CHELTENHAM BOROUGH COUNCIL

Annual report on Greenhouse Gas Emissions

Financial year 2020/21

1. Summary of emissions results for 2020/21 vs 2019/20

Table 1. Summary of GHG emissions data (Tonnes CO2e) 2020/21 vs 2019/20

	2020/21	2019/20 (Base Year)	2019/20 (revised*)
Scope 1	2,954	3,620	3,650
Scope 2	1,047	868	1,279
Scope 3	1,069	1,134	1,178
TOTAL GROSS EMISSIONS	5,070	5,622	6,106
Carbon offsets	0		
Green tariffs	687		

2. Organisation information

Cheltenham Borough Council (CBC) is a second-tier local authority in Gloucestershire and employs around 249 FTE staff (excluding casual and temporary). Cheltenham Borough has a geographic area of 4,663 hectares and a population of 116,000. Our address is: Municipal Offices, Promenade, Cheltenham, Glos., GL50 9SA.

3. Reporting period

1st April 2020 to 31st March 2021.

4. Base year*

Our base year for monitoring our progress to net zero is 2019/20. After considering previous years this seemed to be the year with the fullest correct data set whilst being unaffected by the pandemic.

A revised version of the 2019/20 figures is included where we have widened our scope. An explanation of these revisions is included below.

5. Targets

We have a target to be a net zero carbon council by 2030. A full definition of net zero and exactly what this means for Cheltenham Borough Council is included in
Appendix 1 – Definition of Key Terms.

6. Organisational boundary

The council owns a diverse range of properties. It owns seven large sites, which includes a leisure centre and a number of listed buildings. CBC also owns a wide range of smaller sites including toilets, pavilions, car parks, fountains and other miscellaneous properties. Where CBC receives energy bills direct from an energy supplier (in

most cases paying West Mercia Energy (WME) on behalf of its actual supplier Total Gas and Power (TGP) whether on behalf of itself or another entity such as Cheltenham Borough Homes, that usage has been included in this report even in the instances where a portion or all is recharged to the tenant.

Leisure & culture services

The Cheltenham Trust has run leisure and culture services for the Council since October 2014. The Trust is an independent organisation which occupies and operates the majority of the council's large buildings – Leisure@ and Prince of Wales Stadium, Cheltenham Town Hall, The Wilson Art Gallery & Museum and Pittville Pump Room. Emissions attributable to the Trust are listed separately in this report but form part of the council's total emissions. Currently, the Council is responsible for purchasing all energy and water for these buildings.

Waste & recycling service

Since April 2012, the council's waste & recycling service has been delivered by Ubico Ltd, a company wholly owned by several local authorities including Cheltenham Borough Council. Emissions attributable to Ubico are listed separately in this report, but form part of the council's total emissions as again the Council is responsible for paying all electricity water and gas for the depot, their main site.

Housing stock

The council's housing stock is managed by an Arms' Length Management Organisation (ALMO), Cheltenham Borough Homes (CBH). Where CBH operations are housed in council buildings their energy consumption is included in this report, where operations are housed in other buildings it is not. Where we receive energy bills direct from the supplier whether on behalf of ourselves or another entity such as Cheltenham Borough Homes, that usage has been included in this report even in the instances where we may recharge a portion or all to the tenant. Fuel consumption by the CBH vehicle fleet is included under scope 3 as the council has no direct control over the size, use or efficiency of the fleet.

Gloucestershire Airport

The council has a 50% shareholding in Gloucestershire Airport and therefore our reported total includes 50% of the emissions from the airport's ground operations under scope 3.

7. Operational scopes

We have measured our scope 1 and 2 emissions and some significant scope 3 emissions. A full definition of what each scope covers is included in Appendix 1 – Definition of Key Terms. However, as our Scope 3 reporting is not exhaustive, a list is included here.

