

## Appendix One

### Recommended actions to improve air quality in the London Borough of Barnet

#### Air Quality Action Plan Update 2016

The primary source of poor air quality (high air pollution) in Barnet is traffic on the main roads. Therefore actions are recommended that tackle congestion, promote alternatives to the traditional petrol and diesel vehicles, and promote active travel (cycling and walking).

#### Recommended new measures to include in the updated air quality action plan

Action	Description	Effectiveness in reducing air pollution
1	Ultra Low Emission Zone (ULEZ) for the whole Borough	Good
2	Differential parking charges based on pollutant emissions	Medium
3	Freight Consolidation Scheme	Medium
4	Increase cycle parking provision and key destinations	Low
5	Cycle lanes on key roads in the Borough	Medium
6	Actions on TfL-controlled roads	Good
7	Actions on M1 (Highways Agency-managed)	Good
8	Improve electric vehicle charging infrastructure	Medium
9	Green barriers and vegetation	Medium
10	Construction Site Enforcement	Medium

#### 1. Membership of Ultra Low Emission Zone (ULEZ).

The ULEZ will come into being in September 2020. It includes all vehicles and covers the area of the current congestion charging zone. A feasibility study was carried out in 2015 to consider the expansion of the proposed ULEZ. One proposal is to have the boundary of the A406 as the limit of the zone. This could lead to residential streets close to tube, bus and railway stations near the A406 North circular in Barnet becoming more congested with people trying to avoid paying the charge. There are also highly polluted trunk roads north of the A406 in Barnet such as A1, M1, A41, A5 and A1000 that if not in ULEZ will not see a significant reduction in vehicle congestion or pollution reduction to residents. It is recommended to push for the whole of London to be part of the ULEZ and therefore to incorporate the whole of Barnet. This action is likely to have the most significant impact on reducing air pollution.

#### 2. Differential parking charges based on pollutant emissions.

The Council's new parking permit scheme links the charges to the emissions in gCO<sub>2</sub> (grams of carbon dioxide) that the vehicle emits in order to try to persuade car owners to move towards less carbon dioxide polluting vehicles.. This action reflects the Council's Parking Policy and encourages the take-up of low emission vehicles.

#### 3. Join Freight Consolidation Scheme.

Barnet has recently been awarded as part of the London Mayor's Air Quality Fund £55K over a period of two years to join the existing North London Freight Consolidation Scheme on a trial period. Boroughs work together to consolidate their deliveries. Goods are delivered to a consolidation centre, from which cleaner low emission vehicles make the final part of the journey to Council offices. The aim is to reduce the amount of vehicle trips and therefore the amount of air pollution. This action would require engagement with the Procurement Team within Barnet Council and Procurement officer time to manage the project. The benefits include a clear demonstration of the Council's commitment to lead by example and reduce pollution.

#### 4. Increase provision of cycle parking

In order to make cycling to key destinations easier, better parking provision for cyclists needs to be provided. Sites should include shopping areas, rail and tube stations, and other transport hubs.

#### 5. Cycle lanes on key roads in Barnet.

It is important to encourage alternative means of transport on Barnet's key roads as road traffic is the primary source of air pollution in Barnet. Many of these roads are sufficiently wide to accommodate a cycle lane (1-1.5m wide with a white line). This would improve car and bicycle lane discipline and reduce congestion for motorists, while making cycling a safer option.

Different key roads could be linked to make East to West and North to South cycling routes. This type of cycle lane is relatively inexpensive compared to dedicated superhighways / mini Holland schemes, and need not impede parking or restrict access to businesses. The effect of this action is high if a high modal shift is achieved.

#### 6. Actions on TfL-controlled roads

Transport for London manage the roads which are the busiest and the source of the most air pollution in Barnet, namely the A406, A41, A5 and A1. The Council needs to work with TfL to ensure they prioritise work to reduce congestion and improve air quality on these roads. This includes deploying the newest lowest emission buses, creating cycle lanes where feasible, and better traffic signal management and junction design.

#### 7. Actions on the M1

The M1 motorway is managed by the Highways Agency. It passes through very populated areas of Barnet, causing poor air quality and also high noise levels. The Council needs to work with the Highways Agency to ensure that Barnet is prioritised for spending. A barrier in Mill Hill for example could reduce noise and have a positive impact on air quality. Another option is reducing speed limits to 50mph to reduce noise and improve air quality.

