

## St Albans District Council Corporate Emissions Summary 2022/23

St Albans City and District Council greenhouse gas emissions are calculated on an annual basis to evaluate progress towards our climate change mitigation goals. For more information on how these are calculated and what is included and excluded, please see Appendix 1.

The full statement of emissions is given in Appendix 2.

#### <u>Headlines</u>

#### St Albans District Council's CO2e emissions for 2022/23 were 3,527 tonnes. Our net emissions were 3,115 tonnes, taking into account the green energy we purchased from Ecotricity.

- This is equivalent to the emissions created by 916 residents over a year (3.4 tCO2 per capita emissions).
- Corporate emissions are 5% lower than 2021/22 (192 tonnes). Whilst positive, we did not achieve our established need for a 348 tonne reduction per year.
- We have succeeded in reducing corporate emissions by 51% since 2008/09 but to be on track with our planned trajectory to net zero, we would need to have achieved a 60% reduction by now. Our target emissions for 2022/23 was 2,865 tonnes.
- Purchasing 100% green electricity from Ecotricity has reduced our net emissions by 449 tonnes. This positive action is accounted for by our 'net emissions figure' but we can only include that to the net emissions figure, not the 'gross' emissions figure as that renewable energy is already factored into the national electricity mix. If the energy were generated by the Council, it would create a direct reduction.
- Using our net emissions, we missed our target emissions by 250 tonnes in 2022/23.
- As detailed in the calculation method (Appendix 1), this corporate emissions analysis excludes emissions associated with staff commuting, procurement of goods, food, waste, and water. This year we have incorporated some emissions to account for the heat and power used by staff working at home for Council purposes. We used the assumption that 72% of staff are working 2 days per week at home.

Figure 1: Corporate Emissions in 2022/23 compared to the baseline year

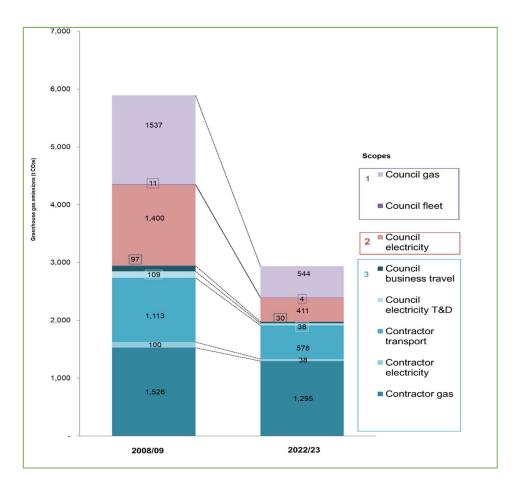
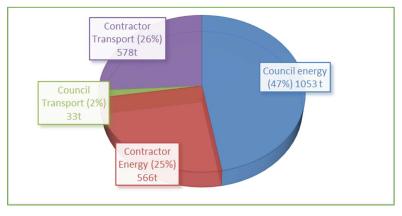


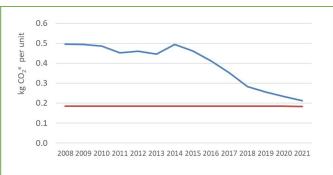
Figure 2. Contribution of emission sources to annual emissions 2022/23



#### **Corporate Electricity**

- Emissions from SADC electricity are 73% (450 tonnes CO2e) lower than in 2008/09 and 17% (83 tonnes CO2e) lower than 2021/22.
- 61% of the overall reduction is due to the ongoing decarbonisation of the national grid. This means that even if we use the same quantity of electricity as we did in 2008/09, our emissions would have reduced by 61% (Figure 3). Gas conversion factors on the other hand have remained largely unchanged. Hence it is valuable to analyse electricity by consumption rather than emission.





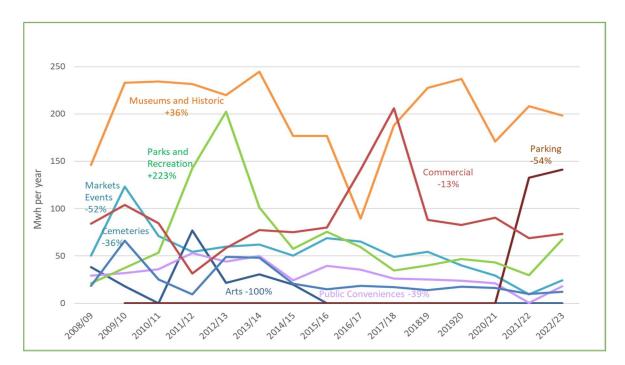
 Whilst overall electricity consumption has been reduced by 24% since 2008/09 (678 MWh), it has gone up since last year by 22% (384 MWh).

