



Mental Health UK

2022 Greenhouse gas (GHG) inventory report

Prepared in conformance with ISO 14064-1 and produced by **Our Carbon**

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Executive Summary

This report on the total greenhouse gas (GHG) emissions for Mental Health UK aims to give a comprehensive and robustly quantified report for their 2022 financial year: 01/04/21 – 31/03/22. This is a **baseline year report** which has been prepared in accordance with ISO 14064-1 to present the total emissions associated with Mental Health UK.

Below we present the total GHG emissions in Scopes 1-3, in line with the GHG protocol.

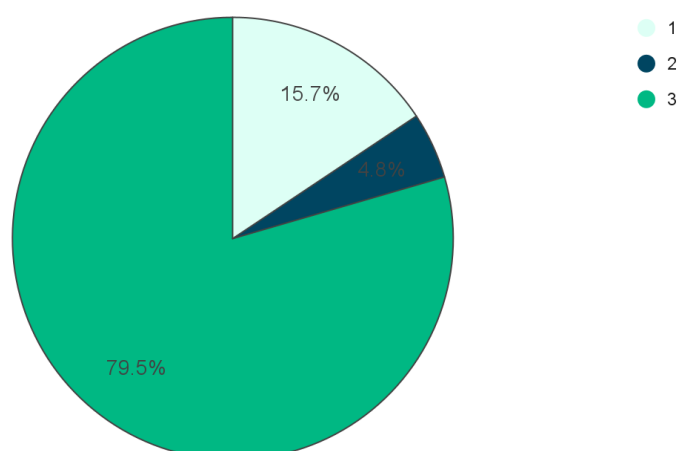
Total emissions by Scope

Scope	2022 Emissions (tonnes CO2e)	%
1 (Direct emissions)	4.09	15.67
2 (Indirect emissions)	1.26	4.83
3 (Other indirect emissions)	20.75	79.5
Total emissions	26.10	100

* Excluding Scope 3 category 5, and refrigerant emissions (falling into Scope 1 - fugitive emissions).

The total emissions by scope data is presented in our online shareable profile, which also includes a breakdown by item. This is shared with the reporting company separately.

Emissions breakdown by Scope (tonnes CO2e)



Introduction

Company information

Mental Health UK provides support and services to people whose lives are affected by mental health problems. Bringing together four charities from across the country, Mental Health UK have been supporting people with their mental health for nearly 50 years.

Inventory team and contact information

Our Carbon

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Reporting period

This inventory report covers the period from 01/04/21 – 31/03/22. This has been established as Mental Health UK's **baseline year**.

Organisational boundaries

What are organisational boundaries?

Organisational boundaries define where the scope of an organisation begins and ends. As organisations vary in their structures (parent companies, groups, subsidiaries, associated/affiliated companies, franchise, and others), it is important to define organisational boundaries when GHG reporting, so we know what to account for.

There are two established frameworks in which to approach this:

1. **Equity share approach** – this approach accounts for GHG emissions according to an organisation's share of equity in the organisation/operation in question. For example, if an organisation owned 50% of an operation, say a marketing business, it would only report 50% of the emissions from said business.
2. **Control share approach** – there are two types of control approach, financial control and operational control

- a. Financial control – this approach accounts for GHG emissions from facilities over which it has financial control. An organisation is considered to have financial control when it bears both the majority of the risk and benefit from the operation's financial performance.
- b. Operational control – this approach accounts for emissions from facilities over which it has operational control. This is the most common approach as it is usually most appropriate to consider emission sources from a lens of operational control.

Chosen method

The method chosen for Mental Health UK is the operational control approach. This allows Mental Health UK to align their assessment of their carbon account with their operations.

Reporting/operational boundaries

What are reporting/operational boundaries?

