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# Review of the Air Quality Strategy

Andrew Taylor

Environment & Rural Affairs Department

Climate Change & Air Division



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## Outline

- Background
- Scope of review
- Process
- Exposure reduction/PM<sub>2.5</sub>
- EU developments
- Consultation
- Next steps



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## Background

- Air Quality Strategy sets out short- to medium-term policy framework for air quality in Scotland and rest of UK
- First published in 1997
- Policies have been effective in improving air quality and have generated significant health benefits



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- 100,000+ life years saved p/a
- 4,000+ deaths brought forward avoided p/a
- But....clear that we must do more to achieve NO<sub>2</sub> and PM<sub>10</sub> objectives



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## Vision & Scope

- Previous reviews have concentrated solely on objectives – setting and changing
- This review will focus more on policies.....
  - how effective have current policies been?
  - do we need additional policies?



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## Review Drivers

- Effectiveness of current policies – are they delivering cost effective health benefits?
- Analysis of additional measures
- Extend scope of AQS to 2020 (quantitatively) and beyond (qualitatively)
- Reflect developments at EU level



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## Vision and scope

- Will also:
  - assess progress in working towards existing objectives
  - consider case for reviewing existing objectives and setting new ones



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## Process

- Considerable amount of preparatory work over last 12-18 months:
  - UK Govt and DAs' Interdepartmental Groups on Air Quality (IDG) and Costs & Benefits (IGCB)
  - stakeholder involvement through UK Air Quality Forum and May 05 workshop organised by NSCA





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## Measures

- Effectiveness of existing measures has been assessed
- Preliminary assessment of long list of additional policy measures
- Detailed analysis of shorter list of most promising measures – these taken through to final consultation



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## Additional measures

- A: Euro standard V/VI – low scenario
- B: Euro standard V/VI – high scenario
- C: Programme of incentives for early uptake of Euro V & VI
- D: Incentives to phase out most polluting vehicles
- E: incentives to increase penetration of LEVs into UK fleet
- F: Impact of road user charging schemes on air quality
- G: LEZ implemented in London + 7 largest urban areas in UK



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## Additional measures contd.

- H: Retrofitting of Heavy Duty Vehicles with diesel particulate filters
- I: Domestic combustion switch from coal to natural gas/oil
- J: Domestic combustion – product standards for gas fired appliances
- K: Large combustion plant measures
- L: Small combustion plant measures
- M: Reducing national VOC emissions by 10%
- N: Shipping measures
- O: combined scenario – measures C+E
- P: combined scenario – measures C+L
- Q: combined scenario - measures C+E+L



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## Assessment of measures

- Detailed costs & benefits analysis
- Compliance with objectives
- Habitats & ecosystems – critical loads
- Qualitative assessment
- Overall analysis – driven by costs & benefits



# ‘Traffic Lights’ Assessment

Measures	Monetary Costs and Benefits analysis	Exceedences assessment	Ecosystem assessment	Qualitative assessment <sup>1</sup>
A New Euro Standard V/VI – Low intensity	G	G	G	SI+
B New Euro Standard V/VI – High intensity	A	G	G	SI+
C Programme of incentives for early uptake of Euro V and VI Standards	G	G	G	SI+
D Programme of incentives to phase out the most polluting vehicles (e.g. pre-Euro)	R	A	Insignificant effects	SI+, N+, H+
E Programme of incentives to increase penetration of low emission vehicles (LEV)	G	A	Insignificant effects	SI+, N+
F Impact of national road pricing scheme on air quality	G	G	Insignificant effects	SI+, N+
G Low Emission Zone in London and 7 largest urban areas	Not yet available	A	Insignificant effects	SI+, N+, C-, SB-
H Retrofit (Diesel Particulate Filters) DPFs on HDV and captive fleets (buses and coaches)	R	n/a	Insignificant effects	SI+



