Carbon Footprint Report

for

Intermedical (UK) Ltd

Baseline year - 01.03.24 to 28.02.25

Authored by Paul Brown on 20th March 2025

Introduction

Project Background

This advice includes:

- The delivery of a carbon footprint audit and production of an associated carbon footprint report (Scope 1 & 2 only)
- Information about the Government's net zero strategy and direction of travel relevant to the SME environment
- Advice and tips on how to reduce carbon emissions
- Information and advice on carbon offsetting for those 'hard to reach' residual carbon emissions which cannot be realistically reduced by other means
- Encouragement to sign up to the Government's SME Climate Commitment

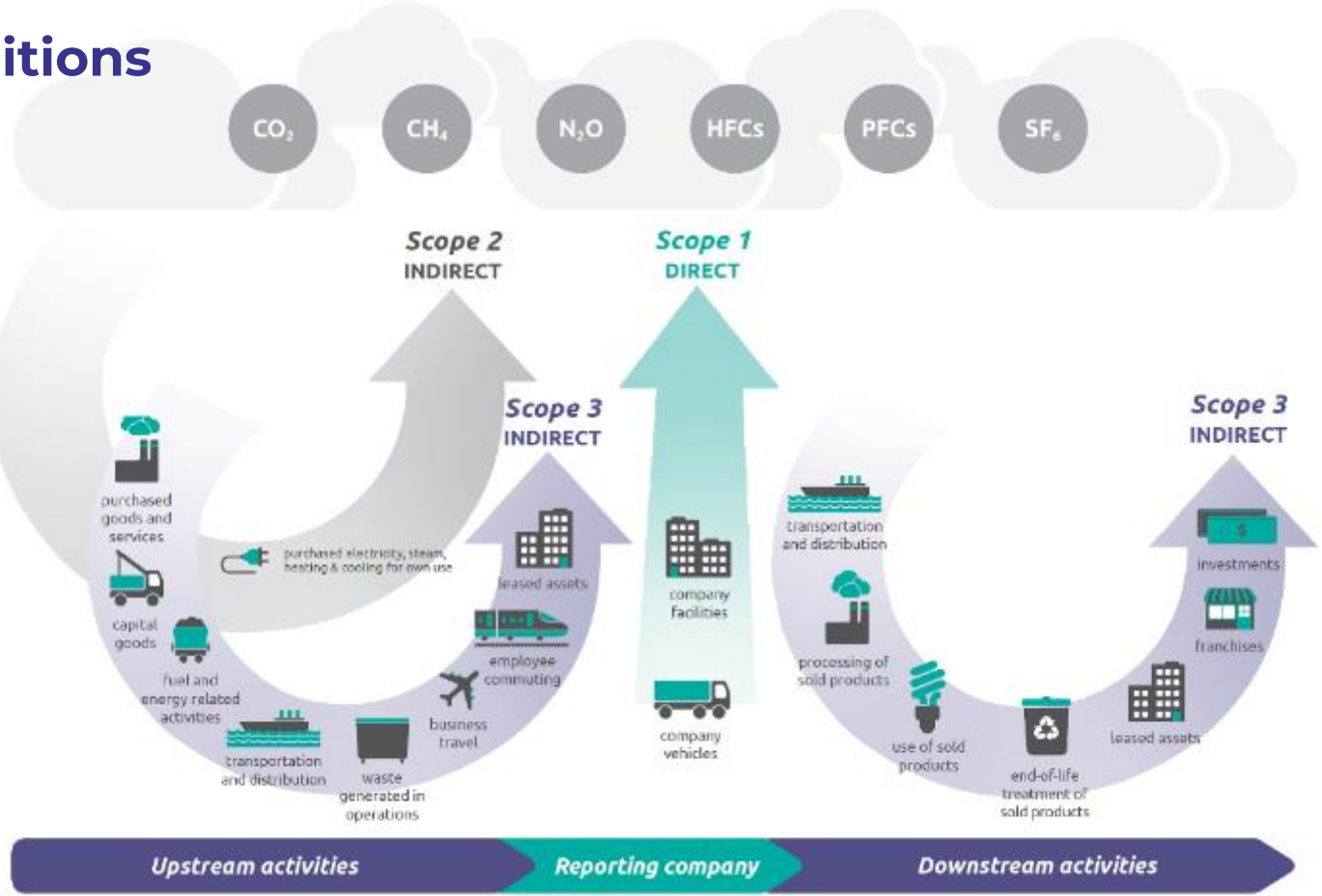
Methodology

Depending on the SMEs preference, contact was made by the Decarbonisation Adviser via either a personal visit to their business premises or via an online meeting. At the initial meeting, it was explained what information and data would be needed to calculate the SMEs Scope 1 and 2 emissions. This was based on how the business operates and this was all explored in the initial meeting.

