

CARBON FOOTPRINT REPORT

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LOBAL



Carbon footprint report for CMP Products Limited 01 November 2021 to 31 October 2022

CMP Products Limited emitted 1,768,075 kgCO2e (Kilogrammes of carbon dioxide equivalent) for 2021/22 (across scope 1 and 2). This can be presented as 1,768 tCO2e (tonnes of carbon dioxide equivalent) with an intensity indicator of 4.26 tCO2e per total full-time equivalent employee (FTE) and 28.11 tCO2e per million GBP £.

When Scope 3 is added, this brings the total to 2,345 tCO2e.

	Total tCO2e Base Year 2019-20	Total tCO2e Previous Year 2020-21	Total tCO2e Current Year 2021-22	% Change from Base line
Scope 1	755	694	713	-5.56
Scope 2	1437	1155	1,055.01	-26.58
Scope 3	124	111	577	365

Table 1 – Tracking emissions over time

Table 2. UK GHG emissions and energy use data for period 01 November 2021 to 31 October 2022

Emissions source	Units	kWh	Carbon (kgCO₂e)	Carbon (tCO ₂ e)		
Scope 1	Scope 1					
Natural gas	3,595,745 kWh	3,595,745	656,367.35	656.37		
Average car (hybrid)	1,234 km	-	148.17	0.15		
Small car (hybrid)	15,372 km	-	1,588.28	1.59		
Van diesel (average up to 3.5 tonnes)	8,435 km	-	1,953.11	1.95		
LPG	10,650 litre	-	16,582.82	16.58		
HFC-134a	5 kg	-	6,721.00	6.72		
CO2	12 kg	-	11.95	0.01		
R-407C	17 kg	-	29,696.76	29.70		
Total Scope 1			713,069	713		





Scope 2	Scope 2				
UK National Grid electricity	5,455,609 k\Wb	5,455,609	1,055,005.74	1,055.01	
Total Scope 1 & 2	Room		1.768.075	1.768	
Total tCO2e per *FTE on gross s	cope 1 & 2		,,	4.26	
Total tCO2e per *fm Turnover	on gross scope	1&2		28.11	
Scope 3					
Transmission and distribution	5,455,609		96,509.73	96.51	
of UK national grid electricity	kWh	5,455,609			
WTT - Natural Gas (kWh)	3,595,745 kWh	3,595,745	111,827.68	111.83	
WTT- UK electricity	5,455,609	F 455 COO	252,321.93	252.32	
(generation)	kWh	5,455,609			
WTT- UK electricity (T&D)	5,455,609 kWh	5,455,609	23,077.23	23.08	
Average car (petrol)	24,833 km	-	4,233.53	4.23	
Flights (Domestic, without RF)	12,882 km	-	1,675.05	1.68	
Flights (International, without RF)	211,970 km	-	15,759.97	15.76	
National rail	10,233 km	-	363.18	0.36	
WTT - Flights - Domestic,	12,882 km		346.65	0.35	
to/from UK - Average		-			
passenger					
WTT - Flights - International,	211,970 km		3,264.34	3.26	
to/from non-UK - Economy		-			
class					
WII - Hybrid - Small car	15,372 km	-	431.66	0.43	
WII - Petrol - Average car	24,833 km	-	1,213.09	1.21	
WII - Hybrid - Average car	1,234 km	-	38.66	0.04	
WII-National rail	10,233 km	-	91.28	0.09	
Water supply	6,342 m3	-	944.96	0.94	
Niotorbike (Average)	1,347 mile	-		0.25	
Average car (Unknown Tuer)	209,033 KIII	-	40,018.20	40.02	
Regular taxi	9,512 KIII 1 965 km	_	1,003.09	0.41	
WTT - IPG	1,303 Kill		1 957 77	1.96	
WTT - Unknown - Average car	269 633 km	_	12 155 04	12.16	
WTT - Motorcycle - Average	2 167 km		67.93	0.07	
WTT - Regular taxi	1 965 km	_	71 38	0.07	
WTT - Local bus (not London)	9.312 km	_	267.08	0.27	
WTT- Vans - Diesel - Average	8.435 km		497.30	0.50	
(up to 3.5 tonnes)		-			
Water treatment	6,342 m3	-	1,725.02	1.73	
Total Scope 3	<u>.</u> .		576,518	577	
Total Scope 1, 2 & 3			2,344,593	2,345	
Total tCO2e per *FTE on gross s	cope 1, 2 & 3			5.65	
Total tCO2e per *£m Turnover	37.27				



