

ANGUS COUNCIL

INFORMATION REPORT FOR THE PERIOD APRIL 2021 TO MARCH 2022

REPORT BY GRAEME DAILLY DIRECTOR OF INFRASTRUCTURE & ENVIRONMENT

ABSTRACT

This report provides information to members with regard to services in the Infrastructure and Environment Directorate, albeit that a decision is not required in terms of the current Scheme of Delegation to Officers and the Order of Reference of Committees.

1. SIGNIFICANT INFORMATION - SCHEDULES

There are two schedule which contain key background information related to services delivered by the Infrastructure and Environment Directorate for the period 1 April 2021 to 31 March 2022.

Where there are references to other documents (eg: consultation documents/audit reports) that are associated with the relevant schedule a link to that document has also been included.

2. REPORT AUTHOR

This report and associated schedule has been compiled by Gavin Balfour Service Leader Assets who can be contacted by emailing Assets@angus.gov.uk.

List of Appendices:

Schedule 1 – Water Annual Report 2021/22
Schedule 2 – Energy Annual Report 2021/22

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WATER ANNUAL REPORT FOR 2021/22

1. BACKGROUND

- 1.1 The Corporate Services committee at its meeting of 28 April 2011 approved Report No: 312/11, UPDATE OF MARKET PROCUREMENT OF WATER SERVICES. This introduced new contractual and corporate management arrangements for the provision of water and drainage services.
- 1.2 Service Directorates have provision within their budgets for water and drainage costs. However, responsibility for the overall management of these budgets and the provision of budget monitoring information rests with the Head of Infrastructure.
- 1.3 Assets currently manages the water and drainage contract for all non-housing properties within Angus Council and maintains an overview, in conjunction with Finance and Legal, of the rate of expenditure on the associated budgets.

2. CURRENT POSITION

- 2.1 This report presents the end of year status of the water consumption and water and drainage expenditure for the Council non-housing properties for 2021/22. Compared to the 2020/21 outcome it shows a 21,025 cubic meter increase in water consumption and an increase of £36,520 on the water and drainage expenditure for 2021/22.

Water Consumption

- 2.2 The water consumption status, as at 31 March 2022 is detailed in Table 1 and **Appendix 1**, these figures reflect only the consumption made against presented invoices.

See **Appendix 1** for the directorate breakdown of Table 1

Table 1	Budget Consumption m ³	Metered Consumption m ³	Difference m ³	Percentage Consumption to Budget
2019/20	181,108	149,690	-31,418	83%
2020/21	178,011	119,922	-58,089	67%
2021/22	178,011	140,947	-37,064	79%
	Difference between years	21,025	17.5%	

- 2.3 The performance by individual directorates, as detailed in **Appendix 1**, notes have been added where there are significant differences between the budgeted and the metered consumption.
- 2.4 A graph showing the overall progress in reducing the Council's water consumption is detailed in **Appendix 3**. The graph shows that the water consumption has decreased from our original base year of 2011/12 with consumption of 257,500m³ at that time by 53% to 119,922m³ in 20/21, The original target was for a reduction to a consumption figure of 167,000m³ by 19/20 which was exceeded. It is to be noted that the reduction in the consumption in 20/21 was affected by the impact on Covid-19 on the operation and occupation of the buildings. The consumption figure has increased in 21/22 to 140,947m³ however this still below the revised target of 142,205 as calculated in section 2.5.
- 2.5 Carbon emissions are directly linked to Scottish Water and their efforts at decarbonizing the energy used in the supply of water. The Council has no impact on this element however the Council will make sure that the water consumption is as efficient as possible. A water reduction target of 2.5% per annum based on 2019/20 consumption level of 149,690m³ up to 2030/31 (total 25%) is to be applied. This is a reduced target level compared with the original target figures set in 2011, as the easier reduction options have already been taken. It is

envisaged that the reduction in consumption will mainly come from reducing baseloads, promoting water saving measures on sites and reductions in building stock.

- 2.6 Carbon emissions associated with water consumption and waste water are reported in the statutory Public Bodies Climate Change Duties report.

Expenditure on Water and Drainage

- 2.7 The expenditure status, as at 31 March 2022 is detailed in Table 2 and **Appendix 2**; these figures reflect only the payments made against presented invoices.