A Baseline Year for calculating carbon emissions was agreed based on the circumstances of the business in question 01.03.24 to 28.02.25 year was used (unless there was a specific reason why this was not a representative year for the business).

Carbon emissions were calculated based on the GHG (Greenhouse Gas) protocol accounting standards. Conversion factors used are the UK Government published factors for the year in question. Carbon emissions are illustrated in the format 'tCO2e' (tonnes of carbon dioxide equivalent). For purchased electricity, the 'location based' method was used to calculate emissions unless the SME was self-generating their own electricity on site.

Scope definitions



Approach for Intermedical (UK) Ltd

Established in 1997, Intermedical UK Ltd has been a leading provider of portable oxygen solutions and respiratory care. The company has supported thousands of customers, including some of the most renowned hospitals across the UK, by supplying reliable and innovative respiratory products.

Having achieved ISO 13485 certification in 2006, Intermedical UK Ltd continues to adhere to this internationally recognised standard, which governs quality management systems for medical devices. This commitment ensures that customers receive products that meet the highest standards of safety and performance.

The Premises – Unit 6

The company operates from a brick and steel-frame industrial unit, featuring steel cladding and a pitched roof constructed from corrugated steel. The roof is fitted with corrugated plastic skylights to allow natural light ingress. It is estimated that the building was constructed in the late 1990s.

Layout

The ground floor of the premises comprises a reception, restroom facility and warehouse area.

The first floor mezzanine houses two offices and the service department.

This report provides an overview of Unit 6, emphasising its capabilities and the facilities.

Utilities Report
The building is equipped with electricity for its energy needs.

Heating
There are a mixture of thermostatically and non thermostatically controlled wall mounted panels for heat provision. Hot water provision is via a small wall mounted electric water heater.

Lighting
The building has legacy lighting throughout.

Insulation
There is no insulation in the walls or the ceiling voids.

Glazing
The premises is single glazed throughout.

Special Equipment
There is a small plugin compressor.

Summary

This report outlines the utility provisions within Unit 6, including heating, lighting, insulation, and glazing. It is important to note that ongoing efforts are being made to further improve energy efficiency.

Figure for electricity consumption for Unit 6 has been obtained.

Electricity – 32,792 kWh per annum

The baseline year of 01.03.24 to 28.02.25 will be used to calculate the carbon footprint. The 2024 GHG conversion factors are applied to the calculation.

The Premises – Unit 9

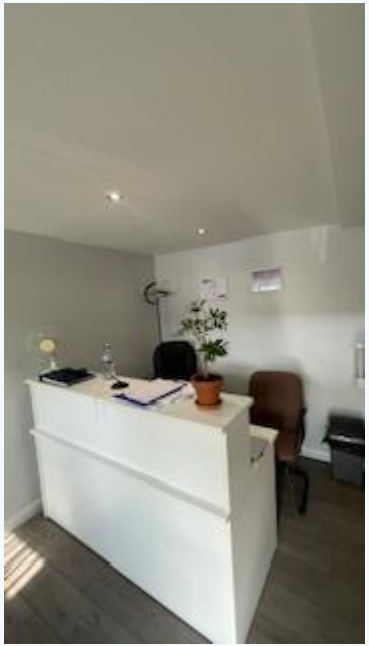
This is the company's other warehouse, directly opposite Unit 6. The structure is the same as Unit 6, a brick and steel-frame industrial unit, featuring steel cladding and a pitched roof constructed from corrugated steel. The roof is fitted with corrugated plastic skylights to allow natural light ingress. It is estimated that the building was constructed in the late 1990s

Layout

The ground floor of the premises comprises a reception, restroom facility and warehouse area.

The first floor mezzanine houses one office.

This report provides an overview of Unit 9, emphasising its capabilities and the facilities.



Utilities Report
The building is equipped with electricity for its energy needs.

