

Black Carbon Campaign Briefing Sheet 4

# Examples of Actions in the UK to Cut Black Carbon Emissions

Case studies demonstrating actions taken in the UK to reduce particulate matter and black carbon emissions



Across the UK many initiatives have been put in place to reduce particulate matter emissions. These have been driven by our understanding of the health impacts of black carbon emissions. With the particulate matter still one of the biggest hazards to our health in urban areas and increasing understanding of the climate impacts of black carbon now is the time for these examples of best practice to become common practice all across the UK. Some of the best known and most effective initiatives are listed below.

### **Low Emission Zones**

A low emission zone is an area where access is only allowed to vehicles that meet a certain emission standard. Non-compliant vehicles caught in the zone are typically receive a large fine. Criteria for low emission zones can vary, both in the pollutants they aim to reduce and the types of vehicles covered. Low emission zones are one of the most effective ways of improving air quality and reducing black carbon emissions from vehicles.

The UK's largest low emission zone covers the whole of Greater London. It applies to larger vehicles only (not cars) and sets minimum standards for particulate matter emissions. Smaller low emissions zones have also been established (or are planned) in Oxford, Reading and Norwich. On the continent low emission zones are far more common, for example they are popular in Germany (60 LEZs implemented or planned), Italy (19 LEZs) and the Netherlands (15 LEZs). In these countries national Low Emission Zone frameworks have been established, backed by national databases of compliant vehicles.

*More information :*

<http://lowemissionzones.eu>

### **Tax Incentives**

Fleet operators can be encouraged to retrofit their vehicles through tax incentives and grants. These incentives can be used in conjunction with low emission zones to provide a 'carrot and stick' approach.

In the UK operators of heavier vehicles purchased after October 2006 may be able to obtain a 'Reduced Pollution Certificate' if the vehicle(s) are retrofitted to meet a higher standard for particulate matter emissions. A testing and certification regime is in place to award certificates to eligible vehicles. Vehicles with a certificate pay a lower rate of Vehicles Excise Duty (road tax), with the exact discount varying depending on the size of the vehicle. A vehicle can also gain a Reduced Pollution Certificate if it converted to run on petrol or gas (Liquid Petroleum Gas or Compressed Natural Gas), as this also significantly reduces particulate matter emissions.

*More information:*

[www.businesslink.gov.uk/bdotg/action/layer?topicId=1081997744](http://www.businesslink.gov.uk/bdotg/action/layer?topicId=1081997744)

### **Voluntary Agreements With Fleet Operators**

Voluntary arrangements can sometimes achieve significant emission reductions at a lower cost to mandatory schemes such as Low Emission Zones. One example of where these have been used is Oxford, where local bus operators have agreed with local authorities to improve the emission standard of buses used in the city. The local authorities have backed up this agreement by keeping open the option of a low emission zone if the voluntary arrangement fails to have the desired impact.

In Yorkshire local authorities have set up the innovative ECO Stars fleet recognition scheme. This is a voluntary scheme for fleet operators who want to display and improve the environmental performance of their fleets. The scheme goes beyond simple retrofit, and rates the performance of fleets across six categories - fleet composition, fuel management, driver skills development, vehicle specification / preventative maintenance, use of IT support systems, and performance monitoring and management. The scheme awards a one to five star rating for overall performance, and provides advice and guidance on further fleet improvement.

*See:*

[www.care4air.org/ecostars](http://www.care4air.org/ecostars)

### **Low Emission Strategies**

Low Emission Strategies are an innovative use of planning conditions by local authorities to help reduce air pollution and greenhouse gas emissions from new development. Under this approach binding agreements are made with developers to reduce transport emissions arising from new development, targeting both the construction and operational phases.

Low Emission Strategies were pioneered by the London Borough of Greenwich and are now used by many local authorities all around the UK. Mitigation measures secured in Greenwich include:

- A temporary Low Emission Zone for the development and construction of the Warren development
- Emission based parking policies in the Greenwich Millennium Village
- Requirements for a new superstore to have 50% of delivery vehicles and 50% of home delivery vehicles associated with

the store meeting the Euro 5 emission standard. The superstore was also required to report to the Council on the implementation of pollution measures and targets five and ten years after opening

*More information:*

[www.lowemissionstrategies.org](http://www.lowemissionstrategies.org)

### **Fleet Licensing**

Local authorities are the licensing body for local taxi services, and in London this power has been used to reduce emissions from one of the city's icons - black taxis. Taxis make up a large proportion of the traffic in central London and therefore have a large impact on air quality in the city centre.

Since 2008 taxi licences in London have only been issued to vehicles that meet the Euro 3 pollution standard. Older taxis that do not meet the standard need to retrofit an approved filter and catalyst, be converted to Liquid Petroleum Gas or otherwise be re-engineered to meet the Euro 3 standard.

The Mayor of London is following up this action by introducing an age limit for taxis and emission standards for new vehicles entering the fleet. From 2012 a rolling 15 year age limit will be set for taxis so that no taxis over 15 years old will be licensed to operate in London unless they have a special exemption. From 2012 new taxis entering the fleet will be required to meet the Euro 5 emissions standard.

*More information:*

[www.tfl.gov.uk/businessandpartners/taxisandprivatehire/1392.aspx](http://www.tfl.gov.uk/businessandpartners/taxisandprivatehire/1392.aspx)

## Construction Equipment

Most construction sites are highly mechanised, and emissions from diesel machinery used in both demolition and construction can be high. In 2006 the Greater London Authority and London Councils published Best Practice Guidance on the control of emissions in construction and demolition. This guidance provides advice for air pollution mitigation measures to be included within a Code of Construction Practice.

The guidance includes advice on retrofitting of construction and demolition equipment with suitable diesel particulate filters, backed by a register of approved filter models and suppliers. However, implementation of the guidance in London has been patchy - as it is not mandatory local authorities have not yet enforced it widely. The Mayor has committed to the guidance, and is expected to consult on upgrading it to Supplementary Planning Guidance in the summer of 2012 to ensure that it can be more easily enforced.

*More information:*

[www.london.gov.uk/thelondonplan/guides/bpg/bpg\\_04.jsp](http://www.london.gov.uk/thelondonplan/guides/bpg/bpg_04.jsp)

## About The Black Carbon Campaign



The Black Carbon Campaign is raising awareness of the need to reduce black carbon emissions to help achieve rapid climate change mitigation and slow the rate of Arctic melting. In the UK it is headed by the NGO ClientEarth and forms part of the wider European Soot Free for the Climate alliance.

[www.clientearth.org](http://www.clientearth.org)