Reporting/operational boundaries establish the boundaries of the operations for GHG reporting. They are typically categorised into three Scopes in conformance with the GHG Protocol: Scope 1, 2 and 3. Scope 1 corresponds to 'Direct emissions'. These are emissions from sources that are directly owned or controlled by your organisation. Scope 2 corresponds to 'Indirect emissions'. These are emissions from electricity, heat and steam purchased by your organisation. Scope 3 corresponds to 'Other indirect emissions'. These are associated with all other emissions sources from an organisation that it does not have direct ownership or control but are indirectly responsible for. There are 15 categories under Scope 3, such as waste, water, employee commuting, and the transport associated with an organisation's value chain. Establishing the Scopes and categories to report on establishes the reporting/operational boundaries for an organisation.

Established reporting/operational boundaries

In this report, we have comprehensively assessed Scopes 1, 2 and 3, including all 15 Scope 3 categories. Due to the nature of Mental Health UK's operations, category 2-4 and 8-15 are not applicable.

Materiality

We have not excluded any business items from consideration under any materiality boundary.

Verification

This report has not been verified by a third-party. This option is available to the reporting company should they wish to do so.

Carbon Accounts

Quantification approaches

Each business item and its associated emission source has been calculated separately. Each item has then been assessed by the Our Carbon uncertainty framework (see the uncertainty section pg. 8 for details) and an additional number of emissions has been added to the total to account for any uncertainty in data and emission factor quality. The final total of emissions is detailed in the 'Total Emissions (incl certainty score)' column in the complete emissions breakdown section for each business item, and then summed in Scopes (1-3).

In each instance, a direct measurement of GHG was not possible. Therefore, each calculation involves multiplying an annual figure (e.g. gas consumption in kWh) by its equivalent emission factor.

Changes to approaches previously used

There have been no changes to approaches previously used.

Emission factor sources

We use the highest quality emission factor available to us for each item. We source from national bodies such as the UK Government DEFRA and use the best third-party sources available to us for other items not covered by governmental or nationally established research bodies. A full list of emission factor sources for this report can be found in the appendix.

GWP values and sources

GWP stands for 'Global Warming Potential'. Each GHG has a GWP which details how much more warming that GHG is relative to CO₂ (which has a GWP of 1). Aside from DEFRA's 2021 conversion factors, which source GWP from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4), all other emission factors used in this report only disclose an emission factor for CO₂e, and do not disclose sources of GWP values.

Biogenic emissions

This account contains no biogenic emission sources or removals and so this section is not relevant to Mental Health UK.

Exclusions

Scope 3 category 5 was excluded from this carbon account due to no available data or information. Refrigerant emissions from appliances, falling into Scope 1 - fugitive emissions, were also excluded from this carbon account due to no available data or information.

Complete emission breakdown

Please see the table at the end of the document for the complete breakdown of reported emissions.

Uncertainty

Our Carbon uncertainty framework

To manage uncertainty in carbon calculations, Our Carbon has established an uncertainty framework. It is based on two rating scores:

1. **Data Evidence Quality:** the quality of data provided from the reporting organisation.
2. **Our Carbon Evidence Quality:** the quality of the source of emissions factor used.

Each business item is rated on these criteria, and are given a score between 0 and 5, with 5 being the highest. We then add an additional percentage (%) number of emissions to the initial calculation, providing a total emissions number which includes our uncertainty factoring. We then sum up these final numbers by category and Scope.

The percent (%) of emissions added to the initial calculation is detailed by score below:

Score	Percent (%)
0	30
1	25
2	20
3	15
4	10
5	5

A score of 5 results in a 5% addition, and a score of 0 results in a 30% addition, with any number in the middle of 0-5 giving an % addition scaled between these two parameters. For example, a score of 1.5 would result in a 22.5% addition, and so on.

The scores are assessed using the following criteria:

Data Evidence Quality

- 0 = No evidence provided
- 1 = Estimate using guess work

- 2 = Estimate including the use of some basis of information, such as calendar items, or informal note taking.
- 3 = Modelled estimate. Some evidence provided but requires assumptions to derive the annual figure. An example would be calculating business travel using a mileage total for a trip, and extrapolating to the total number of trips taken in a year. **OR** exact numbers given with little evidence.
- 4 = Some high level of evidence provided (such as invoices) but some requirement to adjust the information in line with the accounting year.
- 5 = All evidence provided by invoice or in granular detail. For example, electricity invoices for the exact period of the account.