Table 2	Budget Volume	Total Spend	Difference £	Percentage Spend to Budget
2019/20	£806,000	£770,739	£35,261	96%
2020/21	£778,000	£717,000	£61,000	92%
2021/22	£846,189	£753,520	£92,669	89%
	Difference between years	£36,520	5.1%	

See **Appendix 2** for a directorate breakdown of Table 2.

- 2.8 Table 2 shows a £36,520 increase in expenditure for 2021/22 compared with the previous financial year, but there is an underspend of £92,669 when compared to the Budget allowance for 2021/22. The difference in the budget volume figures between 20/21 and 21/22 was mainly due to a lump sum reduction of £78k applied due to anticipated Covid-19 impact on water usage.
- 2.9 The performance by individual directorates, is detailed in **Appendix 2**, notes have been added where there are significant differences between the budget volume and total spend figures.
- 2.10 In general the usage and operation of buildings across the Council estate has returned to normal however the occupation levels on offices has reduced to accommodate the ongoing agile programme. This is indicated by the underspend of £92,669 in 2021/22 compared to the budget volume figure.

3. FINANCIAL IMPLICATIONS

- 3.1 Table 2 and **Appendix 2** shows an underspend against the budget of £92,669 for 2021/22. This underspend has been progressed on a managed basis and absorbed within the cash limited budgets available to Council directorates.

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Appendix 1	2021/22 Water Consumption Status
Appendix 2	2021/22 Water Expenditure Status
Appendix 3	Overall Water Consumption Graph

Appendix 1 2021/22 Water Consumption Status

Directorate	Budget Consumption m ³	Metered Consumption m ³	Percentage Consumption to Budget	
People Directorate	89,882	80,289	89%	
Angus Health & Social Care Partnership	13,584	10,724	79%	
Place Directorate	52,490	33,078	63%	
HR, Digital Enablement & Business Support	0	0	0%	a
Legal & Democratic	100	14	14%	b
Facilities Management	8421	5446	65%	
Other Services	11	19	173%	c
Sub Totals	164,488	129,570	79%	
Common Good	6	367	6117%	d
Place Directorate - HRA	13,517	11,008	81%	
Sub Totals	13,523	11,375	84%	
Totals	178,011	140,945	79%	

Notes:

- a – Originally budget related to Padanaram School now included in Facilities Management.
- b – Print & Design unit – end of year based on estimated read, low consumption
- c – War Memorial Monifieth - end of year based on estimated read
- d – William Lamb Studio - end of year based on estimated read

