



CARBON AUDIT RESULTS 2022

CRUCIAL COMPLIANCE

JANUARY 1ST - DECEMBER 31ST, 2022

Purchased services
15.1%

Electricity
18.3%

Water
4%

A/C
11.2%

Air travel
36.3%

Employee commuting
12.2%

27,200 KGS
OF CARBON DIOXIDE EQUIVALENT
(CO₂E)

EXECUTIVE SUMMARY

An independent carbon footprint audit was conducted for Crucial Compliance in line with the Greenhouse Gas Protocol and UN guidelines. The analysis showed that the company's emissions are in line with other comparable companies, at slightly over 27 tonnes. This equates to approximately 2.5 tonnes per employee per year, which is better than average for Gibraltar.

The main emissions sources of the company can broadly be grouped into three categories, shown below. Business-related flights were the largest source of emissions followed by office electricity consumption, which is typical for services companies with an international client base. Any carbon reduction efforts should therefore prioritise these areas. As with most professional services firms, purchased goods/services - which covers the carbon footprint from the provision of services such as legal work, insurance and accounting - also ranks high. Emissions from temperature control result from 'refrigerants' in A/C units leaking into the atmosphere, and are inevitable for companies in warm climates. Emissions from waste disposal and water consumption are negligible and simply estimated using verified per capita averages.

TRAVEL

Business flights - 36%
Employees commutes - 12%

INDIRECT

Purchases - 15%
Water - 4%
Waste disposal - 1%

OFFICES

General electricity usage - 18%
Airconditioning - 11%



Independent Limited Statement of Assurance

Crucial Compliance ("the organisation") commissioned twentytwenty LLP ("we", "our") to conduct an independent greenhouse gas inventory ("carbon audit") of its emissions for the calendar year beginning on January 1st 2022 and ending on December 31st 2022.

Scope of Analysis

We performed the carbon footprint analysis based on the activity data provided by the organisation, which included:

- Electricity and water usage data;
- Air travel itineraries;
- Employee commuting details;
- Details of temperature control equipment types and settings;
- Product and service consumption statistics;
- Independently verified national emissions averages for waste disposal.

The activity data covered all Scope 1 and Scope 2 emissions identified, in addition to several Scope 3 sources in line with best practices.

Concluding Statement of Compliance

We verify that, to the best of our knowledge, and with respect to the information presented by the organisation, the carbon audit report enclosed fully complies with:

- The Greenhouse Gas Protocol
- ISO 14064-1:2018
- The Climate Registry
- United Nations Framework Convention on Climate Change (UNFCCC) guidance

We confirm that, in our view, the carbon footprint calculated represents an accurate and comprehensive account of the organisation's emissions for the period specified.

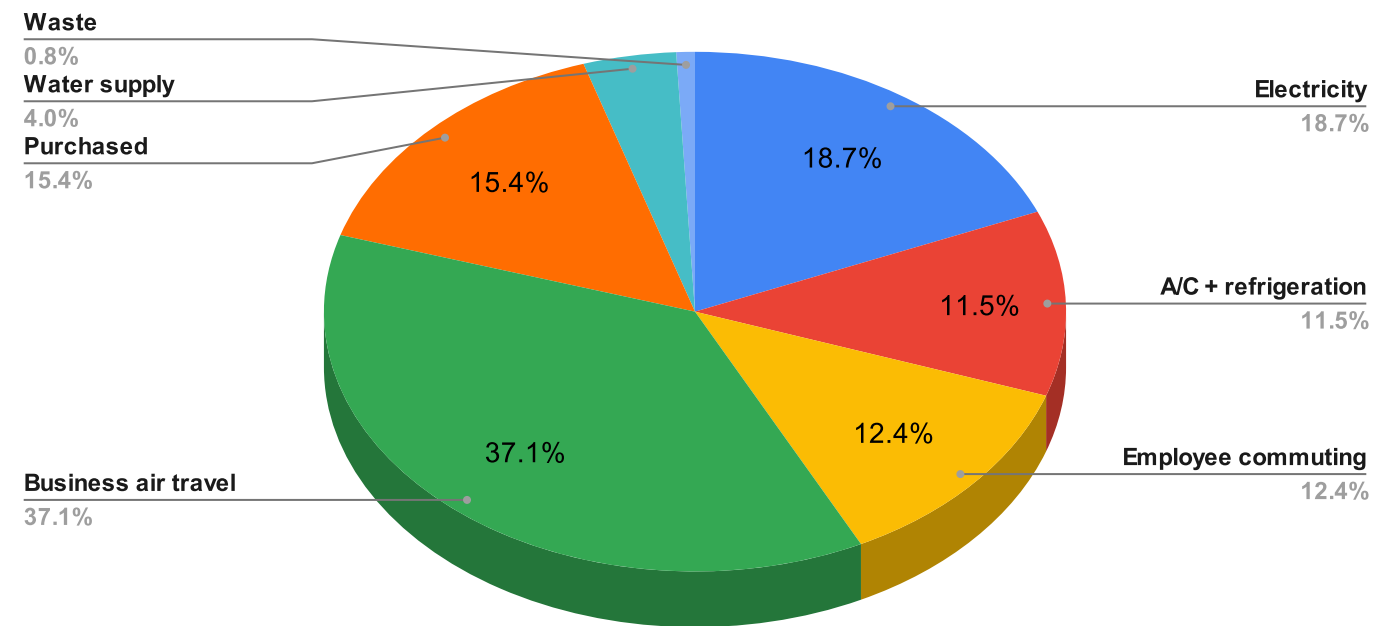
Ryan Robba BA MSc PGCert
Partner
twentytwenty LLP

