

<b>2020</b>						
		NUMBER		RATE		TOTAL
Gas Use		4,500,000	Kwh	0.18	kg CO2e/kwh	810,000
Direct renewable heat		50,000	Kwh	0	kg CO2e/kwh	0
Petrol, diesel for business use						3,000
Electricity use		1,500,000	Kwh	0.5	kg CO2e/kwh	750,000
Direct renewable power		26,000	Kwh	0	kg CO2e/kwh	0
Travel	Commuter Car	400,000	km	0.1	kg CO2e/km	40,000
	Commuter Bus	300,000	km	0.05	kg CO2e/km	15,000
	Business travel flights	120,000	km	0.25	kg CO2e/km	30,000
	academic travel flights	500,000	km	0.25	kg CO2e/km	125,000
	Student travel flights	3,000,000	km	0.25	kg CO2e/km	750,000
College food	low carbon meal	43,000		5	kg CO2e/meal	215,000
	high carbon meal	12,000		25	kg CO2e/meal	300,000
Conference food	low carbon meal	25,000		5	kg CO2e/meal	125,000
	Med carbon meal	15,000		10	kg CO2e/meal	150,000
	high carbon meal	10,000		25	kg CO2e/meal	250,000
						<b>3,563,000</b>
<b>2030?</b>						
		NUMBER		RATE		TOTAL
Gas Use		1,500,000	Kwh	0.18	kg CO2e/kwh	270,000
Direct renewable heat		250,000	Kwh	0	kg CO2e/kwh	0
Petrol, diesel for business use						3,000
Electricity use		1,500,000	Kwh	0.3	kg CO2e/kwh	450,000
Direct renewable power		500,000	Kwh	0	kg CO2e/kwh	0
Travel	Commuter Car	150,000	km	0.08	kg CO2e/km	12,000
	Commuter Bus	450,000	km	0.05	kg CO2e/km	22,500
	Business travel flights	75,000	km	0.2	kg CO2e/km	15,000
	academic travel flights	75,000	km	0.2	kg CO2e/km	15,000
	Student travel flights	1,750,000	km	0.2	kg CO2e/km	350,000
College food	low carbon meal	50,000		3	kg CO2e/meal	150,000
	high carbon meal	5,000		20	kg CO2e/meal	100,000
Conference food	low carbon meal	35,000		3	kg CO2e/meal	105,000
	Med carbon meal	10,000		10	kg CO2e/meal	100,000
	high carbon meal	5,000		20	kg CO2e/meal	100,000
						<b>1,692,500</b>
<b>Possible Pathways to carbon reduction - which are right for your college?</b>						
Gas Use	Turn down the heat					
	Better insulation, new windows, passivhaus?					
	More efficient boilers and heating systems					
	Better controls systems					
	District heat networks					
	Gas alternatives - heat pumps? Biofuel? Solar heat					

Diesel	Use zero emmission alternatives - electric motors			
	Reduce mileage through vehicle sharing			
Electricity	More efficient plant and equipment			
	Turn things off			
	LED lighting			
	Solar Panels, wind or water power			
	Use third party renewably generated energy			
Travel	Commuter	Don't allow car parking		
		Arrange/insist on car shares		
		ZEV charging points		
		Virtual meeting equipment		
		Virtual meeting policy		
		Two semesters not three terms at Oxford?		
Food	Reduce 'high carbon' / 'high GHG' content in menus			
	Educate diners and label food			
	"Eat food, not too much, mostly plants"			
Generally	Understand the issues as they pertain to your college			
	Estimate the elephants in the room			
	Engage, inspire, ACT			

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