

Hacel Lighting Limited

PAS 2060:2014 Specification for the demonstration of carbon neutrality

Qualifying Explanatory Statement - CY 2024

Declaration of achievement for their third application period

This QES has been produced by CO2balance on behalf of Hacel Lighting Limited – March 2025





Contents

Introduction	Page 3
<u>Declaration</u>	Page 4
Illustration of Hacel's PAS 2060 Application Periods	Page 5
Carbon Footprint	Page 6
Carbon Reduction	Page 9
Carbon Offsetting	Page 10
<u>Contacts</u>	Page 11
Appendix A – Credit Retirement Evidence	Page 12
Appendix B – Declaration of Commitment to Carbon Neutrality	Page 14
Appendix C – Qualifying Explanatory Statement: Checklists	Page 15
Appendix D – Qualifying Explanatory Statement: Checklists	Page 16

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Introduction

This document forms the second Qualifying Explanatory Statement to demonstrate that Hacel Lighting Limited has achieved carbon neutrality under the guidelines of PAS 2060:2014 and its commitment on carbon neutrality under the guidelines of PAS 2060:2014.

Hacel Lighting has engaged with carbon management and project development company CO2balance to assist in achieving carbon neutrality through the PAS 2060:2014 process.

PAS 2060 Information Requirement	Information as it relates to Hacel Lighting Limited
Entity making PAS 2060 declaration:	Hacel Lighting Limited
Subject of PAS 2060 declaration:	The office, factory and vehicles that are operated by Hacel Lighting.
Description of Subject:	Hacel Lighting is a major UK lighting manufacturer. The company combines design flair and manufacturing excellence to produce high quality lighting products. The company is located in Wallsend, near
	Newcastle Upon Tyne.
Rationale for selection of the subject:	The scope and subject of this PAS2060 includes all emissions based on the operational control principle of defined in the WBCSD / WRI GHG Protocol – Corporate Standard.
What type of conformity assessment has been/is to be undertaken?	Other party validation
Baseline date for PAS2060 programme	1st January 2021 – 31st December 2021
First Achievement Period	1st January 2021 – 31st December 2021
Second Achievement Period	1st January 2022 – 31st December 2022
Third Achievement Period	1st January 2023 – 31st December 2023
Fourth Achievement Period	1st January 2024 – 31st December 2024
Commitment Period	1 st January 2025 – 31 st December 2025



Declaration

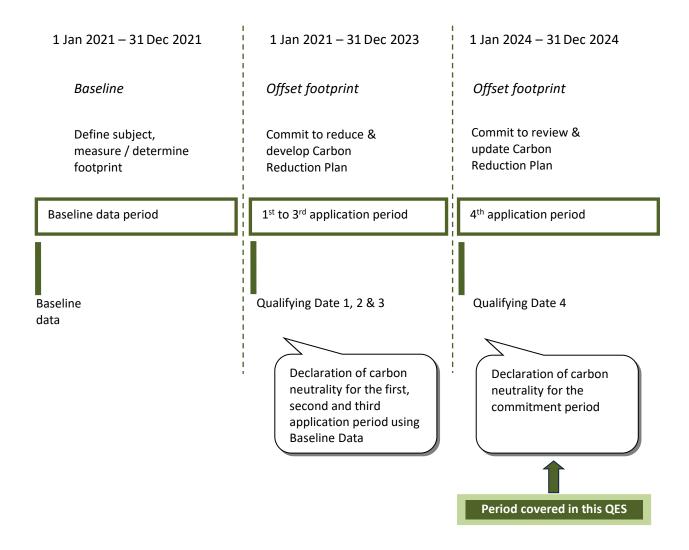
This Qualifying Explanatory Statement contains information pertaining to the subject's carbon neutrality. Any and all information herein is believed to be correct at the time of publishing. Should any information come to light that would affect the validity of the statements herein, this document will be updated to accurately reflect the current status of any carbon neutral statement made by Hacel Lighting. This is the fourth declaration of carbon neutrality by Hacel Lighting.