Summary of Carbon Footprint by Emissions Type		
Source	Emissions (MTCO2e)	% of Footprint
Electricity	5.1	18.7%
A/C + refrigeration	3.1	11.5%
Employee commuting	3.4	12.4%
Business air travel	10.1	37.1%
Purchased goods/equipment	4.2	15.4%
Water supply	1.1	4.0%
Waste	0.2	0.8%
Total emissions (MTCO2e)	27.2	

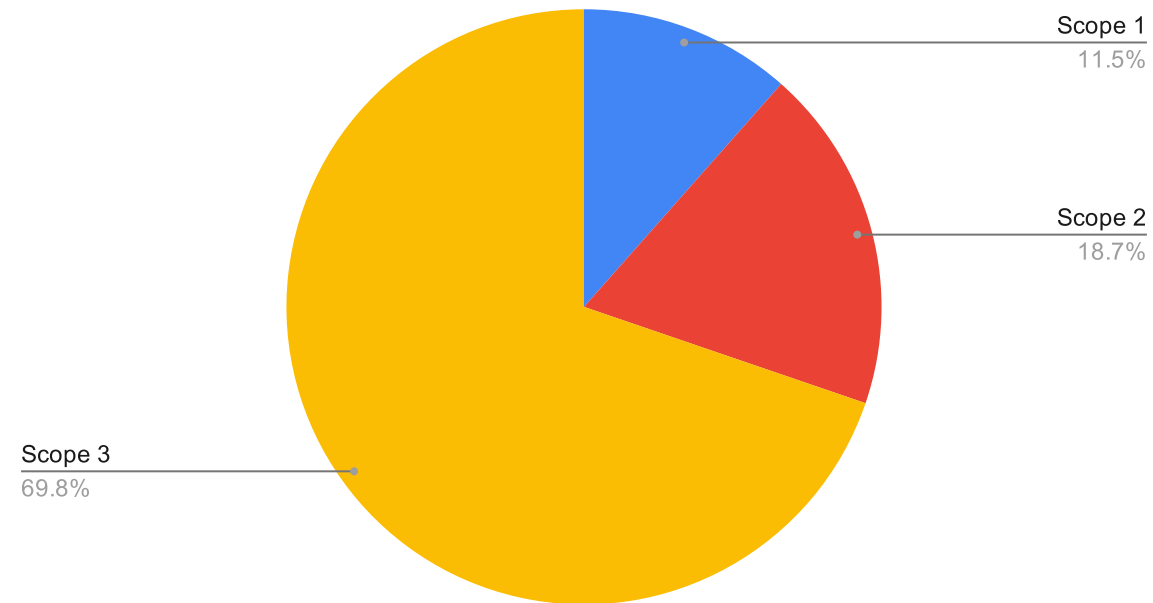
Relative Emissions (MTCO2e)	
Per employee	2.47
Per £'000 revenue	N/A
Per area (m2)	0.19

