



# Cleaner Air 4 Communities Action Planning Toolkit

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*Improving air quality in your community*





# Your Action Planning Toolkit

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This toolkit provides you with the resources you need to develop an action plan to tackle air pollution in your local area.

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## The Challenge

Air pollution is a silent killer that many of us don't know about. Its effects on our health are often slow and progressive, making the cause seem less obviously connected with the consequences. The Committee on the Medical Effect of Air Pollutants (COMEAP) published data on annual mortality rate in 2008, in order to demonstrate the effects of long term exposure to air pollution. It found that as a result of air pollution, there were **29,000 premature deaths across the UK** and the total years of life lost was 340,000 during the year, with an average loss of life of 11.5 years. **Around 4,250 of the premature deaths were in Greater London.**

## Main pollutants

- **Nitrogen Dioxide (NO<sub>2</sub>)**
  - **Source** – fossil fuel combustion
  - **Health concerns** –irritation of the lungs, increased chance of respiratory infection, lung disease, increase in asthma attacks, chronic bronchitis.
- **Particulate matter (PM)** - Particulate matter is classified under two sizes:
  - **PM<sub>10</sub>** are less than 10 micrometres (µg) in diameter. These are small enough to get into our lungs.
  - **PM<sub>2.5</sub>** are less than 2.5 µg in diameter. These are so small that they can pass through the lungs into the blood, causing further heart problems.
  - To give an idea of scale, an average human hair is a 100 times thicker than a PM<sub>10</sub> particle.
  - **Source** – fossil fuel combustion, particularly of diesel/coal
  - **Health concerns** – premature death in people with heart/lung disease, increases in heart attacks, decreased lung function, difficulty breathing, coughing, irritation of the airways.

## Air pollution in law

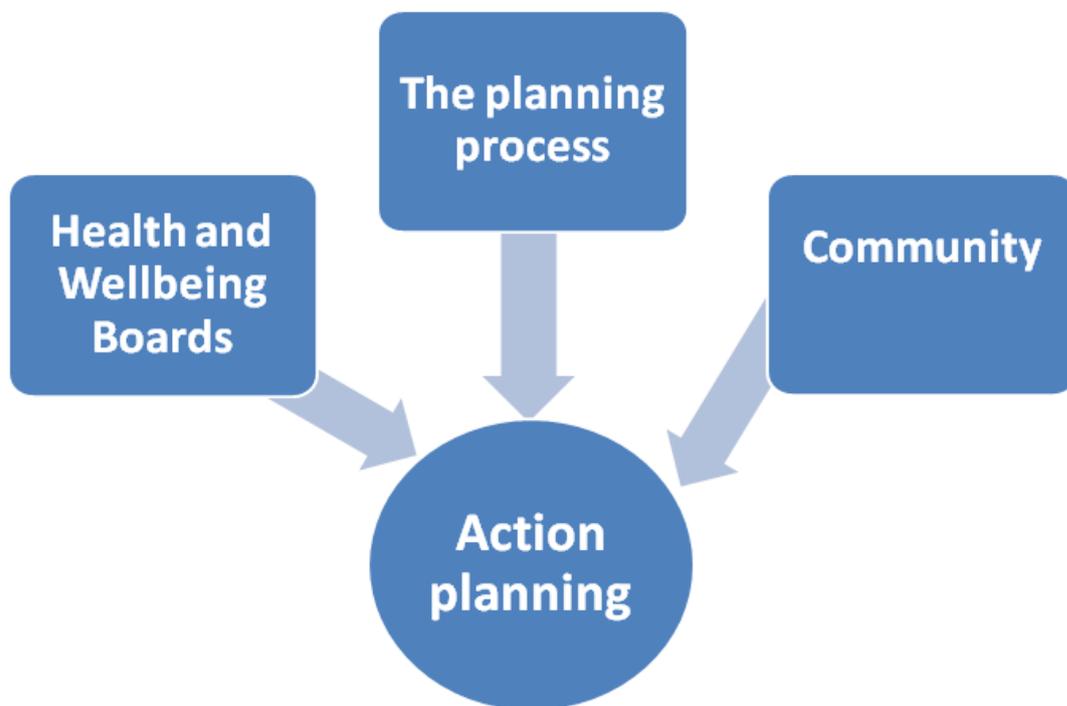
The European Union (EU) regulates air pollution, with limits for major pollutants. Any country in breach of these limits is liable to pay large fines for breaking the law. The department for Environment, Food and Rural Affairs is primarily responsible for meeting the EU air quality limits. The UK limits for the two pollutants of concern are:

Pollutant	Annual limit	Daily limit (not to be exceeded more than 35 times per year)	Hourly limit (not to be exceeded more than 18 times per year)
NO <sub>2</sub>	40µg/m <sup>3</sup>		200µg/m <sup>3</sup>
PM <sub>10</sub>	40µg/m <sup>3</sup>	50µg/m <sup>3</sup>	
PM <sub>2.5</sub>	25µg/m <sup>3</sup>		



## How Can You Achieve Better Air Quality as a Community?

Once you have identified air pollution hotspots in your local, you can start thinking about how you can help reduce air pollution emissions and exposure. There are several routes to take, which can be combined to increase your chances of success.