Entity making PAS 2060 declaration	Hacel Lighting Ltd
Type of conformity assessment has been/is to be undertaken	Other party validation
Declaration Statement	"Carbon neutrality of Hacel Lighting Ltd's operational activities will be achieved by Hacel Lighting Ltd in accordance with PAS 2060 for the period of 2024, CO2balance UK Limited declares".
Name of Senior Representative	Chris Neal, Finance Controller / Company Secretary
Signature of Senior Representative	Like
Date	12th March 2025

Illustration of Hacel Lighting's PAS 2060 Application Periods

The diagram below represents the timeline of Hacel Lighting's application periods for PAS2060.

This follows the Option 3 route as defined by PAS2060:2014 "Specification for the demonstration of carbon neutrality", showing the demonstration of carbon neutrality using first year offsetting concessions to achieve carbon neutrality for the first application period. This QES covers the fouth application period as shown below.





Carbon Footprint

A full Greenhouse Gas Assessment was conducted internally by Hacel Lighting and reviewed by CO2balance to calculate the carbon emissions emitted by Hacel Lighting. The Assessment was conducted in line with the Greenhouse Gas Protocol published by the World Business Council for Sustainable Development and the World Resources Institute (WBCSD/WRI Protocol).

Greenhouse Gas Emissions for 2024*	217.65 tCO₂e
Number of full-time employees	76 ¹
Emissions per full time employee	2.69 tCO ₂ e
Emissions per floor space (m2) ²	0.068
TCO2e per million revenue 2024 ³	23.33
Period covered	1 st January to 31 st December 2024

The data above reports emissions from electricity consumption on the "market-based method". This reflects emissions from electricity sources that Hacel has purposefully chosen. Since 1st August 2021, Hacel have purchased their electricity supply from a dedicated green source, therefore a zero emission is reported for electricity consumption during the reporting period of 2024; in addition, the solar panels at the location has resulted in solar energy export to the national grid.

In line with the Greenhouse Gas Protocol, the figure below shows the emissions from Hacel under a total "location based" method, which reports all electricity using the host county's grid average. Assessments are required to disclose both the market based and location-based figures. Figures used elsewhere in this document use the Market Based Method.

Location Based Reporting:

Total Emissions: 261.19 tCO2e

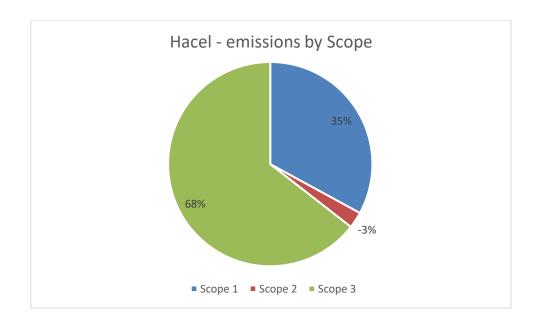
³ Based on a revenue figure of £9.33 million in 2024



^{*}This covers Scope 1, Scope 2 and reportable Scope 3 emissions from the company

¹ Based on the number of employees as end of 2024 financial year (31st December 2024)

² Based on floor space of 3,186 square metres



Scope	2024 - tCO2e	Percentage
Scope 1	75.61	35%
Scope 2	-5.93 ⁴	-3%
Scope 3	147.97	68%
	217.65	100%

 $^{^4}$ The figure reflects the 100% renewable energy tariff along with the exported on-site solar energy generated and exported to the National Grid, resulting in a minus figure.



Standard and Methodology

The assessment methodology for the Greenhouse Gas Assessment follows the reporting principles and guidelines provided by the Greenhouse Gas Protocol published by the World Business Council for Sustainable Development and the World Resources Institute (WBCSD/WRI Protocol). In line with the WBCSD/WRI Protocol, CO2balance uses these procedures to undertake Greenhouse Gas Emissions Assessments.

The selected methodology – the Greenhouse Gas Protocol – is an approved PAS2060 methodology and was applied in accordance with its provisions and the principles set out in PAS2060.

Organisational Boundary

CO2balance have calculated the emissions for which Hacel Lighting has direct Operational Control over as defined by the WBCSD/WRI.