- Accounts are added and removed to the corporate portfolio but over time we have made a net loss of 10 accounts due to property disposals. This has led to a reduction in ~276 MWh in electricity, or -59 tonnes CO2e, since the baseline year (using the current emissions factor). This represents about 40% of our achieved reduction.
- Electricity consumption by broad property category is detailed in Appendix 3. Apart from the Museums and Historic category, electricity consumption across all property groups went up in 2022/23. This is likely to be due to meters being read and accurate bills being received, as a result of last years work to audit our meters, rather than actual increased consumption.

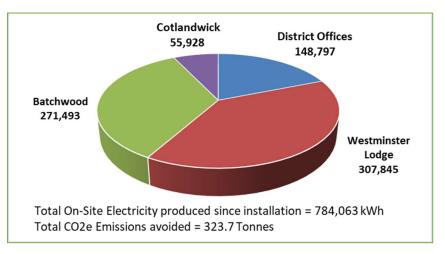


#### Figure 4a. Electricity Consumption (kWh) by property group, with % change (2008/09 – 2022/23)

Figure 4b. Electricity Consumption (kWh) by property group, with % change (2008/09 – 2022/23)



- Figures 4a and 4b display energy use by property group since 2008/09. The Museums and Historic group has increased energy use by 36% since the baseline year. This is because St Albans Museum and Gallery, which replaced the former Museum of St Albans, is a much larger building and requires more energy to maintain the temperature and humidity of the exhibits. The Parks and Recreation group show increased electricity consumption by 223% since 2008/09. This is because multiple sites were underbilled in the baseline year.
- To date, we have generated 784 MWh electricity through our solar panels (Figure 5). This has directly reduced our emissions by 324 tonnes since they were installed. All PV panels will have paid for themselves and start generating additional income by the end of 2028. The District Offices PV has already repaid the initial investment and is now saving the Council around £2,000 p.a.



#### Figure 5. Total Renewable Energy Generated to date (kWh)

#### **Corporate Gas**

- Emissions from gas consumption (Figure 6) are 65% (993 tonnes) lower than in 2008/09 with reductions evident across all property groups except the Museum and Historic. Gas consumption by broad property group is provided in Appendix 3.
- Gas consumption is 26% lower than 2021/22 (1,045 MWh) with every property group achieving a reduction. This year we are pleased that the District Offices is consuming expected levels of gas, following several years of abnormally high consumption.
- Whilst the Museums and Historic property group has reduced consumption since last year, overall gas consumption is 36% higher than in 2008/09. This is due to the new St Albans Museum and Gallery using more than 5 times the gas it used in 2011/12 to maintain a constant temperature of the exhibits and new public areas.
- It's also important to note that we have lost 14 gas accounts since the baseline year. This
  amounts to an automatic reduction of ~3,684 MWh gas units and 675 tonnes CO2e. This makes
  up a significant proportion of the overall gas emissions reduction.

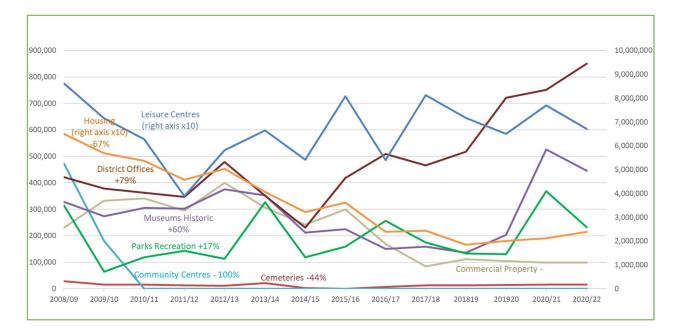
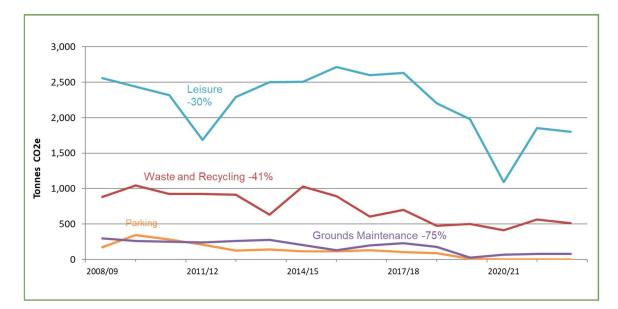


Figure 6. Gas Use (kWh) by Building group showing percentage change (2008/09-2022/23)

