

# Air Quality Plan for the achievement of EU air quality limit value for nitrogen dioxide (NO<sub>2</sub>) in North East (UK0036)

December 2015









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# 1 Introduction

#### 1.1 This document

This document is the North East non-agglomeration zone (UK0036) updated air quality plan for the achievement of the EU air quality limit values for nitrogen dioxide (NO<sub>2</sub>). This is an update to the air quality plan published in September 2011 (http://uk-air.defra.gov.uk/library/no2ten/).

This plan presents the following information:

- General information regarding the North East non-agglomeration zone
- Details of the NO<sub>2</sub> exceedance situation within the North East non-agglomeration zone
- Details of local air quality measures that have been implemented, will be implemented or are being considered for implementation in this non-agglomeration zone

This air quality plan for the North East non-agglomeration zone should be read in conjunction with the separate UK overview document and the list of UK and national measures. The UK overview document sets out, amongst other things, the authorities responsible for delivering air quality improvements and the list of UK and national measures that are applied in some or all UK zones. The measures presented in this zone plan, the accompanying UK overview document and the list of UK and national measures show how the UK will ensure that compliance with the  $NO_2$  limit values is achieved in the shortest possible time.

This plan should also be read in conjunction with the supporting UK Technical Report which presents information on assessment methods, input data and emissions inventories used in the analysis presented in this plan.

#### 1.2 Context

Two  $NO_2$  limit values for the protection of human health have been set in the Air Quality Directive (2008/50/EC). These are:

- The annual mean limit value; an annual mean concentration of no more than 40  $\mu \mathrm{gm}^{-3}$
- The hourly limit value: no more than 18 exceedances of 200  $\mu \mathrm{gm}^{\text{-3}}$  in a calendar year

The Air Quality Directive stipulates that compliance with the NO<sub>2</sub> limit values will be achieved by 01/01/2010.

#### 1.3 Zone status

The assessment undertaken for the North East non-agglomeration zone indicates that the annual limit value was exceeded in 2013 but is likely to be achieved before 2020 through the introduction of measures included in the baseline.

#### 1.4 Plan structure

General administrative information regarding this non-agglomeration zone is presented in section 2.

Section 3 then presents the overall picture with respect to NO<sub>2</sub> levels in this non-agglomeration zone for the 2013 reference year of this air quality plan. This includes a declaration of exceedance situations within the non-agglomeration zone and presentation of a detailed source apportionment for each exceedance situation.

An overview of the measures already taken and to be taken within the non-agglomeration zone both before and after 2013 is given in section 4.

Baseline modelled projections for 2020, 2025 and 2030 for each exceedance situation are presented in section 5. The baseline projections presented here include, where possible, the impact of measures that have already been taken and measures for which the relevant authority has made a firm commitment to implement. However, it has not been possible to quantify the impact of all the measures. This section therefore also explains which measures have been quantified, and hence included in the model projections, and which measures have not been quantified.

# **General Information About the Zone**

#### **Administrative information**

Zone name: North East Zone code: UK0036

Type of zone: non-agglomeration zone

Reference year: 2013

Extent of zone: Figure 1 shows the area covered by the North East non-agglomeration zone.

Local Authorities within the zone: Figure 2 shows the location of Local Authorities within the non-agglomeration zone. A list of these Local Authorities is also given below. The numbers in the list correspond to the numbers Durham

3. Gateshead Metropolitan Borough Council

4. Hartlepool Borough Council

5. Middlesbrough Borough Council

3. Newcastle C in Figure 2.

- 7. North Tyneside Council
- 8. Northumberland Council
- 9. Redcar and Cleeveland Borough Council
- 10. South Tyneside Metropolitan Borough Council
- 11. Stockton-on-Tees Borough Council
- 12. Sunderland City Council

(Note: Local Authority boundaries do not necessarily coincide with zone boundaries. Hence Local Authorities may be listed within more than one zone plan.)

Figure 1: Map showing the extent of the North East non-agglomeration zone (UK0036).

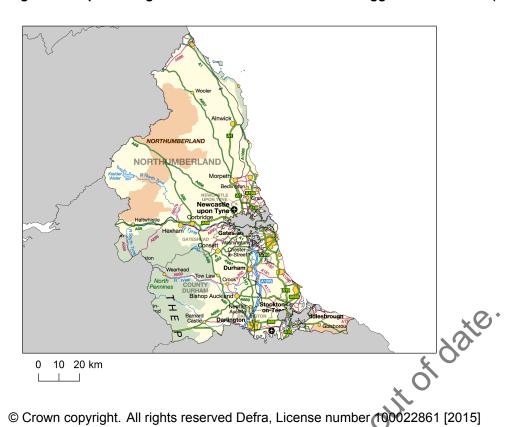
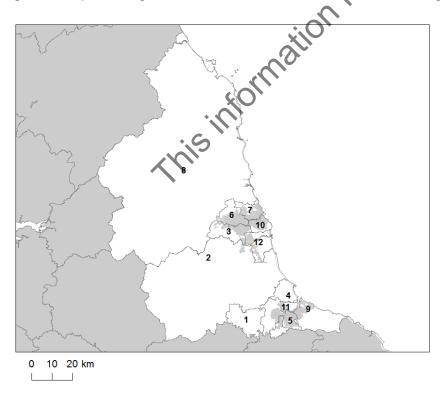


Figure 2: Map showing Local Authorities within the North East non-agglomeration zone (UK0036).



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#### 2.2 Assessment details

#### Measurements

NO<sub>2</sub> measurements in this zone were available in 2013 from the following national network monitoring stations (NO<sub>2</sub> data capture for each station in 2013 shown in brackets):

- 1. Stockton-on-Tees Eaglescliffe GB0956A (97%)
- 2. Sunderland Silksworth GB0863A (84%)

Full details of monitoring stations within the North East non-agglomeration zone are available from http://uk-air.defra.gov.uk/networks/network-info?view=aurn.

#### Modelling

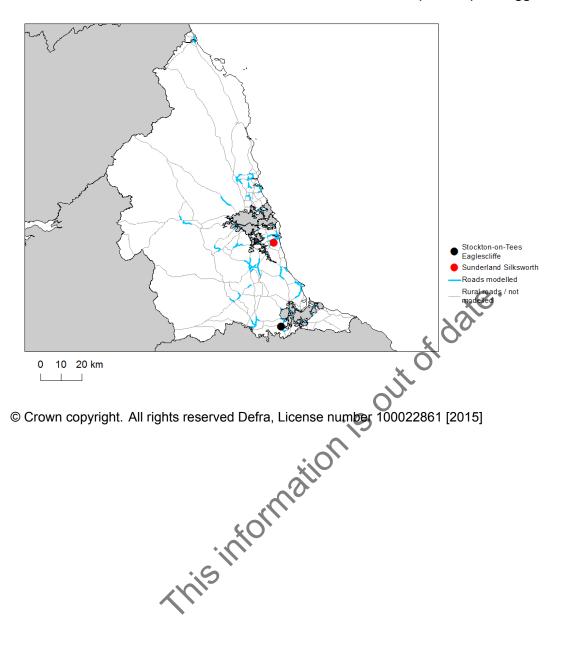
Modelling for the 2013 reference year has been carried out for the whole of the UK. This modelling covers the following extent within this zone:

- Total background area within zone (approx): 8,377 km<sup>2</sup>
- Total population within zone (approx): 1,510,704 people
- Total road length where an assessment of NO<sub>2</sub> concentrations has been made: 257 km in 2013 (and similar lengths in previous years)

#### Zone maps

Figure 3 presents the location of the  $NO_2$  monitoring stations within this zone for 2013 and the roads for which  $NO_2$  concentrations have been modelled.  $NO_2$  concentrations at background locations have been modelled across the entire zone at a 1 km x 1 km resolution.

Figure 3: Map showing the location of the NO<sub>2</sub> monitoring stations with valid data in 2013 and roads where concentrations have been modelled within the North East (UK0036) non-agglomeration zone.



### 2.3 Reporting under European Directives

From 2001 to 2012 the UK has reported annually on air quality concentrations using a standard Excel questionnaire (Decision 2004/461/EC). These questionnaires are available online from <a href="http://cdr.eionet.europa.eu/gb/eu/annualair">http://cdr.eionet.europa.eu/gb/eu/annualair</a>. Since 2013 reporting has been via an e-reporting system (Decision 2011/850/EU) <a href="http://cdr.eionet.europa.eu/gb/eu/">http://cdr.eionet.europa.eu/gb/eu/</a>.