Summary of Carbon Footprint by Emissions Scope		
Source	Emissions (MTCO2e)	% of Footprint
Scope 1	3.1	11.5%
Scope 2	5.1	18.7%
Scope 3	18.9	69.8%
Total emissions (MTCO2e)	27.2	

Summary of Emissions by Source



Breakdown of Emissions by Scope



Fuel Type	Heat Content (HHV)	CO2 Factor (kg CO2 per mmBtu)	CH4 Factor (g CH4 per mmBtu)	N2O Factor (g N2O per mmBtu)	Biogenic CO2 Factor (kg Biogenic CO2 per mmBtu)	AR4 (kgCO2e)	AR5 (kgCO2e)	Units	Source
Coal and Coke									
	mmBtu per short ton								
Anthracite Coal	25.09	103.69	11	1.6		104.4418	104.422	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Bituminous Coal	24.93	93.28	11	1.6		94.0318	94.012	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Sub-bituminous Coal	17.25	97.17	11	1.6		97.9218	97.902	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Lignite Coal	14.21	97.72	11	1.6		98.4718	98.452	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Mixed (Commercial Sector)	21.39	94.27	11	1.6		95.0218	95.002	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Mixed (Electric Power Sector)	19.73	95.52	11	1.6		96.2718	96.252	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Mixed (Industrial Coking)	26.28	93.9	11	1.6		94.6518	94.632	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Mixed (Industrial Sector)	22.35	94.67	11	1.6		95.4218	95.402	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Coal Coke	24.8	113.67	11	1.6		114.4218	114.402	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Other Fuels - Solid									
Municipal Solid Waste	9.95	90.7	32	4.2		92.7516	92.709	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Petroleum Coke (Solid)	30	102.41	32	4.2		104.4616	104.419	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Plastics	38	75	32	4.2		77.0516	77.009	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Tires	28	85.97	32	4.2		88.0216	87.979	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Biomass Fuels - Solid									
Agricultural Byproducts	8.25		32	4.2	118.17	120.2216	120.179	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Peat	8		32	4.2	111.84	113.8916	113.849	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Solid Byproducts	10.39		32	4.2	105.51	107.5616	107.519	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Wood and Wood Residuals	17.48		7.2	3.6	93.8	95.0528	94.9556	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Natural Gas -									
Natural Gas	0.001026	53.06	1	0.1		53.1148	53.1145	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Other Fuels - Gaseous									
Blast Furnace Gas	0.000092	274.32	0.022	0.1		274.35035	274.347116	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Coke Oven Gas	0.000599	46.85	0.48	0.1		46.8918	46.88994	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Fuel Gas	0.001388	59	3	0.6		59.2538	59.243	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Propane Gas	0.002516	61.46	3	0.6		61.7138	61.703	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Biomass Fuels - Gaseous									
Landfill Gas	0.000485		3.2	0.63	52.07	52.33774	52.32655	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Other Biomass Gases	0.000655		3.2	0.63	52.07	52.33774	52.32655	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Petroleum Products									
	mmBtu per gallon								
