-type: none"> Progress will be updated as appropriate.
8	To reschedule the dry recycling waste rounds to reduce fuel consumption and improve efficiency	Transport and Stores Manager	March 2021	<ul style="list-style-type: none"> Progress will be updated as appropriate.
9	To reschedule the green waste rounds to reduce fuel consumption and improve efficiency	Transport and Stores Manager	March 2021	<ul style="list-style-type: none"> Progress will be updated as appropriate.
10	To develop a plan for future infrastructures to support growth in BBC's Electric Fleet and the domestic use of Electric Vehicles	Transport and Stores Manager	March 2022	<ul style="list-style-type: none"> Progress will be updated as appropriate.
11	Electric Vehicle Fleet Procurement for small vans below 2 tonnes	Transport and Stores Manager	2021-2024	<ul style="list-style-type: none"> The Council currently has a fleet of 8 small vans (below 2 Tonnes). Two of these vehicles have been replaced with electric vehicles. From 2021 to 2024 the remaining 6 vehicles where practical and economic (As they reach a life of 12 years) will be replaced with 1 electric vehicles.
12	To use the on board Vehicle Monitoring IT System data for fleet vehicles (e.g. it records harsh braking, excessive speeding etc. On the basis of this data a programme of driver training will be created to address safety, fuel economy, extended vehicle life and reduced emissions	Transport and Stores Manager	November 2020	<ul style="list-style-type: none"> Progress will be updated as appropriate.

Measure	Measure	Responsible Officer	Target Date	Comments
13	Capital Fleet Vehicle Replacement for HGV's	Transport and Stores Manager	2021-2024	<ul style="list-style-type: none"> The Capital Vehicle Fleet replacement programme for HGV's (Refuse Freighters 26 Tonnes) identified for replacement will be replaced with Euro standard engines (Euro 6 onwards). Before purchasing, consideration will be given based on practicality and economics of the adoption of new technologies that have come to market. This includes Electric and Hydrogen Propulsion methods.
14	Vehicle emissions testing	Transport and Stores Manager	On-going On-going	<ul style="list-style-type: none"> All BBC Fleet vehicles (98 road vehicles including 20 LGV's) are annually emission tested in house prior to MOT Emission testing. BBC also undertakes additional emissions tests on all fleet vehicles if any new fuel or engine components have been changed. This is to ensure vehicle emission compliance.
15	To encourage cycling and walking as alternatives to using private vehicles	Head of Public Protection and HR	On-going	<ul style="list-style-type: none"> Annual walking and cycling awareness will be promoted on BBCs website.
16	Marketing of cycling	BBC	On-going	<ul style="list-style-type: none"> Cycling in Broxtowe has increased by 5% between 2010 and 2019.
17	To investigate the feasibility of increased provision for cycle parking in the Borough	Head of Public Protection and HR	2023	<ul style="list-style-type: none"> Progress will be updated as appropriate.
18	Traffic management control patrols on arterial route through the Borough at peak period travel times to identify hot spots where parking affects the traffic flow	Parking services – Parking Manager	On-going	<ul style="list-style-type: none"> All main routes into, out of and through the Borough are patrolled regularly and enforcement action where necessary is taken. If particular areas suffer as a result of road works patrols are increased to ensure the smooth flow of traffic.
19	Increase the number of Electric Vehicle Charging Points in the Borough	Parking services – Parking Manager	2021	<ul style="list-style-type: none"> This is undertaken in association with BP chargemaster, who fund the capital and revenue for number of years BBC lose income by dedicating spaces solely for Electric Vehicle use. 2 x rapid fast charges being installed at Victoria Street car park Stapleford in 2021, BBC will dedicate 4 spaces for Electric Vehicle use.

