

Carbon Neutral PAS 2060
Declaration

Riverside, Hull

Cranswick Foods

Qualifying Explanatory Statement



Mission Zero team
CRANSWICK PLC – RIVERSIDE, HULL

Contents page:

1. Introduction

- a. Introduction
- b. Context
- c. Riverside
- d. General Information
- e. Checklist

2. Project summary

- a. Executive summary
- b. Methodology
- c. Specification (PAS 2060)

3. Context and drivers

- a. Site governance & strategy
- b. Cranswick PLC targets

4. Emissions baseline & projections

- a. Measurement
- b. Scope 1 & 2 emissions
- c. Scope 3 measurement

5. Reduction solutions

- a. 2017 – 2021
- b. 2021 onwards

6. Offset portfolio

1. Introduction

a. PAS 2060 requires that an entity making a declaration in respect to carbon neutrality, in accordance with its provisions, make a qualifying explanatory statement (QES) that includes the evidence substantiating the declaration. This document forms the QES that demonstrates the commitment of Cranswick plc's Riverside Hull site (Riverside) to achieving carbon neutrality, which includes evidence substantiating the declaration under PAS 2060. All information is believed to be accurate at the time of issue. Should any further information be brought forward that would affect the validity of the statements herein, this document will be updated accordingly to reflect the most recent status of carbon neutrality for Cranswick plc's Riverside Hull (Riverside).

b. Cranswick PLC is a leading UK food producer and supplier of premium, fresh, and added-value products. The company is listed on the London Stock Exchange and is a constituent of the FTSE 250 index.

Cranswick PLC has pledged to become the world's most sustainable meat business, has committed to a Net Zero target by 2040, and is in the process of setting a group-wide Science-based target to encourage their individual sites to hit the Net Zero target in 20 years' time.

c. Riverside is one of Cranswick PLC's sites that specialises in the production of meat products. This site forms part of the food and agriculture industry, more specifically

meat (pork and chicken, mainly) production, which contributes to the increase in a significant amount of greenhouse gases in the UK each year.

Riverside has started its own journey as a site to reduce its Scope 1 & 2 carbon equivalent emissions. The historic site emission data will be discussed in this document, including a detailed analysis of the current state and future ambition.

Overall, this document will outline the site's road map to achieving PAS 2060 Carbon Neutrality by the end of Q1 2021.

d. General Information

Information required under PAS 2060:2014 guidance	Riverside Response
Individual(s) responsible for the evaluation and provision of data necessary for the substantiation of the declaration	Ben Wingfield, Site Director, Riverside Hull William Clare, Project Manager, Veris Strategies / Avon Energy Stuart Fowler, Third Party Auditor, Carbon Footprint Ltd
Entity responsible for making the declaration	Cranswick Foods PLC, Riverside Hull site
Subject of PAS 2060 declaration	Scope 1 & 2 of all direct operational emissions of the Riverside Hull site
Rationale of the selection of the subject	The scope and subject of this PAS 2060 includes all direct emissions in operational control, as stated in the PAS 2060:2014 guidelines.
Type of conformity assessment undertaken	3 rd Party (ISO14064-3 verification and validation)
Application Period	2020 calendar year initially, with an addition of 3 months to align to financial year in April 2021 (April 2020 – March 2021)
Commitment Period	Continued annual commitment to offset operational emissions from Scopes 1 & 2 with an endeavour to include Scope 3 from 2021 – 2022 onwards.
Senior Representative Signature	
Name and Position:	Ben Wingfield, site director
Date:	16.02.2021

e. Checklist for QES supporting declaration of achieving carbon neutrality.

Information required under guidance	Response
Define standard and methodology used to determine its GHG emissions reduction	Section 2 b, 2 c
Confirm that the methodology used was applied in accordance with its provisions and the principles set out in PAS 2060 were met.	Section 2 b, 2 c
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. (The methodology employed to quantify reductions shall be the same as that used to quantify the original carbon footprint. Should an alternative methodology be available that would reduce uncertainty and yield more accurate, consistent, and reproducible results, then this may be used provided the original carbon footprint is re-quantified to the same methodology, for comparison purposes. Recalculated carbon footprints shall use the most recently available emission factors, ensuring that for purposes of comparison with the original calculation, any change in the factors used is considered).	Section 4 of this report, and the Carbon Footprint Verification report (provided upon request, publicly available)
Describe how reductions have been achieved and any applicable assumptions or justifications	Section 5 a, 5 b
Describe the actual reductions achieved in absolute and intensity terms and as a percentage of the original carbon footprint.(Quantified GHG emissions reductions shall be expressed in absolute terms and shall relate	Section 4 b

