

BlackPeak

E N E R G Y



Report Prepared by	Date Prepared	Report Approved by	Date approved	Revision
Martin Schulze-Hulbe	4 August 2024	Niksha Singh	6 August 2024	1

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Organisation Goals and Inventory Objectives

Southern Implants is a medical device manufacturing company operating out of premises located at 1 Albert Road, Irene Security Estate, Centurion.

BlackPeak Energy has prepared this Greenhouse Gas (GHG) Report for Southern Implants for the years 2022 and 2023. The 2022 report provides a baseline from which incremental improvements for future years are determined. The information for 2023 reflects the improvements achieved for year 1 after the base year. The reporting periods for each year are 1 January to 31 December. The baseline and the subsequent improvement can be used to meet future ESG reporting requirements and to develop future emissions improvement scenarios.

The person responsible for this report within Southern Implants is Victoria Blackbeard, and the intended users of this report are Southern Implants management and employees.

The report was prepared in accordance with the International Standard ISO 14064-1. The GHG sources identified are diesel and petrol combustion from the standby generator and the company vehicles, as well as electricity consumption. GHG's from diesel and petrol are direct emissions (scope 1), while emissions for electricity consumed are indirect emissions from upstream activities (scope 2). The reduction in emissions through the use of the company's solar PV installation were calculated and are shown as scope 2 emission improvements. Scope 3 emissions from downstream activities are generally accepted as being difficult to quantify and have not been included in this report. These typically include emissions generated in Southern Implants' supply chain.

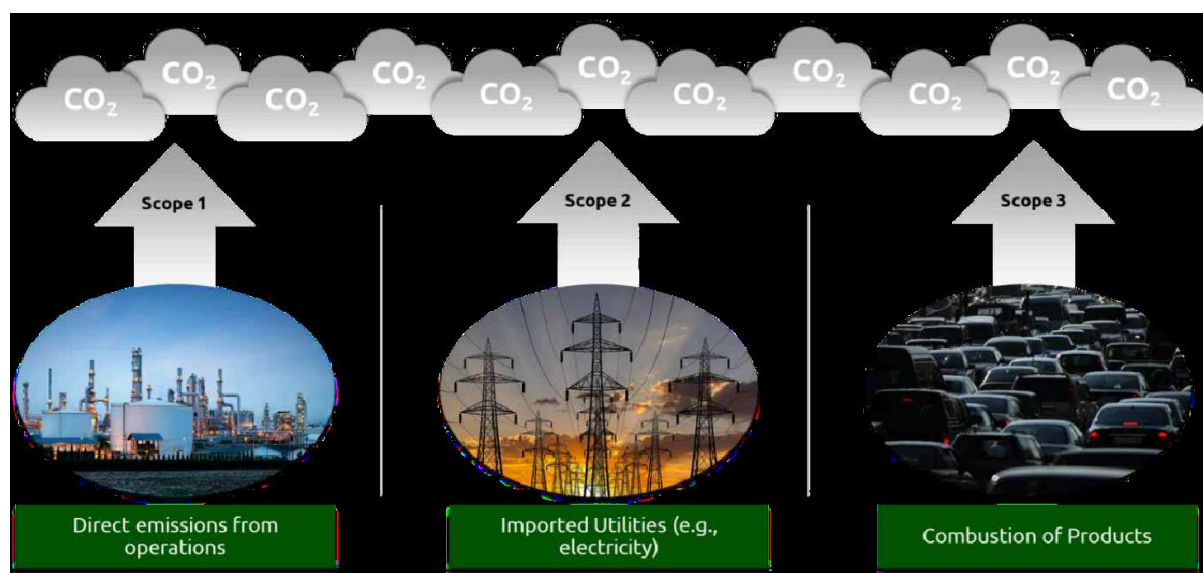
GHG emissions are expressed as CO₂ equivalent emissions and are reported on a tonnes per annum basis. GHG's included in this report are CO₂ (carbon dioxide), CH₄ (methane) and N₂O (nitrous oxide). Perfluorocarbons (PFC's), hydrofluorocarbons (HFC's) and sulphur hexafluoride (SF₆) have been omitted as they are not a material source of GHG's for this business operation.

This is the first GHG report for Southern Implants. The 2023 emissions improvements over the 2022 operation developed in this report, can be considered for verification, should this be required for the company's reporting requirements.