Measure	Measure	Responsible Officer	Target Date	Comments
20	To contribute to Nottingham Go-Ultra Low programme - introduction of area wide EV charging network	NCiC/NCC/ BBC; OLEV funding	2020	<ul style="list-style-type: none"> •£6.1m funding secured for 2016-2020 through the Go Ultra Low programme •123 locations in the county have been investigated for the potential provision of EV charge points as part of GUL project - 24 in Broxtowe; of which five were currently feasible; providing one rapid and 20 fast charge points within car parks in four towns within the borough (Beeston, Eastwood, Kimberley and Stapleford). •Funding for the programme ended in 2020; additional funding to continue the programme is being sought.
21	Promoting on the Council Webpage the Council's Electric Vehicle Charging Points Network within the Borough	Parking services – Parking Manager	On-going	<ul style="list-style-type: none"> • The Council currently has 28 electric vehicle charging points in Beeston, Stapleford, Kimberley and Eastwood these are displayed with the postcodes for easy identification on the Council website and this is updated when necessary.
22	To continue investigating the installation of Electric Vehicle Charging Points for staff and visitors to the Council to use	BBC	2020 On-going	<ul style="list-style-type: none"> • Investigation into this has been undertaken and the infrastructure and power supply has already been installed within Devonshire Avenue car park. • Funding opportunities for further charging points need to be explored.
23	Investigation into whether it is feasible for free parking in the borough car parks for Electric and Hybrid vehicles	Parking services – Parking Manager	2021 2023	<ul style="list-style-type: none"> • There are currently 28 x 7KW Electric Vehicle spaces, an additional 2 rapid Electric Vehicle charging spaces from January 2021, totalling 30 spaces. • It is currently not free to park and this would need consideration by members Any free provision would have to be managed by limiting time, otherwise it would reduce the availability of spaces for Electric Vehicles.
24	Review of off-street car parking charging	BBC	2020 2020	<ul style="list-style-type: none"> • BBC is currently consolidating all of their Off-Street Parking Orders into one Order which will be made legal in 2020. • Charges will also be reviewed on an adhoc basis with the next review being due in 2020 for the 2020/21 charges. This review will also include the use of electric vehicle charging points.
25	To contribute to Bus infra-structure	BBC and NCC; integrated transport block funding	On-going On-going	<ul style="list-style-type: none"> •An annual programme of updates and maintenance of all stops including updating network maps to ensure all information is current and accurate is on-going. In 2019/20 this included the North Broxtowe Infrastructure Improvements - bus stop infrastructure improvements on strategic corridors to tie in with growth areas and operator investment. •Implementation on-going. •BBC provides 50% of the funds for the installation of new bus shelters and real time bus information at bus stops.

Measure	Measure	Responsible Officer	Target Date	Comments
26	Sustainable Travel information for the Public	Head of Public Protection and HR	On-going	<ul style="list-style-type: none"> • BBC have leaflets on safe cycling on the tram lines, bus routes, Broxtowe cycling map, Broxtowe Country and Erewash Valley routes and walking leaflets. These are all available in the Council reception. • Sustainable Travel methods are also available on the main council website.
27	To Replace older combination boilers and system boilers to Seasonal Efficiency of a Domestic Boiler in the UK (SEDBUK) A rated condensing boilers	Capital Works Manager	2022 On-going	<ul style="list-style-type: none"> • The replacement of the remaining less efficient units (less than 1%) is planned over the next 18 months. • The typical life cycle of a unit is 15 years. Therefore, the current stock needs to be replaced as it becomes beyond its serviceable life. This is a 15 year Rolling program.
28	To investigate and consider new heating technologies that are more efficient, effective and produce lower emissions	Capital Works Manager	2021 and ongoing 2021	<ul style="list-style-type: none"> • Currently reviewing the development of hydrogen technology for boilers. Studies show that the emissions are reduced greatly. Subject to existing networks and Government. • A trial is currently being undertaken for fitting air source heat pumps in 2 new builds. The success of this will be reported on.
29	To investigate and consider suitable alternative replacements for the remaining electrically heated Council properties	Capital Works Manager	December 2024 On-going consideration	<ul style="list-style-type: none"> • Initially these systems will primarily be replaced with high heat retention storage heaters. • Air source heat pumps will also be considered at suitable properties where a retro fit solution is possible.
30	Taxi Licensing Conditions	Licensing Team - Licensing Manager	On-going	<ul style="list-style-type: none"> • No cars normally older than 8 years will be licensed as a taxi within the borough.
31	To Increase the number of low emission and electric vehicles licensed as Taxis by Broxtowe Borough Council.	Licensing Team - Licensing Manager	On-going	<ul style="list-style-type: none"> • Broxtowe Borough Council currently license 1 Electric vehicle and 16 Hybrid vehicles out of the 154 Vehicles that are licensed to operate as Taxis.
32	To Investigate the feasibility of incentives for Taxi Drivers to purchase low emission or electric vehicles	Licensing Team - Licensing Manager	April 2023	<ul style="list-style-type: none"> • Progress will be updated as appropriate.
33	To consult with Taxi Trade about Increasing the number of Low Emission and Electric vehicles licensed	Licensing Team - Licensing Manager	April 2023	<ul style="list-style-type: none"> • Progress will be updated as appropriate.