Adjustments				
Dual reporting - Green tariff	5,455,609		148,228.91	1/10 22
electricity	kWh	5,455,009		140.23

Notes: For 01 November 2021 to 31 October 2022 the number of Full-time equivalent employees (FTE) was 415 and the Turnover was GBP £62,900,000









Graph 1. Emissions categories percentages Nov 2021- Oct 2022.

Electricity:	52.1%
Scope 1 Natural Gas:	26.3%
Scope 1 Fuels:	0.70%
Scope 1 Business travel - fleet:	0.40%
Scope 1 F-Gas:	1.5%
Scope 3 WTT:	16.4%
Scope 3 Employee Commute:	2%
Scope 3 Business travel- gery fleet:	0.40%
Scope 3 Business travel-flights:	0.7%
Scope 3 Water:	0.10%

Graph 2. Breakdown by Scope Nov 2021- Oct 2022

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Scope 1	86423	97554	93735	89802	114912
Scope 2	98431	73341	103145	100669	115934
Scope 3	52675	45242	53462	54384	58440

Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
79988	43239	23576	7531	5954	11921	58436
93496	105904	102374	106484	100933	100284	102240
49400	47989	43908	42443	40662	41243	46668

Graph 3. Tracking Emissions over Multiple Years

	2019-20	2020-21	2021-22
Scope 1	755.000	694.000	713.000
Scope 2	1437.000	1155.000	1055.006
Scope 3	124.000	111.000	576.516



Carbon Footprint Detailed Breakdown by site (Unit 1)

Unit 1 emitted 189,337 kgCO2e (Kilogrammes of carbon dioxide equivalent) for 2021/22 (across scope 1 and 2). This can be presented as 189 tCO2e (tonnes of carbon dioxide equivalent) with an intensity indicator of 2.28 tCO2e per total full-time equivalent employee (FTE) and 0 tCO2e per million GBP £.

When Scope 3 is added, this brings the total to 242 tCO2e.

Table 2. Unit 1 GHG emissions and energy use data for period 01 November 2021 to 31 October2022.

Emissions source	Units	kWh	Carbon (kgCO₂e)	Carbon (tCO₂e)
Scope 1				
Natural gas	418,780 kWh	418,780	76,444.16	76.44
Total Scope 1	76,444	76		
Scope 2				
UK National Grid electricity	583,788 kWh	583,788	112,892.94	112.89
Total Scope 1 & 2			189,337	189
Total tCO2e per *FTE on gross sc	2.28			
Total tCO2e per *fm Turnover of	n gross scope 1	L & 2		0
Scope 3				
Transmission and distribution of UK national grid electricity	583,788 kWh	583,788	10,327.21	10.33
WTT - Natural Gas (kWh)	418,780 kWh	418,780	13,024.07	13.02
WTT- UK electricity (generation)	583,788 kWh	583,788	27,000.20	27.00
WTT- UK electricity (T&D)	583,788 kWh	583,788	2,469.42	2.47
Total Scope 3			52,821	53
Total Scope 1, 2 & 3	242,158	242		
Total tCO2e per *FTE on gross sc	ope 1, 2 & 3			2.92
Total tCO2e per *fm Turnover o	n gross scope 1	l, 2 & 3		0
Adjustments				
Green tariff electricity	583,788 kWh	583,788	15,861.52	15.86

Notes: For 01 November 2021 to 31 October 2022, the number of Full-time equivalent employees (FTE) was 83



Carbon Footprint Detailed Breakdown by site (Unit 3)

Unit 3 emitted 417,457 kgCO2e (Kilogrammes of carbon dioxide equivalent) for 2021/22 (across scope 1 and 2). This can be presented as 417 tCO2e (tonnes of carbon dioxide equivalent) with an intensity indicator of 2.51 tCO2e per total full-time equivalent employee (FTE) and 0 tCO2e per million GBP £.