## Through Health and Wellbeing Boards

Local Health and Wellbeing Boards bring together health groups including the NHS, adult social care and children's services, to plan how best to meet the needs of their local population and tackle local inequalities in health.

### What can you ask for from your Health and Wellbeing Board?

- **Include air quality in their strategic planning and decision making**
  - Implement National Institute for Clinical Excellence (NICE) guidance on cycling and walking, and support the development of cycling in the community.
  - Monitor the impact of air quality.
- **Let people know the risks and effects of air pollution**
  - Distribute leaflets about air pollution risks in doctors surgeries and other community hubs.
  - Get doctors to explain the effects of air pollution to vulnerable people (young people, people with existing respiratory problems such as asthma) and how they can reduce their risk.
  - Set up a text alert system to provide live pollution warnings to those most at risk.
- **What can you do to assist your health and wellbeing board?**
  - Continue monitoring air quality with diffusion tubes and particulate meters, and share your findings with the Health and Wellbeing Board.



## Through Planning: Working with your local council

### What are you asking for from your council?

Write letters to your council to ask for the following:

- **New developments to be air quality neutral**  
Ask councils to create guidance for developers on how to construct 'air quality neutral' developments, including:
  - Public transport connections within walking distance
  - Avoid creating an urban canyon effect, where streets have high building either side
  - Pedestrian friendly design with well lit, safe pavements
  - Buffer zones between roads and living spaces
  - Cycle storage
  - Low NO<sub>2</sub> heating
- **Use Community Infrastructure Levies (appendix 2) and Local Development Frameworks to fund infrastructure which improves air quality**
  - Improve / expand cycle routes (more cycle routes / better maintained)
  - Put up 'No idling' signs around town centres and schools
  - Put up '20 is plenty' road signs on small roads for a smoother journey  
*And much more expensive, but really worth considering*
  - Fund last mile carbon free' logistic centres
- **Other requests from the council**
  - Ask TFL to retrofit/replace its oldest buses first with new, low emission hybrid buses
  - Enforce existing 'no idling' laws (after one minute of idling drivers are wasting money as well as polluting)  
*For our schools*
    - Create safe walking routes for children along less polluted roads
    - Create 'walking buses' to school.
  - *For housing developments*
    - Support community energy developments with low NO<sub>x</sub> boilers



## What You Can Do as a Community

### Monitor

- Continue monitoring air pollution using diffusion tubes, lichen studies and particulate meters, to build a bigger picture of local air quality.
- Work with your friends to encourage taxis and delivery vehicles not to idle their engine.
- Become a lichen observer and set up a lichen study team to increase awareness and knowledge about local air quality.

### Organise

- Create a car pool club in your community group or school.
- Hold an event to raise awareness of the effects of air pollution and the simple steps that people can take to reduce their exposure and emissions (See next page).
- Hold events with other communities and groups to form a network, making your voices louder and your evidence stronger.
- Events such as a walking and cycling to school/work week.

### Share

- Hold an event to share your monitoring results with your community.
- Talk to your family and friends about air pollution to increase awareness in the whole community.
- Give out leaflets publicising the disadvantages (Higher NO<sub>2</sub> / PM emissions) of diesel engines.



## What We Can All Do to Reduce Exposure and Emissions

### Exposure

- Walk along quieter roads, avoiding main roads.
- Avoid walking along roads which are enclosed by buildings and trap pollution.
- Go jogging early in the morning before pollution builds up throughout the day.
- Download the King's College London Pollution app to see live pollution levels and choose cleaner walking routes

### Emission

- Don't idle your engine when waiting to pick children or friends up
- Drive smoothly with gentle acceleration to reduce your emissions
- Walk and cycle as much as you can





## Creating Your Action Plan

You should now have a range of ideas about reducing air pollution, working in collaboration with your health board, council and community.

On the next page you will find planning templates which will help you build your action plan and develop the details. Remember to try and be as specific as possible when developing your plan, with achievable objectives, milestones and timings.

Think about what resources or networks your community already has in place which could make some goals easier to achieve than others.