In addition, the UK has reported on air quality plans and programmes (Decision 2004/224/EC) since 2003. Historic plans and programmes are available on <a href="http://cdr.eionet.europa.eu/gb/eu/aqpp">http://cdr.eionet.europa.eu/gb/eu/aqpp</a>.

# 3 Overall Picture for 2013 Reference Year

#### 3.1 Introduction

There are two limit values for the protection of health for NO<sub>2</sub>. These are:

- The annual limit value (annual mean concentration of no more than 40  $\mu$ gm<sup>-3</sup>)
- The hourly limit value (no more than 18 hourly exceedances of 200  $\mu$ gm<sup>-3</sup> in a calendar year)

Within the North East non-agglomeration zone the annual limit value was exceeded in 2013. Hence, one exceedance situation for this zone has been defined, NO<sub>2</sub>\_UK0036\_Annual\_1, which covers exceedances of the annual limit value. This exceedance situation is described below.

# 3.2 Reference year: NO<sub>2</sub>\_UK0636\_Annual\_1

The NO<sub>2</sub>\_UK0036\_Annual\_1 exceedance situation covers all exceedances of the annual mean limit value in the North East non-agglomeration zone in 2013.

Compliance with the annual limit value in this exceedance situation has been assessed using a combination of air quality measurements and modelling. Table 1 presents measured annual concentrations at national network stations in this exceedance situation since the 1st Daughter Directive (1999/30/EC) came into force in 2001. This shows that there were no measured exceedances of the annual limit value in this zone in 2013. Table 2 summarises modelled annual mean  $NO_2$  concentrations in this exceedance situation for the same time period. This table shows that, in 2013, 47.2 km of road length was modelled to exceed the annual limit value. There were no modelled background exceedances of the annual limit value. Maps showing the modelled annual mean  $NO_2$  concentrations for 2013 at background and at roadside locations are presented in Figures 4 and 5 respectively. All modelled exceedances of the annual limit value are coloured orange or red in the maps.

The maximum measured concentration in the zone varies due to changes in emissions and varying meteorology in different years. However, the models are also updated each year to take into account the most up-to-date science, so the modelled results for different years may not be directly comparable.

The modelling carried out for this exceedance situation has also been used to determine the annual mean NOx source apportionment for all modelled locations. Emissions to air are regulated in terms of oxides of nitrogen (NOx), which is the term used to describe the sum of nitrogen dioxide (NO<sub>2</sub>) and nitric oxide (NO). Ambient NO<sub>2</sub> concentrations include contributions from both directly emitted primary NO<sub>2</sub> and secondary NO<sub>2</sub> formed in the atmosphere by the oxidation of NO. As such, it is not possible to calculate an unambiguous source apportionment specifically for NO<sub>2</sub> concentrations; therefore the source apportionment in this plan is presented for NOx, rather than for NO<sub>2</sub> (for further details please see the UK Technical Report). Table 3 summarises the

modelled NOx source apportionment for the section of road with the highest modelled  $NO_2$  concentration in this exceedance situation in 2013. This is important information because it shows which sources need to be tackled at the location with the largest compliance gap in the exceedance situation.

Figure B.1 in Annex B presents the annual mean NOx source apportionment for each section of road within the  $NO_2\_UK0036\_Annual\_1$  exceedance situation (i.e. the source apportionment for all exceeding roads only) in 2013. In this figure roads have been grouped into motorways, primary roads (major roads managed by local authorities) and trunk roads (major roads managed by highways authorities).

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Table 1: Measured annual mean NO $_2$  concentrations at national network stations in NO $_2$ UK0036\_Annual\_1 for 2001 onwards,  $\mu$ gm $^3$  (a). Data capture shown in brackets.

Site name (EOI code)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
									40 (00)	04 (00)	40 (00)	40 (00)	40 (07)
Stockton-on-Tees Eaglescliffe (GB0956A)									18 (86)	21 (99)	18 (99)	18 (96)	16 (97)
Stockton-on-Tees Yarm (GB0734A)	40 (99)	39 (97)	43 (89)	37 (99)	34 (99)	38 (99)	39 (99)	34 (65)					
Sunderland Silksworth (GB0863A)				17 (6)	16 (93)	18 (91)	15 (87)	14 (96)	15 (70)	16 (96)	16 (97)	18 (90)	16 (84)

Annual Mean Limit Value = 40 $\mu$ gı	m <sup>-3</sup>						× O	•					
2: Annual mean NO₂ mode	l results	in NO <sub>2</sub> _U	K0036_A	nnual_1	for 2001 o	onwards							
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2
Road length exceeding (km)	31.4	6.6	122.3	77.2	70.9	75.0	68.4	52.7	57.8	73.9	48.4	44.0	4
Background exceeding (km²)	3	0	0	0	<b>60</b>	0	0	0	0	2	0	0	C
Maximum modelled	50.1	58.9	88.5	73.8	80.5	79.4	76.9	82.8	77.0	85.1	70	69	6

(a) Annual Mean Limit Value = 40  $\mu \mathrm{gm}^{-3}$ 

Table 3: Modelled annual mean NOx source apportionment at the traffic count point with the highest modelled concentration in 2013 in NO2\_UK0036\_Annual\_1 ( $\mu$ gm<sup>-3</sup>) (traffic count point 28776 on the A1; OS grid (m): 419640, 563050).

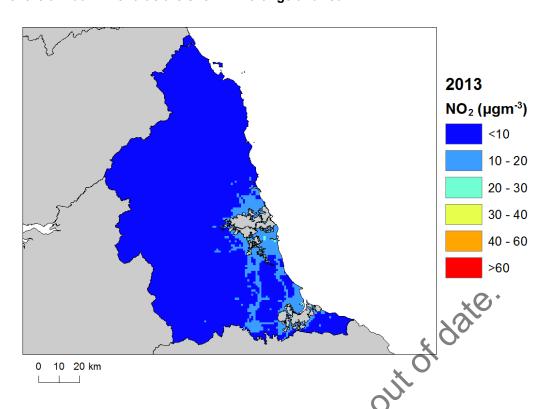
Spatial scale	Component	Concentration at highest road link (a)
Designal haskground sources NOv (i.e. contributions from	Total	5.7
Regional background sources NOx (i.e. contributions from	From within the UK	2.8
distant sources of > 30 km from the receptor).	From transboundary sources (includes shipping and other EU	2.9
	member states)	
	Total	32.1
	From road traffic sources	21.8
	From industry (including heat and power generation)	3.8
	From agriculture	NA
Urban background sources NOx (i.e. sources	From commercial/residential sources	2.3
located within 0.3 - 30 km from the receptor).	From shipping O	0.0
	From off road mobile machinery	3.4
	From natural sources	NA
	From transboundary sources	NA
	From other urban background sources	0.8
	Total	141.1
	From petrol cars	11.8
	From diesel cars	40.2
	From HGV rigid (b)	38.2
Local sources NOx (i.e. contributions from sources	From HGV articulated (b)	30.5
< 0.3 km from the receptor).	From buses	3.6
	From petrol LGVs (c)	0.3
•	From diesel LGVs (c)	16.4
.6	From motorcycles	0.1
MIS	From London taxis	0.0
Total NOx (i.e. regional background + urban background + lo	cal components)	178.9
Total NO <sub>2</sub> (i.e. regional background + urban background + lo	cal components)	65

<sup>(</sup>a) Components are listed with NOx concentration of NA when there is no source from this sector.

<sup>(</sup>b) HGV = heavy goods vehicle

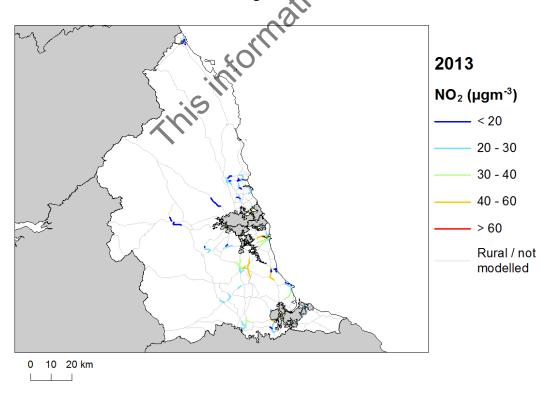
<sup>(</sup>c) LGV = light goods vehicle

Figure 4: Map of modelled background annual mean  $NO_2$  concentrations 2013. Modelled exceedances of the annual limit value are shown in orange and red.