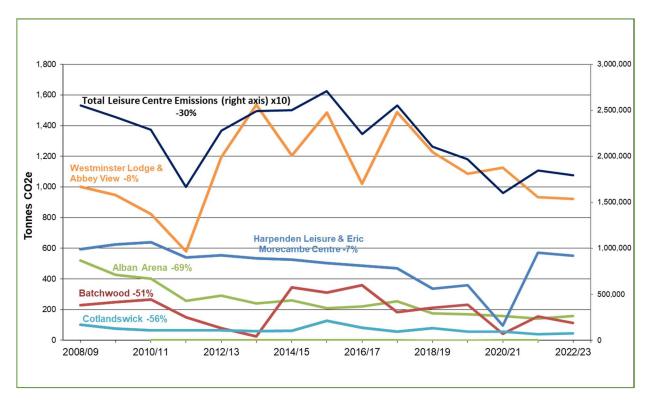
#### **Contracted Services**

- Services provided by our largest contractors (waste and recycling, leisure and grounds maintenance), make up 68% of our total gross emissions. This emphasises the need for the Council to incorporate ongoing emissions reduction targets within our largest contracts at the procurement stage.
- Contractors have reduced emissions by 39% since 2008/09 (Figure 8). Taking the Parking service in-house in 2019/20 contributed to this reduction.
- Off all our contractors, John O'Connor has achieved the most significant reductions (-75%).
- Our Leisure Centre emissions (Figure 9) are the lowest they have been since 2012/13. Positive reductions have been achieved across all sites. The closure of Harpenden Public Halls in June 2021 also contributed to this.



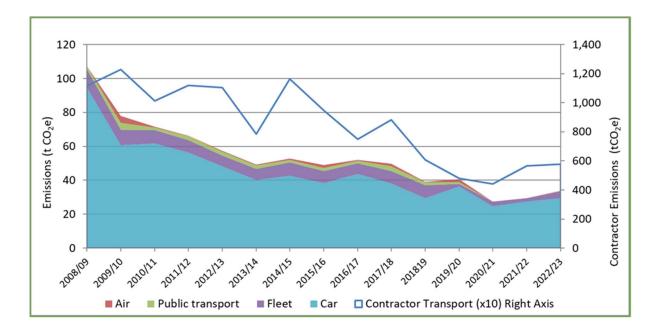
#### Figure 8: Emissions by Councils largest contractors showing % change, 2008/09 – 2022/23

Figure 9. Greenhouse Gas Emissions from contractor-operated leisure centres, with % change, 2008/09-2022/23



#### **Corporate Transport**

- Emissions from Council transport make up just 1% of our calculated emissions. Figure 10 shows that contractor transport (Waste and Recycling, Leisure and Grounds Maintenance) contribute significantly to our transport emissions.
- Council employees and Councillors travelling by car, contribute around 27 tonnes per year to Councils greenhouse gas emissions statement. Business travel by car has reduced significantly since we started reporting our emissions and staff are now mostly conducting meetings online. We also encourage staff to use the all-electric Enterprise Car Club vehicles where possible.



