



Ricardo
Energy & Environment



A Low Emission Strategy for South Oxfordshire

Final report

Report for South Oxfordshire District Council

Customer:

South Oxfordshire District Council

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SODC LES

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Table of contents

1	The need for a low emission strategy	1
1.1	The national drivers	1
1.1.1	Air pollution.....	1
1.1.2	Climate change	1
1.1.3	An integrated approach	2
1.2	Air quality and climate change in South Oxfordshire	2
2	Objectives of a Low Emission Strategy for South Oxfordshire	5
2.1	What is a Low Emission Strategy (LES)?	5
2.2	Defining principles of a LES for South Oxfordshire	5
2.3	The core themes of the LES.....	5
3	Key actions in the strategy	7
3.1	Promoting low emission behaviour.....	7
3.2	Supporting the uptake of electric and low emission vehicles	8
3.3	A low emission freight strategy.....	9
3.4	A low emission bus strategy	10
3.5	Planning and procurement	10
3.5.1	Planning.....	10
3.5.2	Low emission procurement	11
4	The impact of the Low Emission Strategy	12
4.1	Emission benefits	12
4.1.1	Impacts across the district.....	12
4.1.2	Impacts in the AQMAs.....	12
4.2	Economic assessment	14
5	Taking the LES forward	16
5.1	A partnership approach	16
5.2	Funding opportunities	16
5.2.1	Office of Low Emission Vehicles (OLEV)	17
5.2.2	Transport funding	17
5.2.3	Public health funding	17
5.2.4	Planning gain.....	18
5.2.5	Economic development funds	18
5.2.6	Grant and other funding sources.....	18

1 The need for a low emission strategy

Air pollution is estimated to be responsible for 52,500¹ premature deaths in the UK each year. Climate change is having adverse economic effects due to increases in temperature and extreme weather events such as flooding impacting on infrastructure, agriculture and local habitats. The Council is committed to reducing both air pollution and carbon emissions to ensure a high quality and healthy environment for the residents of South Oxfordshire.

Transport activity is one of the key sources of both air pollution emissions and climate change related emissions. These emissions are not only generated in major towns and cities, but also in more rural areas such as South Oxfordshire.

Managing transport emissions, using a range of local powers, will improve local air quality, reduce health related impacts and contribute to reducing carbon emissions in relation to climate change. This low emission strategy sets out how this could be done in South Oxfordshire.

1.1 The national drivers

1.1.1 Air pollution

There is clear evidence of the impact of traffic-related air pollution on human health. The greatest evidence is in relation to particulate emissions, most importantly fine particulate matter (PM_{2.5}). However, recent evidence on the health impact of nitrogen dioxide (NO₂) has put this at a similar level to particulate matter. Health-based air pollutant concentration limits have been established in European Air Quality Directives to be achieved for the protection of public health. The UK's Air Quality Strategy (AQS) takes this forward in the UK and defines a central role for local action through the Local Air Quality Management (LAQM) regime.

However, despite improvements in emissions from all sectors in recent years pollutant levels in our towns and cities have remained stubbornly high. There remains a significant failure to comply with the health-based limits in respect to nitrogen dioxide (NO₂) levels, with some breaches of the particulate matter (PM) limits at local hotspots. This is reflected in local air quality management data where some 600 Air Quality Management Areas (AQMAs) have been declared across the country due to failure to meet the air quality limits. The vast majority of these, some 85%, have been declared for breaches of the NO₂ limit value, with a further 15% declared due to a PM₁₀ breach, showing that a small PM problem remains. Over 95% of the breaches have been attributed to transport emissions, demonstrating the major role that local transport plays in contributing to poor air quality.

Due to these continuing breaches of the air quality limits the UK is now in breach of the European Directive and the European Commission is taking infraction proceedings against the UK which could result in significant fines, which could in turn be passed onto local authorities where the breaches occur. Therefore the UK Government and local authorities need to take steps to reduce emissions, particularly in relation to transport activity.

1.1.2 Climate change

The Government's commitment to tackling climate change is enshrined in the Climate Change Act 2008, with a target of an 80% reduction in greenhouse gas emissions by 2050 compared to 1990 levels. This overall target is being broken down into a series of five year carbon budgets, which are being developed and monitored by the Committee on Climate Change (CCC). The Carbon Plan brings together the current coalition Government's national policy plans that will deliver the first four carbon budgets producing a 50% emissions reduction on 1990 levels by 2027.

Local authorities have a significant role to play in delivering and supporting these Government objectives within local communities. Their role was explored in detail by the CCC in 2012 and they concluded that local authorities:

¹ 'Draft plans to improve air quality in the UK - Tackling nitrogen dioxide in our towns and cities', DEFRA, September 2015

“have significant scope to influence emissions in buildings, surface transport, and waste, ... (and) there is an opportunity to reduce emissions in these sectors by 20% in 2020 from 2010 levels”

To achieve this the committee also recommended that local authorities should draw up low carbon plans with high levels of ambition.

1.1.3 An integrated approach

The Government has recognised the benefits of tackling both air quality and climate change together in an integrated approach. A report by DEFRA in 2010 explored the benefits of an integrated approach and the need to carry this out at both a national and local level, and concludes:

“Optimising climate change policies for air pollution can yield additional benefits of some £24 billion (net present value) by 2050.”

