

Streamlined Energy & Carbon Reporting (SECR)

Stelrad Limited



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Streamlined Energy & Carbon Reporting

1st January – 31st December 2022 Summary

Overall Carbon Intensity

0.16 tCO₂e per tonne
of product produced
YOY -22.12%

2,711.89 tCO₂e
tCO₂e YOY -29.80%

Carbon & Consumption

YOY = Year-on-year change

Natural Gas

6,841,943 kWh
1,257.71 tCO₂e
tCO₂e YOY: **-33.09%**

Electricity

6,895,954 kWh
1,333.54 tCO₂e
tCO₂e YOY: **-27.36%**

Transport

519,909 kWh
120.64 tCO₂e
tCO₂e YOY: **-18.35%**

Carbon Intensity Metric

0.07 tCO₂e per tonne of
product produced
YOY: **-25.76%**

0.08 tCO₂e per tonne of
product produced
YOY: **-19.40%**

0.01 tCO₂e per tonne of
product produced
YOY: **-9.41%**

Energy Saving Projects

Implemented

- Air compressor and pump optimisation
- Scope 3 emissions calculations



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Executive Summary

Energy usage, associated emissions, energy efficiency actions and energy performance for Stelrad Limited.



Streamlined Energy & Carbon Reporting

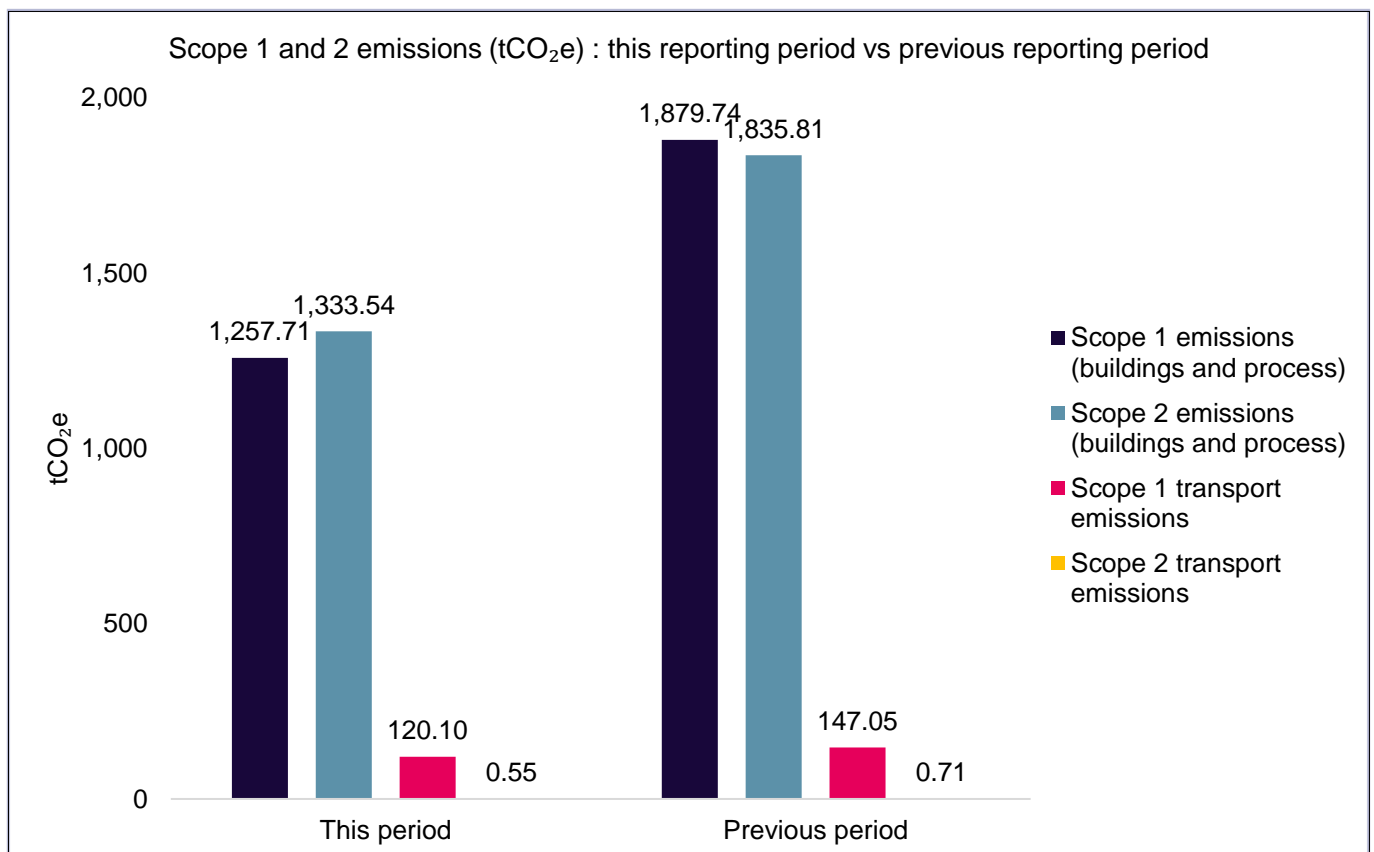
This report summarises our energy usage, associated emissions, energy efficiency actions and energy performance under the government policy Streamlined Energy & Carbon Reporting (SECR), as implemented by the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018.