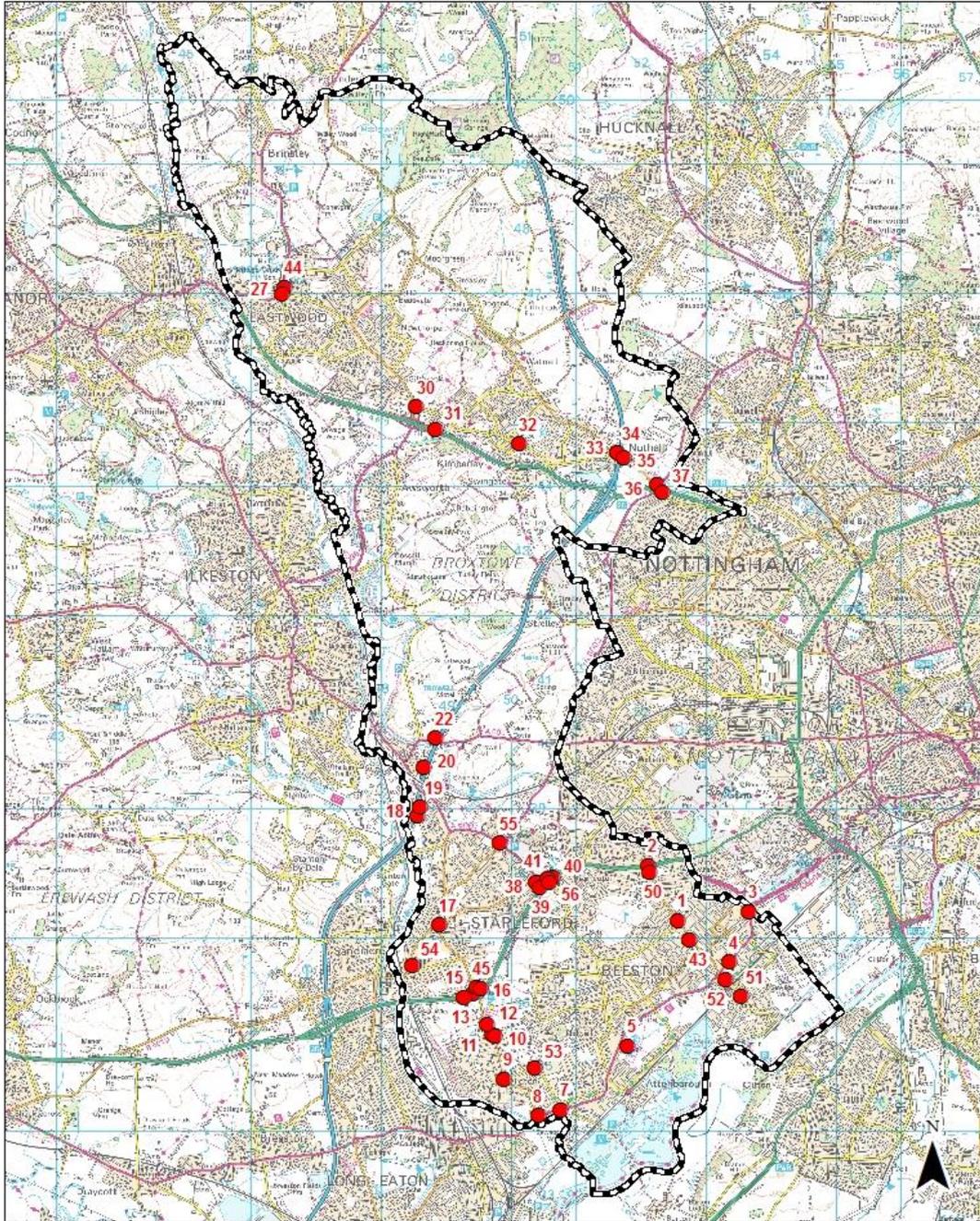
Measure	Measure	Responsible Officer	Target Date	Comments
34	To amend the Taxi Policy as required following consultation on increasing the number of low emission and electric vehicles licensed	Licensing Team - Licensing Manager	June 2023	<ul style="list-style-type: none"> Progress will be updated as appropriate.
35	To provide all allotments within the borough with green waste recycling collections	Environment – Head of Environment	On-going	<ul style="list-style-type: none"> Progress will be updated as appropriate.
36	To communicate with all allotment providers in the borough to discourage the use of bonfires to dispose of garden waste	Public Protection - Chief Environmental Health Officer	On-going	<ul style="list-style-type: none"> Progress will be updated as appropriate.
37	Encouraging the use of Hybrid or Electric vehicles for BBC staff	Head of Public Protection and HR	On-going	<ul style="list-style-type: none"> To encourage employees of BBC to purchase hybrid vehicles and electric vehicles for their personal and business use. One employee used a personal hybrid vehicle in 2019.
38	Flexible working arrangements	NCC/BBC	<ul style="list-style-type: none"> On-going On-going On-going 	<ul style="list-style-type: none"> NCC operates flexible working arrangements for all its staff. BBC New Ways of Working was introduced in 2019, which allows and encourages employees to work from home when practical to do so. Due to Covid-19 restrictions This will be continued, to some extent, going forward.
39	Cycle to work Scheme	Head of Public Protection and HR	On-going	<ul style="list-style-type: none"> Cycle to work Scheme – to assist and give tax relief on bike purchases for employees of BBC. Nine employees used this scheme in 2019.
40	Investigate the feasibility of a Council staff car sharing club	Head of Public Protection and HR	2023	<ul style="list-style-type: none"> Progress will be updated as appropriate.

