

Gloucester City Council

Meeting:	Cabinet	Date:	13 October 2021
Subject:	Annual Report for Energy Costs and Energy Reduction Projects		
Report Of:	Cabinet Member for Environment		
Wards Affected:	All		
Key Decision:	No	Budget/Policy Framework:	No
Contact Officer:	Abi Marshall Asset Management 01452 396212		
	Email: Abi.Marshall@gloucester.gov.uk		
Appendices:	None		

FOR GENERAL RELEASE

1.0 Purpose of Report

- 1.1 The purpose of the report is to inform Cabinet of the Council's energy costs and projects to reduce energy usage

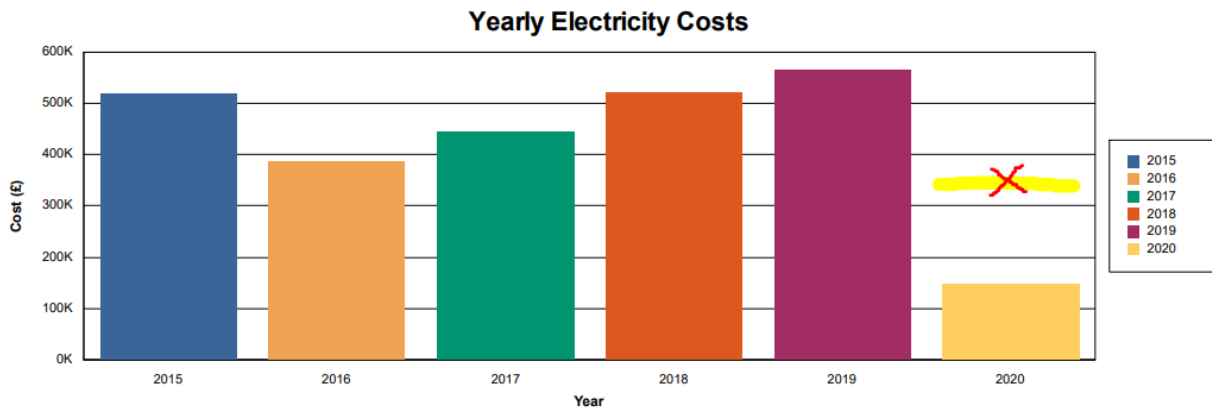
2.0 Recommendations

- 2.1 Cabinet is asked to **RESOLVE** that:

- (1) progress in the reduction of energy usage and consumption in the year 2020-21 be noted
- (2) continued implementation of projects to save energy in the Council's main buildings as set out in section 4 of this report be supported.

3.0 Background and Key Issues

- 3.1 Gloucester City Council adopted a revised and updated Energy Management Strategy in 2012. One of the key objectives of this strategy was a commitment to reduce the Council's energy use across its buildings by 2% per year, along with a commitment to yearly monitoring of energy costs and consumption with an annual report to cabinet. The Council is also committed to reduce its annual spend on energy by £50,000 pa. So far for what we have been billed for in 2020 we are seeing a significant reduction in our annual energy spend, however this is not surprising in light of COVID.
- 3.2 The council's various operational buildings and sites (including those operated by partners e.g. Aspire) consume significant quantities of gas and electricity. The total gas and electricity bills for the year to date 2019-20 for the net operational sites excluding our partners is £563,750 this equates to £1,549 per day. We will not receive the invoices for 2020 - 2021 for a couple of months but on our estimate it will amount to £360,000 (marked with a red cross on the chart below), which results in a significant drop to £989 per day, therefore saving for the Council.



