Air quality – additional regulatory asks for DfT to consider

Summary
- Many parts of the UK, including London, do not currently meet EU limit values for NO2. Strategic changes to national policy and regulations offer an additional mechanism to reduce emissions, improve air quality, protect public health and work towards compliance with EU limit values.
- As part of the Government’s Red Tape Challenge, Defra have committed to review the Clean Air Act, with a view to progressing primary legislation in 2014. Regulatory asks which require primary legislation could be included in the revised Clean Air Act.

1. Encourage the early uptake of low emission and Euro VI vehicles

Requested change:
- Euro VI vehicles face higher capital and operating costs so incentives should be put in place to encourage their early uptake. The objective should be to compensate operators for the additional upfront capital cost and ongoing operational costs of purchasing a Euro VI vehicle.
- Initially Reduced Pollution Certificates could be used to provide further discounts against vehicle excise duty (VED) for Euro VI vehicles. However, as these will expire in December 2016 consideration should also be given to putting in place longer-term incentives to provide certainty to business. This could be done through the new HGV Road User Levy Scheme or other mechanisms.
- Those purchasing Euro VI, electric, plug-in hybrid and other low emission vehicles should all be able to claim capital allowances against tax of 100 per cent in the first year of purchase, in line with other investments in green technology.

Expected outcome:
Euro VI is expected to reduce emissions by over 90%. Assuming a 5 percentage point increase in the proportion of HGV kms driven by Euro VI vehicles, this would deliver a saving of around 170 tonnes of NOx, the equivalent to around 1% of road transport emissions.

2. Tackle dieselisation of the car fleet by amending tax incentives (including VED and capital allowances)

In recognition of the significantly higher levels of air pollution caused by diesel cars, a revision of the incentives structure is needed to take into account air pollutants as well as carbon dioxide while continuing to support the uptake of new low emission vehicles. Any changes to the tax regime should be tax neutral overall.

Requested change:
- Ensure air pollutants are considered alongside carbon dioxide in determining the eligibility for the “free first year” VED incentive (currently available for Bands A to D cars based on carbon dioxide emissions only)
- Amend rules for environmental capital allowances for low carbon vehicles to ensure air pollutant emissions are considered alongside carbon dioxide. The current arrangements incentivise those purchasing large car fleets (e.g. private hire vehicle operators in London) to buy more polluting diesel models.
• Information on air pollution emissions should also be provided alongside information on carbon emissions at point of sale.

Note: Given the issues with Euro 4 and 5 NOx emissions for diesel cars, to qualify for any environmental incentives a diesel car should be at least Euro 6.

Expected outcome:
There are different emissions standards for petrol and diesel vehicles within the same Euro standard, although it is expected that Euro 6 will considerably narrow the gap in performance between petrol and diesel cars. As a result, diesel cars can emit 22 times as much PM$_{10}$ and four times as much NO$_x$ emissions as equivalent petrol euro standard vehicles. There are also particular issues with diesel NOx emission performance as a result of the NOx control systems they use. Low emission vehicles have very low or zero tail pipe emissions. Consequently incorporating air pollutant emissions into the allocation of any taxation incentives for low emission vehicles will deliver significant air quality benefits across the whole of the UK.

3. Include improved vehicle air quality information in the DVLA database. Currently TfL has to absorb the cost to establish bespoke databases for the information required to enforce the London Low Emission Zone (LEZ) scheme; this is a major disincentive to other authorities to introducing their own scheme.

Requested change:
DVLA should expand its database to include the following information:
• The Euro standard of all vehicles (this is especially important if the vehicle meets a higher Euro standard before the mandatory type approval date);
• The Euro standard of a vehicle should be included on the vehicle license. This will help operators understand if their vehicle meets emission scheme standards both in the UK and EU and help operators avoid fines (e.g. currently all UK HGVs have to pay toll fees in Switzerland as they cannot prove Euro standards on their license documents);
• Tightening of annual vehicle testing standards to ensure more regular vehicle servicing and cut significantly the pollution from vehicles not operating as intended.
• These changes should be complemented by a requirement for vehicle retailers to provide consumers with information about air pollutant emissions at point of vehicle purchase, as already happens for CO$_2$.

Expected outcome:
The London LEZ saved around 30 tonnes of PM$_{10}$ in the first year of operation. Comparable schemes in major cities could be expected to make similar savings to the London LEZ.

4. Developing enhanced retrofit standards and a supporting testing regime

Requested change:
• DfT should support the development and adoption of the proposed new UN Economic Commission for Europe retrofit standard. This would be an effective alternative to a national certification and testing regimes which the GLA has
previously lobbied for, enabling DfT to put in place an effective retrofit standard more cost effectively.

