

Goodwin Refractory Services Limited



Qualifying Explanatory Statement in Support of PAS 2060:2014 Other-party Validation

January 2024

3rd- Party Assessor

Energy Gain UK Limited



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1. Introduction

This document forms the Qualifying Explanatory Statement (QES) to demonstrate that Goodwin Refractory Services Limited has achieved carbon neutrality in accordance with PAS 2060:2014 on the 4th of January 2024 for the period commencing 1st April 2022 – 31st March 2023.

This has been achieved through:

- Heavy investment in decarbonising internal emission sources
- Offsetting emissions from the purchase of high-quality carbon credits that represent genuine, additional and permanent GHG emission reductions as recognised by the Verified Carbon Standard (VCS)

This Qualifying Explanatory Statement contains information pertaining to the subject's carbon neutrality. All information represented in this document is believed to be correct at the time of publishing. Should any information emerge that affects the integrity of this report, it will be updated to accurately reflect the current status of any carbon-neutral statement made by Goodwin Refractory Services Limited.

PAS 2060 Requirement	Response
Entity making PAS 2060 declaration:	Goodwin Refractory Services (01797882)
Subject of PAS 2060 declaration:	All offices and commercial premises for which Goodwin Refractory Services Limited has financial control of energy consumption, as well as all leased vehicles. This assessment only covers UK-based emissions.
Description of subject:	GRS and its sister companies are the global market leader in the manufacture and supply of moulding materials to the lost wax and reclaimable pattern industries selling in excess of 65,000 MT per annum. Examples of the industry sectors served include Aerospace, Defence, Automotive, Jewellery, Rapid Prototyping, Art Casting, Crystal Casting and Shoe Moulding. GRS has its manufacturing and R&D headquarters located in Staffordshire, England, and is a wholly owned subsidiary of Goodwin PLC a premium listed company on the London stock exchange.
Rationale for selection of the subject:	The scope and subject of this PAS 2060 includes all emissions based on the

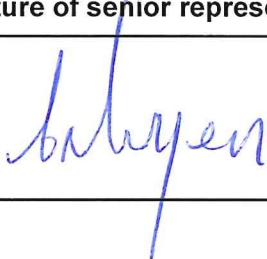
	operational control principle defined in the 2014 WRI GHG Protocol - Corporate Accounting Standard.
Type of conformity assessment:	Other-party validation
Baseline date for PAS 2060 programme:	1 st April 2022 – 31 st March 2023
Individuals responsible for the evaluation and provision of data necessary for declaration:	Gemma Pardy <i>Health, Safety and Environmental Manager</i> Goodwin Refractory Services Ltd

2. Declaration of Achievement of Carbon Neutrality

PAS 2060 Requirement	Response
Declaration of achievement:	Carbon neutrality of all UK operations achieved by Goodwin Refractory Services Limited in accordance with PAS 2060 on the 4 th of January 2024 for the period commencing 1 st April 2022 – 31 st March 2023, validated by Energy Gain UK Ltd
Location-based (gross) carbon footprint of the subject for the period stated above:	186.04 tCO₂e
Which PAS 2060 recognised methodology has been followed to achieve carbon neutrality?	WRI Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard (revised edition 2015)
How have the reductions in GHG emissions during the period been achieved?	Emission reductions were achieved through energy efficiency implementations and a reduction in emission causing activities. A 32% absolute reduction in emissions was achieved and all residual emissions offset through verified schemes.
Location of the GHG emissions report supporting this claim:	Section 4
Locations of the details describing internal reductions achieved:	Section 5
Location of the details describing the carbon offsets:	Section 5

3. Declaration of Commitment to Carbon Neutrality

PAS 2060 Requirement	Response
Declaration of on-going commitment:	Goodwin Refractory Services commits to maintain carbon neutrality for all UK operations in accordance with PAS 2060 for the period commencing 1 st April 2023 – 31 st March 2024.
Period during which the entity commits to maintaining carbon neutrality of the subject:	1 st April 2023 – 31 st March 2024.
Which method, as recognised by PAS 2060, will be followed to achieve carbon neutrality?	WBCSD/WRI Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard (revised edition, 2015)
Prior commitment to carbon neutrality made by the subject:	Yes
Location of the Carbon Footprint Management plan:	Section 5

Name of senior representative	Signature of senior representative
Name: C. DWYER	
Date: 11/01/2024	

4. Quantification of Carbon Footprint

PAS 2060 requires that every individual/organisation provides an appropriate emissions breakdown (by scope) in their Qualifying Explanatory Statement (QES) in accordance with Greenhouse Gas Protocol Guidelines. Organisational footprints should cover at least 95% of the organisation's carbon scope 1 and 2 emissions. Scope 3 emissions should also be included, if feasible. If excluded, a justification should be provided (see Appendix C).



