

## Carbon footprint report for Metpro 01 January 2021 to 31 December 2021

Metpro emitted 57,333 kgCO<sub>2</sub>e (Kilogrammes of carbon dioxide equivalent) for 2021 (across scope 1 and 2). This can be presented as 57 tCO<sub>2</sub>e (tonnes of carbon dioxide equivalent) with an intensity indicator of 1.15 tCO<sub>2</sub>e per total full-time equivalent employee (FTE) and 3.41 tCO<sub>2</sub>e per million GBP £.

When Scope 3 is added, this brings the total to 892 tCO<sub>2</sub>e.

**Table 1. UK GHG emissions and energy use data for period 01 January 2021 to 31 December 2021**

Emissions source	Units	kWh	Carbon (kgCO <sub>2</sub> e)	Carbon (tCO <sub>2</sub> e)
<b>Scope 1</b>				
Average car (petrol)	20,085 km	14,486	3,500.95	3.50
Average car (diesel)	68,194 km	45,813	11,485.97	11.49
Average car (hybrid)	109,435 km	52,990	13,079.72	13.08
<b>Total Scope 1</b>			<b>28,067</b>	<b>28</b>
<b>Scope 2</b>				
UK National Grid electricity	137,836 kWh	137,836	29,266.72	29.27
<b>Total Scope 1 &amp; 2</b>			<b>57,333</b>	<b>57</b>
<b>Total tCO<sub>2</sub>e per *FTE on gross scope 1 &amp; 2</b>				<b>1.15</b>
<b>Total tCO<sub>2</sub>e per *£m Turnover on gross scope 1 &amp; 2</b>				<b>3.41</b>
<b>Scope 3</b>				
Transmission and distribution of UK national grid electricity	137,836 kWh	137,836	2,589.94	2.59
Flights (Long-haul, with RF)	96,207 km	-	41,255.31	41.26
Motorbike	3,600 mile	-	657.86	0.66
Average car (diesel)	19,312 km	-	3,252.74	3.25
Average car (petrol)	115,873 km	-	20,197.78	20.20
Commercial and industrial waste (Combustion)	0 tonne	-	6.01	0.01
WTT- UK electricity (generation)	134,086 kWh	134,086	7,413.61	7.41
WTT- UK electricity (T&D)	134,086 kWh	134,086	655.68	0.66
Freighting goods - Road	1,785,153 tonne.km	-	370,954.81	370.95
<b>Total Scope 3</b>			<b>834,397</b>	<b>834</b>
<b>Total Scope 1, 2 &amp; 3</b>			<b>891,730</b>	<b>892</b>
<b>Total tCO<sub>2</sub>e per *FTE on gross scope 1, 2 &amp; 3</b>				<b>17.83</b>
<b>Total tCO<sub>2</sub>e per *£m Turnover on gross scope 1, 2 &amp; 3</b>				<b>53.08</b>
Adjustments				

\*Notes: For 01 January 2021 to 31 December 2021 the number of Full-time equivalent employees (FTE) was 50 and the Turnover was GBP £16,800,000

**Notes about methodology:**

- Metpro has adopted an operational control approach to establishing the boundary. The methodology adopted in line with the Greenhouse Gas Protocol<sup>1</sup> and the BEIS Environmental Reporting Guidelines<sup>2</sup>. The calculations were completed on the SmartCarbon™ Calculator<sup>3</sup> using the UK Government emissions factors<sup>4</sup>.
- CO<sub>2</sub>e 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 (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>). Different activities emit different gases. Using CO<sub>2</sub>e allows all greenhouse gases to be measured on a like-for-like basis.
- For National grid electricity consumption, THE ORGANISATION 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 Government<sup>2</sup>.

**Additional Notes:**

Metpro Group Ltd have now collated carbon emissions data for years 2019, 2020, and 2021. Following these figures being vetted, we have offset all Scope 1 & 2 emissions for these three years, resulting in our entire domestic operation now being carbon neutral.

We are now looking at how we can reduce these emissions in the coming years with our intention to be 100% carbon neutral by the end of 2024.



## Definitions:

**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 (CO<sub>2</sub>e). (Source: Greenhouse Gas Protocol).

**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.
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/](https://www.smartcarboncalculator.com/)
4. Greenhouse gas reporting: conversion factors - Full set (for advanced users). More at this link: <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>