Appendix 2 2021/22 Water Expenditure Status

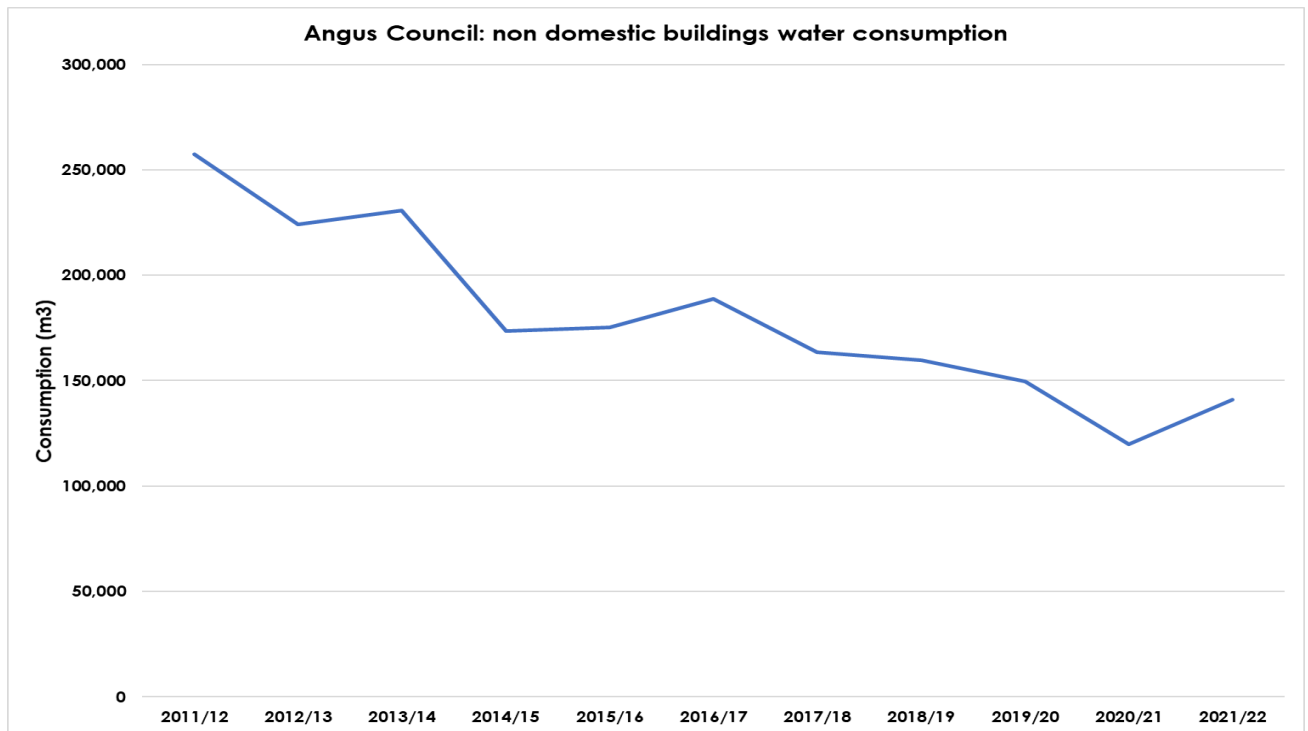
Directorate	Budget Volume (£)	Total Spend (£)	Percentage Spend to Budget	
Centralised Water Management	£51,000	£11,828	23%	
SALIX Repayments - Water Efficiency Fund			0%	
People Directorate	£445,228	£456,995	103%	a
Angus Health & Social Care Partnership	£45,689	£37,436	82%	
Place Directorate	£200,255	£169,045	84%	
HR, Digital Enablement & Business Support	£972	£0	0%	
Legal & Democratic	£972	£208	21%	
Facilities Management	£67,076	£41,387	62%	
Other Services	£972	£802	82%	
Sub Totals	£812,165	£705,872	87%	
Common Good	£972	£3,355	345%	b
Place Directorate - HRA	£33,052	£32,465	98%	
Sub Totals	£34,024	£35,820	105%	
Totals	£846,189	£753,520	89%	

Notes:

a – Issues on various sites with increased baseloads

b – includes 5 & 11 Swan Street, Brechin (currently vacant Common Good responsible for base water and drainage).

Appendix 3 Overall Water Consumption Graph



The graph shows that the water consumption has decreased significantly - since 2011/12 water consumption of 257.500m3 has reduced by 116,553 cubic meters, equating to a fall of 45.3% reduction.

During 2020/21, Covid-19 impacted property occupation and operation across the whole Council estate which resulted in less water demand for that year. In 2021/22 water usage increase by 17.5% compared to 2020/21 as a result of the full operation of Angus Council estate.

The Energy Team monitor the water use through Automatic Meter Reading (AMR) devices meaning issues can be identified, investigated, and resolved quickly. Without AMR, issues are either discovered through time by water damage, low pressure on site or when yearly manual meter reads are taken.

Currently there is a group of problematic sites where water baseloads exist but there are no obvious issue/s on site. These sites need further investigation, but there is no budget to commission more in-depth surveys and no budget to then carry out the remedial works. Significant reductions have been made over the years and this will require ongoing funding to ensure that this is maintained.

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ENERGY ANNUAL REPORT FOR 2021/22

1. BACKGROUND

1.1 Report No: 668/10, THE ESTABLISHMENT OF MANAGEMENT ARRANGEMENTS TO FULFIL THE REQUIREMENTS OF THE CARBON REDUCTION COMMITMENT ORDER 2010. Noted and approved by the Strategic Policy Committee at its meeting of 7 September 2010. Recommended management arrangements for establishing and implementing continuing appropriate carbon reduction strategies.