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Figure 5: Map of modelled roadside annual mean  $NO_2$  concentrations 2013. Modelled exceedances of the annual limit value are shown in orange and red



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# 4 Measures

#### 4.1 Introduction

This section gives details of measures that address exceedances of the  $NO_2$  limit values within North East non-agglomeration zone. This includes both measures that have already been taken and measures for which there is a firm commitment that they will be taken.

Section 5 then explains the extent to which it has been possible to incorporate the impacts of these measures into the baseline modelling carried out for this assessment.

### 4.2 Source apportionment

It is important to understand which sources are responsible for causing the exceedance in order to most effectively tailor measures to address the NO<sub>2</sub> exceedance situation described in section 3 above. This can be achieved by considering the source apportionment for the exceedance situation, also presented in section 3. A summary of what the source apportionment shows and the implications for which measures would therefore be appropriate is given here.

Local road traffic was the dominant source in this exceedance location in the reference year. The largest contribution was from cars contributing about 30% and rigid HGVs and artic HGVs about 20% each of total NOx on the road with the highest concentration. Cars and articulated HGVs were important sources on the motorway roads with the highest concentrations in this exceedance situation. Cars and rigid HGVs and on some roads buses or articulated HGVs and rigid HGVs were important sources on the primary roads with the highest concentrations. Cars, articulated HGVs, rigid HGVs and LGVs were important sources on the trunk roads with the highest concentrations. For all road links concentrations of NOx from diesel cars were approximately four times greater than NOx emissions from petrol cars. NOx concentrations from petrol LGVs are a small component of total NOx concentrations and less than 2% of total NOx from LGVs.

This indicates that appropriate measures should impact on local road traffic sources in this zone. Other measures to address the urban background sources may also be beneficial.

#### 4.3 Measures

Measures potentially affecting  $NO_2$  in this non-agglomeration zone have been taken and/or are planned at a range of administrative levels. These are:

- European Union
- National (i.e. England, Scotland, Wales, Northern Ireland or whole UK)
- Local (i.e. UK Local Authorities)

Details of European Union measures (e.g. Euro Standards, Fuel Quality Directives, Integrated Pollution Prevention and Control) can be found on the European Commission's website (http://ec.europa.eu/environment/air/index\_en.htm). Details of national measures are given in the UK overview document and the list of UK and national measures.

Relevant Local Authority measures within this exceedance situation are listed in Table C.1 (see Annex C). Table C.1 lists measures which a local authority has carried out or is in the process of carrying out, plus additional

measures which the local authority is committed to carrying out or is investigating with the expectation of carrying out in the future.

There are common themes across the zone on the type of measures being taken to improve air quality, including by improving the environment. The main themes focus on improving emissions and concentrations of pollutants by encouraging transport modal shift from using private cars to more sustainable methods of transport such as the promotion of cycling and walking. Additional measures to reduce emissions are keeping vehicle speeds low as well as encouraging the use of greener vehicles.

#### 4.4 Measures timescales

Timescales for national measures are given in the UK overview document and list of UK and national measures.

Local Authorities report on progress with the implementation of their action plans annually and review action plan measures regularly. Information on local measures was collected in February/March 2015. Hence, any Local Authority action plans and measures adopted by Local Authorities after this time have not been included in this air quality plan, unless additional information was provided during the consultation process.

The reference year for this air quality plan is 2013. Where measures started and finished before 2013, then the improvement in air quality resulting from these measures will have already taken place before the reference year and the impact of these measures will have been included in the assessment where the measure has had an impact on the statistics used to compile the emission inventory. Many measures started before the reference year and will continue to have a beneficial impact on air quality well beyond the reference year. Measures with a start date before 2013 and an end date after 2013 may have an impact on concentrations in the reference year and a further impact in subsequent years. Where the Status column in Annex C is 'Implementation', this shows that this measure is already underway or that there is a commitment for this measure to go ahead. Where the Status is 'Planning', 'Preparation' or 'Other' the level of commitment is less clear and it is possible some of these measures may not go ahead.

# Baseline Model Projections

Model projections for 2020, 2025 and 2030, starting from the 2013 reference year described in section 3, have been calculated in order to determine when compliance with the NO2 limit values is likely to be achieved on the basis of EU, regional and local measures currently planned. Details of the methods used for the baseline emissions and projections modelling are provided in the UK technical report.

For national measures, it has not been possible to quantify the impact of all measures on emissions and ambient concentrations. The impact for all quantifiable measures has been included in the baseline projections.

The impacts of the individual Local Authority measures have not been explicitly included in the baseline model projections. However, measures may have been included implicitly if they have influenced the traffic counts for 2012 (used as a basis for the compilation of the emission inventory) or in the traffic activity projections to 2020 and beyond (used to calculate the emissions projections). It should be recognised that these measures will have a beneficial impact on air quality, even if it has not been possible to quantify this impact here.

# 5.2 Baseline projections: NO<sub>2</sub>\_UK0036\_Annual\_1

Table 4 presents summary results for the baseline model projections for 2020, 2025 and 2030 for the NO<sub>2</sub>\_UK0036\_Annual\_1 exceedance situation. This shows that the maximum modelled annual mean NO<sub>2</sub> concentration predicted for 2020 in this exceedance situation is 39  $\mu$ gm<sup>-3</sup>. Hence, the model results suggest that compliance with the NO<sub>2</sub> annual limit value is likely to be achieved before 2020 under baseline conditions in this exceedance situation.

Figures 6 and 7 show maps of projected annual mean  $NO_2$  concentrations in 2020, 2025 and 2030 for background and roadside locations respectively. Maps for 2013 are also presented here for reference.

It should be noted that the baseline projections presented here include the impacts of some measures, where they can be quantified, that have already been or will be implemented.

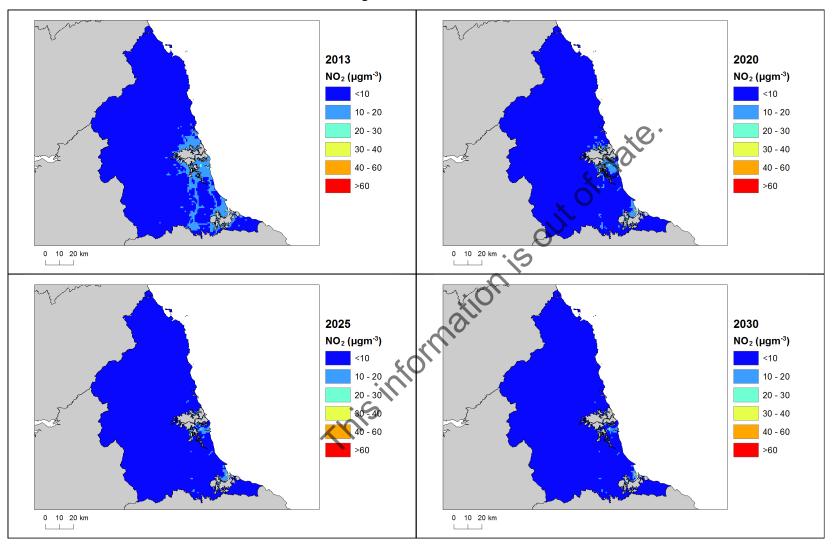
Table 4: Annual mean  $NO_2$  model results in  $NO_2$ \_UK0036\_Annual\_1.

	2013	2020	2025	2030
Road length exceeding (km)	47.2	0.0	0.0	0.0
Background exceeding (km²)	0	0	0	0
Maximum modelled concentration $NO_2$ ( $\mu gm^{-3}$ ) (a)	65	39	30	27
Corresponding modelled concentration NOx $(\mu gm^{-3})$ (b)	179	91	66	58

<sup>(</sup>a) Annual Mean Limit Value = 40  $\mu \mathrm{gm}^{\text{-3}}$ 

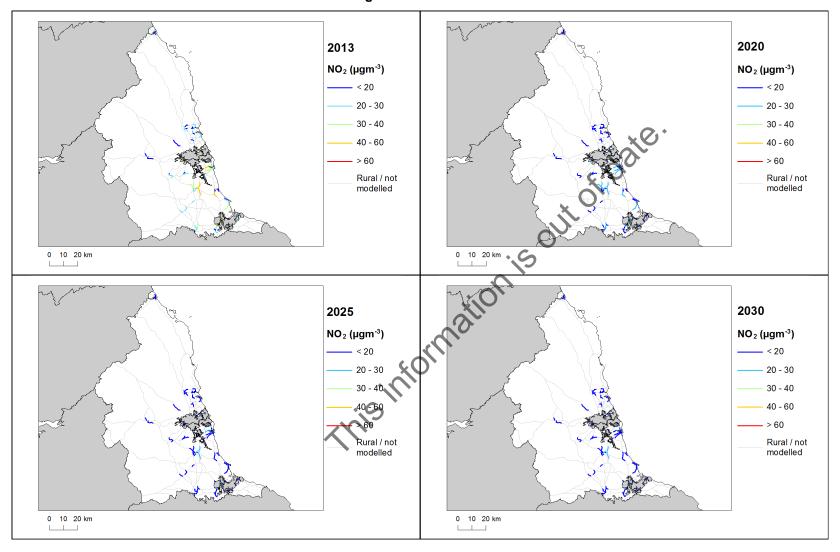
<sup>(</sup>b) NOx is recorded here for comparison with the NOx source apportionment graphs for 2013 presented in Annex B of this plan. Limit values for EU directive purposes are based on NO<sub>2</sub>.