#### Figure 10. Business Travel Emissions from the Council and our Large Contractors 2008-2023

#### Recent and Active Projects to Reduce our Emissions.

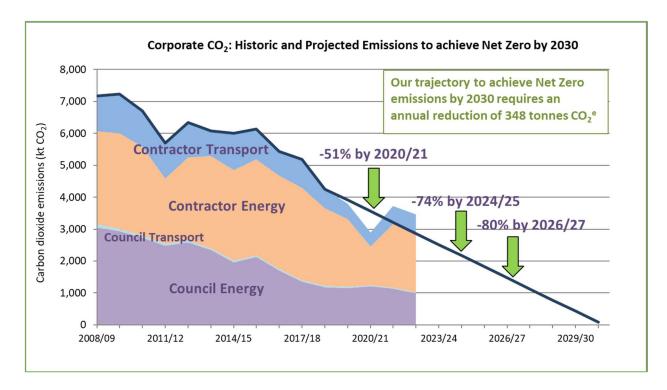
#### Energy

- Installation of energy efficiency measures in the Civic Offices, Sandridge Gate and Ver museum as per the energy audit action tracker.
- EPC and DEC project underway to gather certificates of our largest buildings.
- Energy efficiency measures written into new leisure management contract (e.g. all tennis lighting replaced at Batchwood).
- Funding allocated for surveys to assess options and feasibility for Photovoltaic (PV) panel and Renewable Heating options (Design Phase) for Sandridge Gate Business Centre and Verulamium Museum.
- 3 phases of lighting upgrades at Verulamium Museum have been completed and all display cabinet lighting has been upgraded to LED. All halogen bulbs are due to be changed in the next lighting upgrade at Verulamium Museum in late 2023.
- The Council has been awarded £10.9M funding from the Social Housing Decarbonisation Fund (SHDF) and Green Homes Deal Local Authority Delivery 1B to undertake energy efficiency works to social homes.
- Ensuring utility contracts have been transferred over when assets are devolved, for example the buildings taken on by Harpenden Town Council where SADC was still paying the utilities.
- Planned Preventative Maintenance (PPM) inspections and schedules produced for Council operated assets.
- Officer working group set up to review the legacy situation with regards to utility contracts and out of date information being used by suppliers, with a view to implementing a more refined approach.
- Meters are being audited at all sites and locations to refresh records before entering into a new suite of utility contracts. This is a collaborative effort between the Built Environment, Housing and Finance (Procurement).

#### Transport

- Electric Car Club, Cycle to Work scheme and Discounted Rail Ticket schemes are in place to support Council staff to choose alternatives to the private car.
- An upgraded fleet of Grounds Maintenance vehicles is now in operation which includes 6 electric blowers, 6 electric strimmer's, 2 electric hedge cutters, 1 Gator (park buggy), 2 electric vans, 1 hybrid car and 1 electric JCB for the Cemetery Service which the Council contributed to.
- Veolia are currently trialling electric vehicles and keeping abreast of developments in the technology. Electric street cleaning vehicles and RVC have been trialled.
- We are following local authority discussions on the use of different oils such as (hydrotreated vegetable oil) as an interim step towards net zero.
- Staff Travel Survey undertaken to assess how Council can support staff to employ low emission transport.
- We are exploring whether smaller waste vehicles might be used in the Conservation Area in the next contract to minimise damage to the public realm.

## Figure 11. Corporate CO2e: Historical and Projected Emissions to Achieve Net Zero 2030



#### Are we on track to meet our Corporate emissions reduction target?

- Our <u>Sustainability and Climate Crisis Strategy 2020-2023</u> sets out the following aims to ensure progressive improvement towards eliminating fossil fuels from Council energy and transport. These reductions translate to a reduction of 348 tonnes every year to 2030.
  - 51% reduction in emissions by 2020/21 (compared to 2008)
  - 74% reduction in emissions by 2024/25 (compared to 2008)
  - 80% reduction in emissions by 202627 (compared to 2008)
- We achieved our targets in 2019/20 and 2020/21 due to the forced closures associated with the pandemic, but did not succeed in 2021/22 and 2022/23.
- According to our ideal trajectory to Net Zero by 2030, we should have emitted net emissions of no more than 2,865 tonnes CO2e in 2022/23. We therefore missed our goal by 250 tonnes. To put this into context, this is broadly equivalent to the emissions from energy use at Batchwood Sports Centre and Alban Arena combined.
- As a result of the Councils slow rate of change in emissions over the past 2 years, we now need to reduce emissions by 598 tonnes next year to catch up with our net zero trajectory. This is over twice the emissions of the example above, highlighting the enormity and difficulty of the challenge.

#### **Next Steps and Recommendations**

 Each year that emissions are not reduced to the degree that is needed, more significant and expensive improvements will be required in future as energy becomes more expensive. The recent energy price rises have highlighted the risk to the council of increasing costs of fossil fuel energy.

- The Councils Sustainability and Climate Crisis Strategy to address our environmental impacts and emissions between 2024 and 2027, is currently being developed. Whilst we have few powers to address District-wide emissions, we do have the ability to control our own buildings, operations and services and hence that should be a key focus.
- A significant proportion of our emissions reduction is due to buildings being removed from our portfolio rather than deliberate energy efficiency improvements, though various measures have been implemented based on the last energy audits. In order to achieve our corporate priority to address the climate crisis and realise a more sustainable and low-cost energy future, the Council will need to develop a long-term strategy to address power, heat and light at every building.
- The Council is in the process of commissioning a decarbonisation plan for the estate. This
  proactive approach will involve a comprehensive survey of each building with a view to identifying
  when current installations (heating, lighting etc.) and the building fabric will reach end of life and
  recommend options approaching replacement. This will allow a prioritised programme of works to
  be planned, subject to funding. Alongside this, feasibility studies into possible solar PV projects
  will be considered at assets that have been suggested as the most suitable for the technology.
  We will also continue to implement the energy efficiency actions based on the previous energy
  audits.
- This analysis highlights the need for ongoing energy monitoring to ensure that anomalies can be identified and resolved as quickly as possible. There has been significant progress in this space over the past 12 months due to officer interventions. In addition, we have worked with our bill management bureau to explore how we can refine the reporting process so that anomalies are automatically flagged in monthly reports. The recent Corporate Peer Challenge acknowledged the challenges around energy management and recommended some dedicated resource, this is something the Wider Leadership Team are now considering.
- The Council has manually checked and cleansed all the data relating to energy meters (locations, serial numbers, readings etc) over recent months. This has resulted in a much more accurate data set which has been successfully used to challenge incorrect bills and will be used when moving over to new utility providers. This piece of work has greatly benefited the accuracy of our energy monitoring, greenhouse gas reporting and budget management.
- Other actions likely to be included to the 2024-27 Sustainability and Climate Crisis Strategy include, the introduction of increasing carbon reduction targets for our largest contractors, improved facilities to support Council Officers to choose low-carbon transport and ongoing action to convert out fleet. The final strategy will be available in January 2024.
- Everyone needs to play their part in mitigating climate change. In January we will also be launching St Albans Greener Together. This district-wide campaign will be designed to engage all parts of the community in learning about climate change and sustainability, and then encouraging the community to come together to develop solutions to local issues around energy and transport. Our aim is that local businesses, groups and organisations also start monitoring and taking action to reduce their emissions.