1.2 Report No: 611/11, CORPORATE ENERGY CONSUMPTION AND CARBON EMISSIONS REDUCTION TARGETS, noted and approved by the Strategic Policy Committee at its meeting of 06 September 2011 adopted the following Council uncorrected weather based reduction targets:

- 22.5% carbon dioxide emissions reduction by 2020 compared to the 2010/11 base
- 13.5% energy consumption reduction by 2020 compared to the 2010/11 base

Report No: 294/15, CORPORATE CARBON DIOXIDE AND ENERGY CONSUMPTION REDUCTION TARGETS, noted and approved by the Communities Committee at its meeting of 18 August 2015, adopted increased targets from 2016/17 to 2019/20. The carbon emissions target was increased from 2.5% to 3% per annum and the energy consumption target increased from 1.5% to 2.5% per annum, for the remaining four years.

In May 2019, the Scottish Government lodged an amendment to the Climate Change Scotland Act 2009 to increase the emissions target to 'net zero' by 2045. This was on the back of the Scottish Government declaring a 'Climate Emergency' in April 2019.

In September 2019 the Climate Change (Emission Reduction Targets) (Scotland) Act was passed; it amends the Climate Change (Scotland) Act 2009 target to 'net zero' CO₂ emissions by 2045 and sets interim CO₂ emissions reduction targets of 56% by 2020, 75% by 2030 and 90% by 2040 from the 1990/1995 baseline. Angus Council will adopt these targets and aim for the Councils non-domestic buildings to be 'net zero' by 2045. In order to deliver these requirements a report will be prepared identifying how the Council will assist in meeting these ambitious figures and where required make the appropriate capital fund bids.

1.3 Service Directorates have provision within their budgets for energy costs. However responsibility for the overall management of these budgets and the provision of budget monitoring information rests with the Director of Infrastructure and Environment.

1.4 Assets currently manages the fuel contracts for all non-housing properties within the Council and maintains an overview, in conjunction with the Corporate Improvement and Finance Services, of the rate of expenditure on the associated budgets.

2. CURRENT POSITION

2.1 This report presents the end of year status of the energy consumption, carbon emissions and expenditure on energy supplies for the Councils non-housing properties for 2021/22. Compared to the 2020/21 outcome it shows a 19.4 % increase in energy consumption and a 15.1% increase in carbon emissions. In 2020/21 Council properties had a reduced occupation and operation due to COVID-19.

Energy Consumption

2.2 The energy consumption status, as at 31 March 2022 is detailed in Table 1 and **Appendix 1**, these figures reflect only the consumption made against presented invoices.

Table 1	Total Budget Consumption kWh	Total Actual Consumption kWh	Difference kWh	Percentage Consumption to Budget
2018/19	65,624,820	58,207,839	7,416,981	89%
2019/20	64,919,188	57,473,453	7,445,735	89%
2020/21	66,144,323	55,215,470	10,928,853	83%
2021/22	66,143,532	65,919,257	224,275	100%
	Change between years	10,703,787	19.4%	

See **Appendix 1** for the directorate breakdown of Table 1

2.3 Table 1 shows a 10,703,787 kWh increase in energy consumption which equates to a 19.4% increase compared with the previous financial year.

2.4 The performance by individual directorates is detailed in **Appendix 1**, notes have been added where there are significant differences between budgeted and the metered consumption.

Carbon Emissions

2.5 The carbon emissions status, as at 31 March 2022, is detailed in Table 2 and **Appendix 2**, these figures reflect only the carbon emissions associated with the consumption made against presented invoices.

Table 2	Total Budget Emissions kg	Total Actual Emissions kg	Difference kg	Percentage Emissions to Budget
2018/19	14,564,211	13,336,819	1,227,392	92%
2019/20	13,670,692	12,408,631	1,262,061	91%
2020/21	13,371,961	11,243,868	2,128,093	84%
2021/22	12,825,547	12,936,926	-111,379	101%
	Change between years	1,693,058	15.1%	

See **Appendix 2** for the directorate breakdown of Table 2

2.6 Table 2 shows a 1,693,058 kg increase in carbon emissions compared to the previous financial year. This equates to a 15.1% increase. The increase is mainly due reduced occupation in 2020/21 and increased energy consumption due to the implementation of COVID-19 measures including increased ventilation and in turn increased heating requirements in 2021/22.