GHG Emissions Scope	Description	Total Emissions for baseline period (tCO ₂ e)
Scope 1	<i>Direct emissions from the combustion of diesel, LPG and natural gas</i>	45.2
Scope 2	<i>Indirect emissions from the consumption of electricity</i>	140.8
Scope 3	<i>Not included</i>	N/A
Location-based (gross) Total		186.0

Standard and Methodology Used

Goodwin Refractory Services Limited categorises its GHG emissions as Scope 1, 2 and 3 as described in the WBCSD/WRI Greenhouse Gas Protocol Reporting standard (revised edition, 2015). Emissions have been calculated as tonnes of carbon dioxide equivalent (tCO₂e) for scope 1, 2 and selected scope 3 sources using conversion factors listed in the relevant Defra/DECC Greenhouse Gas Conversion Factors for Company Reporting for the relevant year. All scope 2 emissions are calculated using the location-based methodology.

Data Quality

Only primary data, for GHG emissions sources contributing over 95% of the total footprint, was used. This was derived from invoices and fuel consumption figures covering the reporting period. The emissions factors were sourced from the appropriate national databases. This allows for very high confidence in the data. Wherever uncertainty exists, efforts have been made not to underestimate the actual carbon footprint of the given activity. In total, over 95% of carbon emissions are accounted for within the defined scopes and boundary as required by PAS 2060.

Key Assumptions***Vehicle Mileage***

Where the litres of fuel used by vehicles owned/operated by the company could not be determined directly, the appropriate calculations were made to establish a total. This was achieved by dividing the price paid at pump by the price charged per litre. All data was calculated using appropriate emission factors corresponding to the correct fuel.

Exclusions

Scope 3 emissions sources have been excluded on the grounds of technical and/or financial feasibility. Scope 3 screening is being conducted on FY23-24 emissions and is being completed by a competent third-party assessor. Once these can be accurately calculated and reported on they will be included as part of the GHG inventory. See Appendix C for current exclusions.

5. Carbon Footprint Management Plan

PAS 2060 Requirement	Response
Timescale for achieving carbon neutrality:	Through the use of offsets, carbon neutrality was achieved on the 4 th of January 2024 for the reporting period 1 st April 2022 – 31 st March 2023.
Targets for GHG reduction for the defined subject appropriate to the timescale for achieving carbon neutrality:	Until the next recertification period of PAS 2060, Goodwin Refractory Services Limited shall demonstrate a reduction in its GHG emissions whether it be absolute, or intensity based.
Planned means of achieving and maintaining GHG reductions including assumptions made and any justification of the techniques and measures to be employed to reduce GHG emissions:	<p><u>Emissions Reduction Plan for Commitment Period</u></p> <ul style="list-style-type: none"> • Investigate feasibility of renewable energy sleeving • Investigate modifications to plant to reduce reliance on natural gas for process heat including sub-metering, timers and smart energy management systems. • Consider use of the Salary Sacrifice Scheme to promote the use of a cleaner fleet and support staff in the transition to greener commuting methods
<p>If the entity has made offsets to achieve carbon neutrality, a description of these should be provided here. Information should include:</p> <ul style="list-style-type: none"> • Which GHG emissions have been offset • The type of offset and projects involved • The scheme through which the offsets were made • The number and type of carbon credits alongside the time period over which the credits were generated and the date(s) of their retirement 	<p>The cumulative total of 186.04 tCO₂e from scope 1 & 2 activities was offset by the purchase and retirement of 187 carbon credits.</p> <p>Type of offset: 187 VCUs</p> <p>Name of project: Yelisirur wind power project (VCS 1254)</p> <p>Location: India</p> <p>Vintage: 2019</p> <p>Description: See Appendix A</p> <p>Retirement date(s): 04/01/2024</p>

