

Air Quality Strategy Review: Scope and Vision

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Defra

Outline

- History of the Air Quality Strategy
- Main drivers
- Scope
- Review process including stakeholder engagement
- Measures assessed

History of the Air Quality Strategy

Environment Act 1995:

- set up Local Air Quality Management
- required the creation of a National Air Quality Strategy setting standards for ambient air

The United Kingdom Air Quality Strategy

- Launched March 1997
- Set out principles of air quality policy
- Set standards and objectives for 8 pollutants
- Discussed measures at international, national and local level
- Endorsed by new Government July 1997, with promise of review

The Air Quality Strategy for England, Scotland, Wales and Northern Ireland

- Launched January 2000
- Amended objectives for 6 of the 8 pollutants (5 tighter, 1 less stringent)
- Reviewed actions at local, national and international level
- Addressed implications of devolution

Addendum to the Air Quality Strategy

- Launched February 2003
- Introduced new objective for PAHs
- Additional tighter objectives for PM10 and benzene
- New tighter objective for carbon monoxide
- Different objectives in different parts of the UK

Review of the Air Quality Strategy

- Launched on 5th April 2006
- Main document
- Technical annexes
- Cost/Benefit Analysis
- Supporting evidence base (web only)

1300 pages in total



AQS Review: New Evidence

- Evaluation of the AQS – air quality policies effective with significant health benefits generated;
- AQEG reports on NO₂ and PM – we are not on track to meet air quality objectives across the whole country;
- WHO and COMEAP recommendations on PM_{2.5} – non-threshold pollutant.

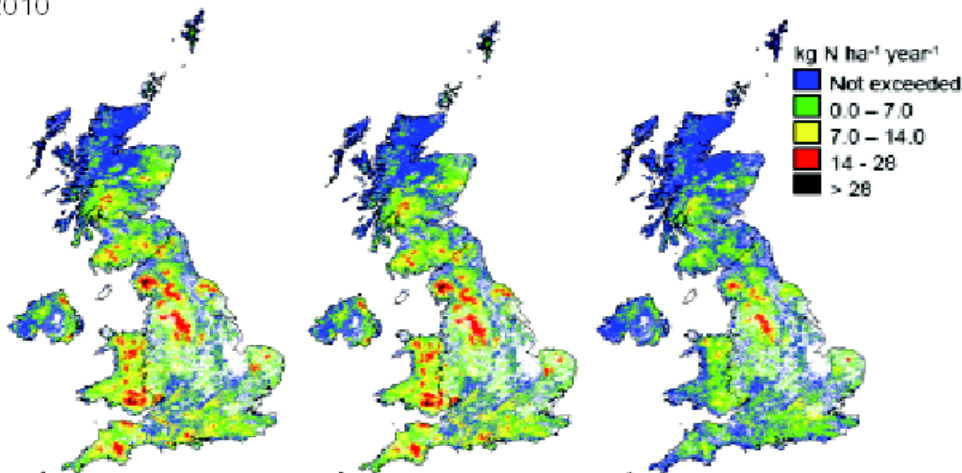
Why Air Quality is important

- In 2005, man-made particulate air pollution in UK was estimated to reduce average life expectancy by **8 months**
- This health impact in the UK is valued at a cost of £9.1-£21.4 bn per annum

Ecosystem effects

Figure A2.62

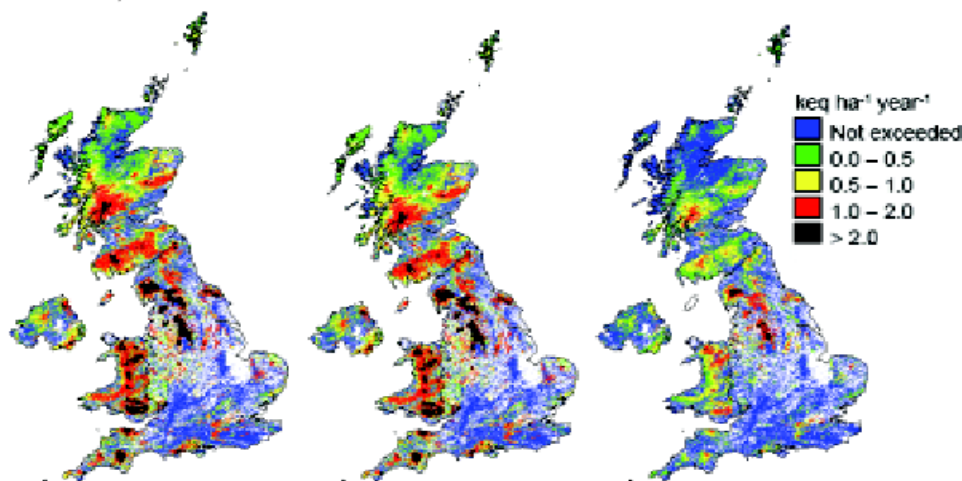
Exceedence of critical loads for acidity deposition, 1995-1997, 2001-2003, 2010