2.7 The performance by individual directorates, is detailed in **Appendix 2**, notes have been added where there are significant differences between budgeted and actual emissions.

2.8 A graph showing the overall progress made towards achieving the Council's interim carbon reduction target of a 75% reduction by 2030 is detailed in **Appendix 4**. A graph showing the overall progress made towards achieving the Council's 'net zero' target by 2045 is detailed in **Appendix 5**.

Expenditure on Energy

2.9 The expenditure status, as at 31 March 2022 is detailed in Table 3 and **Appendix 3**, these figures reflect only the payments made against presented invoices and end of year accruals

Table 3	Budget Volume £	Total Spend £	Difference £	Percentage Spend to Budget
2018/19	£4,971,464	£4,533,223	£438,241	91%
2019/20	£5,085,402	£4,595,612	£489,790	90%
2020/21	£5,208,000	£4,120,135	£1,087,865	79%
2021/22	£4,817,077	£4,857,118	-£40,041	101%
	Change between years	£736,983	17.9%	

See **Appendix 3** for the directorate breakdown of Table 3

- 2.10 Table 3 shows overspend of £40,041 compared to the 2021/22 budget and an increase of £736,983 in energy expenditure compared to the previous financial year.
- 2.11 The performance by individual directorates is detailed in **Appendix 3**, notes have been added where there are significant differences between the budgeted and spend amounts

3. FINANCIAL IMPLICATIONS

- 3.1 Table 3 and **Appendix 3** shows an overspend of £40,041 in 2021/22 against the budget and an increase of £736,983 in energy expenditure compared to financial year 2020/2021. This overspend has been progressed on a managed basis and absorbed within the cash limited budgets available to Council directorates.

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- Appendix 1 2021/22 Energy Consumption Status
Appendix 2 2021/22 Carbon Emissions Status
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Appendix 4 Overall Carbon Emissions Graph – Interim target of 75% reduction by 2030
Appendix 5 Overall Carbon Emissions Graph – ‘Net Zero’ by 2045

Appendix 1 2021/22 Energy Consumption Status

Actual Consumption per Fuel in kWh

Directorate	Electricity	Gas	Kerosene	Gas Oil	LPG	Biomass	Total (kWh)	Budget (kWh)	% to Budget
People Directorate	9,981,966	25,398,778	730,580	462,869	0	552,265	37,126,458	32,788,558	113%
Angus Health & Social Care Partnership	972,762	2,280,620	0	0	0	102,654	3,356,036	3,593,145	93%
Place Directorate	5,079,731	6,524,709	124,110	0	9,540	621,600	12,359,690	14,551,897	85%
HR, Digital Enablement & Business Support	233,272	0	0	0	0	0	233,272	328,100	71%
Legal & Democratic	0	51,127	0	0	0	0	51,127	47,000	109%
Facilities Management	1,380,638	2,803,578	0	0	0	0	4,184,216	4,380,181	96%
Other Services	4,110	0	0	0	0	0	4,110	14,534	28%
Sub Totals	17,652,479	37,058,812	854,690	462,869	9,540	1,276,519	57,314,909	55,703,415	103%
Common Good	22,447	0	0	0	0	0	22,447	22,050	102%
Place Directorate - HRA	1,545,724	3,803,238	0	0	0	87,446	5,436,408	6,018,066	90%
Place Directorate - Street Lighting	3,145,491	0	0	0	0	0	3,145,491	4,400,000	71%
Sub Totals	4,713,662	3,803,238	0	0	0	87,446	8,604,346	10,440,116	82%
Total	22,366,141	40,862,050	854,690	462,869	9,540	1,363,965	65,919,255	66,143,531	100%

Notes:

Generally: Higher than expected consumption can be mainly attributed to a combination of actual energy consumption, increased ventilation and in turn, increased heating requirements due to implementation of COVID-19 measurements.

Legal & Democratic: Overspend is due to an increase in gas consumption.

Common Good: William Lamb Studio end of year based on estimated read unable to gain access to obtain actual meter reads; 11 Swan Street - budget not allocated

Other services: The large percentage underspend in Other Services was due to a higher than required budget allowed for war memorial lighting.