Figure 6: Background baseline projections of annual mean NO<sub>2</sub> concentrations in 2020, 2025 and 2030. 2013 is also included here for reference. Modelled exceedances of the annual limit value are shown in orange and red.



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Figure 7: Roadside baseline projections of annual mean NO<sub>2</sub> concentrations in 2020, 2025 and 2030. 2013 is also included here for reference. Modelled exceedances of the annual limit value are shown in orange and red.



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# **Annexes**

#### **A** References

Air Quality Expert Group (AQEG, 2004). Nitrogen Dioxide in the United Kingdom. http://uk-air.defra.gov.uk/library/aqeg/publications

Decision 2004/224/EC. Commission Decision of 20 February 2004 laying down arrangements for the submission of information on plans or programmes required under Council Directive 96/62/EC in relation to limit values for certain pollutants in ambient air. From the Official Journal of the European Union, 6.3.2004, En series, L68/27

Decision 2004/461/EC. Commission Decision of 29 April 2004 laying down a questionnaire to be used for annual reporting on ambient air quality assessment under Council Directives 96/62/EC and 1999/30/EC and under Directives 2000/69/EC and 2002/3/EC of the European Parliament and of the Council. From the Official Journal of the European Union, 30.4.2004, En series, L156/78

Decision 2011/850/EU Commission Implementing Decision of 12 December 2011 laying down rules for Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air quality. From the Official Journal of the European Union, 17.12.2011,En series, L335/86

CDR Central Data Repository. http://cdr.eionet.europa.eu/

Air Quality Directive 2008/50/EC. Council Directive 2008/50/EC, of 21 May 2008. On ambient air quality and cleaner air for Europe. From the Official Journal of the European Union, 11.6.2008, En series, L152/1

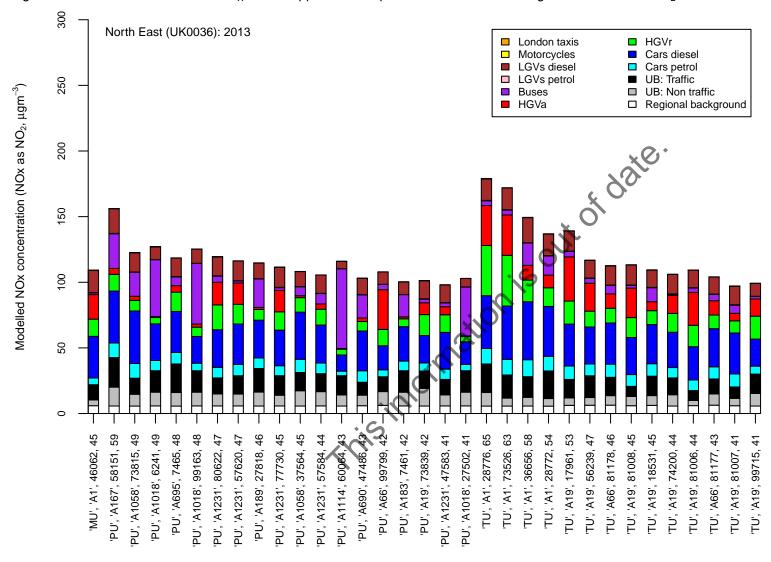
1st Daughter Directive 1999/30/EC. Council Directive 1999/30/EC, of 22 April 1999 relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air (The First Daughter Directive). From the Official Journal of the European Communities, 29.6.1999, En Series, L163/41.

UK overview document, List of UK and National Measures and the UK technical report are available at: http://www.gov.uk/defra.

# **B** Source apportionment graphs

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Figure B.1: Annual mean roadside NO<sub>x</sub> source apportionment plots for all roads exceeding the annual mean NO<sub>2</sub> limit value in 2013.



Road class (MU = motorway, PU = primary road, TU = trunk road), road number, census id 12 and modelled NO<sub>2</sub> concentration (μgm<sup>-3</sup>)

# C Tables of measures

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Table C.1 Relevant Local Authority measures within North East (UK0036)

Measure code	Description	Focus	Classification	Status	Other information
Darlington Borough Council_1	Introduction of 14 new gas powered buses by Arriva bus company.	Reduce vehicle emissions	Public procurement: Cleaner vehicle transport services	Implementation	Start date: 2013 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_2	Introduction of a gas fuelling station at the Arrive Bus Depot.	Reduce vehicle emissions	Public procurement: Other measure	Implementation	Start date: 2013 Expected end date: 2013 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_3	Partnership working with bus companies to promote Euro 5 buses.	Local Sustainable Transport	Public procurement: Cleaner vehicle transport services	Planning	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_4	Funding secured to extend bus service from Crook and Bishop Auckland to Lingfield Point and Darlington College to increase connectivity.	Local Sustainable Transport	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_5	Improvements to the junction at Albert Road and Whessoe Road as part of the North Road Bus Priority Scheme.	Improving Traffic Flows	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2012 Expected end date: 2012 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA

Measure code	Description	Focus	Classification	Status	Other information
Darlington Borough Council_6	Replacement of Stonebridge Roundabout on the inner ring road with a traffic light system controlled junction, bus only lanes and creation of extra lanes on the approaches to Freemans Place roundabout.	Improving Traffic Flows	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA but sections of the inner ring road have been identified as breaching No2 EU Limit values prior to this road improvement works.
Darlington Borough Council_7	Any development that creates a car parking area with 50 or more spaces provide at least one double electric vehicle charging point. For each additional 50 spaces another point will be required to a max of three double charging points.	Electric vehicle charging facilities.	Public procurement: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_8	Local Motion website, leaflets, promotional events to encourage people in Darlington and South Durham to use sustainable transport choices.	Local Sustainable Transport	Public information and Education: Internet  Traffic planning and management:	Implementation	Start date: 2004 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_9	Local Motion promotion of walking e.g. Mega Friday encouraging school children to walk to school.	inform	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2004 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_10	Local Motion - promotion of cycling and cycle training for school children.	Local Sustainable Transport	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2004 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_11	Local Motion - promotion of use of public transport such as catch the bus week.	Local Sustainable Transport	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2004 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA

Measure code	Description	Focus	Classification	Status	Other information
Darlington Borough Council_12	Local Motion - workplace travel planning.	Local Sustainable Transport	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2004 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_13	Local Motion - travel planning for schools.	Local Sustainable Transport	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2004 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_14	Local Motion - promotion of smarter driving and car sharing.	Local Sustainable Transport	Other measure: Other measure	Implementation	Start date: 2004 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_15	Darlington Eastern Transport Corridor - new road which eases congestion and volumes of traffic on Haughton Road and Yarm Road and provides link to A66 and Teesside.	Road improvement works  Local Sustainable Transport	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2009 Expected end date: 2009 Spatial scale: Whole town or city Source affected: Transport Indicator: Traffic through Haughton Village has reduced from average week day traffic flow of 16,705 in 2006 (prior to DETC) to 11,124 in 2011 (after opening of DETC). Target emissions reduction: No AQMA
Darlington Borough Council_16	Darlington Eastern Transport Corridor - pedestrian and cycle path alongside the road providing cycle access to Town Centre.	Local Sustainable Transport	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2009 Expected end date: 2009 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_17	Pedestrianisation of Town Centre.	Pedestrianisation of Town Centre.	Traffic planning and management: Other measure	Implementation	Start date: 2004 Expected end date: 2004 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA

Measure code	Description	Focus	Classification	Status	Other information
Darlington Borough Council_18	New shared use cycle and footpath on North Road and Harrowgate Hill to encourage more sustainable journeys between Darlington and Newton Aycliffe.	Local Sustainable Transport	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2013 Expected end date: 2013 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Darlington Borough Council_19	Cycle network with over 40 km of off road cycling routes through the borough.	Local Sustainable Transport	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: No AQMA
Durham_1	The retrofitting of abatement systems on diesel engines on buses using routes within the declared AQMA.	To improve emissions of air pollutants from the exhaust systems of buses that are operating within the declared AQMA	Public produrement: Other measure	Evaluation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: The number of buses as a proportion of the bus fleets that have been retrofitted with abatement systems. Target emissions reduction: Approx.: 6% (Reduction in NOx)
Durham_2	The expansion of hybrid buses using routes within the declared AQMA.	To expand the proportion of 'hybrid' buses within the bus fleets that operate within the declared AQMA and therefore improving the emission profile of the bus fleets operating within the AQMA.	Public procurement: Other measure	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: The number of buses as a proportion of the bus fleets that are 'hybrids'. Target emissions reduction: Approx.: 0.6 % (Reduction in NOx)
Durham_3	The introduction of an Urban Traffic Control System and SCOOT to coordinate traffic through a network of junctions within Durham City	To achieve a better flow of vehicles through the AQMA and therefore to reduce the length of queues and congestion within the declared AQMA	Traffic planning and management: Other measure	Evaluation	Start date: 2015 Expected end date: 2017 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: A reduction in the length of queues and therefore of congestion within the AQMA. Target emissions reduction: Approx. 12% (Reduction in NOx)

Measure code	Description	Focus	Classification	Status	Other information
Durham_4	The operation of Park and Ride buses that are compliant with Euro VI or Electric	To minimise the emissions of air pollutants from the operation of Park and Ride buses that operate to and from the three existing Park and Ride sites with a view to eliminating these emissions in the future.	Traffic planning and management: Improvement of public transport	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: The replacement of the current Euro VI standard buses with electrically powered vehicles. Target emissions reduction: Approx. 0.7% (Reduction in NOx) from the introduction of Euro VI Standard buses and Approx. 1.2% (Reduction in NOx) from the introduction of electric buses.
Durham_5	The development of a cycleway infrastructure across Durham City	To extend the existing cycleway infrastructure to encourage the uptake of cycling as an alternative means of travel to the use of the private motor car.	Traffic planning and management: Encouragement of shift of transport modes	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: The percentage reduction in the proportion of cars and buses on routes within the Air Quality Management Area. Target emissions reduction: Approx. 5.0% (Reduction in NOx) assumes a modal shift of 7% from existing travel options.
Durham_6	The promotion of 'smarter' travel choices and options with businesses across the city.	To implement measures to encourage employees to reduce the dependency or use of single occupied vehicles.	Traffic planning and management: Encouragement of shift of transport modes	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: The percentage reduction in the proportion of private car journeys. A reduction in the proportion of cars and buses within the traffic fleet. Target emissions reduction: Approx. 4.0% (Reduction in NOx)

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Measure code	Description	Focus	Classification	Status	Other information
Durham_7	Increased parking capacity and improvement of the Park and Ride	To increase the incentive for the use of the Park & Ride service as an alternative to the use of the private motor car.	Traffic planning and management: Improvement of public transport	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: The percentage reduction in the proportion of private car journeys. A reduction in the proportion of cars and buses within the traffic fleet. Target emissions reduction: Approx. 4.5% (Reduction in NOx)
Durham_8	The development of a bus lane system within areas of the city where this can be facilitated	To achieve a better flow of buses through the AQMA and therefore to reduce the emissions of air quality pollutants from buses operating within the AQMA.	Traffic planning and management: Improvement of public transport	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: The length of journey times Target emissions reduction: Approx. 2.0% (Reduction in NOx)
Durham_9	The establishment of Air Quality and Planning Guidance as a Supplementary Planning Document	To raise the importance of Air Quality issues in the planning process and to ensure the impacts on air quality from each development is minimised.		Preparation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Reduce the reliance on the use of private cars in new development and adherence to the latest guidance on Planning and Air Quality Target emissions reduction: Not Assessed
Durham_10	The establishment of an Air Quality Strategy	To integrate the strategic policies that cover air quality in the County Durham Plan with other policies and the measures detailed within the Local Transport Plan (LTP) to focus and address air quality issues within Durham City.	Other measure: Other measure	Other	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: The adoption of the strategy. Target emissions reduction: Not Assessed

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Measure code	Description	Focus	Classification	Status	Other information
Durham_11	To raise awareness of air quality through a range of appropriate campaigns to reduce air pollution.	To promote air quality by the dissemination of information to stakeholders including the public - through the website, consultation media releases and through campaigns.	Public information and Education: Other mechanisms	Planning	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: The number of events. Target emissions reduction: Not Assessed
Durham_12	The development of major infrastructure changes to road systems within the city centre.	To increase the flow of traffic through the declared Air Quality Management Area and therefore to reduce the length of queues and congestion.	Traffic planning and management: Encouragement of shift of transport modes	Other	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: The reduction of traffic volume flowrates on routes within the declared Air Quality Management Area. Target emissions reduction: N/A
Durham_13	The development of a western relief road for the city	To reduce the number of vehicles that use the route through the declared Air Quality Management Area.	Traffic planning and management: Encouragement of shift of transport modes	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: The reduction of traffic volume flowrates on routes within the declared Air Quality Management Area. Target emissions reduction: N/A
Durham_14	The variation of parking charges to encourage low emission vehicles linked to improvements to the Park and Ride.	To encourage the use of the Park and Ride Service as an alternative to the use of the private motor car for trips into the city.	Traffic planning and management: Differentiation of parking fees	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: The reduction of traffic volume flowrates on routes within the declared Air Quality Management Area. Target emissions reduction: Approx. 2.5% (Reduction in NOx)

Measure code	Description	Focus	Classification	Status	Other information
Durham_15	The use of workplace parking levies and linked to improvements to the Park and Ride	To encourage the use of low emission vehicles, alternative transport and the Park and Ride sites.	Traffic planning and management: Improvement of public transport	Evaluation	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: The reduction of traffic volume flowrates on routes within the declared Air Quality Management Area. Target emissions reduction: Approx. 3.0% (Reduction in NOx)
Gateshead Metropolitan Borough Council_1	Parking strategy	Reduce attractiveness of car use	Traffic planning and management: Management of parking places	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Charging levels 1 hr £1, 2 hr £1.70, 3 hr £2.60, all day £4.10 Target emissions reduction: Not known
Gateshead Metropolitan Borough Council_2	Public transport infrastructure	Improve attractiveness of alternatives to the car	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Implementation of improvements Target emissions reduction: Not known
Gateshead Metropolitan Borough Council_3	Pedestrian only	Improve attractiveness of alternatives to the car	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: Implementation of improvements. Removal of subways saw pedestrian usage increase by 14% (2001-10), compared with 17% decrease elsewhere Target emissions reduction: Not known
Gateshead Metropolitan Borough Council_4	Cycle improvements	Improve attractiveness of alternatives to the car	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Implementation of improvements. 61% increase in numbers cycling to wok in Gateshead between 2001-2011 Target emissions reduction: Not known

Measure code	Description	Focus	Classification	Status	Other information
Gateshead Metropolitan Borough Council_5	Bus operation	Improve attractiveness of alternatives to the car	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2016 Expected end date: 2017 Spatial scale: Whole agglomeration Source affected: Transport Indicator: New approach to planning and management of bus network Target emissions reduction: Not known
Gateshead Metropolitan Borough Council_6	Intelligent transport systems	Better management of traffic flows and congestion	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Levels of congestion and delay. Improved monitoring has enabled 5% reduction in delay on main corridors. Target emissions reduction: Not known
Gateshead Metropolitan Borough Council_7	Park and ride	Improve attractiveness of alternatives to the car	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2015 Expected end date: 2018 Spatial scale: Whole town or city Source affected: Transport Indicator: Use of park and ride Target emissions reduction: Not known
Gateshead Metropolitan Borough Council_8	Travel planning	Increase use of alternatives to the car	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Reduced car mode share. Urban core (Gateshead & Newcastle) car driver mode share estimated at 39% Target emissions reduction: Not known
Gateshead Metropolitan Borough Council_9	Low emission zone	Reduced access to polluting vehicles	Traffic planning and management: Low emission zones	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a

