Epping Forest District Council Greenhouse Gas (GHG) Emissions 2019

GHG emissions data for period 1 April 2018 to 31 March 2019 compared to previous and baseline years									
	Global tonnes of Carbon Dioxide Equivalent (CO ₂ e)								
	2018/2019	2017/2018	Base Year 2008/2009						
Scope 1	423.45	434.57	586.23						
Scope 2	296.81	368.74	831.02						
Scope 3	116.31	137.68	2467.57						
Total gross emissions	836.67	940.99	3884.82						
Carbon offsets	Nil	Nil	Nil						
Green tariff	58.79	39.55	Nil						
Total annual net emissions	777.88	901.44	3884.82						

Supporting explanations

1. Company Information

Epping Forest District Council is a Local Authority in the UK. Registered address is Civic Offices, High Street, Epping, Essex CM16 4BZ.

2. Reporting period

1 April 2018 – 31 March 2019

3. Change in Emissions

This year's GHG report has seen a healthy decrease in our carbon emissions.

There has been a 7% reduction in Gas consumption and a negligible change in electricity consumption

Overall there has been a 26% reduction in total $kgCO_2e$ and this is mainly due to the reduction in the conversion factors used to convert kWh consumption into CO_2e .

Comparing previous year's figures:

The Scope 1 emissions for 2019 have decreased by 2.6% The Scope 2 emissions for 2019 have decreased by 19.5% The Scope 3 emissions for 2019 have decreased by 15.5% Total annual emissions for 2019 have decreased by 13.7%

Carbon emissions due to Business travel has decreased over the previous year by 12 tonnes.

It will be interesting to see the impact that the Council's Travel Plan has in the next year on the carbon emissions due to business travel. There will be very limited car parking facilities

available as a result of the Accommodation Strategy which will encourage new initiatives for travel to and from work and business miles for service delivery.

Council owned Facilities

Civic Offices

The past year has seen a freeze on capital expenditure within the civic offices which included the upgrade of ageing plant to more energy efficient equipment.

Air conditioning plant was used extensively during last summer's heat, which impacted on consumption. Consequently, the Electricity usage in the Civic Offices has increased very slightly.

Gas usage decreased which is partly down to improvements made in the operating of the building management system.

Oakwood Hill Depot

Redevelopment allowing staff numbers to increase is taking place so electrical energy consumption is likely to increase this coming year.

Central control over the heating and air-conditioning at the Civic Offices will help reduce the electricity consumption as currently units are left on overnight.

Waltham Abbey Museum

Both Gas and Electricity consumption has varied slightly compared to last year which, despite having not seen an energy profile, could be attributed to fluctuations in this past years high temperature days compared to the previous year.

The use of the building has not changed and is unlikely to in this coming year.

Pyrles Lane Nursery

Again, negligible change. This building should be becoming redundant soon as staff begin to move over to the newly refurbished Town Mead Depot building 21.

Limes Centre

Energy consumption has reduced. There are no plans for any energy efficiency upgrade works at the Centre this coming year and energy consumption should remain the same going forward.

Town Mead Depot

Some increased energy usage. This coming year energy consumption will increase with the addition of staff into Building 21 as they vacate Pyrles Lane Nursey.

4. Approach

We have followed the Government's most recent guidance on how to measure and report greenhouse gas emissions.

5. Organisation Boundary

We have used the financial control approach.

6. Operational Scopes

The Government defines scopes in the following ways:

Scope 1: Emissions from sources that are owned or controlled by the reporting company. Also known as direct emissions.

Scope 2: Emissions that are a consequence of the operations of the reporting company, but occur from sources owned or controlled by another company e.g. as a consequence of the import of electricity. Also known as indirect emissions.

Scope 3: Emissions that are a consequence of all other activities which release emissions into the atmosphere as a consequence of your actions, which occur at sources which you do not own or control and which are not classed as scope 2 emissions. As of 2013, scope 3 also includes losses through transmission and distribution of purchased electricity.

Breakdown of most recent reporting year 18/19						
•	GHG emissions 2018/2019* in tonnes of CO ₂ e					
Scope 1						
Gas Consumption	183.76					
Owned Transport	239.69					
Total Scope 1	423.45					
Scope 2						
Purchased Electricity	296.81					
Total Scope 2	296.81					
Significant Scope 3						
Business Travel	91.01					
Losses through transmission and distribution from scope 2 and scope 3 electricity purchase	25.30					
Total Significant Scope 3	116.31					

*Financial Year 2018/2019

7. Baseline

Our baseline year is financial year 2008/2009. We have used a "fixed base year" approach, which is a fixed point in the past against which to compare current emissions.

8. Target

The Council has declared a climate emergency and has pledged to do everything it can to be carbon neutral by 2030. Approval has been given for the appointment of a Climate Change Officer dedicated to developing and implementing an action plan to deliver this ambitious objective. This officer, when in post, will include amongst other climate change

objectives, responsibilities for reducing the carbon footprint of the Councils own estate and business operations and services.

9. Carbon Offsets and Green Tariffs

Epping Forest District Council does not currently purchase electricity or gas through a green tariff; neither does the Council purchase carbon credits to off-set its GHG emissions.

The Council has 2 buildings that use solar PV, the main Civic Offices in Epping, which began producing electricity in 2016 and a small community centre (The Limes Centre), that we have included in this report.

There is a significant increase in energy produced from last year although some of this will be attributed to readings not taken at the end of the last financial year, being carried forward into the 2018-19 financial year. As a result of the Councils organisational restructure the part of the building containing the solar panel may no longer be under Council ownership going forward and this will therefore affect solar energy production figures in the future.

Appendix A – Year-on-year overview

GHG calculations as submitted from 2008 to 2018 – for overview.

		GHG emissions data year on year As submitted								
		Global tonnes of Carbon Dioxide Equivalent (CO ₂ e)								
	2018/19	2017/2018	2016/2017*	2015/2016	2014/2015	2013/2014	2012/2013	2011/2012	2010/2011	Base Year 2008/2009
Scope 1	423.45	434.57	472.02	471.66	433.74	490.15	536.52	428.30	447.34	586.23
Scope 2	296.81	368.74	449.53	430.71	551.60	585.47	588.85	719.71	818.72	831.02
Scope 3	116.31	137.68	154.41	1905.58	2152.10	2101.83	2216.46	2320.42	2268.68	2467.57
Total gross emissions	836.57	940.99	1075.96	2807.95	3137.44	3177.45	3341.83	3468.43	3534.74	3884.82
Carbon offsets	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Green tariff	58.79	39.55	49.34	1.77	.16	Nil	Nil	Nil	Nil	Nil
Total annual net emissions	777.78	901.44	1026.62	2806.18	3137.28	3177.45	3341.83	3468.43	3534.74	3884.82

*Calculations before 2016/17 included data from some of the leisure centres. This GHG data is now being calculated by the leisure centre operators and therefore is not included in the EFDC data to avoid double counting. Please see the 2016/17 report for further information.