It also summarises, in the appendix, the methodologies utilised for all calculations related to the elements reported under Energy & Carbon.

Stelrad Limited (Stelrad) are a UK-incorporated business, and as of November 2021, Stelrad's ultimate parent company, Stelrad Group PLC, is a quoted company. Under the new SECR legislation, we are mandated to include energy consumption, emissions, intensity metrics and all energy efficiency improvements implemented in our most recent financial year. An organisational boundary has been applied for the reporting.

We are proud to say we achieved 100% verifiable data coverage, with 0% of consumption data estimated.

Year 3



Stelrad's Scope 1 direct emissions (combustion of natural gas and transportation fuels) for this year of reporting are 1,377.81 tCO₂e, resulting from the direct combustion of 7,359,021 kWh of fuel. This represents a carbon reduction of 32.02% from last year.

Scope 2 indirect emissions (purchased electricity) for this year of reporting are 1,334.09 tCO₂e, resulting from the consumption of 6,898,785 kWh of electricity purchased and consumed in day-to-day business operations. This represents a carbon reduction of 27.36% from last year.

Our operations have an intensity metric of 0.16 tCO₂e per tonne of product produced for this reporting year. This represents a reduction in the operational carbon intensity of 22.13% from our previous reporting year.

Organisational Structure and Qualification



Stelrad Limited

Stelrad Limited is a subsidiary of Stelrad Radiator Holdings Limited, a company registered in England and Wales.

We are required to comply with SECR, as we exceed the qualification thresholds of two of the three criteria (employee numbers, turnover, or balance sheet total). As of 4th November 2021, the ultimate parent company of Stelrad Limited, Stelrad Group PLC, are also listed on the main market of the London Stock Exchange (SRAD).

Data Quality and Completeness

Invoices have been entered into a fully managed energy database up to 31st December 2022.



Data Completeness

Stelrad's electricity and gas invoices have been entered into a fully managed energy database up to 31st December 2022, and data quality checks have been conducted for data completeness and accuracy. All transport information was also entered into the energy database up to 31st December 2022.

A total of 100% data coverage was achieved for the reporting period.

Following the ultimate parent listing on the main market of the London Stock Exchange, Stelrad is aware that reporting requirements will be increased to include a broader range of emissions sources. Stelrad has begun measuring Scope 3 emissions, with 2021 as a baseline year.

Annual Reporting Figures

The total consumption and emissions figures for energy supplies reportable by Stelrad Limited.



Consumption (kWh) and Greenhouse Gas emissions (tCO₂e) Totals

The following figures show the consumption and associated emissions for this reporting year for our operations, with figures from the previous reporting period included for comparison.

Scope 1 consumption and emissions relate to the direct combustion of natural gas and fuels utilised for transportation operations, such as company vehicle fleets.

Scope 2 consumption and emissions relate to indirect emissions relating to the consumption of purchased electricity in day-to-day business operations.

Totals

The total consumption (kWh) figures for reportable energy supplies are as follows:

Utility and Scope	2022 UK Consumption (kWh)	2021 UK Consumption (kWh)
Grid-Supplied Electricity (Scope 2)	6,895,954	8,646,009
Gaseous and other fuels (Scope 1)	6,841,943	10,262,848
Transportation (Scope 1)	517,078	654,981
Transportation (Scope 2)	2,831	3,340
Total	14,257,806	19,567,177

The total emission (tCO₂e) figures for reportable energy supplies are as follows. Conversion factors utilised in these calculations are detailed in the appendix.

Stelrad have elected to voluntarily dual report for 2022, utilising market-based location factors to demonstrate the carbon reduction achieved by renewable electricity procurement.