Operational Boundary

The Greenhouse Gas Protocol and the ISO 14064_1 standard defines three scopes that set Operational boundaries when determining emissions. These are as follows:

- Scope 1 Direct Emissions (fuel combustion, company owned vehicles)
- Scope 2 Indirect Emissions (such as purchased electricity for own use)
- Scope 3 Indirect Emissions (outsourced operations, business travel in vehicles not owned by the company, waste disposal)

Data Quality/Confidence

This is Hacel Lightings third Greenhouse Gas Assessment, and the data is a mix of primary and secondary data sources. As such confidence in the quality of the data supporting this GHG Assessment is classed is medium. Utility data originates from primary sources (meter readings). Business travel comes from secondary metrics, such as distance travelled. This data was then converted in tonnes of CO_2e (tCO_2e) using emissions factors supplied by DEFRA'S "UK Government conversion factors for Company Reporting".

For further information on Hacel Lighting's carbon footprint please refer to its Greenhouse Gas Assessment Excel produced internally by Hacel Lighting.



Carbon Reduction Plan

Hacel Lighting have created a Carbon Reduction Plan document to outline activities to reduce the company's carbon emissions, please revert to that document for further information. A summary of the key reduction activities from this plan are shown below:

Emissions reduction targets

General business activity was higher in 2024 compared to 2023 despite the construction industry remaining difficult. As such, and in order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

We project that carbon emissions will continue to decrease over the 2025 year apart from Category 11 Scope 3 which will increase as we sell product with longer operating life.

Carbon Reduction Projects

Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented since the 2020 baseline. The carbon emission reduction achieved by these schemes is difficult to measure against the 2020 baseline due to activity levels.

- Replacement of the oldest of three powder coat cure ovens with a modern efficient unit.
- Installation of in-line flow meters on the gas supply to all three paint ovens.
- Introduction of activity sensors on all lighting on site to cut energy usage during inactivity.
- Replacement of selected air conditioning units with newer safe gas units.
- Purchase of a CNC router in order to manufacture selected components in house rather than importing from China.
- Introduction of bailing machines for paper/card and plastic waste.
- Introduction of an at source carbon offset arrangement with our gas supplier effective from the start of 2021. This was discontinued in 2023 as we moved away from Russian gas supply. We have been monitoring green and blended gas supplies each year, but have not yet committed to the additional costs.
- Changed to 100% green sourced electricity effective from 1/8/2021.
- Membership of the Carbon Club tree planting offset effective 17/7/2021.
- Installation of a suitable solar PV array on the factory roof. Completed May 22.
- Installation of a second solar PV array on the back of the factory roof. Completed May 23.
- Installation of internal energy monitoring. Completed January 23.
- Integration of carbon considerations into our design process. As a result we have reduced



the metal content of the infinitas range of products by 46%.

In the future we plan to implement further measures such as:

- Continuing to replace older air conditioning units with efficient safe gas replacements.
- Continuation of the change from fossil fuel company vehicles to a fully electric fleet.
- Movement to more environmentally friendly packaging on products.
- Work with our supplier base, particularly metals and Electronics in order to improve the accuracy of raw materials reporting, and to increase the use of recycled metals.



Carbon Offset Strategy

During the reporting period of 2024 Hacel Lighting carried out the following carbon offset activities:

- Purchased Fuel Cards all offset at source (amounting to 18.00t)
- Carbon offset purchased via the "Carbon Club" 200t
- TOTAL = 218t

Total emissions: 217.65

Total offset: 218.00

Net emissions: -0.35

Hacel Lighting have offset their emissions Forest Carbon's UK woodland project, certificate of this can found in Appendix A

Project name:	Carbon Club – run by Forest Carbon
Location:	UK woodland
Standard:	UK Woodland Carbon Code
Tonnage:	200

External Verification:

The project has been externally validated and verified by The Woodland Carbon Code, a respected standard that assesses the carbon sequestered for each woodland project. The Code is an ICROA approved carbon standard for carbon neutrality (International Carbon Reduction and Offset Alliance - https://www.icroa.org/)

The Gold Standard is an approved carbon offset standard as laid down by PAS2060 requirements and ensures that the projects met the criteria for:

- ✓ additionality, permanence, leakage and double counting.
- ✓ verified by an independent third-party verifier
- ✓ projects are only issued after the emission reduction has taken place.