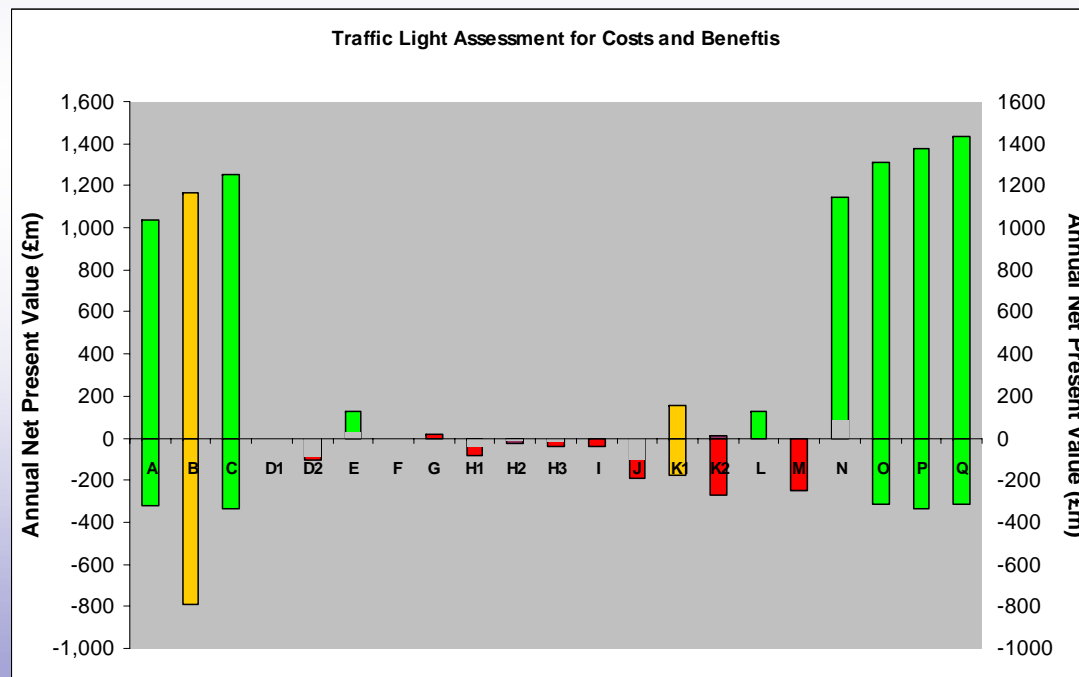
# 'Traffic Lights' Assessment

I Domestic combustion: switch from coal to natural gas or oil	<b>R</b>	N/a	Insignificant effects	SI+, H+, C-, SB-
J Domestic combustion : Product standards for gas fired appliances which require tighter NOx emission standards.	<b>R</b>	Insignificant effects	Insignificant effects	SI+
K Large combustion plant measure	<b>R</b>	<b>A</b>	<b>G</b>	C-
L Small combustion plant measure	<b>G</b>	Insignificant effects	Insignificant effects	SI+, SB-
M Reducing national VOC emissions by ~9%	<b>R</b>	N/a	Insignificant effects	
N Shipping Measure through IMO	<b>G</b>	<b>A</b>	<b>G</b>	
O Combined measures C + E	<b>G</b>	<b>G</b>	<b>G</b>	SI+, N+
P Combined measures C + L	<b>G</b>	<b>G</b>	<b>G</b>	SI+, SB-
Q Combined measures C + E + L	<b>G</b>	<b>G</b>	<b>G</b>	SI+, SB-, N+

1.



# Overall Costs & Benefits Impact





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## Exposure reduction

- Increasing recognition that not all pollutants have a 'safe' level below which human health effects can be considered insignificant – e.g. particles
- Means that health benefits can be gained for whole population by reducing levels everywhere – not just focusing on hotspots





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## Exposure reduction

- If adopted, exposure reduction will require a universal percentage reduction from current particles levels – exact amount to be decided
- Whatever is decided at EU level will follow in UK and Scotland
- However, domestic targets may be introduced in advance
- Will operate in tandem with existing objectives to ensure hotspots are still addressed



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## PM2.5

- Other main development will be new focus on PM2.5 alongside PM10
- Increasing recognition of particular health effects of smaller particles



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## Clean Air for Europe

- September 2005 – EU Thematic Strategy on Air Pollution: Clean Air for Europe (CAFE) published
- Aims to provide an overview of current knowledge of major air pollutants and their effect on human health



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## Clean Air for Europe

- CAFE also proposes to combine Framework Directive and current three DDs – update, streamline and simplify the various provisions
- 4<sup>th</sup> DD will be incorporated at a later date



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## Consultation & Next Steps

- Consultation due to be published on 5 April
- Three month consultation period until 11 July
- Likely to be another stakeholder workshop during consultation period
- Aim to publish revised Strategy by end 2006