#### Appendix 1: Greenhouse Gas Emission reporting protocol

#### 1. Approach

Our greenhouse gas emissions calculations are produced in line with Government guidance.

The most recent (2020) Government guidance on how to report emissions is provided in the document '<u>HM Government, March 2020: Environmental Reporting Guidelines: Including</u> streamlined energy and carbon reporting guidance'.

This method is based on the Greenhouse Gas Protocol, an internationally recognized standard for corporate accounting and reporting of greenhouse gas emissions.

#### 2. Greenhouse gases

The six main greenhouse gases covered by the Kyoto Protocol are Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Hydrofluorocarbons (HFCs), Nitrous oxide (N<sub>2</sub>O), Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF<sub>6</sub>)

We use the standard practice of reporting aggregated greenhouse gas emissions in tonnes of carbon dioxide equivalent (t CO<sub>2</sub>e)

#### 3. Operational scopes

As a Local Authority, we are both directly and indirectly responsible for the emission of greenhouse gases from the activities related to our operations and services. For our greenhouse gas report we adopt the 'operational control approach' to determine where the boundary of our responsibility lies.

Emissions are categorised into three different scopes. These are:

- Scope 1 (direct, controlled emissions): emissions from activities owned or controlled by the Council which release emissions directly into the atmosphere. Scope 1 includes combustion of gas in boilers and Council-owned transport.
- Scope 2 (indirect, controlled emissions): emissions from activities owned or controlled by the Council, associated with our consumption of purchased electricity, heat, steam and cooling. In our calculations, Scope 2 consists of only electricity use.
- Scope 3 (other indirect): Emissions that result from our activities, but occur at sources which we do not own, control, or have full authority over, and are not classified as Scope 2. This scope includes energy use and business travel by our largest contractors, Council staff business travel and emissions associated with transmission and distribution of electricity.

#### 4. Understand emissions scopes

Within the reporting protocols, emissions are grouped into three different scopes:

- Scope 1 (direct, controlled emissions): release emissions directly into the atmosphere. This
  includes a) gas use (e.g., gas central heating) and b) Council-owned fleet (e.g., diesel for
  Council vans or equipment)
- Scope 2 (indirect, controlled emissions): emissions associated with our consumption of purchased electricity, heat, steam and cooling. This includes electricity use by the Council (e.g. building power, electric vehicles)
- Scope 3 (other indirect): Emissions that result from our activities, but occur at sources which we do not own, control, or have full authority over. This scope includes

a) energy use and business travel by the largest contractors (e.g. leisure centres, grounds maintenance)

- b) staff/member business travel
- c) staff homeworking (from 2022/23)

d) emissions associated with transmission and distribution of electricity (this is just a calculation undertaken based on the total energy usage).

There are other emissions that can be optionally included within Scope 3 such as procured goods, water and waste, however focusing on the above is recommended. given the difficulty in assessing data and accurately their carbon impacts at the current time.

#### 5. Property groups

The Council owns a wide variety of properties. For purposes of analysis, properties are categorised into these groupings:

Cemeteries	Hatfield Road and Westfield Road Cemetery
Commercial Property	Business premises (communal areas and unoccupied sites); Sandridge Gate Business Centre
Community Centres	Community Centres (we no longer have any properties in this category)
Housing	Housing communal areas, sheltered housing
Arts	Maltings Arts Theatre (no longer in Council account)
Markets and Events	Market Depot, market feeder pillars
Museums and Historic	Museums, heritage buildings
Offices	District Offices
Other Equipment	Air Quality Analyser (no longer in Council account)
Parking	Drovers Way Car Park
Parks and Recreation	Sports pavilions and dressing rooms

#### 6. Outsourced services

A number of core functions of the Council are outsourced to external providers. Whilst we do not have day to day control over the delivery of these services, we have some control within the initial specification of the contract. We therefore include emissions from energy and fuel use by our largest contractors within Scope 3. The included contractors provide services for waste collection and recycling, grounds maintenance, car parks and leisure facilities.