Our Carbon Evidence Quality

- 0 = No sourced emission factor
- 1 = Emission factor used from a source which has not been verified by more than one source of information.
- 2 = Emission factor used by other sources, but consensus on the quality of the emission factor is not established. Examples of this include emission factors from evolving areas of research, such as digital emissions.
- 3 = Average or broad emission factor used, derived from and cited by multiple sources. Considered to be credible by Our Carbon.
- 4 = Emission factor from credible source but has experienced historical changes as the science evolves and changes year on year.
- 5 = Emission factor from credible source used by national organisations and governments, considered common practice guidance emission source.

Applying this framework to carbon calculations is **optional** for the reporting company. However, we do recommend our model as a qualitative means to account for any uncertainties in the carbon account. We engage reporting organisations about the calculation quality and ways in which both parties can improve scores and reduce additions.

Impact of uncertainty framework on emission totals

The uncertainty framework resulted in an additional 2646.54 kg CO₂e to the initial carbon calculations for Mental Health UK.

Appendix

Full emission factor sources list

- [1]** Albert (2021) *Methodology paper - albert carbon calculator*.
- [2]** Costenaro, D. & Duer, A. (2012) *The Megawatts behind Your Megabytes: Going from Data-Center to Desktop*. In: 2012 p.
- [3]** Department for Business Energy and Industrial Strategy (BEIS) (2021) *Energy Consumption in the UK*.
- [4]** Department for Environment Food & Rural Affairs (DEFRA) (2021) *Greenhouse gas reporting: conversion factors*.
- [5]** Ecoact (2021) *Open-source Carbon Calculation Methodology for Homeworking*.
- [6]** Greenpixie (2022) *Website Carbon Report*. 2022.
- [7]** Itten, R., Hischier, R., Andrae, A.S.G., Bieser, J.C.T., Cabernard, L., Falke, A., Ferreboeuf, H., Hilty, L.M., Keller, R.L., Lees-Perasso, E., Preist, C. & Stucki, M. (2020) Digital transformation—life cycle assessment of digital services, multifunctional devices and cloud computing. *The International Journal of Life Cycle Assessment*. 25 (10), 2093–2098. doi:10.1007/s11367-020-01801-0.
- [8]** Rana, S., Pichandi, S., Moorthy, S., Bhattacharyya, A., Parveen, S. & Fangueiro, R. (2015) *Carbon Footprint of Textile and Clothing Products*. In: pp. 141–166. doi:10.1201/b18428-10.
- [9]** Stieberova, B., Broumova, M., Matousek, M. & Zilka, M. (2022) Life Cycle Assessment of Metal Products Produced by Additive Manufacturing: A Metal Mold Case Study. *ACS Sustainable Chemistry & Engineering*. 10 (16), 5163–5174. doi:10.1021/acssuschemeng.1c08445.

Emission breakdown tables

Please see the tables on the following pages.