Utility and Scope	2022 UK Consumption (tCO ₂ e) (location-based)	2022 UK Consumption (tCO ₂ e) (market-based)	2021 UK Consumption (tCO ₂ e) (location-based)	2021 UK Consumption (tCO ₂ e) (market-based)
Grid-Supplied Electricity (Scope 2)	1,333.54	0	1,835.81	0
Gaseous and other fuels (Scope 1)	1,257.71	1,257.71	1,879.74	1,879.74
Transportation (Scope 1)	120.10	120.10	147.05	147.05
Transportation (Scope 2)	0.55	0.55	0.71	0.71
Total	2,711.89	1,378.35	3,863.31	2,027.51

Intensity Metric

An intensity metric of tCO₂e per tonne of product produced has been applied to our annual total emissions. The methodology of the intensity metric calculations is detailed in the appendix, and the results of this analysis are as follows:

Intensity Metric	2022 Intensity Metric (location-based)	2022 Intensity Metric (market-based)	2021 Intensity Metric (location-based)	2021 Intensity Metric (market-based)
tCO₂e / tonne of product produced	0.16	0.08	0.21	0.11

Energy Efficiency Improvements

Stelrad Limited are committed to year-on-year improvements in their operational energy efficiency.



Energy Efficiency Improvements

We are committed to year-on-year improvements in our operational energy efficiency. As such, a register of energy efficiency measures available to us has been compiled, with a view to implementing these measures in the next five years.

Measures ongoing and undertaken through 2022:

The report is being evaluated to identify opportunities to reduce its carbon impact.

Air Compressor optimisation

The UK site relies on using compressed air to operate the production lines. Through data analysis and trials, the selection sequence for the four compressors was optimised to use the most efficient three and leave a fourth as a standby unit. This has helped reduce the amount of electricity used to make compressed air from 890,681 kWh to 614,438 kWh. This project has reduced the amount of electricity used for Compressed air generation by 15.2%, down to 8.9% of the total electricity used on site.

Measures prioritised for implementation in 2023:

Pump optimisations

There is a project plan to work through the remainder of the site pumps and install frequency inverters to reduce the power needed to operate them. Around six of these pumps are being prioritised in 2023 to complete before the end of the year.

Pump optimisation

The site uses multiple pumps within the processes, including the paint plant and auxiliary water supplies. Through trials and minor improvement projects, several pumps have been retrofitted with frequency inverters to reduce the speed and the power needed to operate. These projects reduced electricity consumption by 119,000 kWh per year without impacting the equipment's performance.

Cooling tower optimisation

The main cooling tower, which services the production lines, has several pumps that operate 24/7/365 and have no logic control system. A project is being written up to install frequency inverters to the pumps and fans while only running them based on demand and environmental conditions. The project is currently being evaluated but is expected to reduce the site's overall baseload.

Scope 3 emissions

The UK operation has completed its first report to capture its scope 3 emissions data.

Compliance Responsibility

This report has been prepared for Stelrad Limited by Net Zero Compliance: a division of Inspired Energy PLC.



Inspired Energy

This report has been prepared by Net Zero Compliance (a division of Inspired Energy PLC) for Stelrad Limited by means of interpreting the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 as they apply to information supplied by Stelrad Limited and its energy suppliers.

Stelrad Limited's registered CEO and CFO are responsible for complying with the Regulations. To the best of their knowledge, they must be satisfied that all relevant information concerning Stelrad Limited's organisation structure, properties, activities and energy supplies has been provided to Inspired Energy.

This includes details of any complex ownership structures (for example, private equity funds, franchises for private finance initiatives) and energy generated on-site (including CHP) or supplied to/from a third party (i.e. not a licenced energy supplier or a landlord/tenant).

Appendix

Reporting Methodology

Scope 1 and 2 consumption and CO₂e emission data have been calculated per the 2019 UK Government environmental reporting guidance. The following Emission Factor Databases consistent with the 2019 UK Government environmental reporting guidance have been used, utilising the current published kWh gross calorific value (CV) and kgCO₂e emissions factors relevant for reporting year 01/01/2022 – 31/12/2022: Database 2022, Version 1.0.

Intensity metrics have been calculated utilising the 2022 reportable figures for the following metrics, and tCO₂e for both individual sources and total emissions were then divided by this figure to determine the tCO₂e per metric:

- Tonnage of products produced **2022** (2021) **16,829** (18,672)



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