#### 7. Excluded emissions

In line with Defra's operational-control approach, we have excluded emissions from assets leased out to other parties which we have no control of. Additional emissions excluded include fugitive emissions from air conditioning, staff commuting, water use, waste production and purchased materials. A summary of included and excluded emission sources are shown in Table A1.

#### 8. Data collection

**Properties:** Energy bills are used to determine the energy consumption of buildings the Council has operational control of. There can be some degree of inaccuracy resulting from estimated billing though this is minimized as we continue to install Automatic Meter Reading (AMR) to many of our energy supplies.

**Transport:** Data from Council-owned vehicles is obtained from fuel card information. Business miles by private vehicle are collected from expenses claim forms submitted to the Council's payroll. Business miles by public transport are collected from records made by staff for claiming reimbursement and from the e-procurement system.

**Outsourced services:** Energy and business mileage figures associated with the delivery of our services are provided by contractors as part of their contractual requirements.

	Scope 1 Direct	Scope 2 Indirect	Scope 3 Other indirect
Included	Gas used in Council- owned and controlled buildings Fleet (Council-owned) vehicles	Electricity used in Council-owned and controlled buildings / equipment	Homeworking of Council staff Business travel in private vehicles and public transport Energy use and business travel of the Council's largest contractors Transmission and distribution of electricity
Exclude d	Fugitive emissions from refrigerants in air conditioning Process emissions		Water use Waste production Staff commuting Purchased materials Well-to-tank of fuels

#### Table A1: Included and excluded emissions

#### 9. Recalculation policy

The Council's baseline year is set for the 2008/09 reporting year. On occasion we recalculate previous figures in order to improve report accuracy. For instance, when Improvements become available to the measurement methodology; Updated conversion factors are released; or Errors are discovered and corrected from the existing data set.

#### **10. Conversion factors**

The greenhouse gas emissions in this report are calculated using the conversion factors and guidance here: <u>https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022</u>

#### 11. Renewable Energy Tariffs and Offsetting

Emissions reductions from approved green tariffs and renewable energy are included to the Net Emissions Total. The Gross Emissions Total (excluding these reductions) must still be shown.

# Appendix 2: Annual Corporate Greenhouse Gas Emissions 2008/09-2022-2023

Net zero target	% change from baseline year	Total Net Emissions	Green Electricity Tariff	%change previous year	% change from baseline year	Total gross emissions	Contractor emissions	Scope 3 - Council business travel, Council homeworking and contractor emissions	Scope 2 - Council electricity consumption	Scope 1 - Council gas consumption and fleet vehicles		Statement of Emissions (tonnes CO2e)
		7,177	0.0			7,177	4,024	4,120	1,400	1,548	2008/09	tonnes CC
	1%	7,228	0.0	1%	1%	7,228	4,215	4,284	1,530	1,292	2009/10	)2e)
	-7%	6,701	0.0	-7%	-7%	6,701	3,888	3,951	1,411	1,215	2010/11	
	-21%	5,701	0.0	-15%	-21%	5,701	3,166	3,225	1,314	1,057	2011/12	
	-12%	6,345	0.0	11%	-12%	6,345	3, 695	3,746	1,304	1,186	2012/13	•
	-15%	6,073	0.0	-4%	-15%	6,073	3,653	3,696	1,240	1,008	2013/14	
	-16%	6,010	0.0	-1%	- 16%	6,010	3,950	3,995	1,122	749	2014/15	
	-14%	6,137	0.0	2%	-14%	6,137	3,945	3,987	1,163	875	2015/16	
	-24%	5,429	0.0	-12%	-24%	5,429	3,600	3,646	976	646	2016/17	
	-28%	5,181	0.0	-5%	-28%	5,181	3,724	3,767	680	619	2017/18	
4,257	-49%	3,629	628.8	-18%	-41%	4,257	3,009	3,041	629	513	2018/19	
3,326	-54%	3,274	523.9	-11%	-47%	3,798	2,579	2,618	524	585	2020/21	
3,023	-66%	2,433	459.9	-24%	-60%	2,893	1,656	1,681	460	717	2020/21	
2,720	-53%	3,349	369.9	29%	-48%	3,719	2,526	2,554	370	740	2021/22	
2,417	-57%	3,115	411.1	-5%	-51%	3,527	2,389	2,419	411	548	2022/23	