# Action Plan Map

## Action plan



TOPIC:



## Next steps

# Action Planning Tool

Goal	Relationships required	Resources required	Actions	Obstacles
Through health and wellbeing boards				

Through Planning				

In the community				



## Case Study: Battersea Society Finds Air Pollution Levels in Clapham Junction to be Four Times the Legal Limit

Air pollution in Clapham Junction has been found to be more than four times higher than the safe and legal limit. Pollution levels along Battersea Park Road were also more than double the European limits.

Members of the Battersea society measured air pollution using 'diffusion tubes', 'ghost wipes' and a particulate meter machine along Battersea Park Road, Nine Elms and around Clapham Junction.

Evidence was found of:

- Particulate Matter (PM10) concentrations **five times the European Union limit**
- Nitrogen Dioxide (NO2) concentrations more than **double the legal limit**
- **Dangerous levels of lead** around Clapham Junction

The highest levels of nitrogen dioxide and particulate matter were found around Falcon Road and Clapham Junction which far exceed the European Union legal limits.

The Battersea Society met on the 25<sup>th</sup> January to discuss the findings and how they can improve public awareness and understanding of air quality. Attendees from Wandsworth Living Streets and Wandsworth Environment Forum were also present.

The group are now working on an action plan to help tackle this problem. Some members are keen to raise awareness of the problem among the most vulnerable groups while others are looking to have discussions with planners and local decision makers.



## Case Study: Sainsbury's in Sheffield

### Background

As a city with a history of major industry, Sheffield, England's third largest city has had longstanding battles with air pollution. It is estimated that poor air quality accounts for up to 500 premature deaths in Sheffield each year.

### The Challenge

In 2010, Sainsbury's Supermarket proposed a **40% expansion** of their Archer Road Store in Millhouse, and planned to build a new multi-storey car park. The expansion promised the creation of 80 new jobs for local people, but **raised extreme concerns** about **road safety and pollution** from Councillors and community groups alike.

It was estimated that the proposed expansion would **increase traffic** from the site, off Abbeydale Road, by 5%. Like many other A-roads in the country Abbeydale Road is **above the National and European Union limits for Nitrogen Dioxide** – the main pollutant from road transport vehicles.

The UK has had air quality standards for over 20 years but that rarely impedes retail developments.

Local concerns about poor air quality and its effects on health led to a **vigorous campaign against the expansion** of the supermarket.

### Decision

Upon investigation by a Planning Inspector, it was discovered that the expected traffic increase would be significantly higher than estimated, and closer to 15%. The inspector concluded that **effects on local air quality and human health were unacceptable**. The Sheffield Council planning board **rejected the proposal because of traffic and air quality concerns**.

Sainsbury's appealed the decision and mounted a legal bid to the High Court which was dropped in 2012. Ted Gunby, chair of Carterknowle & Millhouses Community Group said the decision was "**good news for the neighbourhood**." Neil Parry, EEQOL, said "**developers have to think hard about the air quality issues raised by developments**"

### Conclusion

This is a great success story about a community working together to prevent a potentially harmful development from getting the go ahead, from which other communities can take inspiration. It also has important implications for the way in which air quality assessments for planning applications should be conducted.

# Appendix 1: 14 Cost Effective Actions for the Council to Reduce Air Pollution

## Recommended Actions

   **BUSINESS ENGAGEMENT PROGRAMMES** (BCR > 22, £4M savings), in which large businesses with major centres in the area are engaged on a 1-2-1 basis and programmes that reduce air pollution and costs are enacted.

   **CAR CLUBS** (BCR > 13, £8M revenues) should be expanded as quickly as possible using clean cars. They reduce use of cars and replace dirtier cars with cleaner. They also generate net revenue for councils.

   **ECODRIVING TRAINING** (BCR 6, >£7M savings) programme rolled out to all taxi drivers will save them money, cut air pollution and improve road safety.

   **ZERO EMISSION LAST MILE DELIVERIES** (BCR 4) can be delivered competitively by a number of companies in Central London, whether stationary firms, taxis, couriers or supermarkets. A Central London list of service providers should be drawn up and their use recommended in public and private procurement (such as in Business Engagement Programmes).

   **IDLING ENFORCEMENT** (BCR 4) should be applied experimentally to taxi ranks with 200 taxis, such as Paddington Station. If good compliance is achieved it should be rolled out to smaller ranks. It is unlikely to be cost effective for buses, LGVs or HGVs, except for bus stands of 7 or more.

   **CAMPAIGN DAYS** (BCR 1.7) to reduce in-day car and taxi use through public advertising should be planned for next Spring. **Spraying CMA dust suppressant** (BCR 1.7) is also effective in the worst polluted streets.