Scope 3 currently includes:

- Business travel
- Fleet consumption by CBH
- Transmission and distribution (T&D) element for electricity.
    - The council has no control over this element of electricity consumption which relates to the national grid.
- Water
- Commuting.
    - We have used National Travel Survey Table NTS9907[1] and Modal comparisons Table TSGB0109 [2] to estimate this.
- Purchasing of goods and services

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1016981/nts9907.ods
[2] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/944121/tsgb0109.ods

- There is currently no agreed standard methodology for measuring procurement emissions for Local Authorities. An in-depth exercise was carried out externally as part of the calculation of emissions for the original Carbon Neutral Cheltenham[3] report in 2019 based on some of our expenditure in 2018/19. However, this only included about 16% of our total annual expenditure. This figure was rolled over for the baseline year 2019/2020. Attempts were made to recalculate this year (using an external tool), based on our total expenditure using spend as the baseline which calculated a revised footprint of 10,000 tones based on purchasing alone.
- A snapshot of this data is included in Table 2 below.

Table 2 Emissions by Type of Expenditure.

	Tonnes CO2e 20/21
Business services	3364.08
Paper products	22.42
Other manufactured products	550.85
Manufactured fuels, chemicals and glasses	0.33
Food and catering	0.03
Construction	4780.80
Information and communication technologies	1292.82
Waste and water	31.32
Medical and precision instruments	0.00
Other procurement	167.33
Unclassified	0.00
Total	**10209.98**

The end figure is likely to be a more accurate portrayal of the carbon impact of our full expenditure and our potential immediate areas of influence. However, the calculation method is driven by the amount spent in a particular category, as defined above. This is arguably the least accurate method of calculation – the most accurate is generally deemed to be using our actual suppliers' issued data. Given the large impact this will have on the baseline and our current inability to verify this number, we have reluctantly decided to again roll over the baseline figure of 782 tCO2e until more accurate data can be confirmed. This situation will only be resolved by asking our suppliers to start providing scope 1 and 2 data. We will be working with our procurement provider to ensure this process starts as soon as possible.

8. Carbon offsets

We have not purchased any carbon credits in this reporting year.

9. Green tariffs and reporting

Please see the below quote from the SECR reporting guidelines[4]:

[3] https://www.cheltenham.gov.uk/info/61/sustainability/1622/climate_emergency/3

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf

"While explicit reporting on renewable energy and associated emissions is not a mandatory requirement under the SECR legislation, organisations are encouraged to use dual reporting if they wish to reflect their consumption of renewable energy.

Where organisations have entered into contractual arrangements for renewable electricity, e.g. through Power Purchase Agreements or the separate purchase of Renewable Energy Guarantees of Origin (REGOs), or consumed renewable heat or transport certified through a Government Scheme and wish to reflect a reduced emission figure based on its purchase, this can be presented in the relevant report using a "market-based" reporting approach.

It is recommended that this is presented alongside the "location based" grid-average figures and in doing so, you should also look to specify whether the renewable energy is additional, subsidised and supplied directly, including on-site generation, or through a third party There are several ways these figures may be presented in reports."

Therefore the guidelines encourage organisations to report full emissions but recognise the purchase of renewable energy guarantees of origin (REGO's or renewables).

Therefore we have chosen to present our figures with full emissions, but also to identify how much of our emissions are in fact covered by REGO's and what we have purchased through this route.

CBC received ''Pure Green'' electricity from WME for the full reporting period of 01/04/2020 – 31/03/2021.

The current ''Pure Green'' electricity product is made up of a combination of REGO's sourced from the wholesale market as well as REGO's sourced from a generator or technology directly contracted with TGP. Regardless of whether they are purchased from the wholesale market or from TGP generation, all REGO's are purchased from generators that are 100% renewable including solar, wind and hydro.

It is worth noting that from 01/04/2021 the Council opted for an enhanced ''Your Green'' product

''Your Green'' electricity product ensures that ALL REGO's are sourced from a generator or technology directly contracted with TGP. This ensures that 100% of the REGO's are purchased along with the associated generation. The sources remain solely wind, solar, and hydro. This provides increased traceability, transparency and reduces the perception of 'greenwashing' sometimes associated with REGO backed electricity. The council pay a premium of 0.02 pence per kWh for this.

Reporting

The new product provides no additional benefit in terms of reporting. Being supplied with either ''Pure Green'' or ''Your Green'' allows CBC to report zero emissions for electricity under the GHG Protocol Corporate Standards, Scope 2 as the electricity can be matched to Renewable Energy Guarantee of Origin (REGO) certificates.