#### **APPENDIX 3: Annual Electricity and Gas Consumption by property group**

% change from previous year	% change from 2008/09	Grand Total	Parks and Recreation	Offices	Museums and Historic	Housing	Community Centres	Commercial Property	Cemeteries	Gas Consumption by Property Group	% change from previous year	% change from 2008/09	Grand Total	Public Conveniences	Parks and Recreation	Parking	Other equipment	Offices	Museums and Historic	Markets and Events	Arts	Housing	Community Centres	Commercial Property	Cemeteries
		8,300,949	315,407	420,735	327,785	6,505,651	472,334	230,813	28,224	2008/09			2,803,615	29,422	20,983		9,022	941,661	145,949	50,190	38,312	1,413,932	51,502	83,958	18,685
-16.5%	-16.5%	6,927,903	64,524	378,090	273,535	5,683,115	180,693	333,048	14,897	2009/10	10.5%	10.5%	3,098,031	31,922	37,351		7,568	995,379	) 232,840	) 123,131	17,902	1,466,049	15,620	3 104,114	66,154
-5.9%	-21.5%	6,517,618	118,644	362,713	305,003	5,375,044		340,725	15,489	2010/11	% -6.2%	% 3.7%	1 2,906,818	2 35,859	1 53,444		5,086	9 1,063,852	0 234,229	1 71,187	2 195	9 1,330,135	0 2,827	4 84,625	4 25,378
-13.0%	-31.7%	5,669,155	143,493	347,318	301,811	4,569,394		294,494	12,645	2011/12			.8 2,906,180	9 53,300	14 142,530		4,108	1,113,908	.9 231,665	54,238	15 76,937	1,188,274	- 7	.5 31,637	9,584
13.1%	-22.8%	6,412,034	112,489	478,682	376,074	5,033,035		399,956	11,798	2012/13	0.0% -2.	3.7% 1.	30 2,834,651	00 43,965	30 202,521			1,072,263	55 219,904	38 59,659	37 21,716	1,106,172		37 58,353	34 49,175
-15.5%	-34.7%	5,417,155	326,484	351,506	352,693	4,059,412		306,065	20,995	2013/14	-2.5% -1	1.1% -(	51 2,783,997	65 49,740	21 101,223		922	63 1,052,104	04 244,704	59 61,924	16 30,664	72 1,117,327		53 77,567	75 48,332
-25.8%	-51.6%	4,020,275	118,845	229,932	211,468	3,214,896		242,769	2,366	2014/15	-1.8% -1	-0.7% -1	997 2,269,666				410						•		
17.3%	-43.2%	4,715,910	159,492	419,001	224,913	3,613,436		299,004	64	2015/16	-18.5%	-19.0%		24,359 3	57,673	•	50	980,159 95	176,632 17	50,400 6	19,752 23,320	864,956 1,07	•	74,968 7	20,717 1
-26.3%	-58.2%	3,473,672	256,953	508,918	150,634	2,381,573		168,546	7,047	2016/17	9.8%	-11.1%	2,491,949 2,3	39,777	75,673	•	•	957,616 8	176,522	68,664	20	1,079,028 1,0	•	79,951	14,718
-4.3%	-60.0%	3,323,557	174,473	465,657	159,143	2,427,140		84,155	12,988	2017/18	-4.9%	-15.5%	2,369,115 1	35,529	59,375	•	•	890,637	89,350	65,346		1,069,390 1	•	141,008	18,478
-17.3%	-66.9%	2,750,068	133,551	517,134	135,872	1,840,392		111,173	11,945	2018/19	-18.4%	-31.0%	1,934,315	26,269	34,518			347,933	188,020	49,230		1,065,207		206,170	16,968
15.5%	-61.7%	3,176,379	130,601	721,747	203,806	2,001,576		104,615	14,033	2019/20	14.8%	-20.8%	2,221,261	25,068	40,137		•	734,404	227,653	54,248		1,037,586	•	88,144	14,023
22.3%	-53.2%	3,883,528	368,920	751,478	526,058	2,121,907		99,344	3 15,821	2020/21	-7.7%	-26.9%	2,049,683	24,059	46,789			760,487	237,146	40,190		840,652		82,905	17,454
3.7%	-51.5%	4,027,880	232,686	850,681	445,208	2,385,328		98,992	14,986	2021/22	-3.8%	-29.6%	1,972,714	21,270	43,187			678,568	171,098	29,365		922,315	•	90,555	16,355
-25.9%	-64.1%	2,982,674	121,223	408,669	415,529	1,958,759		64,786	13,709	2022/23	-11.7%	-37.9%	1,742,007	407	29,615	132,620		686,115	208,238	9,457		596,722		68,875	9,958
		-25.9%	-47.9% -6	-52.0%	-6.7%	-17.9% -6		-34.6% -7	-8.5%	change change previous baseline	22.0%	-24.2%	2,125,672	18,035	67,689	141,217		872,397	198,357	24,294		718,323		73,405	
		-64.1%	-61.6%	-2.9%	26.8%	-69.9%	$\left[ \right]$	-71.9%	-51.4%	nge ;line	<u>%</u>	}		5	9 2		(			4	5	\$	ſ	5	11,954