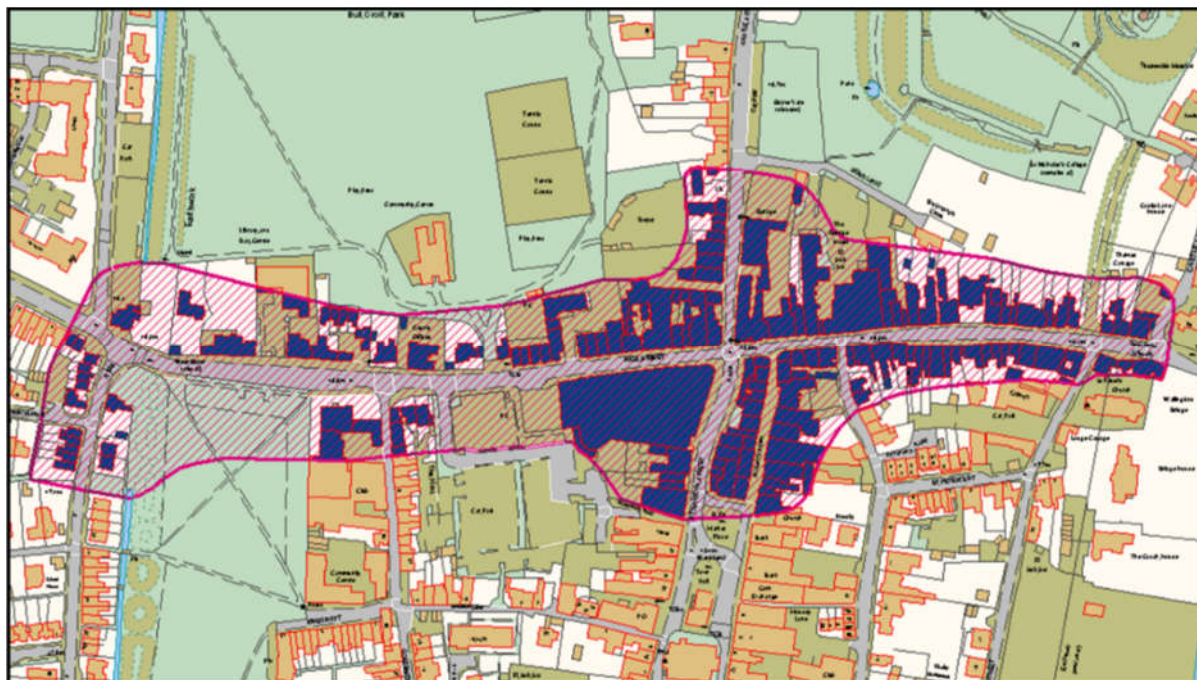
“Action at national, regional and local levels will be needed to ensure policies are integrated to maximise these co-benefits and ensure ambitious but realistic targets for air pollution are set for the future”

As part of this commitment to integrating air quality and climate change at the local level DEFRA have been supporting the work of the Low Emission Strategies Partnership and have published a good practice guide on Low Emission Strategies.

1.2 Air quality and climate change in South Oxfordshire

As a largely rural district South Oxfordshire has very good air quality, however, there are a few areas where congested narrow streets have resulted in air pollution levels above the regulated limit values. In these locations the Council has to declare AQMA's and put in place actions to improve air quality (an Air Quality Action Plan). In South Oxfordshire we have three AQMA's in Henley, Wallingford and Watlington. In Henley some streets, in particular Duke Street, have air pollution levels nearly 50% higher than the regulated limit. In Wallingford and Watlington air pollution levels are about 25% above the limit values.