#### 8. Improve electric vehicle charging infrastructure

Encouraging motorists to choose electric vehicles rather than the traditional petrol or diesel car is a key government policy to improve air quality. However Barnet is currently not well served for charging points compared to other London Boroughs. The installation of more electric vehicle charging points in residential streets as well as car parks would encourage the take up of electric vehicles. Points should also be installed in the new council offices in Colindale.

## 9. Green barriers and vegetation

Belts of vegetation along roads can reduce the amount of air pollution that people behind it are exposed to. They consist of hedges between a road and pavement or cycle track. Urban vegetation is the sum of parks and smaller green patches within the city such as green walls made of ivy and green roofing. Vegetation has the ability to clean the air by filtering out pollutants.

## 10. Construction site enforcement

The GLA has awarded Barnet, Waltham Forest, Haringey and Enfield a grant to fund a construction site dust enforcement officer for three years. Due to the large amount of development in the Borough there are lots of massive construction sites. These create dust, and also have lots of machinery and non-road vehicles which are a source of pollution. The Enforcement Officer will visit construction sites and take enforcement action where appropriate to ensure that construction sites are being managed well and not causing excess pollution or nuisance to residents.

### **Recommended current measures to keep in the air quality action plan**

It is proposed to retain the following measures within the updated air quality action plan.

Action	Description	Effectiveness in reducing air pollution
11	London Low Emission Zone	Medium
12	Promote alternative forms of transport for businesses and commercial properties	Low
13	Work to improve council fleet emissions	Medium
14	Promote alternative forms of transport in schools	Medium
15	Promote design of developments that reduces the need to travel	Medium
16	Promote alternative fuels for vehicles	Medium
17	Encourage cleaner energy sources for buildings	Medium
18	Promote good design and location of new development	Medium
19	Control air pollution from industrial / commercial and residential sources	Medium
20	Monitor air quality	Low

## 11. Barnet is within the London Low Emission Zone

The LEZ encourages the most polluting heavy diesel vehicles driving in London to become cleaner. The LEZ covers most of Greater London and is in operation 24 hours a day, 365 days of the year. It covers lorries, buses, large vans, and minibuses. It is operated by Transport for London. It has been in operation since 2007 and has been successful in reducing air pollution.

12. This action includes work being done in Highways and Development Control to require travel plans for new developments, install electric charging points for new developments. The 2013-2016

Mayor's Air Quality Fund project enabled two electric charging points to be installed at Barnet House and contributed to the new electric charging points at Lodge Lane public car park.

#### 13. Work to improve council fleet emissions

This action contained a variety of measures, some of which have been completed (see below). However it is important to maintain good practise so this action should be developed and kept in the action plan to demonstrate the Council's commitment to cutting its own pollutant emissions.

#### 14. Promote alternative forms of transport in schools

The School Travel Advisors in Highways work with schools to promote safe and sustainable travel to school. This includes initiatives to increase cycling and walking. Schools have their own school travel plans and junior travel ambassadors. This work is very important, not only for the health and wellbeing of pupils, but also to decrease congestion and improve air pollution.

#### 15. Promote design of developments that reduces the need to travel

This action links to the Council's key Plans and Strategies to promote sustainable development. For example the use of brownfield sites near to existing town centres and transport links, and mixed use developments where residential and commercial properties are near to each other.

#### 16. Promote alternative fuels for vehicles

Increasing the take-up of cleaner fuels is part of the Mayor's Air Quality Strategy. Originally this action included LPG but nowadays the push is for zero emission vehicles such as electric.

#### 17. Encourage cleaner energy sources for buildings

Buildings are a source of air pollution, caused by the type of energy used for heat and electricity. Council planning requirements encourage the use of renewable energy. Environmental Health advise planners on the environmental impacts of new local heat and power stations (CHP plants), as they produce nitrogen dioxide a key air pollutant.

#### 18. Promote good design and location of new development

The supplementary planning guidance for sustainable design and construction includes a section on air quality – the aim is to manage the degree to which people are exposed to air pollutants. This is a key tool for the design of new buildings. Scientific Services (Environmental Health) ensure that air pollution is into account when assessing planning applications.