Asphalt and Road Oil	0.158	75.36	3	0.6		75.6138	75.603	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Aviation Gasoline	0.12	69.25	3	0.6		69.5038	69.493	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Butane	0.103	64.77	3	0.6		65.0238	65.013	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Butylene	0.105	68.72	3	0.6		68.9738	68.963	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Crude Oil	0.138	74.54	3	0.6		74.7938	74.783	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Distillate Fuel Oil No. 1	0.139	73.25	3	0.6		73.5038	73.493	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Distillate Fuel Oil No. 2	0.138	73.96	3	0.6		74.2138	74.203	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Distillate Fuel Oil No. 4	0.146	75.04	3	0.6		75.2938	75.283	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Ethane	0.068	59.6	3	0.6		59.8538	59.843	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Ethylene	0.058	65.96	3	0.6		66.2138	66.203	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Heavy Gas Oils	0.148	74.92	3	0.6		75.1738	75.163	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Isobutane	0.099	64.94	3	0.6		65.1938	65.183	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Isobutylene	0.103	68.86	3	0.6		69.1138	69.103	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Kerosene	0.135	75.2	3	0.6		75.4538	75.443	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Kerosene-Type Jet Fuel	0.135	72.22	3	0.6		72.4738	72.463	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Liquefied Petroleum Gases (LPG)	0.092	61.71	3	0.6		61.9638	61.953	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Lubricants	0.144	74.27	3	0.6		74.5238	74.513	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Motor Gasoline	0.125	70.22	3	0.6		70.4738	70.463	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Naphtha (<401 deg F)	0.125	68.02	3	0.6		68.2738	68.263	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Natural Gasoline	0.11	66.88	3	0.6		67.1338	67.123	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Other Oil (>401 deg F)	0.139	76.22	3	0.6		76.4738	76.463	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Pentanes Plus	0.11	70.02	3	0.6		70.2738	70.263	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Petrochemical Feedstocks	0.125	71.02	3	0.6		71.2738	71.263	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Petroleum Coke	0.143	102.41	3	0.6		102.6638	102.653	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Propane	0.091	62.87	3	0.6		63.1238	63.113	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Propylene	0.091	67.77	3	0.6		68.0238	68.013	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Residual Fuel Oil No. 5	0.14	72.93	3	0.6		73.1838	73.173	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Residual Fuel Oil No. 6	0.15	75.1	3	0.6		75.3538	75.343	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Special Naphtha	0.125	72.34	3	0.6		72.5938	72.583	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Unfinished Oils	0.139	74.54	3	0.6		74.7938	74.783	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Used Oil	0.138	74	3	0.6		74.2538	74.243	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Biomass Fuels - Liquid									
Biodiesel (100%)	0.128		1.1	0.11	73.84	73.90028	73.89995	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Ethanol (100%)	0.084		1.1	0.11	68.44	68.50028	68.49995	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Rendered Animal Fat	0.125		1.1	0.11	71.06	71.12028	71.11995	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Vegetable Oil	0.12		1.1	0.11	81.55	81.61028	81.60995	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Biomass Fuels - Kraft Pulping Liquor, by Wood Furnish									
North American Softwood			1.9	0.42	94.4	94.57266	94.5645	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
North American Hardwood			1.9	0.42	93.7	93.87266	93.8645	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Bagasse			1.9	0.42	95.5	95.67266	95.6645	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Bamboo			1.9	0.42	93.7	93.87266	93.8645	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor
Straw			1.9	0.42	95.1	95.27266	95.2645	mmBtu	EPA, "Emission Factors for Greenhouse Gas Inventor