Figure 1: The extent of the AQMA in Wallingford

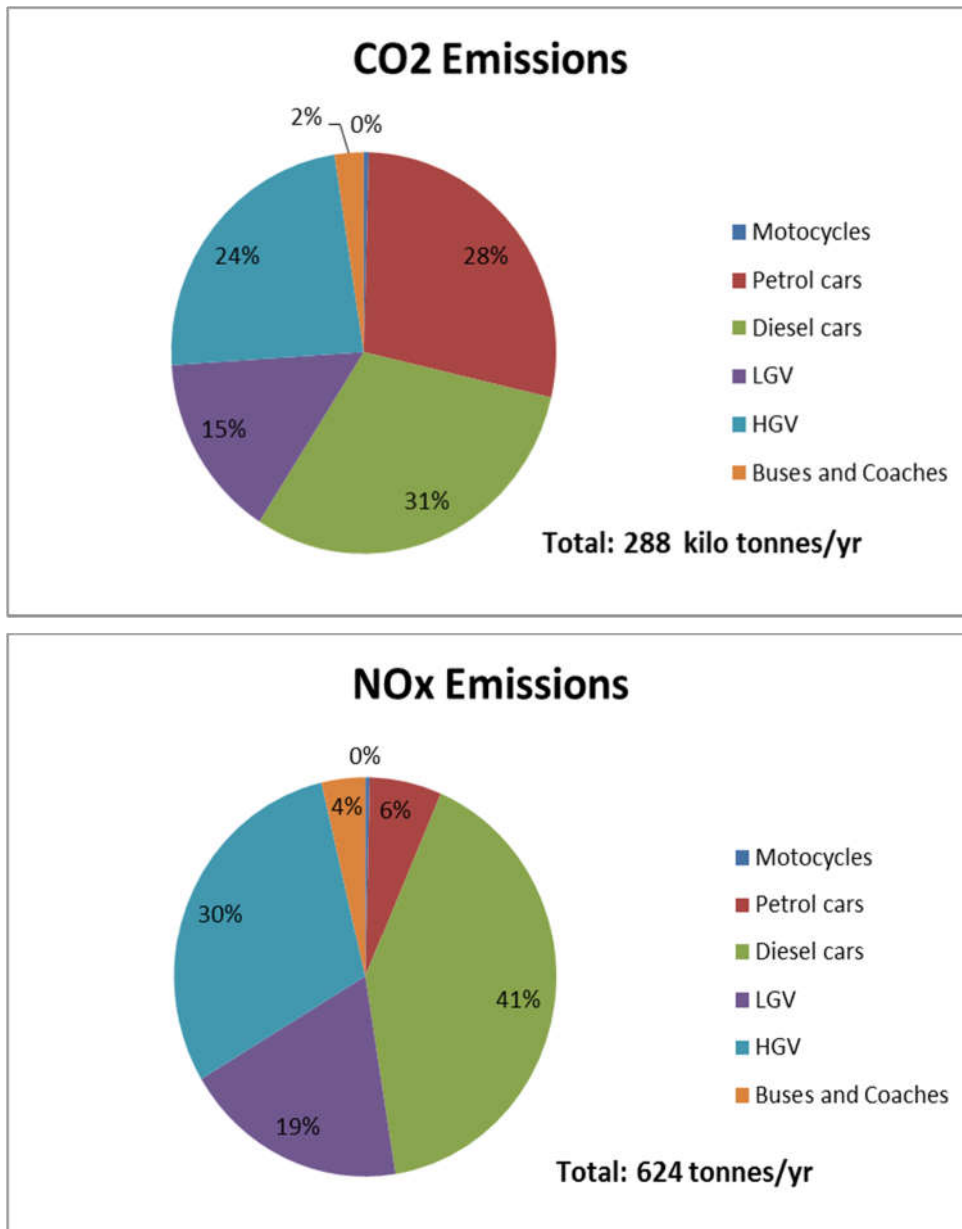


In addition there are some areas, such as Didcot and Thame, which have streets that are close to the air quality limit values. With new housing, economic growth and potential traffic growth in these areas there is the danger that further breaches of the the air quality limit values may occur. Therefore this Low Emission Strategy is needed to mitigate existing problems and help prevent further problems from arising.

In terms of climate change like all areas across the country we contribute to carbon emissions from burning fossil fuel to heat our homes and drive our cars. Nationally we have a target of an 80% reduction in emissions by 2050. Although action is needed at the national level we also have a role to play as a local authority. We already work hard to reduce our own emissions but we also need to help residents and businesses across the district to manage their carbon emissions. This strategy will help us co-ordinate actions to reduce transport emissions across the district.

Transport emissions are a key component of both air quality and climate change related emissions in South Oxfordshire and provide the focus of this Low Emission Strategy. An estimate of the total emissions related to transport in the district was made for 2015 and is shown in Figure 2 below.

Figure 2: Estimated CO₂ and NO_x emissions from transport in South Oxfordshire



In terms of carbon dioxide (CO₂) emissions passenger cars are the dominant source accounting for 59% of emissions. Freight transport accounts for the bulk of the rest. In terms of nitrogen oxides (NO_x) emissions, the primary air pollutant of concern, we can see that diesel vehicles are the main culprit. Diesel cars alone account for 41% of NO_x emissions, with diesel freight vehicles accounting for a further 49%.

Therefore in developing a Low Emission Strategy (LES) to reduce emissions across the district the primary target will be passenger cars and freight vehicles, with a particular focus on diesel vehicles.

2 Objectives of a Low Emission Strategy for South Oxfordshire

2.1 What is a Low Emission Strategy (LES)?

A Low Emission Strategy is an integrated approach to reducing transport emissions, both air quality and climate change related, across the district. It is a key element of the Air Quality Action Plan, pulling together transport measures that will support achievement of air limits where these are being breached. However, it is not focused purely on the AQMAs, as it will be seeking to reduce emissions across the district in order to prevent further breaches from occurring and generating wider health benefits.

The strategy will also provide a focus for measures to reduce carbon emissions from transport activity in South Oxfordshire. By considering both air quality and climate change together it aims to maximise the co-benefits of tackling both issues in a co-ordinated way, allowing resources to be targeted efficiently.

2.2 Defining principles of a LES for South Oxfordshire

In developing an integrated package of measures for the LES a number of key principles were established:

- The LES will seek to reduce both air pollution and climate related emissions from transport in an integrated way.
- It will consider the wider context of South Oxfordshire and carry out actions with a wider set of partners. In particular it will recognise:
 - Policies and programmes that are developed jointly with the Vale of the White Horse District Council who are its partner authority; and
 - Activities that are best carried out at a county level working with the County Council and the Oxfordshire air quality group.
- The LES will support the economic development aspirations of the Council, in particular
 - Helping understand how improved environmental quality supports economic growth;
 - Exploring links with the Local Enterprise Partnership and the wider business benefits of a low emission transport system.

2.3 The core themes of the LES

Working across the Council, and with its key partners, a group of five core themes were identified for the LES comprising:

- Promoting low emission behaviours
- Supporting the uptake of electric vehicles
- A bus emission strategy
- A freight emission strategy
- Low emission planning and procurement

Each of these themes are not separate but overlap and will work together as a coherent whole in order to provide an effective LES. For example the electric vehicle strategy will use planning and procurement powers to promote the uptake of vehicles, and the low emission behaviour theme includes eco-driving and anti-idling campaigns that will also be reflected in the bus and freight emission strategies. This integrated approach is illustrated below.

Figure 3: The five core LES themes



The key actions that the Council is proposing within each of these themes is set out in the following section.

3 Key actions in the strategy

3.1 Promoting low emission behaviour

Emissions from cars, especially diesel cars, are a key source of air pollutant emissions and of the air quality problems in all of the AQMAs and the dominant issue in Henley. Therefore we will work with residents and business across the district to promote behaviours that will reduce emissions from transport activity. In particular we will:

- Support transport, air quality and health behaviour change campaigns, working with the County, local health bodies and community groups.
- Promote low emission vehicles and driving styles.
- Carry out anti-idling campaigns to reduce emissions from stationary vehicles.

In terms of wider behavioural change promotion campaigns; there are a whole package of soft and hard measures designed to encourage mode shift away from the car to other modes. The behaviour change element is the key aspect of this in terms of travel plans, personalised travel marketing and community engagement. It is estimated that such campaigns can produce a 7-8% reduction in road traffic in target areas, with an estimated cost of 4p per car km removed, as well as generate health improvements from increased physical activity.