#### 19. Control air pollution from industrial / commercial and residential sources

The Council has a statutory duty to regulate certain premises to reduce emissions to air, including cement batchers, dry cleaners, crematoria, printing press, petrol stations. vehicle re-sprayers and concrete crushers. It also has a duty to investigate complaints of dust nuisance including complaints about construction sites.

#### 20. Monitor air quality

LB Barnet's Scientific Services team continues to maintain two air quality stations at Tally Ho and Chalgrove School (measuring particulates, PM10 and nitrogen dioxide, NO2. These results are published on the web at [www.airqualityengland.co.uk](http://www.airqualityengland.co.uk). Nitrogen dioxide is also monitored using 15 diffusion tubes across the borough. The results allow us to report to Defra and the GLA, as well as informing residents, and consultants acting on behalf of developers.

### **Previous measures in the air quality action plan**

These measures were in the original air quality action plan, and have been completed. Other measures have been removed in order to create a more stream-lined action plan with fewer actions. So although they do improve air quality, they exist as part of other Council strategies and policies.

<b>Action</b>	<b>Description</b>	<b>Effectiveness in reducing air pollution</b>
21	Vehicle emissions testing	Low
22	Introduction of penalties for stationary vehicles with idling engines	Low
23	Improve traffic flow in town centres by improved coordination of traffic lights	Medium
24	Introduce control parking zones (CPZs)	Low
25	Promotion of LPG fuel for council vehicles	Low
26	Improve emissions of refuse and street cleaning vehicles	Medium
27	Promote Council's Green Travel Plan	Low
28	Promote public transport	High
29	Encourage the use of rail for the movement of bulk freight	Medium
30	Encourage cleaner sources of energy in schools	Medium
31	Encourage energy efficiency	Low
	Encourage composting to reduce need for bonfires	Low

#### **21. Vehicle emissions testing**

This was the London Vehicle Emissions Testing programme and ran between July 2003 and March 2004. All vehicles that failed the emissions test were served with a fixed penalty fine. There was a 4.4% failure rate in Barnet.

#### **22. Introduction of penalties for stationary vehicles with idling engines**

This scheme was not implemented, and the majority of London Boroughs do not issue fixed penalty notices for idling vehicles.

#### **23. Improve traffic flow in town centres by improved coordination of traffic lights**

This is a TfL responsibility and so was removed as an action. Liaison continues between the Council and TfL's traffic signals team.

#### **24. Introduce control parking zones (CPZs)**

Originally the CPZs were experimental but they are now a permanent feature of Council policy and it is no longer considered relevant to have this as an action.

## 25. Promotion of LPG

This action was discontinued due to widespread difficulties with the technology.

## 26. Improve emissions of refuse and street cleaning vehicles

The Council's fleet meets the requirements of the Low Emission Zone. Fuel additives were also trialled to further improve emissions. All vehicles use low sulphur diesel fuels and are regularly maintained and tested. Drivers receive advanced training that includes styles to reduce emissions.

## 27. Promote Council's Green Travel Plan

The Council had a Green Travel Plan, and a dedicated Travel Plan Officer. Initiatives included upgrading shower facilities at NLBP to make cycling a viable option; cycle training for staff; pool Oyster Cards to encourage use of public transport. The post was discontinued, and no regular reviews of the travel plan are being carried out. Therefore it was decided to remove this action from the travel plan.

## 28. Promote public transport

Using public transport cuts congestion as it reduces the amount of private vehicles on the road. While this is an important tool in improving air quality, and highways officers continue to liaise with Transport for London and the North London Transport Forum it was removed from the action plan as the Council has no direct control over public transport.

## 29. Encourage the use of rail for the movement of bulk freight

It is better to use rail and not lorries for bulk freight as less pollution is caused. A new rail freight facility is planned as part of the Brent Cross / Cricklewood regeneration scheme. It was decided that this action is not directly relevant to the air quality action plan.

## 30. Encourage cleaner sources of energy in schools

The government's Building Schools for the Future programme saw many schools retrofitting clean renewable energy systems. However the government stopped this scheme.

## 31. Encourage energy efficiency

This is a requirement in the Council's development control policies and is not directly relevant to the air quality action plan.

## 32. Encourage composting to reduce need for bonfires

Bonfires cause smoke nuisance to neighbours, and air pollution. The Council's nuisance team reacts to complaints of smoky bonfires. It was decided to remove the action from the plan as bonfires are not a big contributor to the air quality problems in Barnet.