Measure code	Description	Focus	Classification	Status	Other information
Gateshead Metropolitan Borough Council_10	Reduce bus emissions	Reduce pollution from vehicles	Retrofitting: Retrofitting emission control equipment to vehicles	Implementation	Start date: 2014 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Reduced pollution from buses Target emissions reduction: Not known
Middlesbrough Borough Council_1	Middlesbrough businesses have been provided the opportunity to establish their own fleet of pool bikes via Local Sustainable Transport Funding	To reduce vehicle use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_2	Free, indoor secure cycle centre for town centre bike parking. Located in Middlesbrough bus station transport hub, the Cycle Centre offers showers, lockers and help and advice	To encourage cycling in the town	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2008 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_3	Bikeability (Cycle proficiency for the 21st Century) offered to primary school children	To encourage cycling in the town	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2006 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_4	Middlesbrough Bike Academy provides a wealth of cycle maintenance training to assist people cycling more frequently	To encourage cycling in the town	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2013 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_5	Child pedestrian training delivered across all primary schools. Walk leader co-ordinators deliver guided walks to groups.	To encourage alternatives to vehicle use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2006 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_6	Installation of physical traffic calming initiatives to keep vehicle speeds low	To improve safety however the measure should also reduce exhaust emissions.	Traffic planning and management: Reduction of speed limits and control	Implementation	Start date: 2014 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Middlesbrough Borough Council_7	Electric pool vehicles are supported, with the installation of 11 free electric vehicle charging bays	To encourage the use of low emission vehicles	Other measure: Other measure	Implementation	Start date: 2010 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_8	Council Fleet Vehicle Procurement -Prioritising uptake of low emission vehicles – the intention to purchase Euro 6 specification vehicles as part of the ongoing fleet renewal programme	To reduce emissions	Public procurement: Other measure	Implementation	Start date: 2015 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_9	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharging – the installation of an electric vehicle charging point at the Council's Depot facility.	To promote low emission vehicle use	Public procurement: Other measure	Implementation	Start date: 2011 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_10	Taxi licensing policy limits the age of a vehicle for a first time license to 3 years old. The maximum age that a vehicle can be licensed as a taxi is 8 years old. Policy to be reviewed in 2015.	To control the age of taxi vehicles which in turn encourages the use of newer vehicles producing less emissions in the fleet	Permit systems and economic instruments: Introduction/increase of environment taxes	Implementation	Start date: 2010 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_11	Variable Messaging Signs are used on the strategic network to alert drivers to traffic problems and assist in managing the traffic.	To reduce traffic congestion	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_12	20mph zones across entire Borough to improve safety, and subsequently reduce emissions through engine efficiency	To reduce emissions as a product of increased safety	Traffic planning and management: Reduction of speed limits and control	Implementation	Start date: 2012 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_13	Installation of strategic bus priority infrastructure to improve reliability and speed of journey	To improve bus efficiency and encourage use of the bus network	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Middlesbrough Borough Council_14	Work based travel plans available to any Middlesbrough based organisation. Picked up as part of planning conditions for large developments.	To reduce vehicle use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_15	Home working is supported at Middlesbrough Council to remove the need for transport.	To reduce vehicle use	Other measure: Other measure	Implementation	Start date: 2008 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_16	Dedicated journey planning website across The Tees Valley is supported www.connectteesvalley.co.uk. Work with Job Centre to promote journey planning for unemployed people looking to get back in to work.	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_17	There is a 100% coverage of school travel plans in Middlesbrough, completed by 2010	To reduce vehicle use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2009 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_18	Widespread promotion of cycling initiatives across the Borough through a range of approaches	To reduce vehicle use  To reduce vehicle use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_19	Widespread promotion of walking initiatives across the Borough through a range of approaches	To reduce vehicle use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2009 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_20	Ongoing work with operators to promote rail travel across the Borough	To reduce vehicle use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Middlesbrough Borough Council_21	Ongoing work with operators to promote bus travel across the Borough	To reduce vehicle use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_22	Websites are used to promote all sustainable transport information - www.connectteesvalley.com / www.middlesbrough.gov.uk / www.menvcity.org.uk	To reduce vehicle use	Public information and Education: Internet	Implementation	Start date: 2008 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_23	A series of printed material available, supporting sustainable transport. This includes walking/cycling maps, guided route golders and public transport literature	To reduce vehicle use	Public information and Education: Leaflets	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_24	Improvements to public transport hubs. Installation of new station at James Cook University Hospital to support passenger facilities.	To reduce vehicle use	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_25	Council adopted 10 year infrastructure plan for walking and cycling improvements	To reduce vehicle use  To reduce vehicle use	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2012 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_26	Work to address pinch points on highway network undertaken to address bus route inefficiency.	To improve bus efficiency and encourage use of the bus network	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Middlesbrough Borough Council_27	Promotion of www.liftshare.com - publicly available car sharing website to reduce single occupancy car journeys	To reduce vehicle numbers	Other measure: Other measure	Implementation	Start date: 2008 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Newcastle City Council_1	Residents parking permits	18,000 residents/visitor parking permits issued.	Other measure: Other measure	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Local Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_2	Specific bus corridors including bus lanes, or segregation of buses.	St. Mary's Place bus corridor scheme implemented. Consideration is now being given to Sandyford Road Corridor.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2001 Expected end date: 2011 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_3	Increase public transport priority	Urban Core Area Action Plan went out for consultation 2011	Other measure, Other measure	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_4	Higher priority for pedestrians and cyclists (in terms of highway space)	Urban Core Area Action Plan went out for consultation 2011	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_5	Decriminalized parking enforcement	Introduced on 15 April 2009. The transfer of enforcement powers from the police to the council to help reduce congestion and improve road safety.	Other measure: Other measure	Implementation	Start date: 2008 Expected end date: 2009 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_6	Urban traffic management control (UTMC)	In process of implementation	Traffic planning and management: Other measure	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_7	Encourage low emission/ zero emission vehicles	Diesel electric hybrid buses are operating on Quaylink Quayside/ City Centre Route.	Other measure: Other measure	Implementation	Start date: 2004 Expected end date: 2006 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Newcastle City Council_7a	Encourage low emission/ zero emission vehicles	Upgrade of Leyland Olympian bus to Euro IV standard.	Retrofitting: Retrofitting emission control equipment to vehicles	Implementation	Start date: 2004 Expected end date: 2006 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_7b	Encourage low emission/ zero emission vehicles	Clean Bus transport fund	Retrofitting: Retrofitting emission control equipment to vehicles	Evaluation	Start date: 2013 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_7c	Encourage low emission/ zero emission vehicles	Clean Vehicle transport fund	Retrofitting: Retrofitting emission control equipment to vehicles	Implementation	Start date: 2015 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_8	Enforcing idling engines legislation	All staff within RSPP are authorised to issue fixed penalty notices, and periodic enforcement is currently carried out. Legislation is flawed by requirement to instruct driver to turn off engine before issue of notice, thus making it impossible to issue notice and actually earry out enforcement.	Other measure: Other measure	Implementation	Start date: 2008 Expected end date: 2015 Spatial scale: National Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_9	Delivery times outside peak hour	A freight consolidation centre operational in Newburn from July 2011. Hours of freight delivery will be co-ordinated around quieter times, in lower emission vehicles	Traffic planning and management: Freight transport measure	Evaluation	Start date: 2006 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_10	Taxi emissions	Taxi licensing strategy was reviewed in 2011 and emission standard will be gradually introduced.	Public procurement: Cleaner vehicle transport services	Planning	Start date: 2011 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Newcastle City Council_11	Use of low emission delivery vehicles/ times of delivery	To be considered as part of freight consolidation	Other measure: Other measure	Evaluation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_12	Low emission zone	Part of Urban Core Area Action Plan	Other measure: Other measure	Other	Start date: 2013 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_13	Speed Restrictions	The speed restriction scheme "20's Plenty" has been rolled out across large parts of the Gosforth area of Newcastle and is an advisory scheme to encourage people to reduce their speed on selected streets and roads across Newcastle.	Traffic planning and management: Reduction of speed limits and control	Evaluation	Start date: 2009 Expected end date: 2011 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_14	Upgrade of Urban Traffic Control (UTC) and Scoot	Signal coordination currently being upgraded as part of the UTMC project.	Traffic planning and management: Other measure	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_15	Park and Ride	To be implemented through both bus and Metro.	Traffic planning and management: Encouragement of shift of transport modes	Other	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_16	Promotion of Cycling	To be implemented through the cycle strategy	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A