Heating
There are thermostatically controlled wall mounted panels for heat provision. Hot water provision is via a small wall mounted electric water heater.

Lighting
The building has a mixture of legacy and LED lighting throughout.

Insulation
There is no insulation in the walls or the ceiling voids.

Glazing
The premises is single glazed throughout.

Special Equipment
There is an electric forklift for use in the warehouse.

Summary

This report outlines the utility provisions within Unit 9, including heating, lighting, insulation, and glazing. It is important to note that ongoing efforts are being considered to improve energy efficiency.

Figure for electricity consumption for Unit 9 has been obtained.

Electricity – 14,069 kWh per annum

The baseline year of 01.03.24 to 28.02.25 will be used to calculate the carbon footprint. The 2024 GHG conversion factors are applied to the calculation.

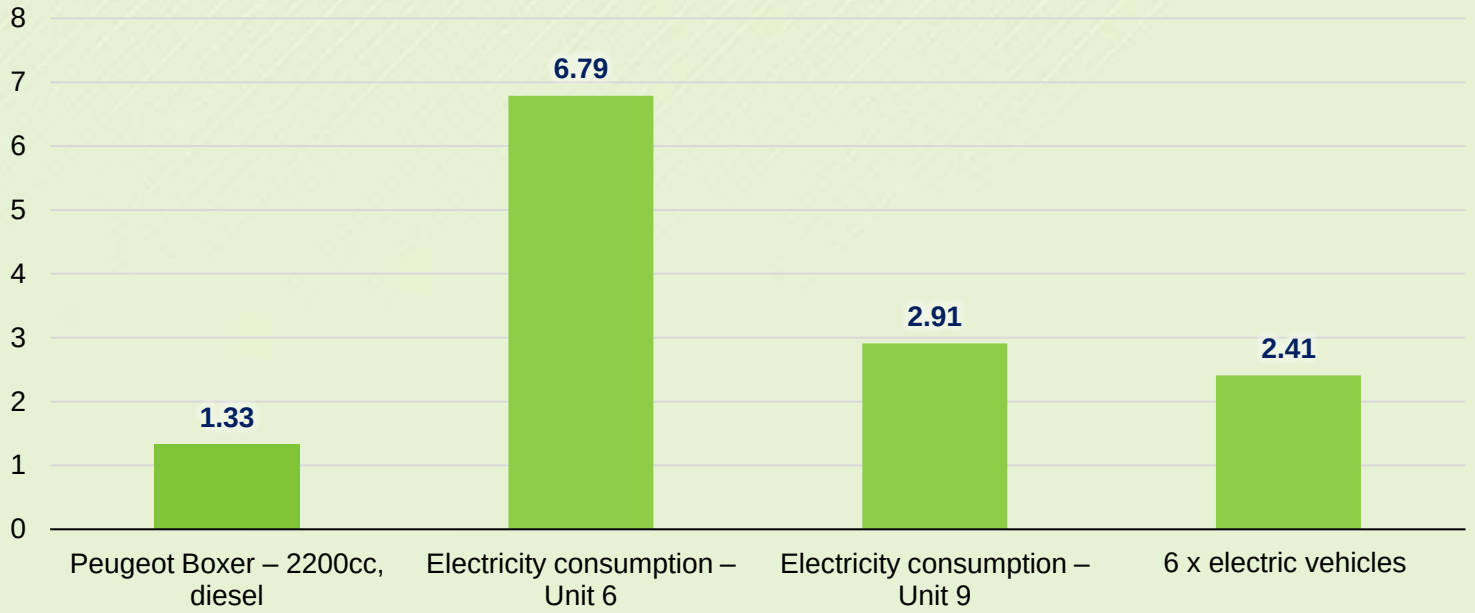
Carbon footprint details for 01.03.24 to 28.02.25

Emission Scope	Type	Miles	Conversion factor	tCO2e
1	Peugeot Boxer – 2200cc, diesel	5,200	1.74610	1.33
2	Electricity consumption – Unit 6	32,792 kWh	0.20705	6.79
2	Electricity consumption – Unit 9	14,069 kWh	0.20705	2.91
2	6 x electric vehicles (using avg. efficiency 0.23 kWh/mile)	77,020	0.02705	2.41
	See spread sheet on page 11 for more detail			

