# **Public Document Pack**

**Bill Cullen** MBA (ISM), BA(Hons) MRTPI *Chief Executive* 

Date: 05 September 2018



To: Members of the Scrutiny Commission

Mr MR Lay (Chairman)
Mr DW MacDonald
Mrs R Camamile (Vice-Chairman)
Mr RB Roberts
Mr KWP Lynch (Vice-Chairman)
Mr BE Sutton
Mr DC Bill MBE
Mr R Ward
Mr SL Bray
Mr HG Williams

Mr WJ Crooks

Copy to all other Members of the Council

(other recipients for information)

Dear Councillor,

Please find attached an appendix which was omitted from the agenda pack for the meeting of the SCRUTINY COMMISSION on THURSDAY, 13 SEPTEMBER 2018.

Please place this with your papers for the meeting.

Yours sincerely

Rebecca Owen

**Democratic Services Officer** 

#### **SCRUTINY COMMISSION - 13 SEPTEMBER 2018**

#### LATE ITEM

#### 8. <u>CARBON MANAGEMENT</u> (Pages 1 - 6)

To report on reductions in carbon emissions arising from HBBC operations from March 2008 to March 2018 and to report on greenhouse gas emissions from 2009 to March 2018 and set future reduction targets.

Appendix 1 attached.

# Agenda Item 8

# Report on Greenhouse Gas Emissions from Hinckley and Bosworth Borough Council's own estate and operations

# (The successor to National Indicator 185) For year 2017-18

Table 1

| GHG emissions                 | data for period 1 April 2017 | to 31st March 2018             |  |
|-------------------------------|------------------------------|--------------------------------|--|
|                               | Tonnes of CO₂e               |                                |  |
|                               | 2015-16                      | 2017-18                        |  |
| Scope 1*                      | 1,801                        | 1,610                          |  |
| Scope 2*                      | 705                          | 372                            |  |
| Scope 3*                      | 178                          | 170                            |  |
| Total gross emissions         | 2,684                        | 2,153                          |  |
| Carbon offsets                | 0                            | 0                              |  |
| Green Tariff                  | -264                         | -230                           |  |
| Total net annual<br>emissions | 2,420                        | 1,923                          |  |
| Intensity measurement         | 23 TCO₂e per 1000 population | 19.6 TCO2e per 1000 population |  |
| Intensity measurement         | 6.5 TCO₂e per employee       | 5.51 TCO2e per employee        |  |

#### 1. Information

Hinckley and Bosworth Borough Council is a District Council located in the south east of Leicestershire. The main council offices are located at Hinckley Hub, Rugby Road, Hinckley. The population of 110,100 (2017 ONS) lives mainly in the urban settlements of Hinckley, Burbage, Barwell and Earl Shilton along with the larger villages of Market Bosworth, Markfield, Groby and Ratby (84%). The rest of the 29,735 hectares is predominately rural. The council provides the green space, street cleansing, refuse and recycling service and housing maintenance in house with an external private partner providing dry recycling. The council has retained its housing stock of 3,359 dwellings including 11 Sheltered Housing complexes. The Hinckley Leisure Centre is owned by HBBC but operated by a private company (People for Places).

The Department of Energy and Climate Change (DECC) and the Department for the Environment, Food and Rural Affairs (DEFRA) require reporting of Greenhouse Gas (GHG) emissions for 2017-18 in Tonnes of Carbon Dioxide Equivalent (TCO<sub>2</sub>e) as displayed above. https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017.

#### 2. Reporting period

1 April 2017 – 31 March 2018. Also included is the data from 1 April 2015 – 31 March 2016.

#### 3. Change in emissions

Our reported <u>net</u> GHG emissions have decreased by 20.5% against 2015-16 and gross emissions GHG decreased by 37.4% against our base line year of 2009-10. This is mainly due to significantly reduced emissions both from gas and electricity from the new Hinckley Leisure Centre and transport related emissions. Employee business travel emissions increased by 42.1% with a significant shift from small petrol to small diesel and medium petrol mileage. The new Hinckley Leisure Centre, operated by PFP from May 2016, significantly reduced electricity and gas consumption compared to the old centre achieving a 35% total reduction in emissions.

#### 4. Our approach

We developed a Carbon Management Plan (CMP) in 2009 as part of the Carbon Trust Local Authority Carbon Management Programme. The CMP outlined the council's approach to reducing its emissions and set an original target of reducing carbon dioxide (CO<sub>2</sub>) emissions by 20% by 2013/14, relative to the baseline year 2008/09. These emissions were calculated using the Government's NI 185 spreadsheet and measure only CO<sub>2</sub> emissions. The target was revised in March 2012 to achieve the target by 2016, which was achieved. A further stretching target was then set to achieve a 35% reduction by 2020 (c.f. 2008-09). Using the data collected to report this provides the data for the Greenhouse Gas Emission reporting within this document. The scope of the activities covered is reported below.

The Greenhouse Gas emissions reported in this document include not only  $CO_2$ , but also methane (CH) and nitrous oxide ( $N_2O$ ) equivalents, as set out by DECC/DEFRA guidelines<sup>1</sup>. Units are represented as tonnes of  $CO_2$  equivalents ( $TCO_2e$ ).

#### 5. Organisational boundary

We have used the financial control approach. Emissions from the council's main contractors have been included as Scope 3 emissions as they are currently not under direct financial control and are therefore reported as Scope 1 emissions.

#### 6. Operational scopes

We have measured our Scope 1, 2 and significant Scope 3 emissions which are given in Table 2.