Source:
EPA, "Emission Factors for Greenhouse Gas Inventories," Table 1 Stationary Combustion Emission Factors, March 9, 2018 (<https://www.epa.gov/climateleadership/center-corporate-climate-leadership>)
Note: Emission factors are per unit of heat content using higher heating values (HHV). If heat content is available from the fuel supplier, it is preferable to use that value. If not, default heat contents are used.

S1 - Mobile Combustion

Mobile Fuel	Column1	CO2 Factor (kg / unit)	CH4 Factor (kg / unit)	N2O Factor (kg / unit)	Biogenic CO2 (kg Biogenic CO2 per mmBtu)	AR4 (kgCO2e)	AR5 (kgCO2e)	Standardized Unit	Source	Fuel Efficiency	MPG Units	kg CO4	kg NO2
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New South Wales and ACT	0.81	0	0	0.81	0.81	kWh	Department of the Environment and Energy, Australian National Greenhouse Accounts, National Greenhouse Accounts Factors, August 2019
Victoria	1.02	0	0	1.02	1.02	kWh	Department of the Environment and Energy, Australian National Greenhouse Accounts, National Greenhouse Accounts Factors, August 2020
Queensland	0.81	0	0	0.81	0.81	kWh	Department of the Environment and Energy, Australian National Greenhouse Accounts, National Greenhouse Accounts Factors, August 2021
South Australia	0.44	0	0	0.44	0.44	kWh	Department of the Environment and Energy, Australian National Greenhouse Accounts, National Greenhouse Accounts Factors, August 2022
SWIS in Western Australia	0.69	0	0	0.69	0.69	kWh	Department of the Environment and Energy, Australian National Greenhouse Accounts, National Greenhouse Accounts Factors, August 2023
Tasmania	0.15	0	0	0.15	0.15	kWh	Department of the Environment and Energy, Australian National Greenhouse Accounts, National Greenhouse Accounts Factors, August 2024
Northern Territory	0.63	0	0	0.63	0.63	kWh	Department of the Environment and Energy, Australian National Greenhouse Accounts, National Greenhouse Accounts Factors, August 2025
North China Grid	0.968	0	0	0.968	0.968	kWh	
China Northeast Grid	1.1082	0	0	1.1082	1.1082	kWh	
East China Grid	0.8046	0	0	0.8046	0.8046	kWh	
Central China Grid	0.9014	0	0	0.9014	0.9014	kWh	
China Northwest Grid	0.9155	0	0	0.9155	0.9155	kWh	
China Southern Grid	0.8367	0	0	0.8367	0.8367	kWh	
Hainan Province China Power Grid	0	0	0	0	0	kWh	