Category	Item Description	Annual Figure	Emission factor descriptor	Unit for conversion	Emission Factor (kg CO2e)	kgCO2e	Data evidence quality	Our Carbon evidence quality	Total certainty score	Total emissions in tonnes CO2e (incl. certainty factor)	Notes	Source
Scope 1 (Direct) Direct GHG emissions occur from sources that are owned or controlled by the company.										4.09		
Stationary combustion	Gas consumption	19867.68	Natural gas	kWh (Gross CV)	0.18316	3638.96	2	5	3.5	4.09		DEFRA 2021
Scope 2 (Indirect) Purchased Electricity, Heat and Steam										1.26		
Electricity consumption	Electricity consumption	5263.304	UK electricity	kWh	0.21233	1117.56	2	5	3.5	1.26		DEFRA 2021
Scope 3 (Indirect) All other indirect emissions sources										20.75		
1 - Purchased goods & services	Clothing	2300	T-shirts	Qty	4	9200.00	3	4	3.5	10.35	Emission factor derived for each Qty of Tshirt Assuming they are made up of cotton Assumptions based on similar product available online	" https://www.researchgate.net/publication/276193965_Carbon_Footprint_of_Textile_and_Clothing_Products "
1 - Purchased goods & services	Medals	4	Metal	Kg	1.77	7.08	3	4	3.5	0.01	Assuming each medal weighs 0.02 kg	https://www.winnipeg.ca/finance/findata/matmgt/documents/2012/682-2012/682-2012_Appendix_H-WSTP_South_End_Plant_Process_Selection_Report/Appendix%207.pdf
1 - Purchased goods & services	Online data storage	268.21	Online Data Storage	GB	1.0871296	291.58	5	4	4.5	0.31		https://www.aceee.org/files/proceedings/2012/data/papers/0193-000409.pdf
2 - Purchased goods & services	Social Event (Food+Travel)	57.83027481	Food and Travel	kg CO2e	1	57.83	4	4	4	0.06		References in Social Event tab
1 - Purchased goods & services	Hotel stay	12	Hotel stay (UK)	Room per night	13.9	166.80		5	5	0.18		DEFRA 2021
1 - Purchased goods & services	Website	805133	Emission per visit	Visits	0.00073	587.75	4	4	4	0.65		Green Pixie to source specific website emissions - https://greenpixie.com/
6 - Business travel	Flights	534.30088	Domestic (to/from UK)-average passenger	pax.km	0.24587	131.37	5	5	5	0.14		DEFRA 2021
6 - Business travel	Car	691	Average car - petrol	miles	0.28053	193.85	5	5	5	0.20		DEFRA 2021
6 - Business travel	Taxis	234.641772	Regular taxi	km	0.20826	48.87	5	5	5	0.05		DEFRA 2021
6 - Business travel	Bus	12.87472	Local bus (not London)	pax.km	0.11774	1.52	5	5	5	0.00		DEFRA 2021
6 - Business travel	Rail	6786.989115	National rail	pax.km	0.03549	240.87	5	5	5	0.25		DEFRA 2021
6 - Business travel	Rail	54.71756	London underground	pax.km	0.02781	1.52	5	5	5	0.00		DEFRA 2021
7 - Employee commuting	WFH Electricity Consumption	864	WFH Electricity Consumption (UK Electricity)	kWh	0.21233	183.45	4	4	4	0.20		https://info.eco-act.com/en/homeworking-emissions-whitepaper-2020
7 - Employee commuting	WFH Gas Consumption	9604.8	WFH Gas Consumption (UK Gas)	kWh	0.18316	1759.22	4	4	4	1.94		https://info.eco-act.com/en/homeworking-emissions-whitepaper-2020
7 - Employee commuting	WFH Gas Consumption	28681	WFH Gas Consumption (UK Gas)	kWh	0.18316	5253.21	4	4	4	5.78		https://info.eco-act.com/en/homeworking-emissions-whitepaper-2020
7 - Employee commuting	WFH Electricity Consumption	2580	WFH Electricity Consumption (UK Electricity)	kWh	0.21233	547.81	4	4	4	0.60		https://info.eco-act.com/en/homeworking-emissions-whitepaper-2020
7 - Employee commuting	Rail	400.96	National rail	pax.km	0.03549	14.23	5	5	5	0.01		DEFRA 2021
7 - Employee commuting	Rail	245.76	London underground	pax.km	0.02781	6.83	5	5	5	0.01		DEFRA 2021
Total Co2e in kgs						23450.30		Check:	26.10			
Weighted total certainty score						3.74						
Weighted certainty score additional emissions						2646.54						
Total CO2e for offset						26096.84						
Total CO2e in tonnes						26.10						