

APPENDIX 3

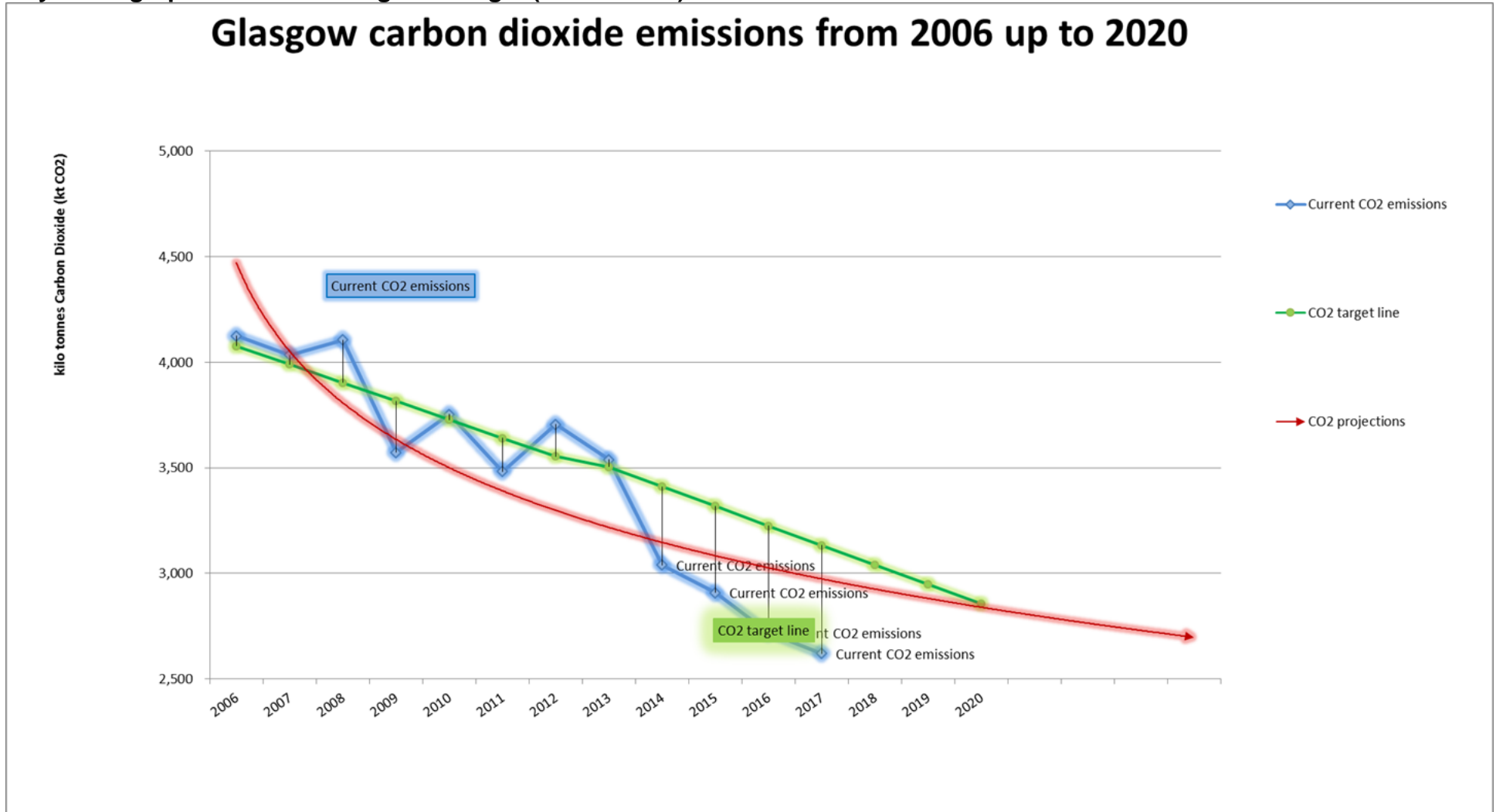
Question 3:

Below is information for the breakdown of emissions. The city has seen an overall reduction in CO₂ emissions of 42% by 2017 whilst the Council has managed a reduction of 43% by 2018/19.

City Level – Emissions from baseline year (2006) to 2017 (most current year of data) in ktCO₂e