Appendix 2 2021/22 Carbon Emissions Status

Actual Emissions per Fuel in kg CO₂

Directorate	Electricity	Gas	Kerosene	Gas Oil	LPG	Biomass	Total (kg CO ₂)	Budget (kg CO ₂)	% to Budget
People Directorate	2,283,474	4,643,405	179,473	117,405	0	8,356	7,232,113	6,361,746	114%
Angus Health & Social Care Partnership	222,529	416,943	0	0	0	1,553	641,025	667,226	96%
Place Directorate	1,162,041	1,192,848	30,489	0	2,043	9,405	2,396,826	2,659,613	90%
HR, Digital Enablement & Business Support	53,363	0	0	0	0	0	53,363	75,056	71%
Legal & Democratic	0	9347	0	0	0	0	9,347	8,593	109%
Facilities Management	315,835	512,550	0	0	0	0	828,385	893,096	93%
Other Services	940	0	0	0	0	0	940	3,325	28%
Sub Totals	4,038,182	6,775,093	209,962	117,405	2,043	19,314	11,161,999	10,668,655	105%
Common Good	5,135	0	0	0	0	0	5,135	5,044	102%
Place Directorate - HRA	353,600	695,308	0	0	0	1,323	1,050,231	1,145,305	92%
Place Directorate - Street Lighting	719,563	0	0	0	0	0	719,563	1,006,544	71%
Sub Totals	1,078,298	695,308	0	0	0	1,323	1,774,929	2,156,893	82%
Total	5,116,480	7,470,401	209,962	117,405	2,043	20,637	12,936,928	12,825,548	101%

Notes as per Appendix 1.

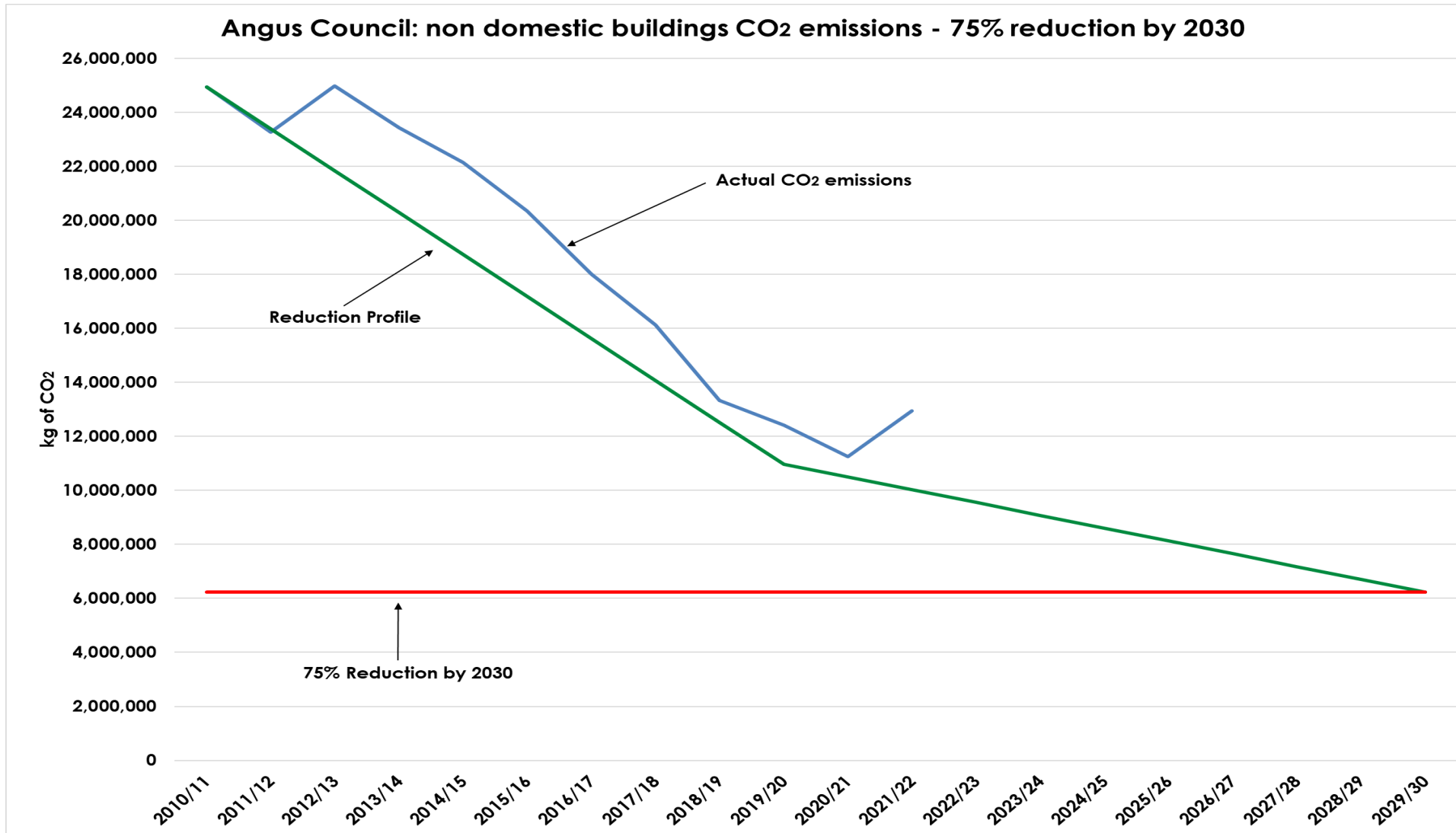
Appendix 3 2021/22 Expenditure on Energy Status