- In 2003, 55% of natural habitats in the UK exceeded levels of harmful acidity;

Figure A2.63

Exceedence of critical loads for nutrient nitrogen deposition, 1995-1997, 2001-2003, 2010



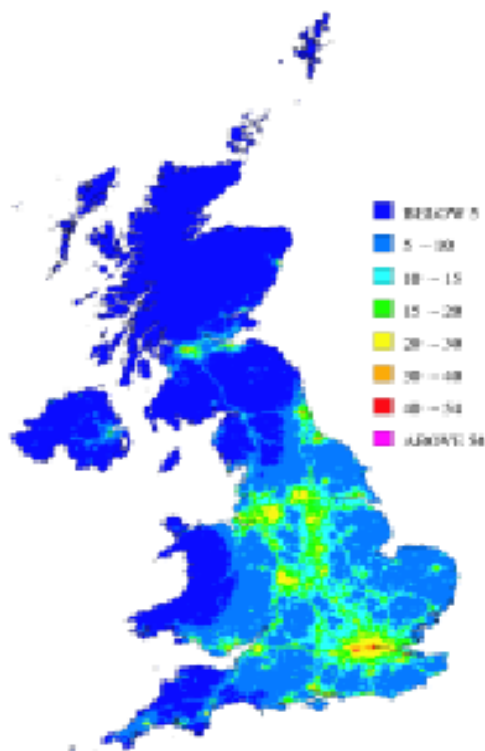
- In 2003, 60% of natural habitats in the UK exceeded level of harmful nutrient deposition

Remaining problem areas

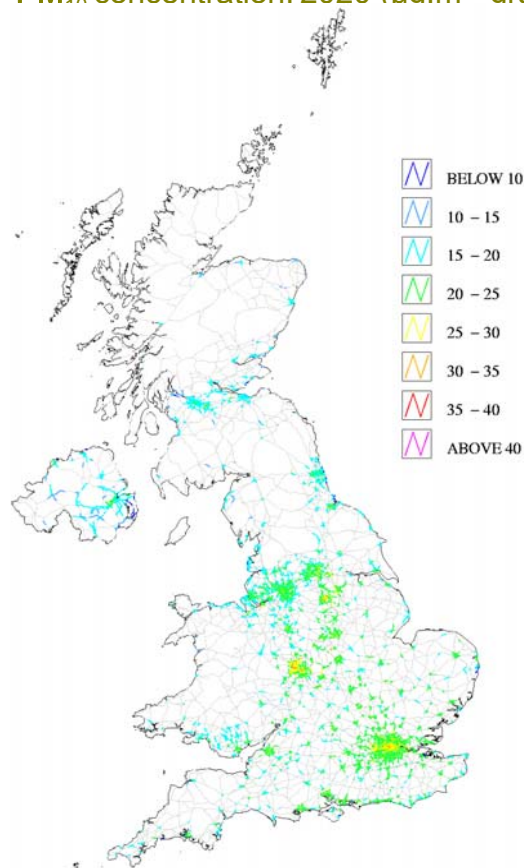
In spite of past performance, we are missing our NO_2 and PM_{10} objectives in few areas across the country and will not meet them in 2020 without further action

Figure 2.6

Annual mean background NO_2 concentration 2020 ($\mu\text{g}\cdot\text{m}^{-3}$)



Urban major roads, annual mean roadside PM_{10} concentration. 2020 ($\mu\text{g}\cdot\text{m}^{-3}$ gravimetric)



Trends

- Measurements show that, at certain locations, long term reducing trends for NO_2 and PM_{10} are flattening out or even reversing.

Figure 2.4

Measured annual mean NO_2 concentrations in the UK (mean of all sites and highest site and 2005 Strategy objective)