In particular we will:

- Explore options with the County to roll out further the 'Travel Choices' initiative being taken in Didcot and the Science Vale.
- Support the County to ensure that local air quality issues and information on low emission vehicles are included in Oxfordshire integrated travel planning system.
- Look for opportunities to work with local community groups to support travel behaviour change projects.
- Ensure that low emission vehicles and eco-driving behaviours are considered within any behavioural change campaigns being taken forward.

Figure 4: The Brompton Dock cycle hire scheme at Didcot station



We will lead by example ensuring that we have an up to date travel plan to promote cycling and public transport to staff, including the investigation of pool cars so that some staff could avoid the need to drive to work. The travel plan will also include advice on eco-driving and low emission vehicles.

In relation to promotion of anti-idling, experience from other UK authorities with anti-idling campaigns suggests that a flexible approach rather formal enforcement be adopted due to the potential costs. As such we will:

- Work with the County to establish 'Switch-off' signage at key traffic queue or waiting locations in the district.
- Encourage the work of the bus quality partnership and partnership working with the freight industry to include messaging on anti-idling and efficient driving behaviours, potentially as part of a wide promotional scheme such as the EcoStars² freight recognition scheme.
- Include anti-idling information with other vehicle information in behavioural change programmes.

3.2 Supporting the uptake of electric and low emission vehicles

Electric vehicles have zero tailpipe emissions and therefore offer significant potential to help tackle local air quality issues. They also have lower overall carbon emissions than petrol or diesel vehicles, and this difference will increase as emissions from electricity generation reduce with greater use of renewable energy. Therefore the promotion of electric vehicles (EVs), as an alternative to diesel and petrol cars, provides a key route to reducing emissions from car traffic. There is also some potential for the use of electric buses and delivery vehicles, again helping to reduce emissions from diesel vehicles.

The promotion of electric vehicles also fits well with the development of the 'Science Vale' enterprise zone, providing potential economic opportunities for the supply and maintenance of these vehicles. It will also contribute to managing emissions from the additional transport activity expected as part of the Science Vale development.

Figure 5: Hertz Electric Car Club Vehicle in Oxford



Overall a target of 2% of all light duty vehicles being electric by 2020 is proposed, which will be increase to 5% going forward to 2025. To achieve this target the key measures will be:

- Establish reduced charges for electric and low emission vehicles in Council owned parking areas.

² ECOSTARS is an environmental fleet recognition scheme – for more details see <http://www.ecostars-uk.com>

- Develop a wider network of fast and rapid charging points focusing on:
 - Council owned premises and parking locations
 - Key retail sites
 - Business parks – particularly those in the Science Vale
 - Didcot railway station
- Work with local businesses to encourage the uptake of electric vehicles and supporting infrastructure, with key targets being:
 - Taxi firms
 - Local delivery companies
 - Car clubs
 - Council vehicles
- Require availability of vehicle charging infrastructure in new developments through the planning system.
- Use the Council's procurement powers to encourage local suppliers to adopt electric or low emission vehicles.

3.3 A low emission freight strategy

Freight emissions, covering both vans and HGVs, are an important element of the transport emissions across the district and within in all of the AQMAs, especially Watlington. At the district level our focus is to work with the freight industry to try and manage freight movement more effectively to reduce its impacts. The key measures that will be developed at the district level are:

- *An HGV eco-driving and anti-idling campaign* – to help improve efficiency and reduce fuel costs. This will be developed working with the County and targeted partnership working with the freight industry. In addition the potential for an 'Ecostars' type freight accreditation programme will be explored.
- *Delivery and Service Plans (DSPs) and Construction Logistics Plans (CLPs)* – can be used to help reduce freight deliveries to key sites and organisations in the district. Working with the County and economic development partners we will explore the best way to engage with organisations to deliver DSPs.
- *Freight journey planning* – County is signed up to the national Freight Gateway system, which should become operational in Oxfordshire this autumn. This provides information on environmentally sensitive areas in the National Freight Journey Planner which feeds into lorry specific satnavs and commercial logistics programmes to influence route choices accordingly. We will work with them to ensure that areas of poor air quality are recognised in this work.

In addition, the District will work with the County and Oxford City Council on developing ideas around freight consolidation. This will be done in terms of the potential for consolidation of goods deliveries to towns such as Didcot and Wallingford, but also in terms of the overall impact of freight movements across the district accessing such a consolidation centre.

There is a particular issue in terms of freight movement and air quality in Watlington. This is caused by freight using this village as a route to the M40 and is exacerbated by infringement of the 7.5t weight limit. There is the possibility of a village by-pass as part of a wider housing development scheme in the village. However, in the short term we will also work with the County to explore:

- *A freight 'clearway'* – which would remove on-street parking areas on Couching and Shirburn Streets that are causing blockages and congestion for both goods vehicles and cars. This would ease the flow of vehicles helping to reduce emissions from queuing traffic. This approach has also been supported by a recent traffic study of the village in support of the neighbourhood plan.
- *Increased enforcement of the 7.5t limit* – as there is data to suggest the limit is not being adhered to and adding to congestion and pollution. A combination of better signage and enforcement methods such as ANPR will be explored with Watlington Town Council.

3.4 A low emission bus strategy

Although buses are not a major source of transport emissions across the district as a whole they can be important in the AQMA's, especially in Wallingford. They are also a very visible element of the public transport system and one that we are seeking to promote to reduce car use. Therefore supporting the development a low emission bus fleet is an important element of the emission reduction strategy. The key measures that will be pursued at the district level are:

- *A voluntary Euro IV emission standard* for all buses operating in the district. This will be developed working through the bus quality partnership with support from the County Council.
- *Supporting eco driving and anti-idling with bus operators* again working through the bus quality partnership, but with complementary signage for anti-idling at key locations. The work on signage will be developed with the County Council.