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Measure code	Description	Focus	Classification	Status	Other information
Newcastle City Council_17	Annual Travel Card discount	This has been rolled out to Newcastle Council staff, and major employers are being encouraged by Nexus to join the scheme.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_18	Quality bus contracts	Discussions are being undertaken between regional bus operators and local authorities on Quality bus partnerships. Part of this could be geared around higher quality vehicle emission standards	Other measure: Other measure	Planning	Start date: 2015 Expected end date: 2017 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_19	Travel Plans for businesses/ schools	Developing programmes from Local Transport Plan 1 and 2 (LTP1 and LTP2)	Other measure: Other measure	Implementation	Start date: 2005 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_20	Alternative Travel	Work is continuing with the football club and key stakeholders to implement a number of greasures to mitigate the negative impacts of travel to St James Park	Traffic planning and management: Encouragement of shift of transport modes	Evaluation	Start date: 2010 Expected end date: 2012 Spatial scale: Local Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_21	Car Loan schemes	Pool car system currently on-going by some employers.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2005 Expected end date: 2015 Spatial scale: Local Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_22	Use of car parking charges to encourage alternatives.	Under investigation as part of the core strategy	Traffic planning and management: Encouragement of shift of transport modes	Other	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

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Measure code	Description	Focus	Classification	Status	Other information
Newcastle City Council_23	Car Clubs	Car clubs are being developed and new cars added as demand arises for this	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_24	Home Zones	Currently programmed as part of Plan Partners LTP schemes	Other measure: Other measure	Other	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_25	Electric Vehicle Recharging Infrastructure	Implemented and now operational. They are being monitored to analyse future need, reliability etc.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_26	Electric Vehicles in NCC Fleet	25 electric vehicles already in fleet  Trialling	Other measure: Other measure	Implementation	Start date: 2007 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_27	Switch EV Council Trial	Trialliag	Other measure: Other measure	Other	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_28	Switch EV Public Trial	Trialling	Public procurement: Cleaner vehicle transport services	Other	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_29	Switch EV Car club trial	Trialling	Public procurement: Cleaner vehicle transport services	Other	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Newcastle City Council_30	Eco driving training	Ongoing	Other measure: Other measure	Implementation	Start date: 2011 Expected end date: 2020 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_31	Subsidise public transport	To be implemented by way of concessionary fares	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_32	Create extra capacity on trains/ Metro/buses	Operator investment as deemed appropriate.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_33	Flexible work times/ school hours/ home working	To be implemented as part of travel plan initiatives. NCC has already implemented this scheme.	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_34	Provision of Real Time Information (RTI) at bus stops	This is currently under review by Nexus	Public information and Education: Other mechanisms	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_35	Target schools and parents with information campaigns	To be implemented	Public information and Education: Other mechanisms	Other	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

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Measure code	Description	Focus	Classification	Status	Other information
Newcastle City Council_36	Health Promotion	To be led by (Primary Care Trust) PCT in liaison with Transport Policy staff	Public information and Education: Other mechanisms	Evaluation	Start date: 2006 Expected end date: 2011 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_37	One off events	To be implemented	Public information and Education: Other mechanisms	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_38	Education regarding safety on Public Transport	LTP3 is committed to improve actual and perceived levels of security through proactive use of more staffing and CCTV.	Public information and Education: Other mechanisms	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_39	Provision of information on 'High Pollution Days'	Not to be implemented in the short term, but may however be linked to future UTMC systems.	Traffic planning and management: Other measure	Other	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_40	Include cycle facilities in new developments	This is a standard requirement for a new development	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2005 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_41	Consideration of the location of essential services such as housing and employment	Implementation as part of the new accessibility strategy and cross organisational working arrangements.	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_42	Strengthen joint working between local authorities	Ongoing	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