Actual Expenditure per Fuel in £

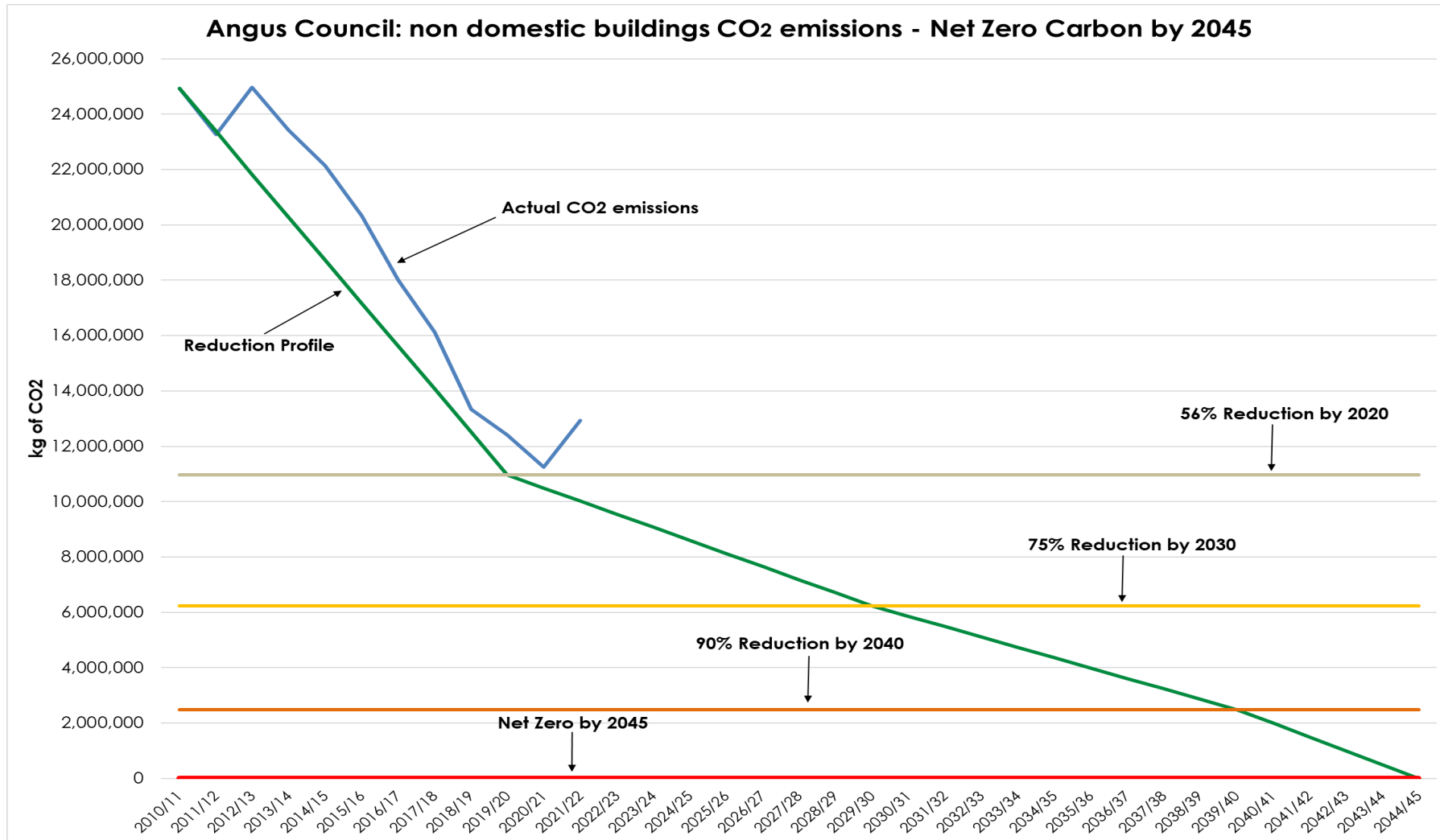
Directorate	Electricity	Gas	Oil	LPG	Biomass	Total (£)	Budget (£)	% to Budget
Centralised Energy Management						£21,724	£30,000	72%
SALIX - Energy Efficiency Fund						£0	£117,981	0%
People Directorate	£1,594,420	£659,603	£66,567		£63,748	£2,384,338	£2,147,543	111%
Angus Health & Social Care Partnership	£154,857	£57,733			£6,514	£219,104	£254,290	86%
Place Directorate	£831,826	£173,764	£3,815	£788	£34,015	£1,044,208	£935,490	112%
HR, Digital Enablement & Business Support	£38,170					£38,170	£44,547	86%
Legal & Democratic	£0	£1,501				£1,501	£1,856	81%
Facilities Management	£227,825	£73,422				£301,247	£344,312	87%
Other Services	£2,845	£109				£2,954	£2,784	106%
Sub Totals	£2,849,942	£966,132	£70,382	£788	£104,278	£4,013,246	£3,878,803	103%
Common Good	£5,871	£90				£5,961	£3,712	161%
Place Directorate - HRA	£278,224	£111,087			£5,549	£394,860	£357,305	111%
Place Directorate - Street Lighting	£443,051					£443,051	£577,257	77%
Sub Totals	£727,145	£111,177	£0	£0	£5,549	£843,872	£938,274	90%
Total	£3,577,088	£1,077,309	£70,382	£788	£109,827	£4,857,118	£4,817,077	101%