In addition we will explore options for *bus only use of the Wallingford Bridge* to ease congestion and queuing at the traffic lights in the High Street on the bridge approach, which is giving rise to high levels of pollution in a confined environment. The existing ring road provides an alternative for other traffic currently using this bridge.

Figure 6: The narrow High Street in Wallingford



3.5 Planning and procurement

3.5.1 Planning

The use of development planning policy is a key lever that the council can use in terms of driving a long term vision of reducing emissions from transport. The National Planning Policy Framework (NPPF) sets out the national policy on the air quality impact from new developments. The NPPF places a presumption in favour of sustainable development, stressing the importance of local development plans and states:

“Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air

Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas is consistent with local air quality action plans (and strategies)”.

The Council is in the process of developing a new Local Plan for South Oxfordshire looking forward to 2031. The Local Plan looks at the key aspirations for the area including economic development and housing needs. Within this plan we need to account for the transport activity related to development in the district and its impact on air pollution and climate change. Within this plan we will:

- Set out our understanding of the current air quality and climate change issues in the district including the current air quality management areas;
- Assess how our aspirations for development may impact on these issues and the potential for worsening air quality in other areas; and
- Consider measures that will help reduce emissions from transport and support the actions set out in this Low Emission Strategy.

In addition we will work with local communities through their Neighbourhood Plans to explore community level solutions especially in areas already subject to Air Quality Management Areas. Many local communities are already keenly aware of these issues and exploring actions in their Neighbourhood Plans. The Joint Henley and Harpsden Neighbourhood Plan (JHHNP) is a good example of this and makes extensive reference to air quality as a key issue and supports the measures we are developing in this LES.

We have already developed guidance for developers on how we expect them to assess and manage the transport emissions for proposed new developments. This guidance is part of our Air Quality Action Plan and promotes:

- Travel plans for new development to reduce vehicle movements
- Investment in cycling and walking infrastructure
- Support for public transport
- Use of low emission vehicles
- Investment in electric vehicle recharging infrastructure

3.5.2 Low emission procurement

Public authorities are responsible for an annual spend of over £230bn in the UK. The UK Government and Local Government bodies have identified the significant role that public sector procurement can have in securing environmental improvements, particularly in relation to vehicle emissions, and assisting the accelerated transition to a low carbon economy. Appropriate procurement strategies can help stimulate economic development, encourage innovation and improve air quality. The Public Services (Social Value) Act 2012 places a requirement on commissioners to consider the economic, environmental and social benefits of their approaches to procurement before the process starts.

In addition the Council has a duty to promote the use of Low Emission Vehicles in its operations under the Cleaner Road Transport Regulations (2011). Working with our partner authority the Vale of the White Horse we will work to promote the use of low emission vehicle in our own fleet and within the transport services we purchase. This will be done by considering:

- Setting technical specifications for energy and environmental performance in the documentation for the procurement of vehicles and transport services;
- Including energy and environmental impacts in the purchasing decision by using energy and environmental impacts as award criteria as part of a procurement procedure; and
- Including energy and environmental impacts in the purchasing decision by monetising them in accordance with set methodologies.

Under our powers with respect to the Social Values Act we will also consider the transport emissions impact of wider service procurement. In particular we will look to encourage the use of low emission

vehicles, eco-driving and anti-idling policies for businesses providing services to the Council. This may be through aware criteria or standards within our procurement processes.

A guide to low emissions procurement has been developed to support our procurement team.

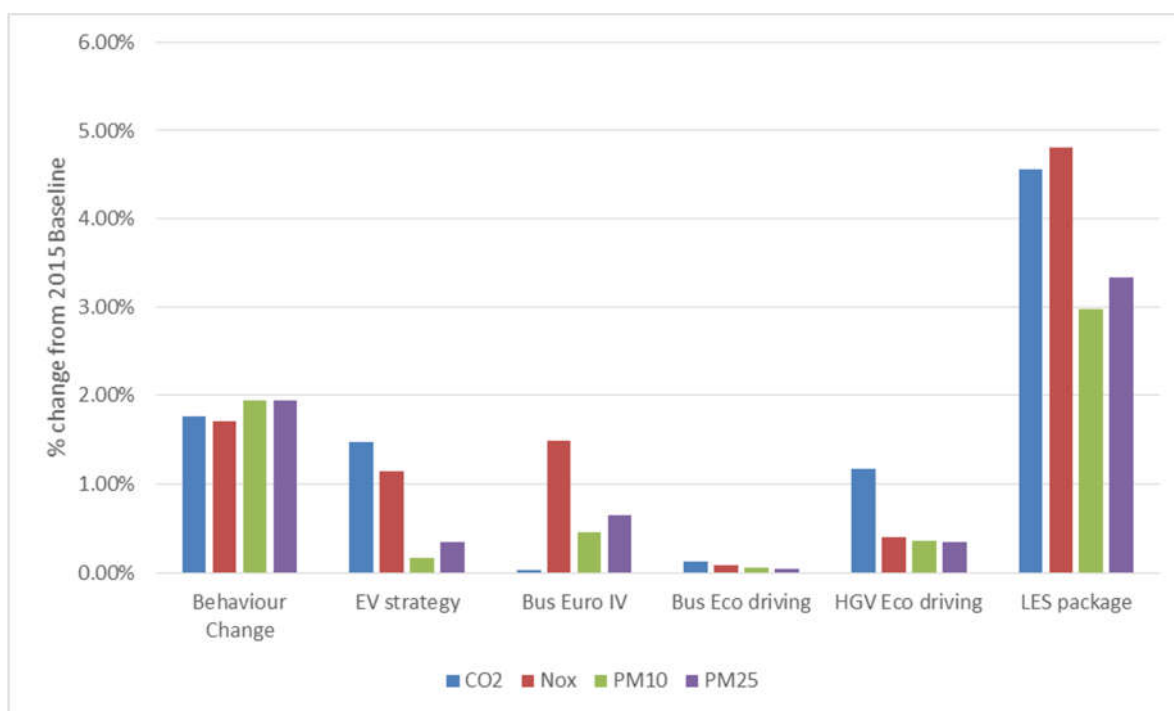
4 The impact of the Low Emission Strategy

4.1 Emission benefits

4.1.1 Impacts across the district

The LES has measures that impact across the whole of the district and some that are specific to the air quality management areas. The estimated impact of the key LES measures on emissions at district level is shown in Figure 7 below.