10. Carbon Footprint

The table shows a full breakdown of our figures by category and scope.

Table 3. Full Carbon Footprint.

	2020/20 tCO2e	2019/20 tCO2e	Revised baseline 2019/20 tCO2e	% change on baseline	% change on revised baseline
Scope 1					
Council					
Gas	347.1	367.04	367.04	-5%	-5%
Fleet diesel	14.5	10.35	10.35	40%	40%
Fleet petrol	1.2	18.22	18.22	-93%	-93%
The Cheltenham Trust					
Gas	882.0	1298.94	1298.94	-32%	-32%
Ubico & shared occupancy property (Depot)					
Gas	102.3	101.43	101.43	1%	1%
Fleet diesel	1125.4	1394.41	1394.41	-19%	-19%
Fleet petrol	26.9	23.48	23.48	14%	14%
Gas oil	102.0	80.26	80.26	27%	27%
Cheltenham Borough Homes (sheltered housing communal areas)					
Gas	323.1	325.84	325.84	-1%	-1%
Misc. Properties not previously included					
Gas	29.7		29.7		0%
Total Scope 1	**2954.2**	**3619.96**	**3649.6**	-18%	-19%
Scope 2					
Council electricity	158.6	236.38	236.4	-33%	-33%
The Cheltenham Trust electricity	441.9	520.23	520.2	-15%	-15%
Ubico electricity	75.5	95.20	95.2	-21%	-21%
Recharged properties electricity	10.9	15.76	15.8	-31%	-31%
CBH Properties	162.1		195.0		-17%
Misc. Properties not previously included Electric	197.5		216.5		-9%
Total Scope 2	**1046.5**	**867.56**	**1279.0**	21%	-18%
Scope 3					
Council					
Mileage claims	5.9	16.40	16.40	-64%	-64%
Rail travel	0.0	0.46	0.46	-100%	-100%
Council electricity (T&D)	13.6	19.97	19.97	-32%	-32%
Other Council Properties (T&D)	17.0		18.4		-8%
Twinning travel	0.0	2.01	2.0	-100%	-100%
Commuting (based on national survey data)	37.7	56.58	56.6	-33%	-33%
Water from Council properties	8.5		8.5		0%
The Cheltenham Trust electricity T&D	38.0	43.96	44.0	-14%	-14%
Recharged properties electricity T&D	0.9	1.33	1.3	-30%	-30%
Ubico electricity (T&D)	6.5	8.04	8.0	-19%	-19%
CBH Properties (T&D)	13.9		16.6		-16%
Cheltenham Borough Homes fuel consumption	99.6	96.65	96.7	3%	3%
Purchasing of goods & services	781.6	782.00	782.0	0%	0%
50% airport emissions from ground operations	45.9	106.80	106.8	-57%	-57%
Total Scope 3	**1069.2**	**1134.22**	**1177.6**	-6%	-9%
Total scope 1, 2 and 3 emissions	**5069.9**	**5621.74**	**6106.2**	10%	17%

We have used the published DEFRA emissions factors for 2020[5] for all 2020/21 calculations.

11. Changes in emissions compared with 2019/20 baseline

Our overall reported emissions have gone down by 10% compared with the original baseline. We have also widened the scope of our reporting so have also included a revised baseline to ensure we are now comparing fuller figures, these figures are included in red.

Scope 1 (Gas and Fuel)

Decrease of 18% overall on the original baseline and 19% on revised baseline

This is mostly driven by the decrease in gas consumption in the Trust properties. This Combined Heat and Power unit (or CHP unit) at Leisure @ Cheltenham was not used for some portion of the year, due to the pandemic lockdown arrangements saving 452 tonnes vs 2019. There were also some savings from other properties due to lockdown and periods of closure. This figure includes 30 tonnes from other CBC premises which have not been accounted for in prior years but will be included henceforth. Please see note below regarding further investigation.

Scope 2 (Electricity)

Increase of 21% overall on original baseline but a decrease of 18% on revised baseline

In the properties originally included in the baseline year, there was actually a decrease of 21% overall or 180 tonnes. This is primarily due to lockdown, the change in working practises and the temporary closure of some buildings such as the Leisure Centre and Art Gallery/Museum. .