Electriciy Consumption kWh by Property Group

2008/09

2009/10

2010/11

2011/12

2012/13 49,175 58,353 .

2013/14

2014/15 20,717 74,968 .

2015/16

2016/17

2017/18

2018/19

2019/20

2020/21

2021/22

2022/23

### **APPENDIX 4 – Energy consumption by Leisure Centre**

ELECTRICITY (Kwh)	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2015/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Alban Arena	326,470	293,830	289,611	260,076	259,087	265,196	277,838	216,633	224,418	226,534	225,568	218,453	155,350	135,210	185,083
Batchwood Golf and Tennis	257,591	206,214	249,749	159,260	45,620	39,207	543,498	533,343	654,450	601,736	553,647	594,721	364,615	385,216	374,069 -
Harpenden Public Halls	54,436	77,862	79,303	79,351	79,351	74,740	75,055	39,978	72,973	99,753	79,515	87,606	60,000	0	0
Harpenden Leisure Centre (Swimming Pool)		(included to Er	ncluded to Eric Morecambe figures until 2020)	figures until 20	)20)								242,460	645,502	582,021
Eric Morecambe (Harpenden Sports)	641,682	762,587	893,271	752,808	712,615	726,243	694,870	666,664	728,546	720,084	705,909	601,467	112,030	125,639	141,187
Cotlandswick (former London Colney Aventure World)	117,609	96,374	78,169	85,075	74,361	86,245	86,575	107,608	136,061	134,071	125,812	107,904	104,296	77,884	116,072
Abbey View Sports Complex (golf, running track,															
tennis courts, volleyball, splash park)		(included to W	included to Westminster Lodge until 2012)	lge until 2012)	460,991	44,274	103,858	81,102	84,947	90,993	75,474	106,324	26,607	59,456	28,946
Westminster Lodge and Abbey View	738,625	788,579	725,348	752,532	998,209	1,593,440	1,254,530	994,810	1,986,155	1,300,439	1,316,450	1,302,378	574,855	1,467,150	1,126,797 -
Cottonmill CCCC (Marlborough Pavillion)		Data to be prov	Data to be provided in Performance Report from 2023/24	mance Report	from 2023/24										
GAS (Kwh)	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Alban Arena	1,938,685	1,515,476	1,413,616	751,080	938,423	654,412	658,578	591,043	688,816	693,637	612,288	623,608	330,464	617,258	675,880
Batchwood Golf and Tennis	549,981	789,794	786,611	413,004	314,628	43,170	413,848	346,275	484,980	503,037	305,940	438,954	392,665	405,482	222,901
Harpenden Public Halls (SADC Management from 1/7	435,641	343,857	277,410	208,227	319,963	328,433	338,265	296,623	227,919	271,475	267,913	230, 122	147,495	0	0
Harpenden Leisure Centre (Swimming Pool)		(included to Er	included to Eric Morecambe figure until 2020)	figure until 20;	20)				841,988	1,036,660	1,013,462	934,597	359,123	1,932,260	1,976,844
Eric Morecambe (Harpenden Sports)	1,486,344	1,346,208	1,103,643	1,076,332	1,234,891	1,144,410	996,277	1,054,117	168,713	135,558	202,259	179,601	81,344	297,485	282,856
Cotlandswick (London Colney Aventure World)	232,479	149,476	152,728	145,940	164,952	116,604	111,273	424, 127	136,781	57,289	241,900	156,119	167,530	125,932	121,403
Abbey View Sports Complex (golf, running track,															
tennis courts, volleyball, splash park)		(included to W	ncluded to Westminster Lodge until 2012)	lge until 2012)		59,439	51,586	62,456	60,478	78,482	63,982	67,419	55,772	78,840	70,399
Westminster I odne	3,429,108	3,015,173	2,546,431	2,546,431 1,291,701	1,381,868	4,303,699	2,842,958	5,308,286	2,786,457	5,349,329	4,463,470	3,875,234	2,327,388	3,252,497	3,710,662