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Organisation and Reporting Boundaries

The organisational boundary captures all activities that lead to the GHG emissions recorded in this report. For this report the organisational boundary encompasses all Southern Implants' activities, but excluding Southern Bioprecision activities, that are run out of the Irene Security Estate and includes Scope 1 and 2 emissions. Scope 3 emissions were excluded from the report.



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GHG inventory of emissions for 2022 and 2023

REPORTING COMPANY				Southern Implants								
Person or entity responsible for the report				Victoria Blackbeard			Contact: 0794209807					
Organisational Boundaries							See earlier/attached					
Reporting Boundaries							See earlier/attached					
Reporting period covered			From: 01 Jan 22		To: 31 Dec 22			From:01Jan23		To: 31 Dec 23		
EMISSIONS			2022 CO ₂ Total (tpa)	CO ₂	CH ₄	N ₂ O		2023 CO ₂ Total (tpa)	CO ₂	CH ₄	N ₂ O	Uncertainty
			GWP	1	1	30		GWP	1	1	30	
1	Category 1: Direct Emissions (CO ₂ e)		55.653	53.346	0.083	2.224		58.897	56.465	0.088	2.344	
1.1	Direct emissions from mobile combustion - diesel		11.429	10.360	0.017	1.052		9.086	8.235	0.013	0.836	Minimal
1.2	Direct emissions from mobile combustion - petrol		40.999	40.065	0.061	0.873		43.546	42.554	0.064	0.927	Minimal
1.3	Direct emissions from stationary combustion - diesel		3.224	2.921	0.005	0.299		6.266	5.676	.010	.581	Minimal
2	Category 2: Indirect Emissions (CO ₂ e)		220.177	220.177	0	0		173.588	173.588	0	0	
2.1	Indirect emissions - electricity		220.177	220.177	0	0		173.588	173.588	0	0	Minimal
			Other related information									
			- Uncertainty is minimal as data in the form of utility bills and fuel invoices were used - Country specific net calorific values (NCV's) Tier 2 emission factors have been used for combusted fuel.									

Changes in emissions over the base case

The 2023 results are evaluated against the 2022 results, i.e. the base case, in order to identify improvements and other notable changes.

Source	Consumption				Difference in Emissions (tons CO ₂ e)				Comments
	Base Case	2023	Base - 2023	UOM	CO ₂	CH ₄	N ₂ O	Total	
Electricity	223530	176231	47299	kWh	46.589	0	0	46.589	Grid electricity savings, but less than kWh generated by Solar PV. Total electricity consumption increased for 2023.
Diesel - mobile	3910	3108	802	litres	2.125	0.004	216	2.344	Lower vehicle usage
Petrol - mobile	17789	18894	-1105	litres	-2.489	-0.004	-0.054	-2.547	Increased vehicle usage
Diesel – stationery generator	1110	2157	-1047	litres	-2.755	-0.005	-0.282	-3.042	Increased generator usage
Generation									
Solar PV	54910	144841	-89931	kWh	-88582				Substantial increase in solar PV generation, of which only approximately 50% reflected in grid electricity savings over 2022.
Red-shaded cells reflect increases in emissions.									

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Conclusions

This report contains baseline GHG emissions and the 2023 improvement case over the baseline for Southern Implants. The GHG reporting boundary for Southern Implants encompasses all operations located at 1 Albert Road, Irene Estate.

The baseline report covers 2022 operation and should be retained for future GHG reports. It is important to note that any changes in the reporting boundary, e.g. if additional business units are to be included, the baseline report needs to be adjusted to incorporate the revised operating boundary.

The 2023 improvement report generated several observations relative to the baseline:

- Total electricity consumption increased by approximately 42000 kWh in 2023 relative to 2022. Purchased grid electricity nevertheless decreased by 47200 kWh, mainly due to the increased solar PV generation. Net CO₂ emissions reduced by 46.600 tons CO₂e.
- Emissions from the stand-by diesel generator increased by 3.000 tons CO₂e, assumedly due to increased load shedding coverage.
- Emissions from diesel vehicles reduced by 2.300 tons CO₂e, while emissions from petrol vehicles increased by 2.500 tons CO₂e.

Further reductions in the future can be achieved in several ways:

- Thorough measurement and tracking of energy consumption, including purchased electricity, liquid fuels and solar PV usage.
- Leverage data management for EPCs to determine changes in emissions.
- Regular cost benefit studies of potential energy reduction initiatives including potential justifications for implementation.
- Vehicle fuel consumption can be optimised.

BlackPeak Energy would like to thank Southern Implants for providing us the opportunity to perform the baseline and 2023 improvement greenhouse gas reports.