However, it came to light during further investigation of our expenditure that an element of energy consumption had not been accounted for in previous years. This relates mainly to CBH properties, tenanted properties and the CHP unit. This added an extra 360 tonnes of emissions to the 20/21 report in Scope 2 and 412 tonnes to the baseline year.

As previously stated, if CBC is purchasing electricity or gas, under SECR guidelines[6], it should be included even if some or all, is later recharged. Properties in this category will continue to be included in our reporting going forward. It should also be noted that the majority of these supplies were not renewables, including those under contract.

Based on the full analysis of expenditure conducted this year, we believe all purchased electricity and gas is now included.

Scope 3 (Various)

Decrease of 6% overall on original baseline and decrease of 9% on revised baseline

There are some smaller changes driven by the adjustments in working practises – the number of people commuting based on the national travel data has reduced by half despite an increase in staff. This is similarly true for business mileage. There has been no twinning or rail travel this year, a pattern that will likely hold true for the majority of next year as well.

There has been a decrease in the airport's emission but appears to have been driven by the electricity usage being inadvertently double-counted last year based on information received. The actual reduction in electricity usage at the airport has been analysed at around 13% based on their latest energy survey.

[5] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/891106/Conversion_Factors_2020_-_Full_set__for_advanced_users_.xlsx

[6] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf

Increases have been driven by wider reporting of electricity and the resulting transmission and distribution emissions. We have now added in water consumption and will add in a figure for waste and home working next year.

As our reporting becomes more and more accurate and includes additional elements of Scope 3, it is inevitable that our recorded emissions will seem to rise irrespective of mitigation actions.

12. Summary

Overall, 2020/21 did see a reduction in emissions, primarily due to the majority of people working from home and the temporary closure of some facilities because of the effect of the pandemic. It appears that a hybrid working system would offer further savings as long as the council can effectively find ways to reuse the space no longer occupied by its operations – by finding tenants or moving to alternative smaller premises, and reducing the building's footprint either by better control of its energy usage or by moving away from gas consumption.

These reductions will not be sustainable long term without more concrete efforts to target our energy and spending footprint.

CBC is currently developing our Climate Change Mitigation Pathway which will be published early 2022.

In the meantime, staff are undertaking actions which should improve the Council's carbon footprint. For example, we are installing a number of automatic gas and electricity meters including half-hourly and submeters in our main buildings and other locations as part of the Government's decarbonisation funding scheme. This integrated metering platform will give us easy visibility of our consumption with clear reporting on our energy usage within 48 hours. It will also enable us to run and inform a behaviour change programme for all staff including the Trust, Ubico etc.

Appendix 1 – Definition of Key Terms

Net-Zero emissions means not adding any greenhouse gases (GHG) to the atmosphere through our activities. Becoming net-zero starts with a plan to rapidly reduce GHG emissions to zero by a set date. However, there are almost always some inevitable emissions that can't be reduced. These are expected to be small and are usually offset by removing an equivalent amount of greenhouse gas from the atmosphere. The UK became the world's first major economy to set a target of being net zero by 2050. **Cheltenham has set a target to be net zero by 2030.**

Carbon footprint is the calculated amount of CO_2 released into the atmosphere as a result of the activities of a particular individual, organization, or community.

Offsetting is the action or process of compensating for CO_2 emissions arising from an organisation's (or individual's) activity by participating in schemes designed to make equivalent reductions of CO_2 in the atmosphere. It is suggested that CO_2 has the same impact on the climate no matter where it is emitted or the source and therefore considered that a tonne of CO_2 absorbed from the atmosphere in one part of the world can cancel out a tonne of CO_2 emitted in another.

Scope 1 emissions cover an organisation's GHG emissions which are produced directly by them. This is usually through the burning of fossil fuels while running its gas boilers and diesel vehicles, for instance.

Scope 2 emissions cover GHG emissions produced indirectly by an organisation, for example, the electricity used to heat a building that has been produced by burning fossil fuels elsewhere.

Scope 3 emissions includes all other indirect emissions that are produced by an organisation's activities, such as waste, employee commuting, and its supply chain.