

# Greenhouse Gas Emissions Report

## *North Kesteven District Council*

Council Offices  
Kesteven Street  
Sleaford  
NG34 7EF

### *Reporting period*

1<sup>st</sup> April 2015 – 31<sup>st</sup> March 2016

Table 1: Greenhouse gas (GHG) emissions for 2008/09 – 2015/16

<b><i>GHG Emissions data for 1<sup>st</sup> April 2008 to 31<sup>st</sup> March 2016</i></b>								
	<b>tonnes of CO<sub>2</sub>e<sup>1</sup></b>							
	<b>2015/16</b>	<b>2014/15</b>	<b>2013/14</b>	<b>2012/13</b>	<b>2011/12</b>	<b>2010/11</b>	<b>2009/10</b>	<b>Baseline 2008/09</b>
Scope 1	816.89	860.32	901.65	921.51	901.78	965.76	974.51	1060.83
Scope 2	533.42	552.31	563.04	578.68	621.56	669.27	678.93	755.57
Scope 3	1159.37	1440.02	1332.43	1253.30	1456.30	1716.06	1829.62	1840.34

<sup>1</sup> kilograms of carbon dioxide equivalent (CO<sub>2</sub>e). CO<sub>2</sub>e is a universal unit of measurement that allows the global warming potential of different GHGs to be compared.

Total gross emissions	<b>2509.68</b>	<b>2852.65</b>	<b>2797.13</b>	<b>2753.48</b>	<b>2979.64</b>	<b>3,251.26</b>	<b>3,373.52</b>	<b>3546.45</b>
Outside of Scopes <sup>2</sup>	200.97	-	-	-	-	-	-	-
Carbon offsets	-	-	-	-	-	-	-	-
Green tariff	512.72	520.68	-	-	-	-	-	-
Total annual net emissions	<b>1996.96</b>	<b>2331.97</b>	<b>2797.13</b>	<b>2753.48</b>	<b>2979.64</b>	<b>3,251.26</b>	<b>3,373.52</b>	<b>3546.45</b>
Intensity measurement (tonnes of CO <sub>2</sub> e per full time equivalents) <sup>4</sup>	<b>2.44</b>	<b>3.81</b>	<b>3.85</b>	<b>4.19</b>	<b>4.43</b>	<b>4.45</b>	<b>4.43</b>	<b>5.06</b>
N° full time equivalents <sup>3</sup>	342	371	380	358	344**	362	371	356

### ***Change in Emissions***

Overall greenhouse gas emissions have reduced by 29.23% (gross) and 43.69% (net) between 2008/09 and 2015/16.

<sup>2</sup> Emissions from heat received from Sleaford Renewable Energy Plant using straw as fuel. Data for informational purposes and not included in gross or net totals

<sup>3</sup> Calculated from the number of full time equivalents (FTE) at year end, plus casual staff, plus Councillors.

<sup>4</sup> Calculated by adding scopes 1 and 2, and dividing by the number of full-time equivalents. (Scope 3 is emissions from outsourced services and is therefore not appropriate to include in this calculation.)

\*\*Average taken from start and end of year FTE figures, due to decreased staffing numbers during financial year.

## ***Approach***

We have followed the Government's Guidance<sup>4</sup> on how to measure and report greenhouse gas emissions. Calculations were made using 2015 conversion factors from the defra spreadsheet<sup>5</sup>, and the direct greenhouse gas emissions are reported in this document.

## ***Baseline Year***

Our baseline year is 2008/09.

## ***Scopes***

The GHG Protocol defines direct and indirect emissions as follows:

- Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity such as boilers or vehicles.
- Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity, such as electricity production, or emissions from staff cars used on Council business.

The GHG Protocol further categorizes these direct and indirect emissions into three broad scopes:

- Scope 1: All direct GHG emissions, e.g emissions from burning gas or oil in our own boilers, or from using diesel in our refuse fleet.
- Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam.
- Scope 3: Other indirect emissions, transport-related activities in vehicles not owned or controlled by the reporting entity such as business mileage, outsourced services, etc.

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<sup>4</sup> 'Environmental reporting guidelines: Including mandatory greenhouse gas emissions reporting guidance', June 2013

<sup>5</sup> DECC conversion factors and guidance <http://www.ukconversionfactorscarbonsmart.co.uk/>

## ***Targets***

Targets were set through the Local Area Agreement for Lincolnshire (2008/09 to 2010/11) and the Carbon Management Plan (2008/09 to 2013/14) for the NI 185 CO<sub>2</sub> emissions. Since 2010/11 we have used the GHG protocol to measure and report the reduction in our carbon footprint.