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Measure code	Description	Focus	Classification	Status	Other information
Newcastle City Council_43	Implement greater planning controls in AQMAs	Air quality is considered when it is a material issue, and consideration is given to planning controls.	Other measure: Other measure	Implementation	Start date: 2004 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_44	Local Development Frameworks need to identify AQMAs	Local development framework has taken air quality into account	Other measure: Other measure	Implementation	Start date: 2004 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_45	Cap existing development sites	Economic redevelopment is essential to the regeneration of the City, and this should only be considered where that development cannot be facilitated	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_46	Encourage mixed use developments	This is already part of Newcastle City Council's sustainable development policy	Other measure: Other measure	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_47	Undertake air quality assessments of relevant new developments	Air quality is considered when it is a material issue, and consideration is given to planning controls	Other measure: Other measure	Implementation	Start date: 2001 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A
Newcastle City Council_48	Air Quality Awareness Campaign	Campaign to raise air quality and how behavioural change can both improve personal health and at the same time improve air quality	Public information and Education: Other mechanisms	Implementation	Start date: 2014 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
North Tyneside Council_1	A188 DfT Pinch Point Scheme	Traffic management	Traffic planning and management: Other measure	Implementation	Start date: 2015 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
North Tyneside Council_2	A1058 Coast Road Local Enterprise Partnership (LEP) Major Scheme	Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2015 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
North Tyneside Council_3	A19 Employment Access - Cobalt Strategic Enterprise Plan (SEP)	Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2015 Expected end date: 2019 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
North Tyneside Council_4	Scaffold Hill / West Shiremoor S.278 Works	Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2015 Expected end date: 2017 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
North Tyneside Council_5	A191 Corridor SEP	Traffic management  Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2015 Expected end date: 2017 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
North Tyneside Council_6	A1056 Weetslade Corridor SEP	Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2015 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
North Tyneside Council_7	Whitehouse Farm S.278 Works	Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2015 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
North Tyneside Council_8	Station Road East S.278 Works	Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2015 Expected end date: 2019 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
North Tyneside Council_9	North Bank of Tyne Access SEP	Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2015 Expected end date: 2019 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_1	Provision of cycle paths	Reduce emissions through the transport network	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_2	Upgrading of cycle paths	Reduce emissions through the transport network	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_3	Promotion of cycling facilities	Reduce emissions through the transport network	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_4	Passenger facilities at railways	Reduce emissions through the transport network	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2013 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_5	Bus route improvements	Reduce emissions through the transport network	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Redcar and Cleveland Borough Council_6	Events held in the Borough (400 to date)	Reduce emissions through the transport network	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_7	Promotion of cycling	Reduce emissions through the transport network	Traffic planning and management: Encouragement of shift of transport modes	Planning	Start date: 2015 Expected end date: 2016 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_8	Personalised Travel Planning	Reduce emissions through the transport network	Traffic planning and management: Encouragement of shift of transport modes	Planning	Start date: 2015 Expected end date: 2016 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_9	Highways Agency environmental investigation of Greystone Roundabout (A174) for future construction. Installation of 3 NOx tubes	N/A Zilon	Traffic planning and management: Other measure	Planning	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_10	Euro VI vehicles procurement: Public sector	Reduce emissions through the procurement process	Public procurement: New vehicles, including low emission vehicles	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_11	Euro VI vehicles procurement: Company vehicles	Reduce emissions through the procurement process	Public procurement: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_12	Tenderers are asked to provide sustainability details	Reduce emissions through the procurement process	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Redcar and Cleveland Borough Council_13	Vehicle bidders submit narrative response of fuel efficiency during procurement process	Reduce emissions through the procurement process	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_14	Air pollution NOx tube partnership study with charity, Sustrans (Get Moving Redcar and Cleveland project)	Promote cycle uptake through the partnership	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2016 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_15	Buddy system to reduce vehicles	Promote car sharing	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_16	Vehicle Retrofitting programmes	Reduce emissions through the fleet management process	Retrofitting: Retrofitting emission control equipment to vehicles	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_17	Fleet efficiency and recognition schemes	Reduce emissions through the fleet management process	Other measure: Other measure	Implementation	Start date: 2015 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_18	Route Management Plans/ Strategic routing strategy for HGV's	Reduce emissions through the fleet management process	Traffic planning and management: Freight transport measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_19	Fleet management zero policy for idling	Reduce emissions through the fleet management process	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Redcar and Cleveland Borough Council_20	Lighter fleet vehicles limited to 62mph	Reduce emissions through the fleet management process	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_21	Electric car uptake (2 bought by Council with on site charging points)	Reduce emissions through the fleet management process	Public procurement: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_22	Driver training and ECO driving aids	Reduce emissions through the fleet management process	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_23	School Capital Maintenance Programme- Number of boilers upgraded	Reduce emissions from old boilers across the Borough  N/A  Manage emissions by identification	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Other, please specify Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_24	Employee car salary sacrifice scheme	N/A FORTH	Public procurement: Other measure	Other	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Redcar and Cleveland Borough Council_25	Manage small waste oil burnets (SWOBs)	Manage emissions by identification of additional waste oil burners	Permit systems and economic instruments: Other measure	Other	Start date: 2015 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Industry including heat and power production Indicator: How many are found or removed Target emissions reduction: N/A
Redcar and Cleveland Borough Council_26	Taxi emission testing	N/A	Permit systems and economic instruments: Introduction/increase of environment taxes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
South Tyneside Metropolitan Borough Council_1	Road Improvements	Construction of New Tyne Crossing (road tunnel)	Traffic planning and management: Other measure	Evaluation	Start date: 2007 Expected end date: 2011 Spatial scale: National Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_2	Congestion Measure	Alternative access to trunk road and road tunnel	Traffic planning and management: Other measure	Evaluation	Start date: 2007 Expected end date: 2011 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_3	Major Junction Improvement	Testo's Grade Separation Major Scheme	Traffic planning and management: Encouragement of shift of transport modes	Planning	Start date: 2015 Expected end date: 2019 Spatial scale: National Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_4	Travel Information	Tyne and Wear UTMC	Traffic planning and management: Other measure	Implementation	Start date: 2008 Expected end date: 2019 Spatial scale: National Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_5	Freight Movements	Tyne and Wear Freight Quality Partnership	Traffic planning and management: Freight transport measure	Evaluation	Start date: 2007 Expected end date: 2019 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_6	Major Scheme Improvement	Lindisfarne AQMA Major Junction Improvement Scheme	Traffic planning and management: Encouragement of shift of transport modes	Planning	Start date: 2015 Expected end date: 2018 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_7	Traffic Management	Travel Planning within A19 Corridor	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2017 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
South Tyneside Metropolitan Borough Council_8	Highway Asset Management Plan	Formulation of Council Wide Strategy	Other measure: Other measure	Implementation	Start date: 2007 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_9	Network Management Plan	Route Based Strategies to prevent congestion	Other measure: Other measure	Implementation	Start date: 2007 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_10	Go Smarter to School	Sustainable Transport Improvements to encourage the use of sustainable transport	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2018 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_11	Park and Ride at Metro Stations	Car Parking arrangements provided at Metro Stations to reduce congestion	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2005 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_12	Better Bus Networks	Arrangements with Public Transport providers to improve network	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2007 Expected end date: 2018 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_13	Tyne Pedestrian Tunnel	Refurbishment of existing tunnel	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2007 Expected end date: 2017 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_14	Electrical Vehicles	Implementation of Electrical Charging Infrastructure	Traffic planning and management: Differentiation of parking fees	Implementation	Start date: 2014 Expected end date: 2018 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
South Tyneside Metropolitan Borough Council_15	Improving Cycling	Strategic Cycling Routes throughout the borough	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2005 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_16	Improving Cycling	Free Cycling Maps through the Tyne and Wear Region	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2005 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_17	Cycle Hire	Seasonal Cycle Hire offered at the South Shields Foreshore Area	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2005 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_18	Public Information	Working with Nexus to disseminate public transport information	Public information and Education: Internet	Implementation	Start date: 2007 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_19	Nexus	Improving the Metro System	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2005 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_20	South Shields 365	Public Transport and Highway Movements to improve the Town Centre	Traffic planning and management: Reduction of speed limits and control	Implementation	Start date: 2005 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
South Tyneside Metropolitan Borough Council_21	Improved traffic control and signalling at major junction	Boldon Lane AQMA	Traffic planning and management: Other measure	Implementation	Start date: 2012 Expected end date: 2012 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Stockton-on-Tees Borough Council_1	Urban Traffic Management and Control (UTM)	Linked traffic signal control to reduce congestion	Traffic planning and management: Other measure	Implementation	Start date: 2010 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_2	20mph zones in residential areas where practical	N/A	Traffic planning and management: Reduction of speed limits and control	Implementation	Start date: 2005 Expected end date: 2017 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_3	Core bus route road space re-prioritisation	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_4	Focus on large employers and new developments	N/A Zijon i	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2009 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_5	Partnership work with Sustrans to deliver ongoing active travel promotions to residents and businesses	N/A N/A N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2009 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_6	PTP delivered to 8000 households in 2014	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_7	Cycling maps, guides, cycle training, guided rides etc.	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2013 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Stockton-on-Tees Borough Council_8	Walking maps and guided walks	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2006 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_9	Web pages focusing on cycling	N/A	Public information and Education: Internet	Implementation	Start date: 2008 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_10	Web pages focusing on walking	N/A	Public information and Education: Leaflets	Implementation	Start date: 2008 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_11	New bus shelters at all town centre locations in the Borough, rail station improvements at all stations including signage, access improvements and new waiting facilities	N/A Zilon	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_12	Focus on access to town centres and routes to schools	N/A	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2009 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_13	5 year Borough wide programme of infrastructure improvements to decrease bus journey times on core routes	N/A	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_14	Policy in place for sustainable procurement of services	N/A	Other measure: Other measure	Implementation	Start date: 2011 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Stockton-on-Tees Borough Council_15	Policy in place for prioritisation of electric vehicles for Council pool vehicle use	N/A	Public procurement: Other measure	Implementation	Start date: 2011 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_16	Large network of EV charging posts across the borough, including a rapid charger in Stockton Town Centre	N/A	Public procurement: Other measure	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_17	Free parking for EV's in charging bays	N/A	Traffic planning and management: Differentiation of parking fees	Implementation	Start date: 2011 Expected end date: 2018 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_18	School Travel Plans - 10 years of work to ensure all schools have a travel plan and are actively working to reduce single occupancy vehicle journeys	N/A	Traffic planning and management: Other measure	Implementation	Start date: 2005 Expected end date: 2010 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_19	Cycle to work schemes	NA	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_20	School Travel Plans - 10 years of work to ensure all schools have a travel plan and are actively working to reduce single occupancy vehicle journeys  Cycle to work schemes  Discount bus and rail tickets for staff	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2007 Expected end date: 2013 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_21	Station improvements encompassing car park expansions, on site information, waiting facilities and security	N/A	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Stockton-on-Tees Borough Council_22	District Heating Scheme	N/A	Low emission fuels for stationary and mobile sources: Other measure	Preparation	Start date: 2018 Expected end date: 2030 Spatial scale: Local Source affected: Industry including heat and power production Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_23	Fleet eco-driving training. Training fleet vehicle drivers to drive in an environmentally aware way	N/A	Other measure: Other measure	Implementation	Start date: 2009 Expected end date: 2012 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_24	Existing taxis to meet Euro 3 standard, new taxis to meet Euro 4	N/A	Permit systems and economic instruments: Introduction/increase of environment taxes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_25	Promotion of home working for council staff	N/A ASTION	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_26	Use the 'Drivers Certificate of Professional Competence' as there are training includes modules that cover ECO driving.	N/A N/A N/A N/A	Other measure: Other measure	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_27	Purchasing of vehicles that comply to the latest Euro 6 emissions legislation.	N/A	Other measure: Other measure	Implementation	Start date: 2015 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Stockton-on-Tees Borough Council_28	Route optimisation projects for refuse vehicles.	N/A	Other measure: Other measure	Implementation	Start date: 2012 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Sunderland City Council_1	Urban Tranport Management and Control (UTMC)	Congestion	Traffic planning and management: Other measure	Implementation	Start date: 2011 Expected end date: 2020 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Sunderland City Council_2	EV infrastructure	Promoting low carbon vehicles	Public procurement: Other measure	Implementation	Start date: 2010 Expected end date: 2020 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Sunderland City Council_3	Priority Lanes	Promote use of sustainable modes	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2008 Expected end date: 2020 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Sunderland City Council_4	Traffic management schemes	ation	Traffic planning and management: Reduction of speed limits and control	Implementation	Start date: 2001 Expected end date: 2020 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Sunderland City Council_5	Cycling	Promote use of sustainable modes  Reduce Bus fleet NOx and	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2005 Expected end date: 2020 Spatial scale: Whole agglomeration Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Sunderland City Council_6	Retrofit buses	Reduce Bus fleet NOx and particulate emissions	Public procurement: Cleaner vehicle transport services	Implementation	Start date: 2013 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Sunderland City Council_7	Low Carbon Energy Assessment (LCEA)	Promote low carbon economy	Public procurement: New vehicles, including low emission vehicles	Planning	Start date: 2011 Expected end date: 2020 Spatial scale: National Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Sunderland City Council_8	Ultra Low carbon vehicle city strategy	Promote low carbon technology	Public procurement: Cleaner vehicle transport services	Preparation	Start date: 2014 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
Sunderland City Council_9	Sunderland Strategic Transport Corridor (SSTC)	Improve connectivity	Traffic planning and management: Other measure	Planning	Start date: 2012 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
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