	Cost (£)
2015	518699
2016	386152
2017	443799
2018	520568
2019	563506

IMPORTANT NOTE

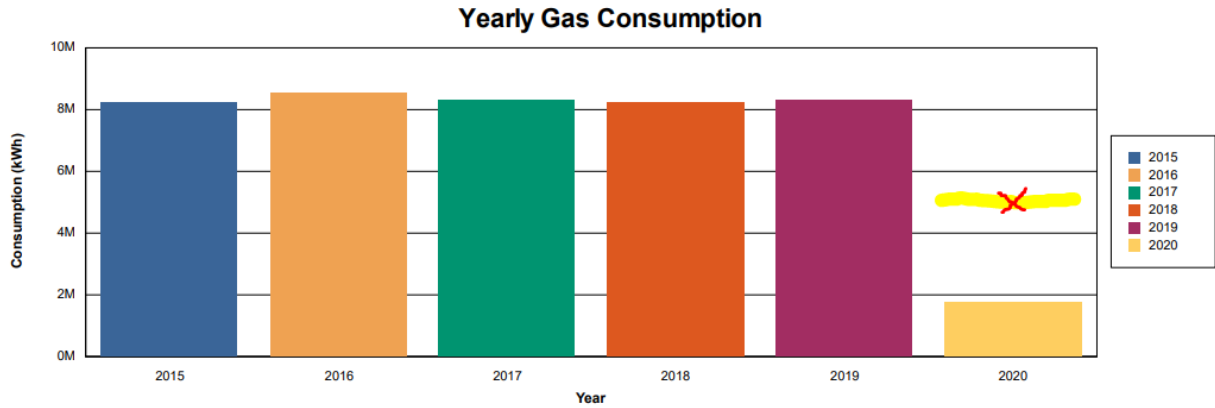
3.2.1 Costs have increased but consumption on the core operational properties has reduced significantly due to COVID.

3.3 Gas Use

We now supply more buildings, arranging the utility supplies to addition sites e.g. the new sports complex at Plock Court and the new Bus Station. They are energy efficient but they do sway the figures, taking out the properties where we pass through the costs the estimated figures are shown below. Gas heats most of the council's buildings and is also used to cool HKP. However, HKP has been vacant now for two years with minimal gas use.

3.4 Work has started at Plock Court where a study identified a large flat roof capable of holding Solar PV's and the adjoining sports field will house a ground source heat pump. This will enable savings of approximately £35,000 per annum and reduce CO2 emissions by 69 tonnes. <http://www.local.gov.uk/case-studies/gloucester-city-council-renewable-energy>. These works have been grant funded by Salix (a non departmental public body wholly owned by the Government). Savings will not be realised until 2022, once the works have been completed.

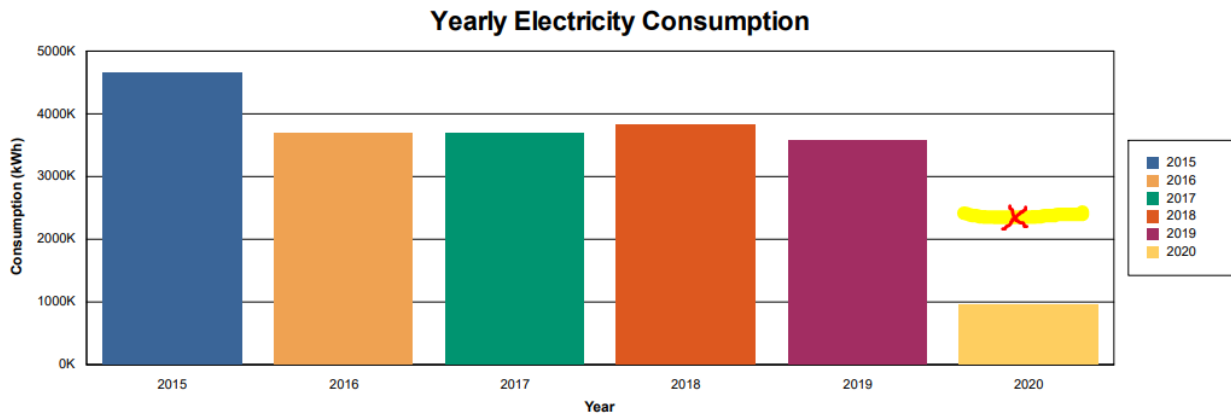
3.5 It is not surprising that due to COVID our gas use has dropped significantly. The estimated amount of gas that we believe will have been consumed for 2020 - 21 is indicated on the chart below with a red cross. You can see over the last 5 years prior to this our consumption has not fluctuated significantly.



	Cons (kWh)
2015	8223766
2016	8538300
2017	8312935
2018	8213454
2019	8290115

3.4 Electricity Use

Again we do not have full year figures but on the same basis as the gas the estimated annual comparison for electricity consumption is shown below.