Figure 7: Emissions impact of the LES at the district level



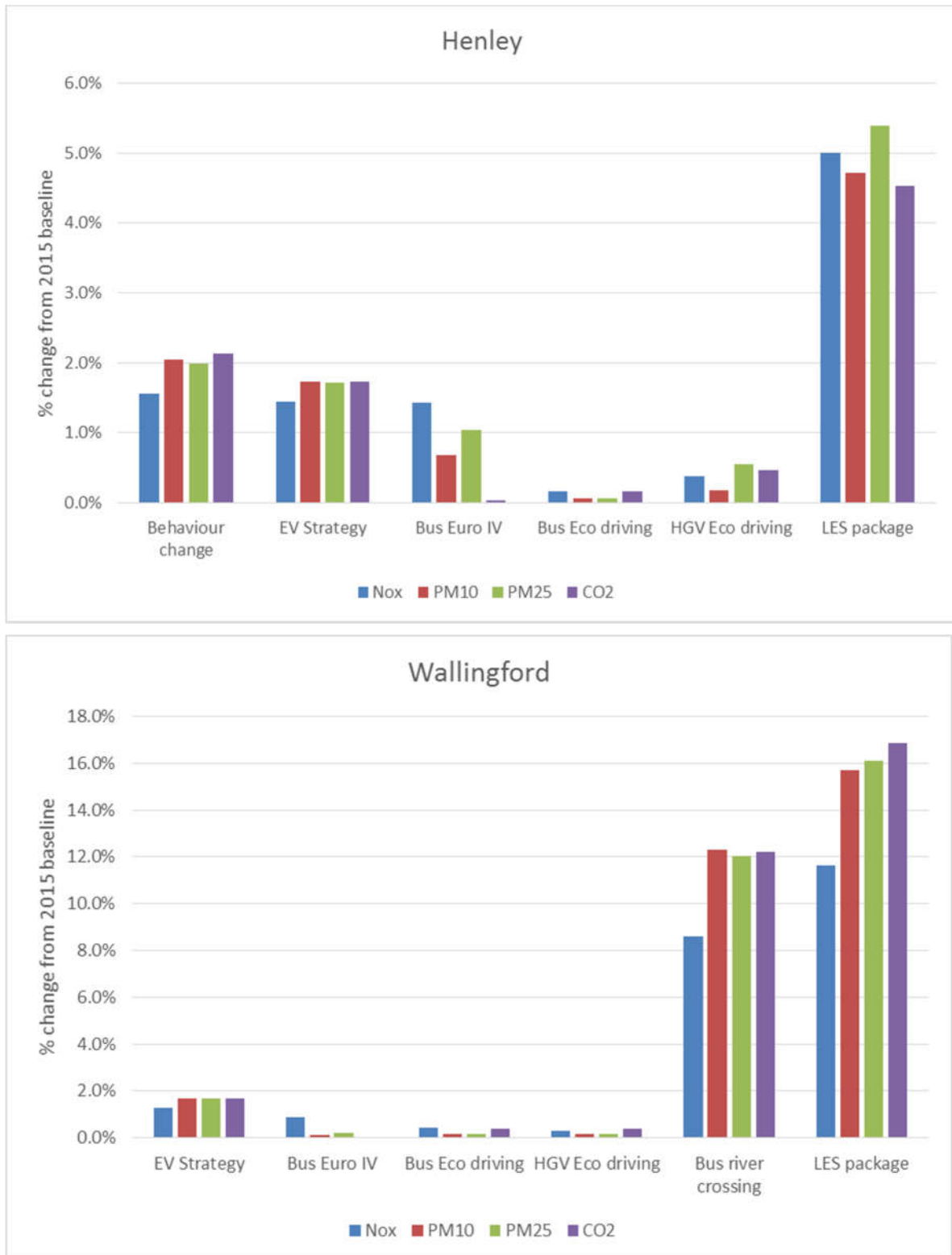
The chart shows the potential impact of the measures in 2015 against a business as usual baseline in 2015. Overall the LES package is expected to reduce emissions across the district by about 4.5% for CO₂ and NO_x and about 3.5% for PM. The greatest impact is for the behaviour change measures that reduce overall traffic levels.