When Scope 3 is added, this brings the total to 558 tCO2e.

Table 3. Unit 3 GHG emissions and energy use data for period 01 November 2021 to 31 October2022

Emissions source	Units	kWh	Carbon	Carbon
			(kgCO ₂ e)	(tCO2e)
Scope 1				
Natural gas	996,254 kWh	996,254	181,856.20	181.86
Average car (hybrid)	1,234 km	-	148.17	0.15
Small car (hybrid)	15,372 km	-	1,588.28	1.59
Total Scope 1			183,593	184
Scope 2				
UK National Grid electricity	1,209,351 kWh	1,209,351	233,864.35	233.86
Total Scope 1 & 2	417,457	417		
Total tCO2e per *FTE on gross so	2.51			
Total tCO2e per *£m Turnover o	n gross scope 1	& 2		0
Scope 3				
Transmission and distribution of UK national grid electricity	1,209,351 kWh	1,209,351	21,393.42	21.39
WTT - Natural Gas (kWh)	996,254 kWh	996,254	30,983.50	30.98
WTT- UK electricity (generation)	1,209,351 kWh	1,209,351	55,932.50	55.93
WTT- UK electricity (T&D)	1,209,351 kWh	1,209,351	5,115.56	5.12
Average car (petrol)	24,833 km	-	4,233.53	4.23
Flights (Domestic, without RF)	12,882 km	-	1,675.05	1.68
Flights (International, without RF)	211,970 km	-	15,759.97	15.76
National rail	10,233 km	-	363.18	0.36





WTT - Flights - Domestic, to/from UK - Average	12,882 km	-	346.65	0.35
passenger				
WTT - Flights - International,	211,970 km		3,264.34	3.26
to/from non-UK - Economy		-		
class				
WTT - Hybrid - Small car	15,372 km	-	431.66	0.43
WTT - Petrol - Average car	24,833 km	-	1,213.09	1.21
WTT - Hybrid - Average car	1,234 km	-	38.66	0.04
WTT - National rail	10,233 km	-	91.28	0.09
Total Scope 3			140,842	141

*Notes: For 01 November 2021 to 31 October 2022, the number of Full-time equivalent employees (FTE) was 166.

Carbon Footprint Detailed Breakdown by site (Unit 36)

Unit 36 emitted 1,161,281 kgCO2e (Kilogrammes of carbon dioxide equivalent) for 2021/22 (across scope 1 and 2). This can be presented as 1,161 tCO2e (tonnes of carbon dioxide equivalent) with an intensity indicator of 7.00 tCO2e per total full-time equivalent employee (FTE) and 0 tCO2e per million GBP £.

When Scope 3 is added, this brings the total to 1,544 tCO2e.

Table 4. Unit 36 GHG emissions and energy use data for period 01 November 2021 to 31 Octob	er
2022.	

Emissions source	Units	kWh	Carbon (kgCO₂e)	Carbon (tCO2e)		
Scope 1						
Natural gas	2,180,711 kWh	2,180,711	398,066.99	398.07		
Van diesel (average up to 3.5 tonnes)	8,435 km	-	1,953.11	1.95		
LPG	10,650 litre	-	16,582.82	16.58		
HFC-134a	5 kg	-	6,721.00	6.72		
CO2	12 kg	-	11.95	0.01		
R-407C	17 kg	-	29,696.76	29.70		
Total Scope 1			453,033	453		
Scope 2						
UK National Grid electricity	3,662,470 kWh	3,662,470	708,248.45	708.25		
Total Scope 1 & 2	1,161					
Total tCO2e per *FTE on gross scope	7.00					
Total tCO2e per *£m Turnover on g	0					