Notes as per Appendix 1.

Appendix 4 Overall Carbon Emissions Graph - Interim target of 75% reduction by 2030



Appendix 5 Overall Carbon Emissions Graph – ‘Net Zero’ by 2045



The impacts of Covid-19 reduced property occupation and operation across the whole Council estate in 2020/21 resulted in a significant reduction in carbon emissions, but the increased ventilation requirements in 2021/22, and in turn increased heating requirements in buildings have meant the reductions achieved due to the closure / low occupancy of buildings have been swallowed up by the increased energy requirements for ventilation and heating. The ongoing carbon emission when compared to 19/20 is relatively flat, the additional ventilation and heating requirements in place to meet current Covid -19 guidance will make any future reduction challenging.

Targets based on the Scottish Governments Climate Change (Emission Reduction Targets) (Scotland) Act 2019 have been set. In May 2019, the Scottish Government lodged an amendment to the Climate Change Scotland Act 2009 to increase the emissions target to 'net zero' by 2045. This was on the back of the Scottish Government declaring a 'Climate Emergency' in April 2019. In September 2019 the Climate Change (Emission Reduction Targets) (Scotland) Act was passed; it amends the Climate Change (Scotland) Act 2009 target to 'net zero' CO₂ emissions by 2045 and sets interim CO₂ emissions reduction targets of 56% by 2020, 75% by 2030 and 90% by 2040 from the 1990/1995 baseline. Angus Council will adopt these targets and aim for the Councils non-domestic buildings to be 'net zero' by 2045. In order to deliver these requirements a report will be prepared identifying how the Council will assist in meeting these ambitious figures and where required make the appropriate capital fund bids.