eGrid Subregion - Residual Mix - Market Based	Units	CO2 Factor (kg/kWh)	CH4 Factor (kg/kWh)	N2O Factor (kg/kWh)	Column1	AR4 (kgCO2e)	AR5 (kgCO2e)	Units2	Source
AKGD	kWh	0.490900342				0.490900342	0.490900342	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
AKMS	kWh	0.228215929				0.228215929	0.228215929	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
AZNM	kWh	0.474108353				0.474108353	0.474108353	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
CAMX	kWh	0.240140873				0.240140873	0.240140873	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
ERCT	kWh	0.485452698				0.485452698	0.485452698	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
FRCC	kWh	0.461385087				0.461385087	0.461385087	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
HIMS	kWh	0.522547482				0.522547482	0.522547482	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
HIOA	kWh	0.754274216				0.754274216	0.754274216	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
MROE	kWh	0.756959483				0.756959483	0.756959483	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
MROW	kWh	0.586748946				0.586748946	0.586748946	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
NEWE	kWh	0.253190725				0.253190725	0.253190725	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
NWPP	kWh	0.300636487				0.300636487	0.300636487	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
NYCW	kWh	0.288398565				0.288398565	0.288398565	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
NYLI	kWh	0.534476961				0.534476961	0.534476961	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
NYUP	kWh	0.133673671				0.133673671	0.133673671	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
RFCE	kWh	0.344031669				0.344031669	0.344031669	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
RFCM	kWh	0.577332369				0.577332369	0.577332369	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
RFCW	kWh	0.564250765				0.564250765	0.564250765	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
RMPA	kWh	0.625653564				0.625653564	0.625653564	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
SPNO	kWh	0.686861318				0.686861318	0.686861318	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
SPSO	kWh	0.641796916				0.641796916	0.641796916	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
SRMV	kWh	0.381081094				0.381081094	0.381081094	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
SRMW	kWh	0.739174126				0.739174126	0.739174126	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
SRSO	kWh	0.49653396				0.49653396	0.49653396	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
SRTV	kWh	0.53790612				0.53790612	0.53790612	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
SRVC	kWh	0.366198728				0.366198728	0.366198728	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
US Average	kWh	0.460364622				0.460364622	0.460364622	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
Newfoundland and Labrador	kWh	0.045064402				0.045064402	0.045064402	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
Quebec	kWh	0.045064402				0.045064402	0.045064402	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
Ontario	kWh	0.045064402				0.045064402	0.045064402	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
Manitoba	kWh	0.239945828				0.239945828	0.239945828	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
Saskatchewan	kWh	0.239945828				0.239945828	0.239945828	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
Alberta	kWh	0.381793234				0.381793234	0.381793234	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
British Columbia	kWh	0.381793234				0.381793234	0.381793234	kWh	Green-e Energy Residual Mix Emissions Rates (2018)
Austria	kWh	0.54587				0.54587	0.54587	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Belgium	kWh	0.18906				0.18906	0.18906	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Bulgaria	kWh	0.49543				0.49543	0.49543	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Croatia	kWh	0.56168				0.56168	0.56168	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Cyprus	kWh	0.77021				0.77021	0.77021	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Czech Republic	kWh	0.6123				0.6123	0.6123	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Denmark	kWh	0.50937				0.50937	0.50937	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Estonia	kWh	1.04329				1.04329	1.04329	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Finland	kWh	0.30164				0.30164	0.30164	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
France	kWh	0.0532				0.0532	0.0532	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Germany	kWh	0.72869				0.72869	0.72869	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
United Kingdom	kWh	0.38096				0.38096	0.38096	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Greece	kWh	0.69583				0.69583	0.69583	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Hungary	kWh	0.37898				0.37898	0.37898	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Iceland	kWh	0.48224				0.48224	0.48224	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Ireland	kWh	0.64035				0.64035	0.64035	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Italy	kWh	0.48723				0.48723	0.48723	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Latvia	kWh	0.32276				0.32276	0.32276	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Lithuania	kWh	0.38073				0.38073	0.38073	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Luxembourg	kWh	0.36121				0.36121	0.36121	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Malta	kWh	0.66892				0.66892	0.66892	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Netherlands	kWh	0.53339				0.53339	0.53339	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Norway	kWh	0.28049				0.28049	0.28049	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Poland	kWh	0.90462				0.90462	0.90462	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Portugal	kWh	0.31552				0.31552	0.31552	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Romania	kWh	0.40259				0.40259	0.40259	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Slovakia	kWh	0.19395				0.19395	0.19395	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Slovenia	kWh	0.50223				0.50223	0.50223	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Spain	kWh	0.45091				0.45091	0.45091	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Sweden	kWh	0.03742				0.03742	0.03742	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)
Switzerland	kWh	0.03484				0.03484	0.03484	kWh	European Residual Mixes 2018 v1.2 (published July 2019) - Table 2, Direct GWP (gCO2/kWh)