Scope 3					
Transmission and distribution of	3,662,470	2 662 470	64,789.09	64.79	
UK national grid electricity	kWh	3,662,470			
WTT - Natural Gas (kWh)	2,180,711	0,711 2,180,711	67,820.11	67.82	
	kWh				
WTT- UK electricity (generation)	3,662,470	3 662 470	169,389.24	169.39	
	kWh	5,002,470			
WTT- UK electricity (T&D)	3,662,470	70 3 662 470	15,492.25	15.49	
	kWh 3,002,470				
Water supply	6,342 m3	-	944.96	0.94	
Motorbike (Average)	1,347 mile	-	246.12	0.25	
Average car (Unknown fuel)	269,633 km	-	46,018.20	46.02	
Local bus (not London)	9,312 km	-	1,003.69	1.00	
Regular taxi	1,965 km	-	409.29	0.41	
WTT - LPG	10,650 litre	-	1,957.77	1.96	
WTT - Unknown - Average car	269,633 km	-	12,155.04	12.16	
WTT - Motorcycle - Average	2,167 km	-	67.93	0.07	
WTT - Regular taxi	1,965 km	-	71.38	0.07	
WTT - Local bus (not London)	9,312 km	-	267.08	0.27	
WTT- Vans - Diesel - Average (up	8,435 km		497.30	0.50	
to 3.5 tonnes)		-			
Water treatment	6,342 m3	-	1,725.02	1.73	
Total Scope 3	382,854	383			
Total Scope 1, 2 & 3	1,544,136	1,544			
Total tCO2e per *FTE on gross scope		9.30			
Total tCO2e per *£m Turnover on g		0			
Adjustments					
Green tariff electricity	3,662,470	3,662,470	99,509.31	99.51	
		1	I		

*Notes: For 01 November 2021 to 31 October 2022, the number of Full-time equivalent employees (FTE) was 166.

Notes about methodology:

CMP Products Limited has adopted an operational control approach to establishing the boundary. The methodology adopted in line with the Greenhouse Gas Protocol1 and the BEIS Environmental Reporting Guidelines2. The calculations were completed on the SmartCarbonTM Calculator3 using the UK Government emissions factors4.

CO2e is the universal unit of measurement to indicate the global warming potential (GWP) of Greenhouse Gases (GHGs), expressed in terms of the GWP of one unit of carbon dioxide. There are seven main GHGs that contribute to climate change, as covered by the Kyoto Protocol: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3). Different activities emit different gases. Using CO₂e allows all greenhouse gases to be measured on a like-for-like basis.



For National grid electricity consumption, CMP Products has included factors for the transmission and distribution of electricity (T&D) losses, which occur between the power station and site(s). The emissions from T&D has been accounted for in Scope 3. As with other Scope 3 impacts, reporting T&D is voluntary but is recommended standard practice by UK Government2.

The market-based emissions of electricity generated from renewable sources is reported separately as an adjustment in accordance with Dual reporting principle of GHG protocol and UK Environmental Reporting Guidelines.

Estimations:

No estimated data has been used for FY21 22

Exclusions:

- CMP Products Limited has not included the carbon emissions from the overseas offices.
- CMP Products Limited has not included the following scope 3 categories:

Scope 3 categories	Included	Justification
	yes/no	
1: Purchased Goods and Services	Water only	
2: Capital Goods	No	Not applicable
3: Fuel- and Energy-Related Activities Not	Yes	
Included in Scope 1 or Scope 2		
4: Upstream Transportation and Distribution	No	Not applicable
5: Waste Generated in Operations	No	To be reported FY 22-23
6: Business Travel	Yes	
7: Employee Commuting	Yes	
8: Upstream Leased Assets	No	Not applicable
9: Downstream Transportation and Distribution	No	Not applicable
10: Processing of Sold Products	No	Not applicable
11: Use of Sold Products	No	Not applicable
12: End-of-Life Treatment of Sold Products	No	Not applicable
13: Downstream Leased Assets	No	Not applicable
14: Franchises	No	Not applicable
15: Investments	No	Not applicable

Carbon Footprint Verification:

This verification exercise has been undertaken by an independent third party auditor (Francisco Manuel Dominguez Bueno) in accordance with the principles contained within 'ISO 14064-3: 2019 Specification with guidance for the verification and validation of greenhouse gas statements', namely: impartiality, evidence-based approach, fair presentation, documentation and conservativeness.