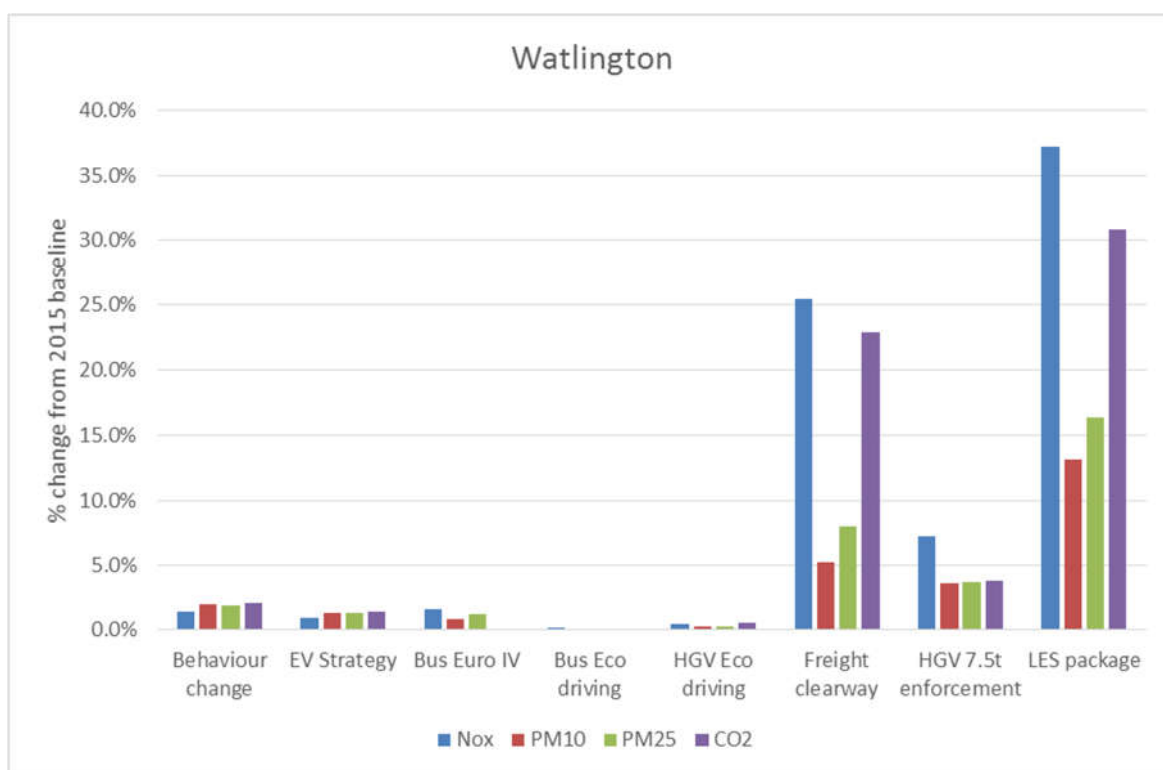
Overall the reductions in emissions are not large, but they are a starting point and will contribute to reducing pollution across the district.

4.1.2 Impacts in the AQMAs

As well as the measures that impact across the district there are some additional measures targeted just at the areas of worst pollution in the AQMAs. The impact on emissions of the district wide measures and the additional local measures for each of the AQMAs are shown below.

Figure 8: Impact of the LES in the AQMAs





In Henley no additional measures are included in the LES and so the impact is similar to that of the district as a whole with emissions reduced by between 4-5%. In Wallingford the key local measure included in the LES is the bus only use of the Wallingford Bridge river crossing. This has a much greater affect in the town than the district wide measures reducing emissions by some 12%, with the overall package reducing emissions by 16%. In Watlington two local measures are included which are the freight 'clearway' and better enforcement of the 7.5t weight limit. These two measures have a significant impact on local emissions with the whole LES package reducing NOx emissions by some 35%, CO₂ by 30% and PM by about 15%.

In terms of pollution concentrations and air quality limits these measure will have some success. In Henley most areas are expected to comply with the NO₂ limits except for Duke Street which will remain a problem beyond 2020. In Wallingford the picture is similar with some problems remaining on the High Street, but these should be resolved by 2020. In Watlington the impact of the LES package will be to remove all areas where the limits are exceeded from 2015.

4.2 Economic assessment

The cost of each of the measures in the LES has been estimated along with a valuation of the emissions benefits. This was assessed over a 10 year period from 2016 to 2025 to give an overall net present value (NPV) for the measures and a benefit cost ratio (BCR) as shown in Table 1 below.

The most economically efficient measures are the bus and HGV eco driving schemes benefiting from fuel costs savings. The EV scheme is also cost effective again benefiting from fuel cost savings of electricity vs petrol/diesel. More locally the freight 'clearway' scheme in Watlington shows a positive economic benefit being easy to implement and generating good emissions benefits.

The other measures do not have a positive economic benefit. However, when combined in a package the overall LES does have a positive economic benefit with a BCR of over 2. This supports the package approach that has been taken with the LES.

Table 1: Economic assessment of the LES measures

Scenario	Total PV benefits 2016 – 2025 (£millions)	Total PV cost 2016 – 2025 (£millions)	NPV (£millions)	Rank (NPV)	Benefit Cost Ratio	Rank (BCR)
Area measures						
Behaviour change	2.37	5.72	-3.35	10	0.41	8
EV strategy	1.41	0.38	1.02	4	3.68	3
Bus Euro IV	0.29	0.50	-0.20	7	0.59	7
Bus Eco-driving	0.84	0.04	0.81	5	22.24	2
HGV Eco-driving	13.86	0.50	13.36	1	27.76	1
AQMA measures						
Wallingford Bus Crossing	0.09	0.79	-0.70	8	0.12	9
Watlington HGV Clearway	0.20	0.14	0.06	6	1.44	6
Watlington HGV 7.5t enforcement	0.07	0.87	-0.80	9	0.08	10
Combined						
Area LES	18.77	7.13	11.64	2	2.63	4
Area LES plus AQMA	19.13	8.93	10.20	3	2.14	5

5 Taking the LES forward

5.1 A partnership approach

In delivering the LES the Council will work with a range of partners as indicated in Table 2 below. Since the LES is focused on transport measures, the highways authority: Oxfordshire County Council, is a key partner. They will take a lead role in the behaviour change work building on existing experience from Oxford and Didcot. In terms of the behaviour change element of the LES the Council will also be looking to work with local community groups, to access local engagement, and the Health and Wellbeing Board to support their initiatives on active travel.

Table 2: Delivery partners for the LES

Measure	SODC	Oxfordshire County	Health and Wellbeing Board	Vale of the White Horse	Local Groups	Transport Operators
Low emission behaviours	✓	✓✓	✓		✓	
EV strategy	✓✓	✓		✓	✓	✓
Freight strategy		✓✓				✓
Bus strategy		✓✓				✓
Planning and procurement	✓✓			✓		

The County Council will also have an important role to play in the bus and freight strategies, primarily through the management of the bus quality partnership and targeted partnership working with the freight industry, but also through ongoing work in managing freight and public transport activity in the County. Clearly in taking forward these strategies it will also be important work directly with the local transport operators such as Thames Transit.