Contacts

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- www.hacel.co.uk

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- www.co2balance.com



Appendix A – Credit Retirement Evidence



Note: contract that confirms Hacel are purchasing carbon neutral gas (gas that has been offset), has been reviewed by CO2balance and is available on request. The Carbon Club is an annual programme, offsetting 200t every year.



Appendix B – Declaration of Commitment to Carbon Neutrality

CERTIFICATE OF OFFSET

This is granted to

HACEL LIGHTING LIMITED

Have met the requirements of PAS2060 for Carbon Neutrality

and have offset the carbon emissions from their business operations emitted during January 2024 to December 2024 and have committed to maintain this carbon neutrality up to December 2025

Date: 12th March 2025







CO2balance UK Ltd, 1 Discovery House, Cook Way, Taunton, Somerset, TA2 6BJ +44 (0) 1823 33223 enquiries@co2balance.com www.co2balance.com



Appendix C – statement of validation of carbon neutrality from CO2balance UK Ltd



Declaration of Commitment to Carbon Neutrality for 2024 under PAS2060¹

Entity making PAS 2060 declaration	Hacel Lighting Ltd
Type of conformity assessment has been/is to be undertaken	Other party validation
Declaration Statement	"Carbon neutrality of Hacel Lighting Ltd's operational activities will be achieved by Hacel Lighting Ltd in accordance with PAS 2060 for the period of 2024, CO2balance UK Limited declares".
Name of Senior Representative	Chris Neal, Finance Controller / Company Secretary
Signature of Senior Representative	Line
Date	12th March 2025

Hacel Lighting Ltd's Carbon Footprint

Hacel Lighting Ltd have carried out their own internal Greenhouse Gas Assessment to quantify their carbon footprint. They have engaged with CO2balance UK Ltd, who are a founding member of the International Carbon Reduction and Offset Alliance (ICROA), to review their findings to ensure that they are in line with the WBCSD/WRI GHG Protocol methodologies.

Carbon Management Plan

Following on from the quantification of Hacel Lighting Ltd's greenhouse emissions for the financial year of 2024, a Carbon Management Plan (CMP) will be produced and sent for approval by Hacel Lighting Ltd. This will set out Hacel Lighting Ltd's carbon reduction commitments.

Carbon Offsetting

Once Hacel Lighting Ltd's operational greenhouse emissions have been ascertained, Hacel Lighting Ltd can commit to offset these emissions through PAS2060 approved projects to achieve carbon neutrality status.

PAS 2060 – Specification for the Demonstration of Carbon Neutrality. For more information, visit: http://www.bsigroup.co.uk/en-G8/PAS-2060-Carbon-Neutrality/



CO2balance UK Ltd. 1 Discovery House, Cook Way, Bindon Road, Taunton, Somerset, TA2 68J, UK Tet: +44 (0) 1823 332233



Appendix D – Qualifying Explanatory Statement: Check Lists

Table 1 – Check list for QES supporting declaration of commitment to carbon neutrality:

Activity and evidence required by PAS2060	Location
1) Identify the individual responsible for the evaluation and provision of data necessary	Page 4
for the substantiation of the declaration including that of preparing, substantiating,	
communicating and maintaining the declaration.	
2) Identify the entity responsible for making the declaration.	Page 3
3) Identify the subject of the declaration.	Page 3
4) Explain the rationale for the selection of the subject.	Page 3
5) Define the boundaries of the subject.	Page 3 & 6
6) Identify all characteristics (purposes, objectives or functionality) inherent to that subject.	Page 3 & 6
7) Identify and take into consideration all activities material to the fulfilment,	Page 3
achievement or delivery of the purposes, objectives or functionality of the subject.	
8) Select which of the 3 options within PAS 2060 you intend to follow.	Page 5
9) Identify the date by which the entity plans to achieve the status of "carbon neutrality" of the subject and specify the period for which the entity intends to maintain that status.	Page 5
10) Select an appropriate standard and methodology for defining the subject, the GHG emissions associated with that subject and the calculation of the carbon footprint for the defined subject.	Page 6
11) Provide justification for the selection of the methodology chosen.	Page 8
12) Confirm that the selected methodology was applied in accordance with its provisions and the principles set out in PAS 2060.	Page 8
13) Describe the actual types of GHG emissions, classification of emissions (Scope 1 2 or	Page 8
3) and size of carbon footprint of the subject exclusive of any purchases of carbon offsets.	
a) All greenhouse gases shall be included and converted into tCO2e.	Page 8
b) 100% Scope 1 (direct) emissions relevant to the subject shall be included when determining the carbon footprint.	Page 7 (and separate Greenhouse Gas Excel)
c) 100% Scope 2 (indirect) emissions relevant to the subject shall be included when determining the carbon footprint.	Page 7 (and separate Greenhouse Gas Excel)
d) Where estimates of GHG emissions are used in the quantification of the subject carbon footprint (particularly when associated with scope 3 emissions) these shall be determined in a manner that precludes underestimation.	Page 7 (and separate Greenhouse Gas Excel)
e) Scope 1, 2 or 3 emission source estimated to be more that 1% of the total carbon footprint shall be taken into consideration unless evidence can be provided to demonstrate that such quantification would not be technically feasible or cost effective.	Page 7 (and separate Greenhouse Gas Excel)
f) The quantified carbon footprint shall cover at least 95% of the emissions from the subject.	Greenhouse Gas Assessment Excel
g) Where a single source contributes more than 50% of the total emissions, the 95% threshold applies to the remaining sources of emissions.	Greenhouse Gas Assessment Excel
h) Any exclusion and the reason for that exclusion shall be documented.	Greenhouse Gas Assessment Excel



14) Where the subject is an organization/company or part thereof, ensure that:	
• • • •	Craanhaysa Caa
a) Boundaries are a true and fair representation of the organization's GHG	Greenhouse Gas Assessment Excel
emissions (i.e. shall include all GHG emissions relating to core operations including subsidiaries owned and operated by the organization).	Assessment Excel
 b) Either the equity share or control approach has been used to define which GHG emissions are included. 	Page 8
15) Identify if the subject is part of an organization or a specific site or location, and treat	Greenhouse Gas
as a discrete operation with its own purpose, objectives and functionality.	Assessment Excel
16) Where the subject is a product or service, include all Scope 3 emissions (as the lifecycle of the product/service needs to be taken into consideration).	N/A
17) Describe the actual methods used to quantify GHG emissions (e.g. use of primary or	Page 8
secondary data), the measurement unit(s) applied, the period of application and the size	1 age o
of the resulting carbon footprint. (The carbon footprint shall be based as far as possible on	
primary activity data.)	
18) Provide details of, and explanation for, the exclusion of any Scope 3 emissions.	Greenhouse Gas Assessment Excel
19) Document all assumptions and calculations made in quantifying GHG emissions and in	Greenhouse Gas
the selection or development of greenhouse gas emission factors. (Emission factors used	Assessment Excel
shall be appropriate to the activity concerned and current at the time of quantification.)	
20) Document your assessments of uncertainty and variability associated with defining	Page 8
boundaries and quantifying GHG emissions including the positive tolerances adopted in	
association with emission estimates	
21) Document carbon footprint management plan:	Page 9
a) Make a statement of commitment to carbon neutrality for the defined subject.	Page 4
b) Set timescales for achieving carbon neutrality for the defined subject.	
c) Specify targets for GHG reduction for the defined subject appropriate to the	Page 9
timescale for achieving carbon neutrality including the baseline date, the first qualification date and the first application period.	
d) Document the planned means of achieving and maintaining GHG emissions	Page 9
reductions including assumptions made and any justification of the techniques and	1 486 3
measures to be employed to reduce GHG emissions.	
e) Specify the offset strategy including an estimate of the quantity of GHG emissions to be offset, the nature of the offsets and the likely number and type of credits.	Page 10
22) Implement a process for undertaking periodic assessments of performance against the Plan and for implementing corrective action to ensure targets are achieved.	Page 10
23) Where the subject is a non-recurring event such as weddings or concert, identify ways	N/A
of reducing GHG emissions to the maximum extent commensurate with enabling the	
event to meet its intended objectives before the event takes place and include post event	
review	D 0
24) For any reductions in the GHG emissions from the defined subject delivered in the	Page 8
period immediately prior to the baseline date and not otherwise taken into account in any GHG emissions quantification (historic reductions), confirm:	
• the period from which these reductions are to be included;	
• that the required data is available and that calculations have been undertaken using	
the same methodology throughout;	
• that assessment of historic reduction has been made in accordance with this PAS,	
reporting the quantity of historic reductions claimed in parallel with the report of total reduction.	
25) Record the number of times that the declaration of commitment has been renewed	Page 4
without declaration of achievement.	