It is the opinion of the Verifier that CMP Products Ltd have developed their Scope 1 and 2 GHG emissions inventory in accordance with its own procedures (based on the GHG Protocol) and



through the use of the SmartCarbon Calculator. Limitations in utility data traceability in the baseline year has been addressed in Year 2 (FY21 22) reporting. Mr. Francisco Manuel Dominguez Bueno undertook a pre-defined verification process and the GHG emissions for FY21 22 reported through the SmartCarbon Calculator were accurate. There were no residual material issues. GHG emissions data has been confirmed as (in kgCO2e):

Reporting Period	Scope 1	Scope 2	Total (Scope 1,2,3)
FY 2021/22	713,069 kgCO2e	1,768,075 kgCO2e	2,344,593 kgCO2e

Carbon Reduction Plan.

Commitment to achieving Net Zero

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

CMP Products Limited is committed to achieving Net Zero emissions by 2040.

We project that carbon emissions will decrease over the next five years to 1,758,444tCO2e by 2028. This is a reduction of 25%

Progress against these targets can be seen in the graph below:





2019-20 2020-21 2021-22 2022-23 2023-24 2024-25 2025-26 2026-27 2027-28 2028-29 2029-30



Completed Carbon Reduction Initiatives

The following GHG reduction and energy efficiency measures and projects have been completed or implemented since the FY19/20 baseline. The carbon emission reduction achieved by these schemes equate to reductions of 5.56% in Scope 1 and 26.58% in Scope 2.

CMP Products Limited has achieved the objective of reducing the average monthly electricity consumption against total hours worked across the three Cramlington sites (Unit 1, Unit 3 and Unit 36). The objective for this financial year FY21/22 was a 5% reduction of 17.2 kWh that was the result of the base financial year FY20/21.

CMP Products achieved a reduction of 6.39%, achieving 16.1 kWh per hrs worked. In order to achieve this result, the company has:

- Increase production operative head count for Monday to Friday work patterns.
- Increase equipment reliability / availability through TPM.
- Optimised equipment performance, by addressing historical defects, (Wickman Spindles)

• Restructured the production-planning department, to focus on machinery optimisation through larger batch production.

- Expanded the installation of lights with timers or PIR sensors.
- Implemented shutdown procedure for manufacturing machinery and electrical equipment in Unit 36.
- Installed compressed air pressure restrictors at point of use.
- Bought energy efficient equipment where possible.
- Put heating and tamper control in place for all shop floor areas.
- Reduced usage through machinery change and upgrade (nickel plant).
- Purchased sustainable electrical green energy.

GHG & Energy Reduction Initiatives (Energy Objectives / Targets FY2022/23)

CMP Products Limited plans to reduce the energy usage per worked hour by 5% from November 2022 to October2023. In order to achieve this objective, CMP will:

- Improve the efficiency of the older machinery in the shop floor.
- Replace the older machinery when possible.
- Expand the automatic storage system.
- Expand the conveyors in the shop floor in Unit 3.
- Change the high energy cleaning solution used in the Plate Plant, to a lower temperature chemical.
- Install Voltage optimisation equipment across all sites.
- Replace water/ heating system in Unit 36
- Following the shutdown procedure successfully implemented in Unit 36, CMP will implement shutdown procedures in Unit 3 and 1



Operational improvements will also include:

- Continued no work allowed in weekends (except month end weekend).
- Ventilation and cooling system are to be analysed for a better energy control.
- Replace existing FLT fleet due to the implementation of more efficient systems and processes.

• Review site-specific energy performance results with the appointed site "Energy Champions" and implement energy saving projects.

GHG Carbon Emissions Benchmarking by Industry:

CMP Products has compared their current GHG Carbon Emissions against the industry average. This information has been taken from the UK Office for National Statistics (ONS) website, which publishes GHG emissions intensity by industry.

CMP Products falls under the Industry described as "Fabricated metal products, except machinery and equipment, excluding weapons and ammunition". The industry average is 210 tCO2e per million GBP £.