<p>The offset strategy to be adopted to meet the achievement of carbon neutrality element of PAS 2060. This should include:</p> <ul style="list-style-type: none"> • An estimate of the quantity of GHG emissions to be offset • The nature of the offsets • The likely number and type of credits 	<p>Goodwin Refractory Services Limited has a strategy in place that prioritises energy efficiency and procurement of low carbon energy over the acquisition of carbon credits. There is an interim need for offset credits, however, as more emission reduction plans are put in place this dependency will decrease. Any offsets purchased in the future will be from specified and audited sources that are recognised under the PAS 2060:2014 standard.</p>
<p>What type of conformity assessment has been undertaken?</p>	<p>Energy Gain UK Ltd certifies that it has correctly calculated Goodwin Refractory Services Limited's carbon footprint for the period between 1st April 2022 – 31st March 2023 and has satisfactorily offset all residual emissions to achieve carbon neutrality, in accordance with PAS 2060:2014.</p>

Appendix A - Carbon Offsetting Strategy

The following information covers the confirmed offset strategy for the period of carbon neutrality. Investment has been made in high-quality, third-party assessed **Verified Carbon Standard (VCS)** carbon offsets that are aligned with the United Nations Sustainable Development Goals (SDGs). These standards ensure that the generated carbon credits are from projects that are both additional and permanent. All VCS projects are subject to desk and field audits by both qualified independent third parties and VCS staff to ensure that standards are met, and methodologies are properly applied. The issued credits are then stored in the Verra registry that tracks the generation, retirement, and transferal of all carbon credits. **187 credits** relating to the baseline period emissions were purchased and retired. The details of the project can be found below:

119.70 MWp Wind Project in Maharashtra, India

The registry report can be found at the following link:

<https://registry.verra.org/app/projectDetail/VCS/1254>

Description

The “Yelisirur wind power project, India” has a group of 17 wind turbines each with a capacity of 1.5MW. The current planned project life is 20 years. GE India Industrial Pvt Ltd will be responsible for operation and maintenance of the Yelisirur Wind Power Project for a period of Five years.

The plant is located in Yelisirur Village, which is in the Gadag District in the state of Karnataka, India. The project site is well connected from the railway station. The nearest rail head to the project site is the Gadag Railway Station which is 25 km from the project site and the nearest airport is at Hubli which is at a distance of 75 km from the project site.

The project generates renewable energy from Wind power and exports the energy onto the electricity grid in India.

Certified SDG Impacts

This project contributes to the following Sustainable Development Goals (SDG's):



Appendix B - Summary of Carbon Credit Retirement

The following information details the retirement of the carbon credits used to offset emissions for the baseline period. A total of 187 credits were retired on the 4th of January 2024, within the 12-month timeframe allowable under PAS 2060. Credit retirements were done by a third-party and the credit block details can be found below:

Project ID	Standard	Vintage	Quantity	Registry Link
VCS 1254	VCS	2019	187	Link

Appendix C - Scope 3 Emissions

All Scope 3 emissions that are relevant to the operations of Goodwin Refractory Services Limited are identified below, along with the justification of exclusion. The Scope 3 emission sources that have been included are those that Goodwin Refractory Services Limited has the most amount of control over and is able to report to the greatest level of accuracy.

Emission Source	Description	Reported
<i>Employee Commuting</i>	Transportation of employees between their homes and their worksites during the reporting year in vehicles not owned or operated by the reporting company	<u>Excluded</u> Excluded due to refinement of reporting requirements.
<i>Business Travel</i>	Transportation of employees for business related activities during the reporting year in vehicles not owned or operated by the company.	<u>Excluded</u> Emissions associated to business travel have been excluded for this assessment. This is expected to be minimal.
<i>Upstream/Downstream Transportation and Distribution</i>	Transportation and distribution of products purchased/sold by the reporting company in the reporting year between the company's tier 1 suppliers/consumers.	<u>Excluded</u> Transport emissions from products and services purchased is not financially viable to measure and report
<i>Waste Generated in Operations</i>	These are the emissions related to the different disposal methods of all waste generated from the reporting company's operations where the disposal/treatment has occurred in premises not owned or controlled by the reporting company.	<u>Excluded</u> Excluded due to lack of data available from third-party suppliers.