	Cons (kWh)
2015	4667132
2016	3701944
2017	3693705
2018	3830721
2019	3582306
2020	948988

3.5 Water Use

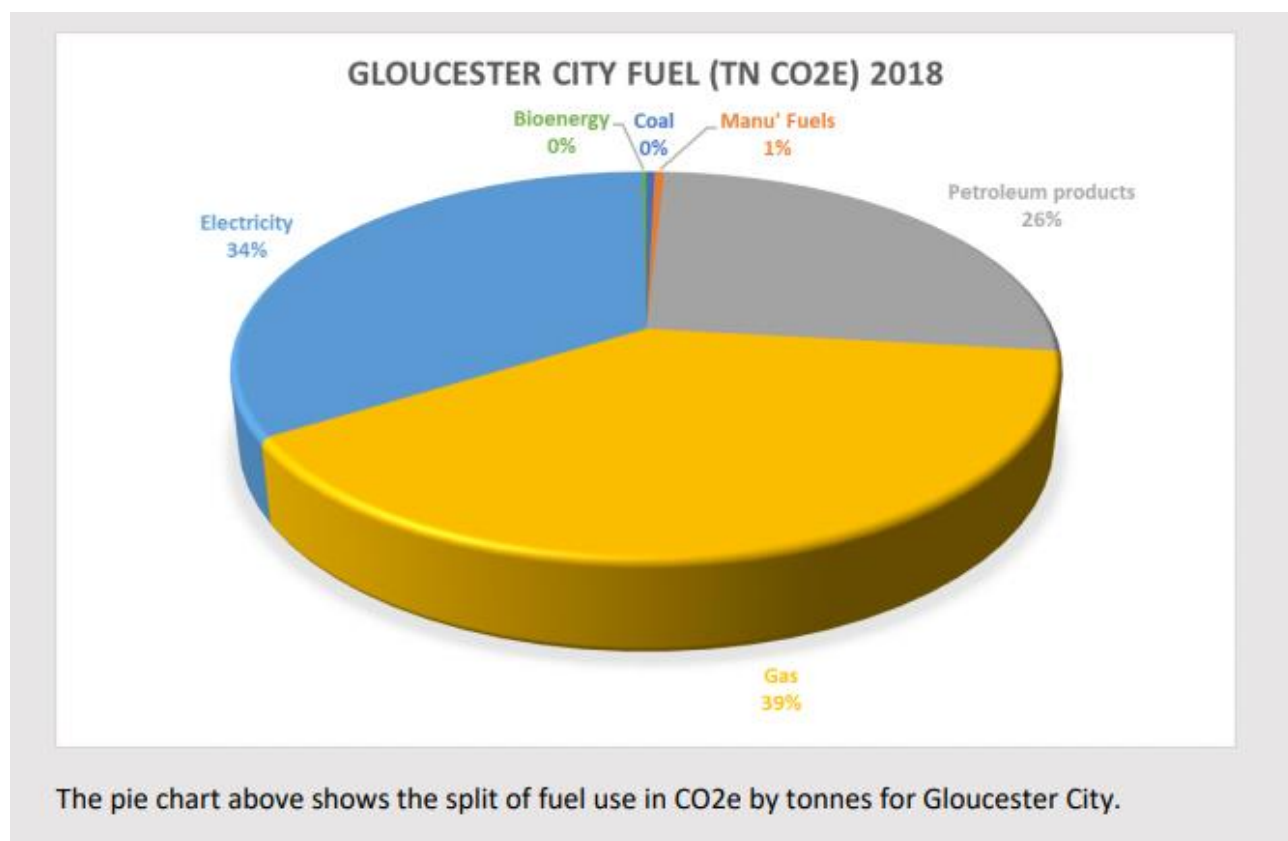
The other main utility cost for the Council is water, currently supplied by Severn Trent. The monitoring of water resources are carried out under contract by Aquafund who both monitor our usage and at their own cost have installed water saving devices in our building the cost of which are covered by sharing the resulting drop in water costs with them.

3.6 General energy price trends

It is highly likely and very probable that energy prices will rise sharply 2021-2022. West Mercia Energy (WME) are warning of extreme market rises. We are shielded for the next 12 months due to a cap we have in place, so now is exactly the right time to consider alternatives with significant grants available for implementation of a number of schemes that target carbon neutrality. However, expertise is required to tap into these, this expertise does not lie within the property team, who are best positioned to help with the implementation and advise on Green Leases.

3.7 Carbon Dioxide Emissions

In October 2020 a report was commissioned by the Climate Change Officer in relation to our Carbon Emissions and how the Council could expect to make large savings in energy use and consequent reductions in CO2 emissions. The Council is working towards achieving net zero carbon emissions by 2030 and a City wide commitment of 2050. The report is extremely comprehensive. [Climate Change Strategy Appendix 1.pdf \(gloucester.gov.uk\)](#)



The councils CO2 emissions have reduced by year on year when compared with the baseline year 2003-4.