Input	Value									
Days of annual leave	22.5									
# Employees	11									
Floor area (m2)	143									
Revenue	N/A									
Factor	Value	Unit	Source							
Standing charge	£6.00	/month	http://www.gibelec.gi/sites/default/files/Electricity%20Tariffs%20and%20Charges.pdf							
Electricity price	£0.085	£ / kWh	http://www.gibelec.gi/sites/default/files/Electricity%20Tariffs%20and%20Charges.pdf							
Grid emissions factor	0.71 [1]	kt/GWh	https://www.gibraltar.gov.gi/new/sites/default/files/HMGoG_Documents/2016-GibraltarCityInventory_Report_Final.pdf							
Car emissions factor	0.000180136	MTCO2/km	Carbon Footprint Ltd							
Bike emissions factor	0.000104488	MTCO2/km	Carbon Footprint Ltd							
Bus emissions factor	0.000101064	MTCO2/km	Carbon Footprint Ltd							
Basic Conversions										
	1 kt	1000000	kg	Google Conversion Tool						
	1 GWh	1000000	kWh	Google Conversion Tool						

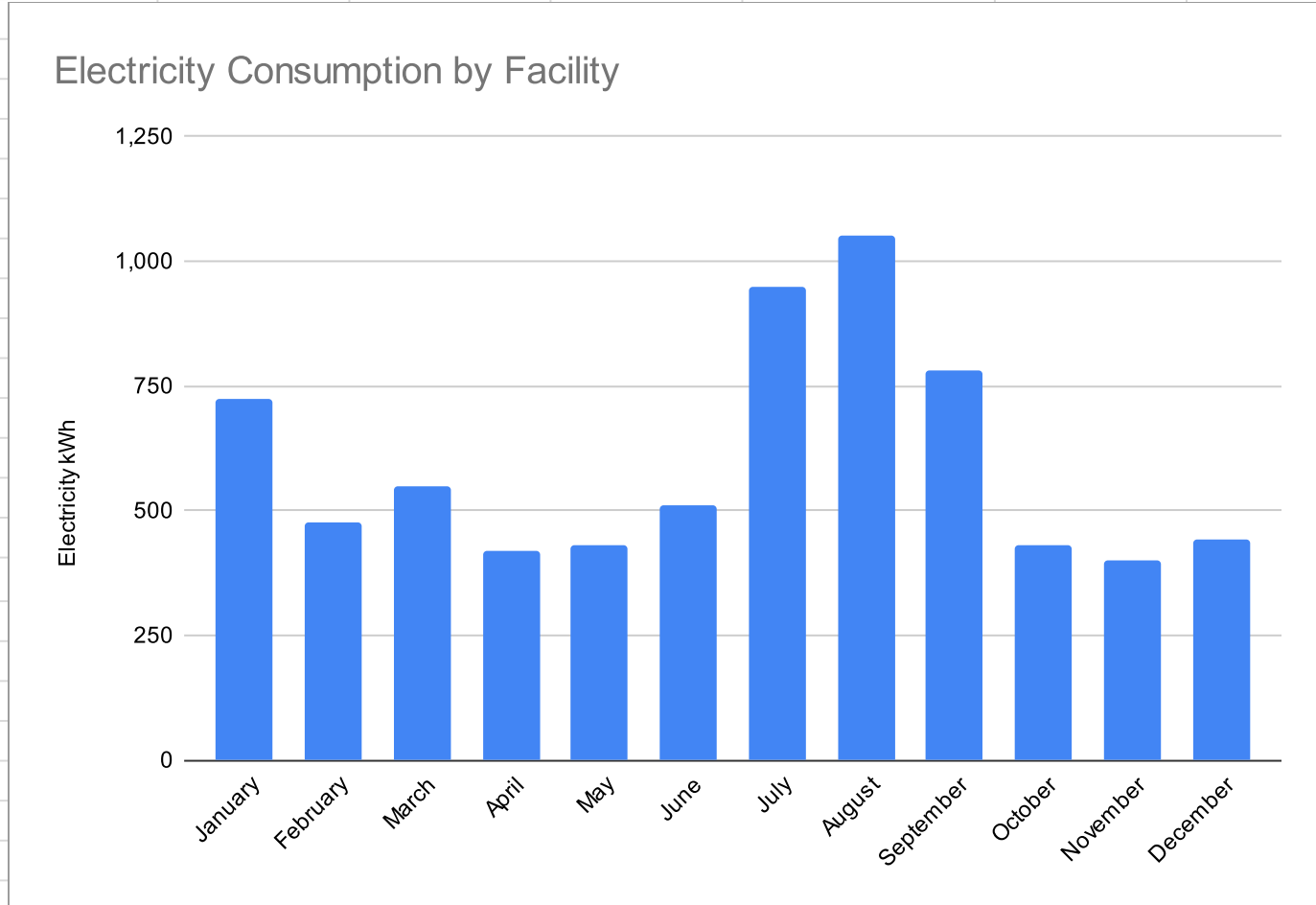
Air Travel (2022)			
Route	# of trips (est.)	MTCO2e/trip**	MTCO2e/route
Gibraltar - London	2.00	0.53	1.06
Gibraltar - London - Las Vegas	1.00	3.40	3.4
Malaga - Barcelona	2.00	0.22	0.44
Malaga - Porto	1.00	0.18	0.18
Malaga - Manila	1.00	3.36	3.36
Seville - Malta	2.00	0.51	1.02
Malaga - Berlin	1.00	0.63	0.63
			0
			0
			0
			0
			0
			0
			10.09
<i>**Inclusive of DEFRA's (UK Government) radioactive forcing rating of 1.891</i>			

Product category	Weighting	Factor
Food/drinks	Low	Industry average per employee
Clothes/textiles	None	Industry average per employee
Paper/stationery	High	Industry average per employee
Computers/IT	High	Industry average per employee
TV/phone equipment	Low	Industry average per employee
Motor	Medium	Industry average per employee
Furniture	Medium	Industry average per employee
Hotels	Medium	Industry average per employee
Data/mobile networks	Low	Industry average per employee
Banking/finance	Low	Industry average per employee
Insurance	Low	Industry average per employee
Education	None	Industry average per employee
Recreational	None	Industry average per employee
	TOTAL	4.2

Location/date	[2]	Electricity kWh
January		725
February		475
March		550
April		420
May		430
June		510
July		950
August		1,050
September		780
October		430
November		400
December		440
Year total		7,160
Emissions (tonnes)		5.08