CMP Products has calculated that scopes 1 and 2 GHG Carbon Emissions are 28.11 tCO2e per million GBP £. When scope 3 is included, the GHG Carbon Emissions are 37.27 tCO2e per million GBP £





Definitions:

Baseline emissions - are the reference point against which emissions reduction can be measured.

Carbon footprint - The total set of greenhouse gas emissions (GHG) caused directly and indirectly by an individual event, organisation, or product expressed as Carbon Dioxide Equivalent (CO2e). (Source: Greenhouse Gas Protocol).

CO2e - is the universal unit of measurement to indicate the global warming potential (GWP) of Greenhouse Gases (GHGs), expressed in terms of the GWP of one unit of carbon dioxide. There are seven main GHGs that contribute to climate change, as covered by the Kyoto Protocol: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3). Different activities emit different gases. Using CO₂e allows all greenhouse gases to be measured on a like-for-like basis.

Dual reporting - There are two ways to report carbon impact of electricity, by using the national grid factor (location-based method) and by using the supplier provided factor (market-based method). GHGP guidance requires organisations using grid electricity to use the National Grid Average Factor (location based) method. However, if the organisation purchases renewable energy via a green tariff, they have a choice to also report using market-based method.

If market-based method is use, then it is essential (as per GHGP and UK guidance) that organisational footprint is calculated using national grid factor (for SECR compliance) and the market-based figure is reported separately. If an organisation is wishes to report by market-based method (for example to maintain consistency with other entities within the broader organisation) then they can refer to the residual fuel mix disclosure available at https://www.gov.uk/government/publications/fuel-mix-disclosure-data-table/fuel-mix-disclosuredata-table#fn:1

Guarantees of origin - a tracking mechanism that allows corporate purchasers of renewable power to ascertain that the energy was generated using clean technology. Also known as a GO or GoO, Guarantees of Origin create a tamper-proof chain of information around the energy's progress from generation to delivery.

Procurement Policy Note 06/21: Taking account of Carbon Reduction Plans in the procurement of major government contracts. This note sets out how to take account of Carbon Reduction Plans in the procurement of major central government contracts. Organisations tendering for work above a specific spend threshold must have a Carbon Reduction Plan. Procurement Policy Note 06/21: Taking account of Carbon Reduction Plans in the procurement of major government contracts – GOV.UK (www.gov.uk)

SECR Regulations - apply to all large businesses (as defined in the Companies Act), Limited Liability Partnerships and quoted companies. All organisations that meet two or more of the following requirements must comply.

- Turnover £36 million or more
- Balance sheet total £18 million or more
- 250 employees or more

The SECR report has to be filed with your company accounts each year and lodged with Companies House.



Scope 1 (direct emissions) emissions are those from activities owned or controlled by your organisation. Examples of Scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces and vehicles; and emissions from chemical production in owned or controlled process equipment.

Scope 2 (energy indirect) emissions are those released into the atmosphere that are associated with your consumption of purchased electricity, heat, steam and cooling. These indirect emissions are a consequence of your organisation's energy use, but occur at sources you do not own or control.

Scope 3 (other indirect) emissions are a consequence of your actions that occur at sources you do not own or control and are not classed as Scope 2 emissions. Examples of Scope 3 emissions are business travel by means not owned or controlled by your organisation, waste disposal, materials or fuels your organisation purchases. Deciding if emissions from a vehicle, office or factory that you use are Scope 1 or Scope 3 may depend on how you define your operational boundaries. Scope 3 emissions can be from activities that are upstream or downstream of your organisation. More information on Scope 3 and other aspects of reporting can be found in the Greenhouse Gas Protocol Corporate Standard.

References:

1. The GHG Protocol Corporate Accounting and Reporting Standard. Revised Edition (2015) World Resource Institute and World Business Council for Sustainable Development. https://ghgprotocol.org/corporate-standard

2. Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance (March 2019) UK Government Department for Business, Environment and Industrial Strategy.

3. SmartCarbon Calculator: https://www.smartcarboncalculator.com/

4. Greenhouse gas reporting: conversion factors - Full set (for advanced users). https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting

5. Corporate Value Chain (Scope 3) Standard. https://ghgprotocol.org/standards/scope-3-standard