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## Table 2 Operational scope

All 2017-18 figures for electricity DCF Carbon Factors 2017. Transmission and distribution losses for electricity have not previously been reported within Scope 2 and therefore no adjustment is made.

|  | TCO₂e   |         |        |  |
|--|---------|---------|--------|--|
|  | 2015-16 | 2017-18 | %      | State specific   |
| O 4 D' 1   |         |         | Change | exclusions/inclusions  |
| Scope 1 Direct                                   |         |         |        |  |
| Gas consumption                                  | 1,158   | 922     | -20.4% | Includes Hinckley Leisure Centre. Owned and maintained by HBBC but operated by PFP.  |
| Owned and controlled council Transport           | 643     | 688     | +7%    |  |
| Fugitive emissions                               |         |         |        | Emissions from air conditioning and refrigeration units in office buildings excluded as data not collected in 2009/10 and very limited across estate.<0.5% |
| Total  | 1,801   | 1,610   | -10.6% |  |
| Onema Oliveli (                                  |         |         |        |  |
| Scope 2 Indirect                                 |         |         |        |  |
| Electricity                                      |         |         |        |  |
| HBBC   | 331     | 230     | -30.6% |  |
| PFP  | 374     | 143     | -61.8% | Hinckley Leisure Centre  |
| Total  | 705     | 372     | -47.1% |  |
| Scope 3 Indirect                                 |         |         |        |  |
| Staff business travel                            | 44      | 63      | +42.1% |  |
| Employee commuting                               |         |         |        | Figure not calculated as data is not captured and therefore unavailable.   |
| Contractors transport                            | 134     | 107     | -20.7% | Palm (dry recycling) relocated base  |
| Waste disposal                                   |         |         |        | Figure not calculated as data is not captured and therefore unavailable.   |
| Total  | 178     | 170     | -4.6%  |  |
| Total Gross<br>Emissions                         | 2,684   | 2,153   | -19.8% |  |
| % change from<br>base year 2009-10<br>3438T CO₂e | -21.9%  | -37.4%  |        | Note green tariff reduction will be applied to Gross to obtain Net.  |
| FTE Employees                                    | 373     | 391     | +4.8%  |  |
| Population (mid<br>year ONS estimate<br>'000)    | 105     | 110.10  | +4.8%  |  |
|  |         | Pa      | ge 3   |  |

#### 7. Geographic breakdown

All direct emissions are located within the borough except for transport beyond borough boundaries.

#### 8. Base year

Our base year for this report is the financial year 2009/10. Our carbon footprint has been restated for all years in order to account for material changes to the conversion factors provided by Defra for company reporting purposes.

Our base year recalculation policy is to recalculate our base year and the prior year emissions for relevant significant changes in operations which meet our significance threshold of 5% of total base year emissions. Base year figures recalculated in 2014 for transport corrections identified following housing repairs services being brought in-house.

### 9. Targets

The council set a target in 2008 of reducing carbon dioxide ( $CO_2$ ) emissions by 20% by 2013/14, relative to the baseline year 2008/09. These emissions were calculated using the Government's NI 185 spreadsheet and measure only  $CO_2$  emissions. This was revised in March 2012 to 20% by 2016. This target was met and a new target of 35% reduction by 2020 set in 2016. This has been exceeded as the NI185 figures for 17-18 show 40.2% gross and 41.4% weather corrected reductions from 2008-09. The gross GHG emissions show a 37.4% reduction on 2009-10 base year.

#### 10. Intensity measurement

We have chosen two intensity measures to reflect the number of staff providing services and also the population they are provided to.

#### 11. External assurance statement

As a small, rural local authority with relatively low emissions we have not sought an independent external assurance statement.

#### 12. Carbon offsets

Our energy consumption falls well below the threshold required for participation in the Carbon Reduction Commitment Scheme and we have therefore not purchased any carbon credits to offset our emissions.

#### 13. Green Tariffs

We purchased 0.65GWh of green electricity under contract to Total Gas & Power equating to a reduction of 230TCO<sub>2</sub>e. This is 100% of grid electricity purchased. The HLC generated 0.6GWh from gas powered CHP displacing a notational 210 TCO<sub>2</sub>e. The PV panels on the Hinckley Hub generated 28,786kWh during the year thereby reducing our gross emissions by 10.1 TCO<sub>2</sub>e. As this reduced demand from the grid and was not exported this is therefore not claimed in the net emissions figure.

#### 14. Further information

For further information please contact <a href="mailto:esadmin@hinckley-bosworth.gov.uk">esadmin@hinckley-bosworth.gov.uk</a> 01455 238141.

### 15. Glossary

CO<sub>2</sub> - Carbon dioxide

CO<sub>2</sub>e - Carbon dioxide equivalents

DEFRA - Department for Environment, Food and Rural Affairs

DECC - Department of Energy and Climate Change

GHG - Greenhouse Gas

NH4 - Methane

N2O - Nitrous Oxide

Table 3 Scope of data collection

| Scope 1 &2          | Offices:                               |
|---------------------|--|
| Gas and Electricity | Hinckley Hub                           |
|                     | Jubilee Building                       |
|                     | Hinckley Leisure Centre                |
|                     | Sheltered Housing complexes            |
|                     | (communal areas, external lighting and |
|                     | heating)                               |
|                     | Homeless accommodation                 |
|                     | Community centres and houses           |
|                     | Park pavilions and changing rooms      |
|                     | Market lighting and power              |
|                     | Car park ticket machines and lighting  |
|                     | Leachate pumping station               |
|                     | Public toilets                         |
|                     | Cemeteries                             |
| Scope 1             | Refuse/Recycling fleet                 |
| Transport           | Grounds Maintenance vehicles           |
| ·                   | Housing Repairs                        |
| Scope 3             | Casual and essential users on council  |
| Transport           | business                               |
| ,                   | Palm Recycling Limited fleet (dry      |
|                     | recycling) \ \                         |
|                     |  |