- DfT should also lobby the European Commission to support EU retrofit standards for NOx and PM to ensure pan-European interoperability and avoiding any single market regulatory issues.
- All retrofit systems should be subject to a robust, independent certification process to ensure product quality and performance. Annual VOSA testing and vehicle certification to be included as part of annual vehicle checks.

**Expected outcome:**
Although retrofit solutions are possible to improve on emissions from Euro V it is not possible to retrofit to Euro VI, as there is such a significant step change between these standards. An interim standard would enable schemes like the Low Emission Zone to be used to affordably clean up fleets while waiting for the widespread roll-out of Euro VI vehicles.

### 5. Put in place mechanisms to stop removal of manufacturer-fitted pollution abatement systems

There is increasing evidence that people are removing the pollution abatement systems installed by manufacturers, particularly diesel particulate filters, to reduce fuel consumption or increase speed/other aspects of performance. A number of website advertise these services.

**Requested change:**
- The removal of manufacturer-fitted pollution abatement systems should be an offence subject to a penalty (with limited exceptions, e.g. for those fleets fitting additional or enhanced retrofit equipment).
- Further steps should also be taken to stop the advertisement of these services.

**Expected outcome:**
This regulatory change would prevent increased particulate emissions as diesel engines without diesel particulate filter will not meet their relevant Euro standard.

### 6. Support regulation for noise reduction in the freight fleet and delivery practices

**Requested change:**
- Tighten vehicle noise standards to encourage local authorities to allow out of standard working hours deliveries.

**Expected outcome:**
This regulation would assist deliveries out of normal working hours, thus reducing daytime congestion and emissions. A large scale trial of some of the regulatory changes set out above was carried out over three months in LB Wandsworth. The Freight Transport Association found that during the trial journey times, decibel levels, delivery costs and CO2 emissions were reduced. Assuming benefits from the Wandsworth trial would be broadly replicated at other sites there would be considerable national benefit to these regulatory changes. London also had a largely positive experience of out of hours deliveries during the Olympic period.
7. Bring penalty charges for engine idling into line with other traffic offences

**Requested change:**
- The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002 Regulations should be amended so that penalty charges for idling offences are brought into line with parking penalty charges, to provide a stronger deterrent (a maximum of £130 in London rather than the current £20).
- Amend the Regulations to enable easier enforcement by parking wardens and civil enforcement officers to ensure local authorities use the powers available to them. This should include removing the requirement to warn the driver before issuing a penalty to the registered keeper rather than to the vehicle itself.

**Expected outcome:**
In 2011 TfL conducted a survey of over 1,750 vehicles parked or loading at the side of the road in central London. This survey showed that 59% of drivers left their engines running rather than switching them off. TfL estimate that if all drivers in Central London switch off engines for one minute each day instead of leaving them idling it could reduce emissions by 90kg per annum. Clearly strengthening this regime would create a greater deterrent to idling and produce significant emissions reductions.

8. National emission standards or age limits for taxis

**Requested change:**
- Consider introducing national emission standards and/or age limits for taxis, while retaining flexibility for different authorities to set tighter standards if their local circumstances require this.

**Expected outcome:**
The introduction of taxi age limits in London saved 52 tonnes of NO\textsubscript{x} and 8 tonnes of PM\textsubscript{10} equating to 10% of taxi NO\textsubscript{x} and 14% of taxi PM\textsubscript{10} exhaust emissions. A national standard would boost efforts being led by TfL to ensure that manufacturers develop viable ultra low emission taxis as soon as possible.

9. Reduce emissions from airport operations

**Requested change:**
- The Government should work with airport operators and the aviation industry to ensure that airside fleets are upgraded, more use is made of fixed electrical ground power and pre-conditioned air so that auxiliary generators are not needed and continued improvements are made to aircraft efficiency.

**Expected outcome:**
The aviation sector is responsible for 7% of NO\textsubscript{x} emissions, this is divided between airport operations, responsible for 92% of emissions, and landside vehicles and stationary sources (8% emissions). The GLA is working with Heathrow and the London boroughs of Hillingdon and Hounslow to develop a package of measures to address landside (excluding aviation) emissions with the aim to meet local air quality limit vales.

10. Address tyre and brake wear

**Requested change:**
As exhaust emissions improve, the proportion of emissions from tyre and brake wear is expected to increase. To date limited action has been taken to address these sources and Government has a critical role to play in undertaking additional research to further understand this issue, and then putting in place appropriate steps to reduce this emissions source.

**Expected outcome:**
The latest London Atmospheric Emissions Inventory based on research by King’s College London indicates that up to 75% of road transport emissions of PM now come from tyre and brake wear, so addressing this source provides the best route to delivering further reductions in PM.

*Greater London Authority and Transport for London*
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