Note: 2020 figure used for this location as 2021 appears to be an unusually low outlier

Benchmarking: kWh/m2/year	
Your organisation	50
EU average	230 <i>European Commission</i>
USA average	216 <i>US Department of Energy</i>

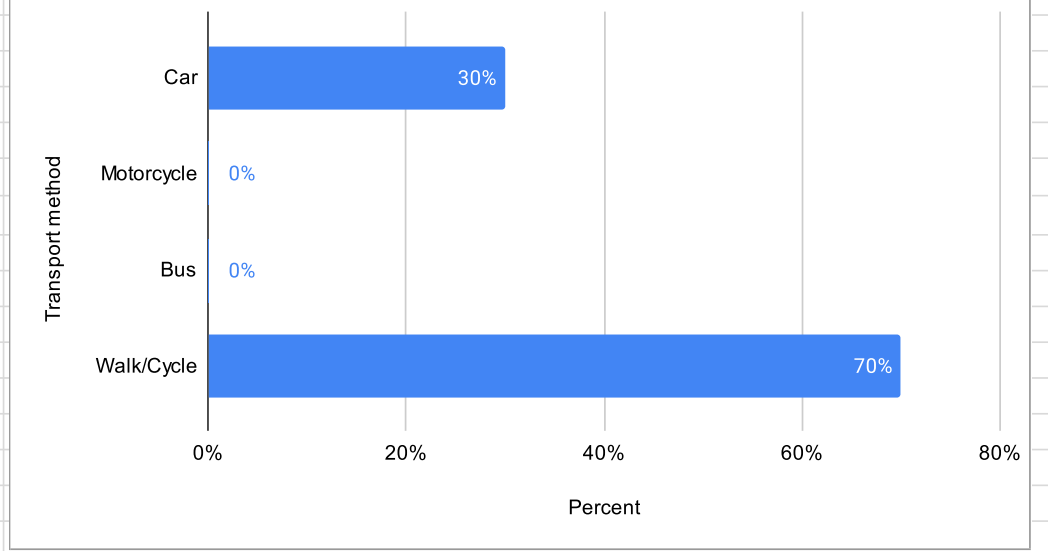


Water	
Factor/employee	0.06002
Emissions	0.66
Waste	
Factor/employee	0.02
Emissions	0.22

Distance key*								
Location	Distance (km)	# Motorbikes	# Cars	# Buses	km Bikes	km Cars	km Buses	# Walk/Cycle/WFH
Other (Spain)	25.0		3		0.0	16966.1	0.0	0
Gibraltar	2.0				0.0	0.0	0.0	7
Totals per transport type:		0	3	0				7
					Total (km):	0.0	16966.1	0.0
					Emissions/type:	0.0	3.1	0.0
					Total (MTCO2e):			3.06
					Count			10
					Average/per:			0.31
					Total (MTCO2e):			3.36

Transport method	Percent
Car	30%
Motorcycle	0%
Bus	0%
Walk/Cycle	70%

Employee commuting methods



Office facility					
# A/C or refrigerating units per type	Full capacity (kg)	Leak rate (%)*	Refrigerant	Global Warming Potential (GWP)*	Emissions (MTCO2e)
3 [3]	5 [4]	10%	R410A	2088	3.13
					0.00
					0.00
					3.13
<i>*Source: The Climate Registry default emissions factors</i>					
Refrigerant Blend	AR5 GWP factor	Gas			
R-401A	17.94	HFC			
R-401B	15	HFC			
R-401C	20.7	HFC			
R-402A	1902	HFC			
R-402B	1205	HFC			
R-403A	1780	PFC			
R-403B	3471	PFC			
R-404A	3943	HFC			
R-407A	1923	HFC			
R-407B	2547	HFC			
R-407C	1624	HFC			
R-407D	1487	HFC			
R-407E	1425	HFC			
R-407F	1674	HFC			
R-408A	2430	HFC			
R-410A	1924	HFC			

[1] Taken from 2018 National Greenhouse Gas Inventory published by the Gibraltar Government

[2] estimated based on usage, excludes fixed standing charges

[3] Approximation deducted from ESOS expenditure report and industry averages

[4] Industry average figure used