to the application period selected and/or shall be expressed in emission intensity terms (e.g. per specified unit of product or instance of service)).	
State the baseline / qualification date	Section 1 d
Record the percentage economic growth rate for the given application period used as a threshold for recognising reductions in intensity terms.	1.4 % UK GDP
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, 49% reduction in absolute terms since 2016
Select and document the standard and methodology used to achieve carbon offset.	Section 6
Offsets generated or allowance credits surrendered represent genuine, additional GHG emission reductions elsewhere	Section 6
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).	Section 6
Carbon offsets are verified by an independent third-party verifier.	Section 6
Credits from Carbon offset projects are only issued after the emission reduction has taken place	Section 6
Credits from Carbon offset projects are retired within 12 months from the date of the declaration of achievement.	Section 6

Credits from Carbon offset projects are supported by publicly available project documentation on a registry which shall provide information about the offset project, quantification methodology and validation and verification procedures.	Section 6
Credits from Carbon offset projects are stored and retired in an independent and credible registry.	Section 6
Document the quantity of GHG emissions credits and the type and nature of credits purchased including the number and type of credits used and the time period over which credits were generated including:	Section 6
Which GHG emissions were offset	Section 6
The actual amount offset	291 tonnes CO2e
The type of credits and projects involved	VCS/Verra, Gold Standard, Section 6
The number and type of carbon credits used and the time period over which the credits have been generated.	Links in Section 6
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

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.	Section 6
Specify the type of conformity assessment.	Section 1 d
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).	Section 1 d
Make QES publicly available and provide a reference to any freely accessible information upon which substantiation depends	Completed

2. Project Summary

a. Executive summary

Riverside are a site part of the Cranswick Foods group of sites that are all working towards carbon neutrality over the coming years. Riverside's scope 2 emissions are all accounted for by the market-based approach of REGO certificates purchased across group. The scope 1 on site is made up mainly of natural gas for heating and refrigerant leakage. Albeit low emission quantities, they are two key issues that require focus and planning to reduce. This document summarises the ways the site is addressing these emissions long term, and how they are offsetting them in the immediate term.

b. Methodology

This carbon neutral project applied the Greenhouse Gas Protocol Corporate Standard (2015 edition) as a framework in accounting for emissions and developing an emissions inventory.

The business rationale for compiling the GHG inventory:

1. Managing risks and identifying reduction opportunities on site
2. Public reporting and participation in reporting programmes internally and externally (where applicable)
3. Participating in GHG markets in the purchasing of offsets (Scope 1 & 2)
4. Recognition for voluntary early action towards group Net Zero target

The boundaries of the site have been defined as 'operational', which includes all on-site and off-site activities, processes, services, and impacts. This is applicable to

Riverside as an operational entity, not Cranswick PLC, and will therefore only include operational authority of the site as opposed to the company's operational authority.

The standard classifies emissions into 3 'scopes':

Scope 1. Emissions that arise from direct emission, primarily carbon-based fuel combustion, including on site combustion and processes using natural gas, and refrigerants as fugitive emissions.

Scope 2. Emissions which arise from purchased electricity, heat, steam, etc. – but whose production is from carbon-based fuel.

Scope 3. All other emissions, notably those that arise from:

- a. Purchased goods and services including farm produce up stream
- b. Supply chain logistics from third party freight vehicles
- c. Business travel & Employee commuting
- d. Waste disposal
- e. Investments

Scope 3 emissions are currently being developed at group level. However, a site-specific scope 3 analysis will also be carried out to ensure all emissions at upstream farms have been factored in. Scope 3 data is not included in this report but will be based on estimations of quantity of meat produced on site by estimated kg/CO₂e per tonne of meat from farms. Estimations will also be made on freight to and from site and waste management. This is currently a work in progress and to be included in future PAS 2060.

c. Specification (PAS 2060, ISO14064-1)

The specification in use to demonstrate carbon neutrality for the site is the BSI PAS 2060:2014 standard. PAS 2060 is an internationally recognised and applicable

standard that sets out the requirements for achieving and demonstrating carbon neutrality – allowing the site to maintain a consistent GHG inventory with accuracy and transparency. The benefits of PAS 2060 are:

- Meet customer, stakeholder, industry, and legal expectations
- Reduce greenhouse gas emissions and quantify your carbon footprint
- Identify areas of inefficiency and improve overall performance
- Make cost savings by reducing energy consumption and bills
- Gain credibility with an accurate carbon neutrality statement

Further to the above, the overall site emissions inventory for scopes 1 and 2 were audited and verified by Carbon Footprint Ltd. The methodology used for building the emissions inventory was ISO14064-1, and the verification standard used was ISO14064-3:2019. The report issued by the 3rd party auditing team Carbon Footprint Ltd states: 'Cranswick's boundaries and system has satisfactorily captured the most significant and relevant emissions sources.'

3. Context and drivers

a. Site Governance & Strategy

The site has seen a considerable reduction since 2016 in energy use, which has positively contributed towards high environmental performance. As of July 2020, the site established a Mission Zero team to govern the multiple carbon reduction projects over the coming years. This governance team for PAS 2060 Carbon Neutrality is below in the RACI table:

Roles / Stages	Site Director Ben Wingfield	Programme Lead(s) Will Clare / Ben Wingfield	Project Lead Will Clare	Project Sponsor Engineering Team	Project Auditor Carbon Footprint Ltd
Data Gathering & Analysis	A	I / C	R	C	
Carbon Management Plan	A	I / C	R	C	
Public Commitments	A	R	C		
Offset Portfolio Development	A	C	R		
Third Party Audit	I	I	C	C	A / R
Carbon Neutral PAS 2060 approval	I	I	R	I	A / R

R = Responsible A = Accountable C = Consulted I = Informed

The site vision and strategy are inextricably linked to Cranswick's overarching targets, with some additions. Milton Keynes targets for 2020 are to be:

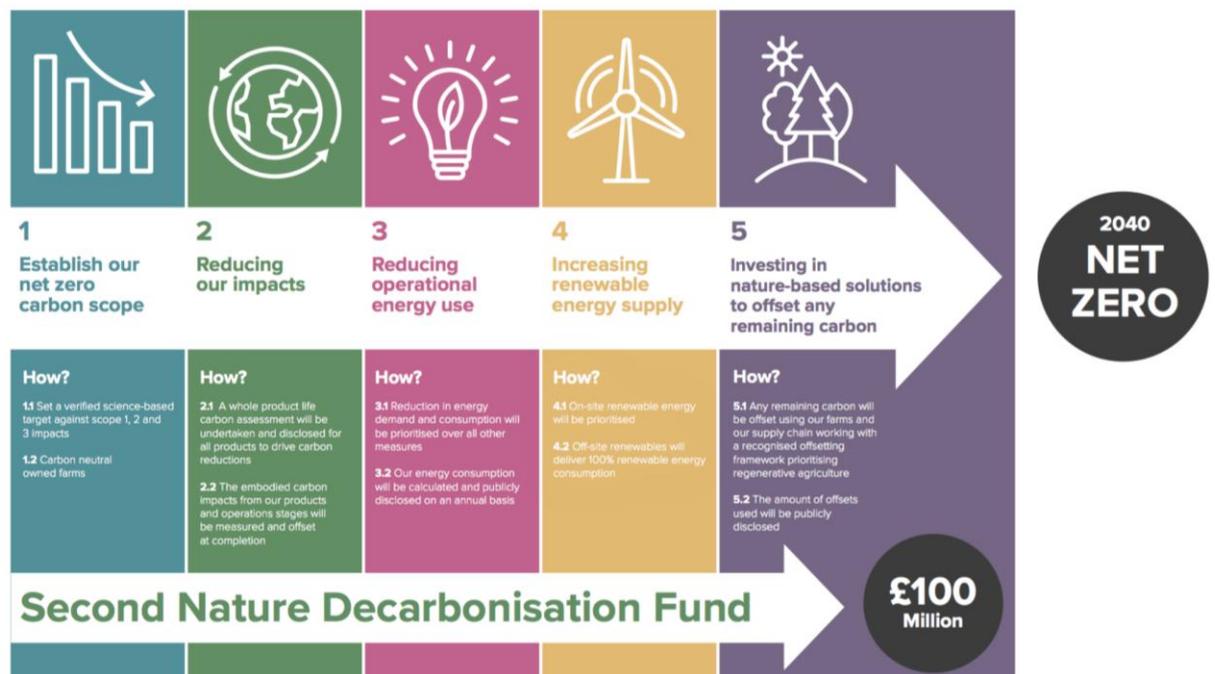
1. The first Cranswick site to be Carbon Neutral PAS 2060
2. And the first cooked sliced meat manufacturing site to be carbon neutral in the UK

b. Cranswick PLC Targets

As part of their Second Nature sustainability programme, Cranswick have set 3 ambitious targets in relation to carbon management:

1. The world's most sustainable meat business (2018)
2. Committing to the Science Based Targets initiative and setting a target (2020)
3. Net Zero by 2040, 10 years ahead of the UK Government target (2020)

Cranswick's Net Zero journey is broken down into 5 strategic aims, that ultimately form the base for the Milton Keynes site's carbon reduction journey:



4. Emissions inventory & projections

a. Measurement

At Riverside, a 5-stage process in building an emissions inventory was developed:

1. **SLT Master Class:** an introduction for the site's senior leadership team to net-zero, carbon, and the management of emissions. This also involved the establishment of a 'Mission Zero' governance team as mentioned above to ensure ownership and accountability throughout the project.
2. **Scope & Boundaries:** Using the 'Operational Boundaries' approach as stated in the GHG Protocol Corporate Standard. This determined that the site's emissions were based on the electricity and gas consumption metered to the site, any transport owned by the site (within and on the site), and f-gas refrigerant leakage from the site's fridges / cooler / air conditioning units.
3. **Data Gathering:** with assistance from onsite engineers, the data gathered was from source, metered data based on monthly readings both for indirect electricity consumption, and for natural gas consumption. Refrigerant data was also gathered, with the site using a high GWP f-gas mix.

The data gathered is from a baseline year of 2016 up to the current reporting year of 19/20. The data and emissions were split into the financial year for the site from April to March. Therefore, the years of emissions included in the emissions inventory are:

- 2016-17
- 2017-18
- 2018-19
- 2019-20

4. Data Interpretation: the site’s emissions data was then calculated using a combination of the following:

- a. UK location-based conversion factors for kgCO₂e/kWh for electricity. This changed from year to year based on the grid’s gradual decarbonisation from the baseline year of 2016:

Year	GB Grid Carbon Intensity (kgCO ₂ e/kWh)
2016	0.41205
2017	0.35156
2018	0.28307
2019	0.2556
2020	0.23314

- b. UK location-based conversion factors for kgCO₂e Natural Gas from 2016:

Year	Natural Gas Carbon Intensity (kgCO ₂ e/kWh)
2016	0.18400
2017	0.18416
2018	0.18396
2019	0.18385
2020	0.18387

b. Scope 1 & 2 emissions

- 1. Scope 1 emissions that significantly contribute to the site’s GHG inventory are:

- a. Stationary combustion of natural gas: this measured at a total (over the period from (Jan) 2017 – (Mar) 2020 at: 928.75 t/CO₂e. Mainly used for on-site boilers, and hot water. The total CO₂e for the offsetting period (2020) is 290.45 t/CO₂e.
 - b. The refrigerant leakage on site is 19% of the overall Scope 1, at 54.77 t/CO₂e per annum and 164.3 t/CO₂e total since 2017 baseline year.
2. Scope 2 emissions no longer generate emissions for the site due to the Cranswick group-wide procurement of 100% renewable energy. The electricity has however been calculated both from a market-based and location-based approach, meaning the would-be emissions are still collected for reporting purposes. This is to encourage further efficiency of the site's electricity demand. The market mechanism for the procurement of 100% renewable energy is through UK-based Renewable Energy Certificates known as REGOs (Renewable Energy Guarantee of Origin).
 - a. Market-based approach electricity: this is measured as 0 for the site as all indirect electricity has been purchased from renewable sources.
 - b. Location-based approach: the electricity generated using the GB grid's emissions factor is a total of 1075.97 t/CO₂e from 2017 to present. The total for the offsetting period (2020) is 742.69. However, the market-based approach will be used for the purposes of carbon neutrality and the purchase of offsets.
3. Other: all other emissions were either negligible and not-recorded, or not categorised as Scope 1 or 2, such as freight carrying produce to and from site either being owned by group or by customers downstream.