BBC= Broxtowe Borough Council, **NCC**= Nottinghamshire County Council, **NCiC**= Nottingham City Council.

Conclusion.

The project has identified forty measures in total which the Council can undertake to further improve air quality within the borough. Thirty of the forty are new measures that were devised.

Appendix A: Map of the Borough of Broxtowe.



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Figure A.1 – 2019 Diffusion Tube Location

Appendix B: How the public can get involved

Residents and businesses living or working in Nottinghamshire can improve the air quality in the area by taking simple measures. One of the main changes that can be made is to use sustainable travel more and reduce dependency on the car when possible. Below are some of the actions that people can take, and particularly for short journeys.

- Public transport – To use all means of public transport whenever possible e.g. trams, buses and trains. In addition to printed materials, an integrated public transport planning tool detailing local bus, rail and tram networks, as well as for trips further afield can be found at <https://www.nottinghamshire.gov.uk/travelchoice/journey-planner> and <http://www.traveline.info/> Details on travelling on school buses to Nottinghamshire schools and assistance available to do so, can be found at <http://www.nottinghamshire.gov.uk/education/travel-to-schools>. The tram timetable is available at <http://www.thetram.net/> The Big Wheel promotes sustainable travel within the Nottingham urban area (including parts of Broxtowe); it assists people and businesses with journey planning and advice. Further information can be found at <http://www.thebigwheel.org.uk/>
- Car share – The Nottinghamshire car share scheme, ‘*nottinghamshare*’, is available to anyone <https://liftshare.com/uk/community/nottinghamshare> but all businesses can produce their own.
- Park and Ride – There are a variety of Park and Ride sites within Nottinghamshire, which serve the Nottingham Tram and buses. Information for these Park and Ride sites which includes maps of their locations are found at <http://www.nottinghamshire.gov.uk/transport/public-transport/park-and-ride>
- Walking and Cycling – The health benefits of physical activity e.g. walking or cycling outweigh the risks from air pollution. The worst pollution can easily be avoided by travelling along quieter streets. Even walking on the side of the pavement furthest from the road can help.