From this calculation, we can confirm that Intermedical (UK) Ltd has a Scope 1 and 2 carbon footprint of **13.44 tCO2e** for the year 01.03.24 to 28.02.25

TOTAL **13.44**

tCO2e = 13.44


8
7
6
5
4
3
2
1
0
1.33
6.79
2.91
2.41
Peugeot Boxer – 2200cc, diesel
Electricity consumption – Unit 6
Electricity consumption – Unit 9
6 x electric vehicles

Electric Vehicle Carbon Emissions

Type	Make	Model	Mileage (miles)	Electricity Used (kWh)	Emissions (kgCO2e)	Emissions (tCO2e)
SUV	BMW	iX3	15000	3450.00	469.20	0.47
Saloon	Polestar	2	22000	5060.00	688.16	0.69
Saloon	Tesla	Model 3	8000	1840.00	250.24	0.25
Saloon	Tesla	Model 3	20000	4600.00	625.60	0.63
SUV	BMW	iX	12000	2760.00	375.36	0.38
Hatchback	Cupra	Born	20	4.60	0.63	0.00
		Totals	**77020**	**17714.60**	**2409.19**	**2.41**

Carbon Reduction Recommendations

- **Insulation:** It is recommended that the feasibility of installing cavity wall insulation and ceiling cavity insulation be verified. Commissioning a professional survey is advised to assess the potential and scope for such upgrades.
- **Double glazing:** Consideration should be given to replacing the existing single glazed windows to improve thermal performance and reduce heat loss.
- **Energy efficient Equipment Replacement**: A key aspect of Intermedical (UK) Ltd.'s energy strategy involves prioritising energy efficiency in all equipment replacement decisions. It is advised that any new equipment purchased should have the highest available energy efficiency ratings to minimise energy consumption over its operational life.
- **Passive Infrared Sensors (PIRs) Installation**: Where practicable, it is recommended that Passive Infrared Sensors (PIRs) be installed to control lighting systems. These sensors detect occupancy and motion, thereby optimising lighting usage and reducing unnecessary energy consumption.
- **Heating**: It is recommended that Intermedical (UK) Ltd assess the feasibility of installing infrared heating panels in the office areas. These panels, when installed directly above workstations, can provide targeted, low-energy heating throughout operational hours.
- **Lighting**: The existing legacy lighting systems should be replaced with energy-efficient LED lighting to reduce electricity consumption and improve lighting quality

General Energy Efficiency Recommendations: To support reductions in electricity consumption and associated carbon emissions, the following measures are advised:

- Thermostatic Control of Electric Heaters: Ensure that all electric heaters are fitted with thermostatic controls and that ambient temperatures are regulated to approximately 19°C to avoid unnecessary energy use.

- Switching Off Equipment: All electronic equipment should be fully switched off when not in use, rather than left on standby mode, to prevent avoidable energy consumption.

- Use of Timers: Consider the installation of timers on electrical appliances to automate shutdown during non-operational hours, thereby reducing energy wastage.

As part of the journey, I would also strongly recommend signing up for the Government's SME Climate Commitment to further publicise your work and ambition in this area. Once your commitment has been accepted, you can refer to this on your website too.

In the coming years, I would also recommend reviewing your Scope 3 emissions (value chain/supply chain) so that a comprehensive view is obtained of your business from cradle to grave.

Carbon offsetting schemes

For emissions that are hard to reduce, or to move at a pace faster than the Government's plans to decarbonise the national grid, a legitimate avenue to explore is that of carbon offsetting.

Basically, carbon offsetting is where you compensate for your own carbon emissions by funding schemes which remove an equivalent amount of carbon (in the UK or elsewhere in the world).

The sheer amount of carbon offsetting schemes can be overwhelming, but there are a couple of points worth remembering:

- Only consider offsets when it is unfeasible to reduce your emissions by any other way. It should be used as a last resort rather than a starting point.
- Use an offsetting scheme which carries accreditation by a recognised scheme. Examples of these schemes are the VCS (Verified Carbon Standard) and Gold Standard schemes.
- Bear in mind that the cost of carbon offsetting in verified schemes is likely to rise exponentially in the future, so it may become more expensive to continue to offset your emissions.

Depending on the project chosen to offset your carbon emissions, an indicative cost to offset **13.44** tonnes of CO2 would be around **£105 to £227** per year.

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