Emissions summary (detail found in the emissions inventory):

To Date				
	Total Scope 1	Total Scope 2	Total Emissions of site (location-based approach)	Total Emissions of site (market-based approach)
	928.75	3,457.17	4,475.92	928.75

Baseline year				
	Scope 1	Scope 2	Total (location-based)	Total (market-based)
	223.63	1075.97	1,299.60	1,299.60

Offsetting period				
	Scope 1	Scope 2	Total (location-based)	Total (market-based)
	290.45	742.69	1033.13	290.45

Emissions to be offset	Total
	290.45

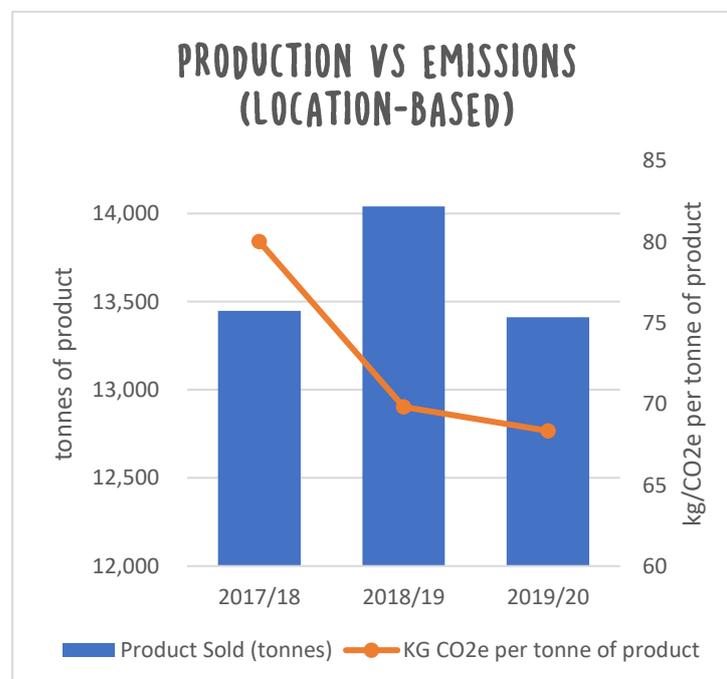
c. Scope 3 measurement

Reporting on scope 3 emissions will begin from April 2021, which will incorporate the wider upstream and downstream impact of the site.

5. Reduction solutions

a. 2017 – 2021

- Location-based emissions have fallen each year from an intensity perspective.



- In absolute terms, emissions from location-based approach have fallen year on year by 7% (8% 2017/18 to 2018/19, 6% 2018/19 to 2019/20).

b. 2021 onwards

The site is preparing further energy efficiency measures and innovation across the site over the next 3 – 5 years. Initiatives include:

- The site will conduct a review on the remaining emissions from Scope 1 consumption and ways to reduce this to zero:
- Refrigerant replacement to ammonia or CO2 grade refrigerant.
- Heating and hot water generated from on site renewables or heat pumps to reduce natural gas consumption to close to zero.
- Investing in nature based solutions in the local area to generate carbon savings.
- The site is looking to invest in RGGOs, renewable gas guarantee of origin, which will act as a market-based mechanism to reduce the source emissions of natural gas and neutralise the emissions they produce with the use of biomethane. This currently is too expensive an option for the site but will be in consideration as the site moves towards net zero.

6. Offset portfolio

- a. With the approval of the emissions inventory, the offset portfolio was chosen to reflect this total amount for the offsetting period 2020 (291 t/CO₂e).

- b. The offset portfolio was selected by the Mission Zero team to reflect two of the site's strategic aims: food security, and carbon reduction:

Project Name	Project Type	Quantity
1. Sudan Cookstoves	Community	100
2. Portel-Para REDD+	Conservation	91
3. KR One Thailand	Renewable energy	100

- c. The Gold Standard and Verra registries were used for the international projects. These projects adhere to an in depth and controlled verification and validation process to fully understand the positive impact of the project lifecycle. Some projects are awarded further sustainable development goal attainment based on

the impact they may have beyond carbon sequestration, such as gender equality, food security, and other measures.

d. Here are the links to the publicly retired offset projects that have offset the total

Scope 1 & 2 verified footprint of the CCFMK entity:

- Darfur Fuel Efficient Cookstoves, Sudan:
 - <https://registry.goldstandard.org/projects/details/507>
- Portel-para Amazon Project:
 - <https://registry.terra.org/myModule/rpt/myrpt.asp?r=206&h=120800>
- Theparak Wind Farm project 3MW:
 - <https://registry.terra.org/app/projectDetail/VCS/2002>