Walking -

- Walk short distances rather than drive; this also has the benefit of improving your health as well.
- Information on walking networks in Nottinghamshire can be found at <http://www.nottinghamshire.gov.uk/planning-and-environment/walking-cycling-and-rights-of-way/walking> and <http://www.nottinghamcity.gov.uk/transport-parking-and-streets/rights-of-way-walking-and-cycling/walking-in-nottingham/> and a planning tool for deciding your route when walking can be found at <http://walkit.com/>
- Walking and cycling to school – School travel plans promote group cycling and walking for pupils to safely get to school. Information on the travel to school options can be found at <http://www.nottinghamshire.gov.uk/education/travel-to-schools>.

Cycling –

Use the extensive cycle routes that are available throughout Nottinghamshire. Maps and cycling journey planners that cover all of Nottinghamshire, including the city and further afield are available at <http://www.nottinghamshire.gov.uk/planning-and-environment/walking-cycling-and-rights-of-way/cycling>. Maps of just the city cycle routes for Nottingham are available at <http://www.nottinghamcity.gov.uk/cycling>. Sustrans is a charity that promotes sustainable travel and further information can be found at <http://www.sustrans.org.uk/> RideWise, a local cycling charity, also provide advice, training, bike rides, free bike loans and information about routes and journey planning. Further information about RideWise can be found at <http://www.ridewise.org.uk/ride/index.php>

- Driving- When driving, people can still help to improve air quality by;
 - Make sure that your car is at its most efficient and think about how you drive, this will also save you money. Tips on how to save money on fuel and reduce your emissions are available at <http://www.energysavingtrust.org.uk/travel/driving-advice>.

- If changing a car, consider buying a low-emission vehicle. More information on these vehicles and the support available at <http://goultralownottingham.org.uk/>
- Bonfires – To not have bonfires at all and to compost all garden waste and recycle rubbish rather than burn it.
- Heating the home –
 - Smoke Control Area – Large parts of Nottinghamshire are smoke control areas, therefore smoke cannot be emitted from a unless you are burning an authorised fuel or using an exempt appliance e.g. some burners or stoves. Further information on suitable fuels and exempt appliances can be found at <https://smokecontrol.defra.gov.uk/index.php> All appliances must be kept in good working order to ensure that they are working efficiently and people are advised to contact their Local Council to determine whether they are in a smoke control area or not.
 - House Boilers – Ensure that boilers are serviced regularly and kept in good working order. If a boiler needs replacing, then purchase one that has a low NOx emission rating

Glossary of Terms

Abbreviation	Description
ASR	Air Quality Annual Status Report
BBC	Broxtowe Borough Council
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
HE	Highways England
HGV's	Heavy Goods Vehicles
HS2	High Speed Train 2
$\mu\text{g}/\text{m}^3$	Microgrammes of pollutant per cubic metre of air
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NCC	Nottinghamshire County Council
PCN	Penalty Charge Notice
PM	Particulate Matter
PM_{10}	Airborne particulate matter with an aerodynamic diameter of $10\mu\text{m}$ (micrometres or microns) or less
$\text{PM}_{2.5}$	Airborne particulate matter with an aerodynamic diameter of $2.5\mu\text{m}$ or less
SEDK	Seasonal Efficiency of a Domestic Boiler in the UK
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
WHO	World Health Organisation

References

Defra, *Clean Air Strategy, 2019* Department for Environment Food and Rural Affairs,
Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf (Accessed 20th November 2020).