

AIR QUALITY AND CLIMATE CHANGE: INTEGRATING POLICY WITHIN LOCAL AUTHORITIES



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What is this leaflet about?

This leaflet looks at how local authorities tackle the issues of poor air quality and climate change, and the benefits of integrating policy and practice between the two areas. It has been produced by the charity Environmental Protection UK, together with a longer, more detailed guidance document.

What's the problem with poor air quality and climate change?

Poor air quality has a direct impact on the health and well-being of both humans and the natural environment. In the UK over 35,000 annual premature deaths are thought to be attributable to air pollution, with the problem concentrated in busy urban areas and close to congested roads. Climate change also threatens to pose significant health and environmental challenges in the years to come, with warmer summer temperatures, more frequent extreme weather events and rising sea levels.

Why do local authorities need to work on air quality and climate change?

Local authorities have a pivotal role in managing both air quality and the causes and effects of climate change, and it is a well recognised fact that the UK will not be able to solve these issues without a significant input at the local level. Local authorities have clear duties on air quality under the Local Air Quality Management regime, as well as regulatory duties under the Clean Air Act and (in England and Wales) the Local Authority Pollution Prevention and Control system.

Local authorities also have responsibilities in the field of climate change. Many local authorities have set improvement targets for both community (public) and corporate emissions of carbon under the system of local authority performance indicators, whilst emissions reduction now forms a central aim of functions such as planning and transportation. An evolving overarching framework is now starting to develop, informed by pilots such as the 'Local Carbon Frameworks' system established under the previous UK Government.

How are air quality and climate change linked?

Air quality and climate change are fundamentally interrelated. Many common air pollutants are 'climate active', and reducing emissions will lessen their warming effect on our climate. A warming climate also threatens to make air quality worse, with the prevalence of harmful 'photochemical smogs' likely to increase throughout longer, hotter summers. The processes of managing emissions of air pollutants and greenhouse gases are also interconnected. Both sets of emissions largely arise from the same combustion processes – vehicle engines, power generation, homes and industry. If the impacts of both sets of emissions are not considered in policy decisions the results can be unintentional trade-offs, with one set of emissions falling at the expense of an increase in emissions of the other.

Why should local authorities integrate air quality and climate change policy?

There are many benefits of integrating policy. Foremost amongst them is that integrated policy is cheaper to implement – measures can be prioritised to ensure that they benefit both areas, rather than two sets of measures being implemented separately. Integrated measures also help to spread benefits over a long timescale. The benefits of reducing greenhouse gas emissions will be felt several decades in the future, whilst air quality benefits are felt 'here and now' in the form of improved public health and natural environmental quality. If policy is not integrated unintentional increases in emissions of air pollutants or greenhouse gases can occur, requiring costly remedial measures to mitigate the impacts.

How can local authorities integrate policy?

The foundation of an integrated approach is a close working relationship between staff and elected members working on the issues. A common vision on the actions needed to reduce both sets of emissions can form a powerful argument for policy change; the alternative can sometimes be opposing views on policy that weaken the argument for action. Climate change and air quality strategies cannot on their own implement the full range of actions they may propose – to do this they need to influence the plans and strategies that guide a local authority's services. Key functions include planning, transportation and housing. Ideally this should be

done via a top down approach, with policy 'hooks' in documents such as the Sustainable Community Strategy and the Local Development Framework.

What actions should local authorities take forward under an integrated approach?

The table on page 5 provides guidance on the air quality and climate change impacts of typical measures and technologies that can be used to address both sets of emissions. A traffic light system is used to indicate what kind of an impact the measure/technology has on both areas:

- Green – The measure generally has a positive impact.
- Amber – The measure may or may not have a negative impact, depending on where or how it is installed.
- Red – The measure generally has a negative impact (although please note that there may be situations where it does not).
- Neutral – The measure will generally have no significant impact.

Note that this system provides a **guide only**. The impact of some measures depends very much on the technology used, and where (geographically) the measure is installed – please see our guidance document for a full consideration of these (see the link at the end of this leaflet).

A red or amber rating in one category does not mean that a measure should be ruled out – in an area where air quality is poor then a relatively small carbon disbenefit may be acceptable if a measure has a significant positive impact on air quality, and conversely if a measure has very significant carbon savings a small air quality disbenefit may be acceptable. In these situations, however, the negative impacts should be identified and managed to minimise their size, and, in the case of air pollutants, their direct impacts on human health.

Measure/ technology	Impact on air quality	Impact on climate change
Transport		
Alternative fuels ¹	Green	Green
Retrofit of exhaust abatement equipment	Green	Amber
Low emission zones	Green	Amber
Low emission strategies	Green	Green
Fleet management and driver training	Green	Green
Emissions related car parking charges	Amber	Green
Travel plans	Green	Green
Car clubs	Green	Green
The Built Environment		
Domestic energy efficiency	Green	Green
Commercial energy efficiency	Green	Green
Combined heat and power	Amber	Green
Biomass heat ²	Red	Green
Micro wind turbines	Neutral	Green
Solar ³	Green	Green
Heat pumps ⁴	Green	Neutral

Where can I get more information?

The full guidance document 'Air Quality and Climate Change: Integrated Policy in Local Authorities' can be downloaded from the Environmental Protection UK website (www.environmental-protection.org.uk/laqclimate)

¹ Biodiesel and bioethanol would have 'amber' status for air quality, as they have little impact on air pollutant emissions

² In locations where coal and oil are the realistic alternatives for heating fuels biomass would have 'green' and 'amber' status for air quality respectively

³ Solar thermal (hot water) would have 'green' status for air quality, solar photovoltaic would be 'neutral' as this displaces power station emissions, rather than emissions from domestic hot water heating usually provided by gas, oil or solid fuel appliances

⁴ Heat pumps used in areas where mains gas is not available would have 'green' status for climate change



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You may also be interested in our leaflets on:

- Biomass and Air Quality
- Development Control –
Planning for Air Quality (2010 update)

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