These seven won't substantially reduce air pollution. To do this, the following large impact measures are recommended, which can also save £248M.pa.

**VERTICAL ROOF EXHAUSTS ON BUSES, A EURO V ONLY CENTRAL BUSES ZONE, and RETROFIT OF ALL EURO III TAXIS WITH DPFs,** should be implemented and could be enforced through a sectorally agreed LEZ in the Centre, with the threat of an enforced TRO based LEZ. Pilot projects

testing the effects of roof exhausts, Euro IV bus engine reprogramming and DPFs on Euro III taxis should be implemented immediately.

The GLA proposal requiring **NEW BUILDINGS TO BE AIR QUALITY NEUTRAL** is essential. This can be delivered cost-effectively by **REQUIRING CSH OR BREEAM LEVEL 4** in many cases, or the Passivhaus standards for more intensive developments. Ensuring old **BOILERS ARE REPLACED BY ULTRA-LOW NOX MODELS INSTEAD OF CLASS 4 OR 5** will reduce emissions by a further 40%-80%. Uptake of Warm Front, CERT, Green Deal etc should be encouraged by councils. Wood fuels must be avoided.

**CYCLING** (BCR > 2.5 and probably much higher) should be reclassified as the primary mode of road transport in Central London for money saving, health and air pollution reasons. A staged approach can initially emphasise high benefit, low cost actions such as **cycle to work schemes, trials of low-cost cycle track designs and co-ordination of cycle promotion, training campaigns and events across councils.** Later **improved and harmonised signage and way-finding across the current several hundred km of Central cycle lanes** would both advertise the infrastructure and improve journey times and safety. Once low-cost designs are proven, the **cycle lanes should be upgraded to tracks** everywhere that roads are wide enough. Finally, **accelerating expansion of the Cycle Hire scheme** is likely to substantially add to cycling numbers.



### Symbols illustrating the action's key advantages



High Benefits:Costs Ratio, BCR figure for 2012 shown



Cost savings or revenue generation, Millions of 2012 £



Strong PM Reduction, Tonnes per annum



Strong NOx Reduction, Shown in tonnes per annum



Councils Leading by example

Recommended Actions

12 - 14 Cost Effective Actions To Cut Air Pollution In Central London



## Appendix 2: What is a Community Infrastructure Levy?

A Community Infrastructure Levy is a new levy that local authorities can choose to charge on new developments in their area. The levy is designed to be a fair and transparent way for developers to meet their obligations to the local community.

In areas where a Community Infrastructure Levy is in force, land owners and developers must pay the levy to the local council.

The charges are set by the local council, based on the size and type of the new development.

The money raised from the Community Infrastructure Levy can be used to support development by funding new local infrastructure, such as new or safer road schemes, park improvements or a new health centre.

The Community Infrastructure Levy:

- Gives local authorities the freedom to set their own priorities for what the money should be spent on.
- Gives local authorities a predictable funding stream that allows them to plan ahead more effectively
- Gives developers much more certainty from the start about how much money they will be expected to contribute
- Makes the system more transparent for local people, as local authorities have to report what they have spent the levy on each year
- Rewards communities receiving new development by giving them a proportion of the money collected in their area

### How can they be used to tackle air pollution?

They can be used to fund the building of infrastructure that reduces air pollution.



### Appendix 3: Additional resources

These resources are not in your pack, but are available for your use. They will give you a more in depth look at air quality and planning.

Resource	Link
Development control: planning for air quality	<a href="http://www.iaqm.co.uk/text/guidance/epuk/aq_guidance.pdf">http://www.iaqm.co.uk/text/guidance/epuk/aq_guidance.pdf</a>
GLA air quality neutral planning support	<a href="http://www.london.gov.uk/sites/default/files/GLA%20AQ%20Neutral%20Policy%20Final%20Report%20J1605%20290513.pdf">http://www.london.gov.uk/sites/default/files/GLA%20AQ%20Neutral%20Policy%20Final%20Report%20J1605%20290513.pdf</a>
Air quality guide for public health professionals	<a href="https://www.london.gov.uk/priorities/environment/clearing-londons-air/air-pollution-and-public-health">https://www.london.gov.uk/priorities/environment/clearing-londons-air/air-pollution-and-public-health</a>
DEFRA air quality resources	<a href="http://www.defra.gov.uk/environment/quality/air/air-quality/">http://www.defra.gov.uk/environment/quality/air/air-quality/</a>
Easy to use data maps	<a href="http://www.maptube.org">www.maptube.org</a>