In relation to the electric vehicle strategy the Council will take the lead supported by our partners. We will work collaboratively with the Vale of the White Horse in taking a co-ordinated approach to the support of EV's, especially across the Science Vale. We will also look for opportunities of joint working with the County Council and in terms of engagement we will work with local community groups and transport operators.

The development of our planning and procurement policy will be an important support measure ensuring a long term approach to the LES. These policies will be developed jointly with our partner authority the Vale of the White Horse.

5.2 Funding opportunities

Funding for the LES measures will be crucial to the success of the strategy. There are a range of funding opportunities that the Council will pursue as summarised in Table 3 below.

Table 3: Funding sources for the LES measures

Measure	OLEV	Transport	Public Health	Planning	Development	Grants (AQ/EU)
Low emission behaviours		✓	✓	✓ Conditions		✓
EV strategy	✓	✓		✓ S106	✓ LEP	✓
Freight strategy		✓		✓ S106	✓ LEP	✓
Bus strategy		✓				✓
Planning and procurement				✓		

5.2.1 Office of Low Emission Vehicles (OLEV)

OLEV has announced £500m of new funding for low emission vehicles from 2015 to 2020. The programme details are yet to be worked out but the funding is expected to cover:

- £200m to continue support for the purchase of electric and plug-in electric cars with a grant of up to £5,000.
- £30m to support electric vans up to 3.5 tonnes and may be made available to other ultra-low emission vehicles (ULEV) such as quadricycles and 2 –wheelers.
- £32m for the deployment of rapid electric vehicle charging infrastructure.
- £20m to local authorities to support the uptake of ULEV taxis.
- £30m for the purchase of low emission buses. This programme will replace the Green Bus Fund.
- £4m will be made available for gas infrastructure to support the switch to gas HGVs.
- £35m for local authorities and communities to apply for '**Low Emission City**' status, aimed at making a step change in the deployment of low and ultra-low emission vehicles in 2 to 4 cities.

The Council will explore all these opportunities for support with our partners.

5.2.2 Transport funding

The County Council is responsible for the main streams of transport funding as the highways authority and we will work with them to help access relevant funds to support the LES. The key elements of transport funding are:

- *The Local Transport Plan (LTP)* – which provides the overall strategy for transport investment in the County. The County is currently developing and consulting on LTP 4 and we will work with them to ensure that the aspirations set out in the LES are considered in the LTP.
- *Local Sustainable Transport Fund (LSTF)* – is central government funding focused on improving the sustainability of transport systems in towns and cities. Some ongoing funding is already being used for behaviour change work in Didcot.

5.2.3 Public health funding

The County's Health and Wellbeing Board targets funding to support positive health outcomes. The board is already working with the County transport team to support increased levels of walking and

cycling to contribute to health outcomes. Working jointly with both of these partners we will seek to jointly resource behaviour change work to achieve health outcomes relating to both active travel and improved air quality.

5.2.4 Planning gain

New developments should support measures to mitigate the impacts of the development including those related to transport. The key planning mechanisms that can be used to generate and target these resources are:

- *Section 106 Agreements* which allow for contributions to be made for measures that may make a scheme acceptable in planning terms. The National Planning Practice Guidance states that Section 106 contributions may be used to off-set the pollution impact of a scheme through the funding of measures contained in an Air Quality Action Plan or Low Emission Strategy.
- *Community Infrastructure Levy (CIL)* allows a developer funding contributions to a defined list of local infrastructure projects. The Council is currently looking at potential CIL contributions and the list of potential projects for this funding. As part of this we will consider inclusion of infrastructure measures in the LES such as EV charging.

5.2.5 Economic development funds

The Strategic Economic Plan for Oxfordshire (SEP) developed by the Local Enterprise Partnership (LEP) provides the focus for Regional Growth Funds. This funding is now linked to wider transport objectives in the County that support this economic growth. A focus of the economic development in the County is the Science Vale enterprise zone, which is part of South Oxfordshire.

We will work with the LEP to identify opportunities where LES measures can support both the SEP economic objectives and the LES air quality and climate objectives. In particular we will explore opportunities for the use of low emission transport technologies in the Science Vale, and more widely across South Oxfordshire, and the added value economic benefit this can bring.

5.2.6 Grant and other funding sources

Government grant funding such as DEFRA's Air Quality Grants provide opportunities to fund projects. We will track these opportunities and exploit them as appropriate. There are also potential opportunities for European Commission funding through programmes such as Horizon 2020 and the Life Environment programme. These opportunities will be explored jointly with our partners. We will also look at the potential for private public partnerships where we can lever in additional private sector funding to develop initiatives that have a direct commercial benefit.

Glossary

AQMAs – Air Quality Management Areas

BCR – Benefit Cost Ratio

CCC – Committee on Climate Change

CIL – Community Infrastructure Levy

CLP – Construction Logistics Plans

CO₂ – Carbon dioxide

DEFRA – Department for Environment, Food & Rural Affairs

DSP – Delivery and Service Plans

EV – Electric Vehicles

HGVs – Heavy Goods Vehicles

JHHNP – Joint Henley and Harpsden Neighbourhood Plan

LAQM – Local Air Quality Management

LES - Low Emissions Strategy

LESP – Low Emissions Strategies Partnership

LSTF – Local Sustainable Transport Fund

LTP – Local Transport Plan

NO₂ – Nitrogen oxides

NPPF – National Planning Policy Framework

NPV - Net Present Value

PM – Particulate matter

PM₁₀ – Particulate matter up to 10 micrometres in size

PM_{2.5} – Particulate matter up to 2.5 micrometres in size

UKAQS – UK Air Quality Strategy

ULEV – Ultra Low Emissions Vehicle



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