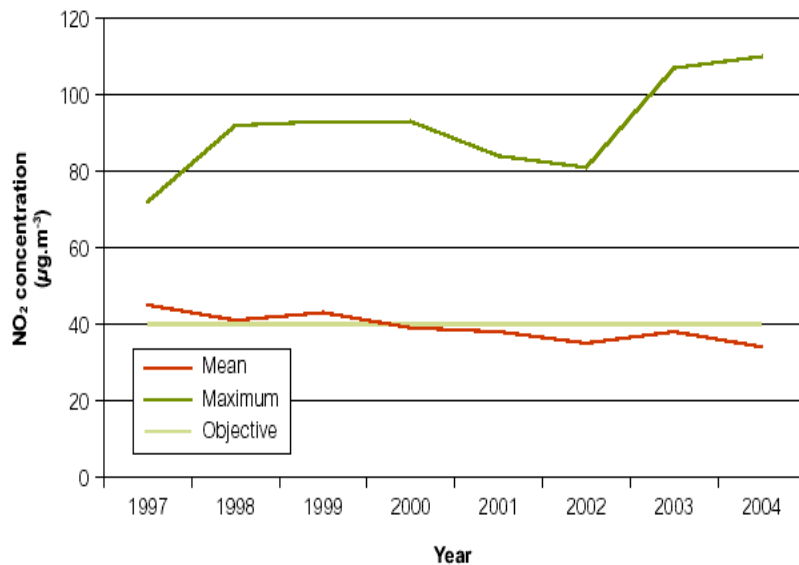
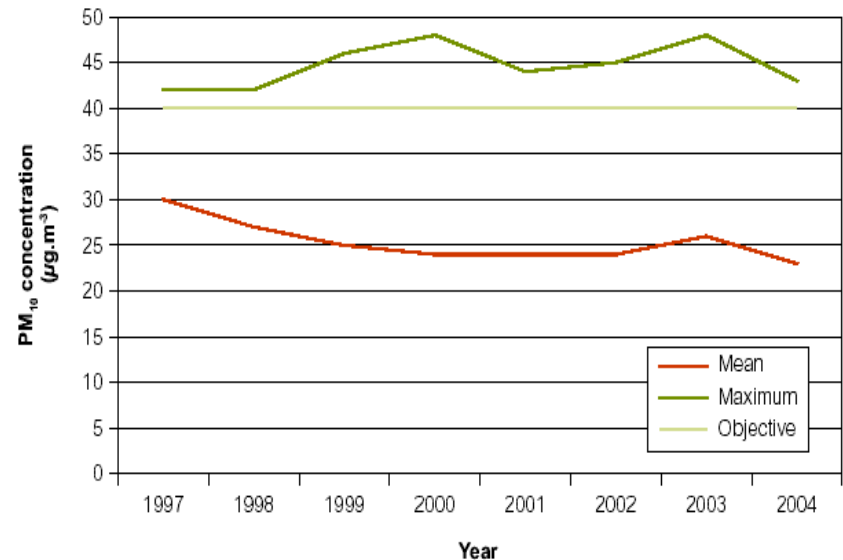


Figure 2.8

Measured annual mean PM_{10} concentrations in the UK (mean of all sites and highest site and 2004 Strategy objective)



Scope of the review

AQS review assesses:

- progress towards meeting the objectives
- additional policy measures to improve AQ
- current objectives and the case for new ones (in particular PM_{2.5})

Aims of the Review

- Generate cost effective health benefits and improve protection of ecosystems across the whole country
- Evidence based ranking of different additional measures to deliver the above
- Extend our assessment of air quality to 2020 (quantitatively) and beyond (qualitatively)
- Provide input for and reflect output of similar European process (CAFE)

The Evidence Base – new work for the review

1. Develop a baseline profile for air pollution across the UK from 2005 to 2020 if no new policy measures are agreed;
2. Develop a profile for air pollution across the UK in 2020 if a number of different new policy measures are agreed;
3. Compare all the impacts, costs & benefits of different measures in order to decide:
 - a) which ones, if any, to implement
 - b) which new objective(s) to set

Additional measures assessed

- Preliminary assessment of long list of additional measures
- IDG, IGCB and AQF agreed short list of additional measures
- Full assessment carried out on short list of additional measures

Short list of Measures

- By sector:
 - transport (8)
 - domestic/commercial (2)
 - industrial (3)
 - shipping (1)
- By level:
 - international (4),
 - UK (9),
 - local (1)
- By type:
 - technology (8),
 - incentivisation (4),
 - demand management (2)
- Combined scenarios (3)

Assessing new measures

Impacts of new policy measures assessed against 4 main criteria:

1. Monetary Costs & Benefits Analysis;
 2. Exceedences assessment;
 3. Ecosystems assessment;
 4. Qualitative assessment.
- (+ Sensitivity studies)

Additional assessments

- Qualitative assessment of measures:
 - Noise
 - Deprived areas
 - Competition
 - Small businesses
- Other measures assessed:
 - Air quality/climate change interactions
 - Local measures
 - Other national transport measures

Consultation process so far

- In Whitehall and DAs:
 - Interdepartmental Group on Air Quality (IDG)
 - Interdepartmental Group on Costs & Benefits (IGCB)
- Including stakeholders in policy making process:
 - Air Quality Forum (AQF)
 - Pre-consultation workshop (May 2005)
 - Formal 3 month consultation
 - Stakeholder workshop

What next?

- End of consultation period – 11th July 06;
- Final Air Quality Strategy – by end 06/ early 07;
- Adoption of new AQD and Euro 5 – 2007(?)
- Adoption of new NEC Directive – during 2008/9(?)
- Next review of Air Quality Strategy – 2009(?)
- But first.....presentations on the detailed assessment of measures and objectives