26) Specify the type of conformity assessment: either a) independent third party certification; b) other party validation; c) self-validation.	Page 4
27) Include statements of validation where declarations of commitment to carbon neutrality are validated by a third party certifier or second party organizations	Appendix C
28) Date the QES and have it signed by the senior representative of the entity	Page 11
29) Make QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (e.g. via websites).	
30) Update the QES to reflect changes and actions that could affect the validity of the declaration of commitment to carbon neutrality.	Page 4

Table 2 – Checklist for QES supporting declaration of achievement of carbon neutrality:

Activity and evidence required by PAS2060	Location
1) Define standard and methodology use to determine its GHG emissions reduction.	Page 8
2) Confirm that the methodology used was applied in accordance with its provisions and the principles set out in PAS 2060 were met.	Page 8
3) Provide justification for the selection of the methodologies chosen to quantify reductions in the carbon footprint, including all assumptions and calculations made and any assessments of uncertainty.	Page 8
4) Describe the means by which reductions have been achieved and any applicable assumptions or justifications.	Page 9
5) Ensure that there has been no change to the definition of the subject.	Page 9
6) Describe the actual reductions achieved in absolute and intensity terms and as a percentage of the original carbon footprint.	Page 9
7) State the baseline/qualification date.	Page 8
8) Record the percentage economic growth rate for the given application period used as a threshold for recognising reductions in intensity terms.	
9) Provide an explanation for circumstances where a GHG reduction in intensity terms is accompanied by an increase in absolute terms for the determined subject.	N/A
10) Select and document the standard and methodology used to achieve carbon offset.	Page 10
11) Confirm that: a) Offsets generated or allowance credits surrendered represent genuine, additional GHG emission reductions elsewhere	Pages 10
 b) Projects involved in delivering offsets meet the criteria of additionality, permanence, leakage and double counting. (See the WRI Greenhouse Gas Protocol for definitions of additionality, permanence, leakage and double counting). 	Pages 10
c) Carbon offsets are verified by an independent third party verifier.	Pages 10
 d) Credits from Carbon offset projects are only issued after the emission reduction has taken place. 	Pages 10
e) Credits from Carbon offset projects are retired within 12 months from the date of the declaration of achievement.	Appendix A
f) Provision for event related option of 36 months to be added here.	N/A
g) Credits from Carbon offset projects are supported by publically available project documentation on a registry which shall provide information about the offset project, quantification methodology and validation and verification procedures.	Page 10 & appendix A
h) Credits from Carbon offset projects are stored and retired in an independent and credible registry.	Page 10 & appendix A
12) Document the quantity of GHG emissions credits and the type and nature of credits actually purchased including the number and type of credits used and the time period over which credits were generated including:	Page 10



a) Which GHG emissions have been offset.	Page 10
b) The actual amount of carbon offset.	Page 10
c) The type of credits and projects involved.	
d) The number and type of carbon credits used and the time period over which the credits have been generated	Page 10 & appendix A
e) For events, a rationale to support any retirement of credits in excess of 12 months including details of any legacy emission savings, taken into account.	N/A
f) Information regarding the retirement/cancellation of carbon credits to prevent their use by others including a link to the registry or equivalent publicly available record, where the credit has been retired.	Page 10 & appendix A
13) Specify the type of conformity assessment: a) independent third-party certification, b) other party validation; c) self-validation	Other party validation
14) Include statements of validation where declarations of achievement of carbon neutrality are validated by a third party certifier or second party organizations.	Appendix C
15) Date the QES and have it signed by the senior representative of the entity concerned (e.g. CEO of a corporation; Divisional Director, where the subject is a division of a larger entity; the Chairman of a town council or the head of the household for a family group).	Page 4
16) Make QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (e.g. via websites).	