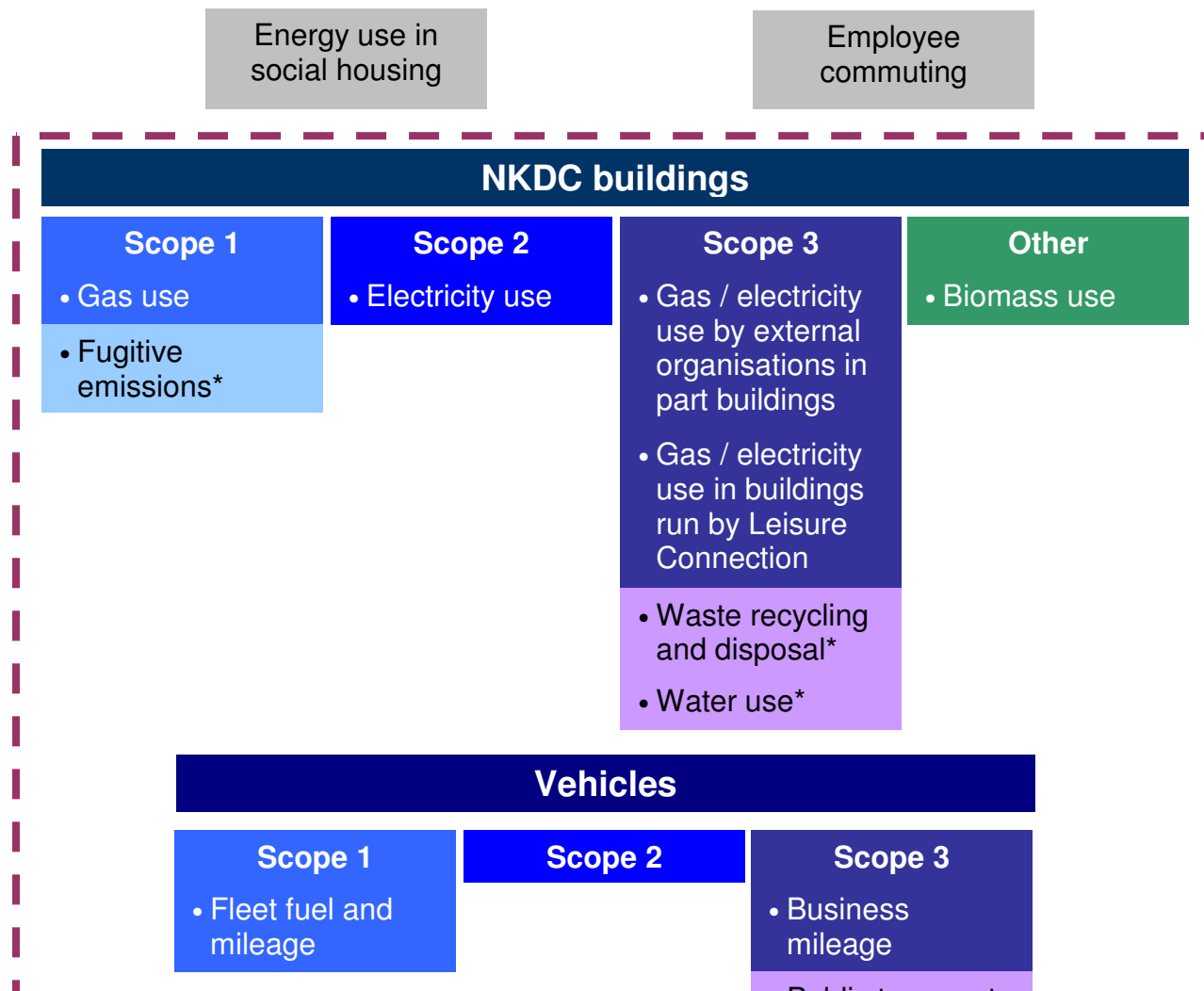
## ***Intensity measurement***

The most appropriate intensity measure to Local Authorities is 'Tonnes CO<sub>2</sub>e per full time equivalents'.

## Organisational boundary

Local Authority operations are most suited to the 'Operational Control' methodology for reporting greenhouse gas emissions. This approach is used across the whole of the Local Authority operations.

**Figure 1: Boundary for greenhouse gas reporting**



Supplier  
transport

Customer  
transport

***Operational scopes***

**Table 2: Operational scopes**

	<b>Greenhouse Gas emissions 2014/15 in</b>	<b>Greenhouse Gas emissions 2013/14 in</b>
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	tonnes of CO <sub>2</sub> e	tonnes of CO <sub>2</sub> e
<b>Scope 1</b>		
Gas consumption	73.05	109.37
Owned transport	787.27	792.28
<b>Total Scope 1</b>	<b>860.32</b>	<b>901.65</b>
<b>Scope 2</b>		
Purchased electricity	31.63	563.04
<b>Total Scope 2</b>	<b>31.63</b>	<b>563.04</b>
<b>Significant Scope 3</b>		
Business travel	107.34	115.53
Gas / electricity/ oil consumption resulting from outsourced services	1158.58	1,116.69
Public transport	3.54	3.11
Mileage resulting from outsourced services	132.54	97.11
T&D losses	38	
<b>Total Significant Scope 3</b>	<b>1440.02</b>	<b>1332.43</b>
<b>Other</b>	-	-

<b>Total annual net emissions</b>	<b>2331.97</b>	<b>2797.13</b>
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