LAD14CD	Year	A. Industry and Commercial Electricity	B. Industry and Commercial Gas	C. Large Industrial Installations	D. Industrial and Commercial Other Fuels	E. Agriculture	Industry and Commercial Total	F. Domestic Electricity	G. Domestic Gas	H. Domestic 'Other Fuels'	Domestic Total	I. Road Transport (A roads)	J. Road Transport (Motorways)	K. Road Transport (Minor roads)	L. Diesel Railways	M. Transport Other	Transport Total	N. LULUCF Net Emissions	Current CO ₂ emissions	Population ('000s, mid-year estimate)	Per Capita Emissions (t)
S1200004	2006	1,164.2	531.9	2.2	95.0	2.0	1,795.3	713.0	664.1	8.9	1,386.0	238.7	354.7	325.7	5.2	4.3	928.5	15.1	4,125.0	568.5	7.3
S1200004	2007	1,145.0	498.7	2.2	94.9	2.7	1,743.5	687.7	639.9	8.3	1,336.0	234.5	357.8	337.6	5.9	4.2	939.9	14.4	4,033.8	571.8	7.1
S1200004	2008	1,198.3	544.0	2.2	96.6	2.1	1,843.2	664.1	662.5	8.9	1,335.5	219.7	352.0	332.4	5.8	4.4	914.2	13.3	4,106.3	576.2	7.1
S1200004	2009	898.5	501.2	0.9	84.0	2.2	1,486.8	578.1	604.6	7.9	1,190.6	212.5	342.9	318.2	5.8	4.0	883.4	12.4	3,573.2	581.6	6.1
S1200004	2010	985.7	538.1	1.5	85.4	2.3	1,612.9	585.1	662.9	8.2	1,256.2	211.3	341.3	310.6	5.8	4.0	873.1	11.7	3,753.9	586.5	6.4
S1200004	2011	961.4	463.3	0.5	75.9	2.3	1,503.5	549.2	549.0	7.7	1,105.9	202.3	348.3	301.1	5.8	3.9	861.3	10.7	3,481.4	593.1	5.9
S1200004	2012	1,065.5	500.7	0.3	78.0	2.2	1,646.8	573.8	594.7	7.5	1,176.0	199.1	370.1	293.1	5.9	3.8	872.0	10.7	3,705.4	595.1	6.2
S1200004	2013	959.2	497.1	0.4	70.1	2.2	1,528.9	514.1	607.7	8.2	1,130.1	196.5	374.6	288.9	5.9	3.9	869.9	9.7	3,538.6	596.5	5.9
	2014	734.8	400.2	0.4	79.2	2.6	1,217.2	435.3	503.9	8.0	947.2	197.1	363.8	295.1	6.0	3.8	865.8	8.9	3,039.1	599.6	5.1
	2015	597.2	447.9	2.4	80.9	2.3	1,130.7	368.0	530.1	8.1	906.2	193.4	371.7	287.9	6.0	3.7	862.7	8.4	2,908.0	606.3	4.8
	2016	464.1	426.6	0.8	82.5	2.5	976.4	285.3	555.0	7.9	848.2	194.7	383.5	296.7	5.9	3.5	884.3	7.9	2,716.8	615.1	4.4
	2017	435.4	410.2	0.3	86.3	2.4	934.6	245.6	539.0	9.9	794.5	189.3	388.0	296.5	5.9	3.5	883.1	6.9	2,619.1	621.0	4.2
	Total reduction from baseline year						860.7				591.5						45.5		1,505.9		

City Level graph of emissions against target (2006 – 2017)



GCC Emissions by year (tCO₂)

Energy Usage	kgCO ₂ /unit	Emissions (tonnes CO ₂)														2019/20	2018/19 % of total	Variation (%)	
		2005/06	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2005/06 vs 2018/19			2016/17 vs 2017/18	
Electricity (buildings)	0.541	80,190	70,418	74,518	72,910	72,233	68,281	71,908	70,148	70,027	63,390	54,002	44,612	32,480		27.08%	-59.50%	-27.19%	
Electricity (street lighting)	0.541	21,816	22,638	22,725	23,892	23,797	21,278	22,513	23,053	23,727	22,481	21,000	14,320	13,199		11.01%	-39.50%	-7.83%	
Electricity (stair lighting)	0.541	13,623	13,545	12,200	11,925	11,299	10,427	9,881	9,554	9,047	7,815	6,097	4,730	3,175		2.65%	-76.69%	-32.87%	
Gas (buildings)	0.1836	50,197	47,104	42,965	46,298	52,586	45,074	52,300	46,991	46,987	49,894	44,634	51,014	47,553		39.65%	-5.27%	-6.79%	
Coal (buildings)	2577	6,752	4,711	2,891	1,212	1,049	990	924	1,289	581	234	0	0	0		0.00%	-100.00%		
Oil (buildings)	2.762	12,767	6,932	10,774	8,988	6,993	7,228	13,343	8,788	8,154	6,873	6,800	7,249	7,274		6.06%	-43.03%	0.34%	
Diesel (transport/plant)	2.639	12,797	12,618	14,056	18,652	17,867	15,991	17,176	17,517	15,654	14,560	16,000	15,472	14,379		11.99%	12.36%	-7.06%	
Petrol (transport)	2.3035	656	632	514	401	337	348	361	345	299	288	300	400	595		0.50%	-9.38%	48.63%	
LPG	1.495	338	16	0	0	0	0	0	0	0	0	0	0	0		0.00%	-100.00%		
Air	0.1883			503	759	744	343	305	381	480	390	1,004	502	440		0.37%		-12.41%	
Rail	0.0611	782	741	62	160	51	33	32	44	33	27	30	481	40		0.03%	61.00%	-91.64%	
Car	0.2235			1,578	1,162	922	1,233	1,158	1,287	979	986	1,000	976	802		0.67%		-17.86%	
TOTAL		199,918	179,355	182,786	186,359	186,878	171,225	189,901	179,397	175,968	166,938	150,867	139,755	119,935	113,939	100.00%	-30.09%	-14.18%	
Percentage of 2005/06			89.71%	91.43%	93.22%	93.48%	85.65%	94.99%	89.74%	88.02%	83.50%	75.46%	69.91%	59.99%	56.99%				
Percentage Reduction against 2005/06			10.29%	8.57%	6.78%	6.52%	14.35%	5.01%	10.26%	11.98%	16.50%	24.54%	30.09%	40.01%	43.01%				
Annual target									2%	3%	4%	5%	5%	5%	5%				
Cumulative Savings		0	-20,563	-17,132	-13,559	-13,040	-28,693	-10,017	-20,521	-23,950				139942.6	20,007				

GCC Emissions against target