4.0 Energy Saving Projects

The move to a pool fleet reduced the Councils Carbon output. Reducing the fleet and the implementation of pure electric vehicles will further extend this.

Installing EV charge points across appropriate car parks will further help encourage more BEV car ownership amongst its residents and businesses across the city.

Investigating and moving to alternative fuels for the Councils heavy RCV fleet is achievable within the Councils 2030 target.

Work has commenced at Plock Court and the installation of the Ground Source heat pump is well under way using grant monies and targeted energy savings of £35,000pa as well as much improved fuel economy using renewables.

Since 2003 the City Council has brought forward a number of capital projects aimed at reducing energy use in all its main buildings.

In the year 2018-19 the main projects delivered were:

- *Installation of LED Lighting in Longsmith Street Car park*
- *Installation of outdoor LED flood lighting and personnel lighting around the City e.g. 43 external lights at Plock court, Flood Lighting at Bishop Hooper monument. Westgate Street reception project replaced lights with LED on PIRs. Although the individual savings produced are small the aggregation of a large number of marginal gains make significant contribution.*
- *Recommissioning and rebalancing of the City Museum boilers, the museum was running on 4 boilers we have got all 8 boilers working and balanced the system which will not only improve resilience but will make fuel savings.*
- *Photovoltaic panels and other energy efficiency measures were made an integral part of the new Bus Station design.*
- *The roll out of the Enterprise Car scheme this has resulted both in a reduction of car usage/journeys and budget savings on travel.*

4.1 A number of other energy saving projects are in the process of development and evaluation. These include; Oxstalls Tennis Centre lighting replacement scheme, Crematorium heat exchanger connection, GL1 Photovoltaic roof scheme and continued replacement of incandescent with LED lights for example North Warehouse flood lights and the Guildhall.

4.2 The 2020 (October) report undertaken by CLS Chartered Consultancy sets out a large number of achievable property related recommendations. This needs a dedicated lead to take forward. There are 13 high consuming sites which have been identified to permit the optimum fuel and energy savings. Targeting these will lead to the most significant cost and carbon reduction. These include buildings such as GL1 and Crematorium.

4.2 Through its leadership, setting good examples by its actions and trend setting the Councils joint ventures and arms length companies will be encouraged to follow suit. Also, because it has control over a large majority of its buildings, operations and fleet, half ownership of the airport and a large influence over its tenanted properties, it will encourage businesses and residents to follow suit by showing what can be achieved.

5.0 Social Value Considerations

5.1 Although there is limited direct scope for social value in the management of the portfolio the disposal strategy seeks to encourage Community Asset Transfer of suitable property Assets which will produce opportunities for ABCD.

5.2 By adopting an Energy strategy in 2003 and continuing to work to improve the energy efficiency of its main buildings the City council is acting in a leadership role by setting an example of good practice that the community can follow.

6.0 Alternative Options Considered

6.1 The Strategy has been carefully considered and is an amalgam of good estate management and the Council's values.

7.0 Reasons for Recommendations

7.1 The Strategy will enable the Council to continue to make a significant contribution towards carbon reduction while cutting costs.

8.0 Financial Implications

8.1 There are no direct financial implications but the strategy will allow the Council to manage its property portfolio in a way that seeks to protect the returns on the property interests. However, there could be savings by the reduction of our energy usage during the pandemic and moving forward. If any savings can be realised then the Council's Money Plan will be updated to account for these.

9.0 Legal Implications

9.1 One Legal have been consulted in the preparation of this report and there are no legal implications at this stage.

10.0 Risk & Opportunity Management Implications

10.1 There are no adverse risks associated with the proposed Strategy it does not change the risk profile of the way our portfolio is managed. However, this is best led by an energy specialist in conjunction with the property team to maximise gains.

11.0 People Impact Assessment (PIA):

11.1 The PIA Screening Stage was completed and did not identify any potential or actual negative impact, therefore a full PIA was not required.

12.0 Other Corporate Implications

Community Safety

12.1 No adverse impacts.

Sustainability

12.2 No adverse impacts.

Staffing & Trade Union

12.3 No adverse impacts.

Background Documents:

Climate Change Strategy - [Climate Change Strategy Appendix 1.pdf \(gloucester.gov.uk\)](#)