



CARBON REDUCTION PLAN JANUARY 2024

Business name: Castell Howell Foods

Publication date: January 2024

Commitment to achieving Net Zero

Castell Howell Foods is committed to achieving Net Zero emissions by 2050, and adopt the ISO14001 environmental management system as a framework to manage environmental standards.

Scope 1 and Scope 2 Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: Financial Year 2020/2021	
Additional Details relating to the Baseline Emissions calculations.	
<i>Our baseline reflects Scope 1 and Scope 2 emissions only.</i>	
<i>With in excess of 14000 products and supply chains that extend globally, accurate scope 3 emissions will require collaboration with suppliers, and customers.</i>	
<i>We recognise that with accurate information our customers can make an informed choice on how to reduce emissions through the food presented on menus.</i>	
Baseline year emissions:	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	3307
Scope 2	626
Scope 3	n/a
Total Emissions	3933 tCO₂e

Current Emissions Reporting

Emissions reporting for financial year 2022/2023 will be available late February 2024.

Reporting Year: Financial year 2021/2022	
EMISSIONS	TOTAL (tCO _{2e})
Scope 1	4286
Scope 2	654
Scope 3	n/a
Total Emissions	4940

Emissions reduction targets

We align with the Welsh Government Net Zero Wales targets in our decision making to reduce our carbon emissions.

- Phase 1 (2021-2040): 89% reduction.
- Phase 2 2050: at least 100% reduction (net zero).

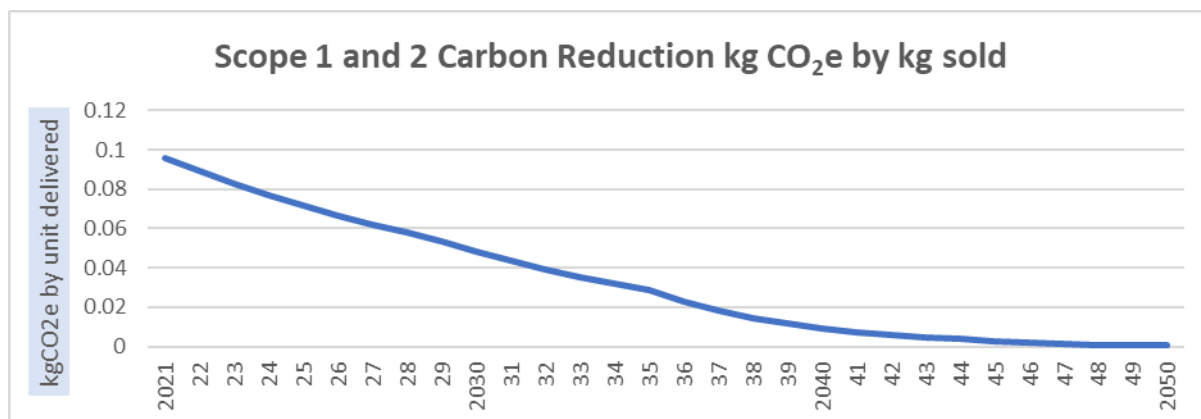
In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets, measuring our emissions as kg CO_{2e} by kg sold. We feel that this is a more accurate unit of measurement, and reflect the aspirations of the business to develop new sales opportunities. This unit of measurement negates food price inflation, that can skew measuring carbon emissions by financial value.

Carbon emissions by unit sold/kg sold are forecast to decrease by 7%, year on year, from 0.083 kg CO_{2e} by kg sold (2023) to 0.057 kg CO_{2e} by kg of product sold (2028) and 0.048 kg CO_{2e} by kg of product sold (2030).

To achieve this reduction we will take a pragmatic approach, and adopt innovation, especially to decarbonise our delivery fleet with the expected introduction of hybrid/hydrogen/methane vehicles. We anticipate that the adoption of new technologies will accelerate by the year 2035 and beyond, and reflected in our year on year decreases.

7% year on year decrease to 2023
10% year on year decrease to 2035
20% year on year decrease to 2045
30% year on year decrease to 2050

Progress against these targets can be seen in the graph below:



Castell Howell measure our Scope 1 and Scope 2 emissions, and report annually via the SECR. The reporting period follows the financial year and is represented as KWH, KG/Co2 and as a unit of energy per KG of product delivered. Figures are calculated using the DEFRA GHG Factors, condensed set.

The SECR report for financial year 2022/2023 will be available from February 2024.

Included in the reported figures is energy consumed at the main depot in Cross Hands, Cash & Carry, Merthyr offices, Avonmouth depot, Porthmadog depot and St Martins (Chirk) depot. Provisions have been made for energy derived from on-site renewable energy sources.

Fuel is either delivered to depot 'bulk tanks', purchased via fuel cards or paid for by colleagues and claimed back. The first two methods of fuel purchase allow for accurate collation of volumes purchased. Changes in the profile of company cars, moving from diesel to hybrid petrol models, has been a positive environmental decision, however collating **accurate** information for this report highlights the need for an advanced system to record fuel purchased (and subsequently claimed back), and kWh of electricity purchased 'off site' to charge the vehicles.

As a company with numerous refrigeration systems, both fixed and on vehicles, Castell Howell recognise that loss of refrigerant has significant environmental impacts. The company complies with F Gas legislation, are ISO14001 audited and aim to move to lower impact refrigerants. It is important to include this measurement on the SECR and report annually.

In comparison to 2020/2021 the tonnage of CO2e by £M of sales has reduced from 39.66t to 29.76t, a reduction of 24.96%. Due to the impact of food inflation, at around 19%, a measure of kg CO2e by kg of units sold is also an important performance indicator. A 7.29% reduction in kg CO2e by 'weight of product sold' better reflects improvements in operational efficiencies, national grid composition and investment in infrastructure.

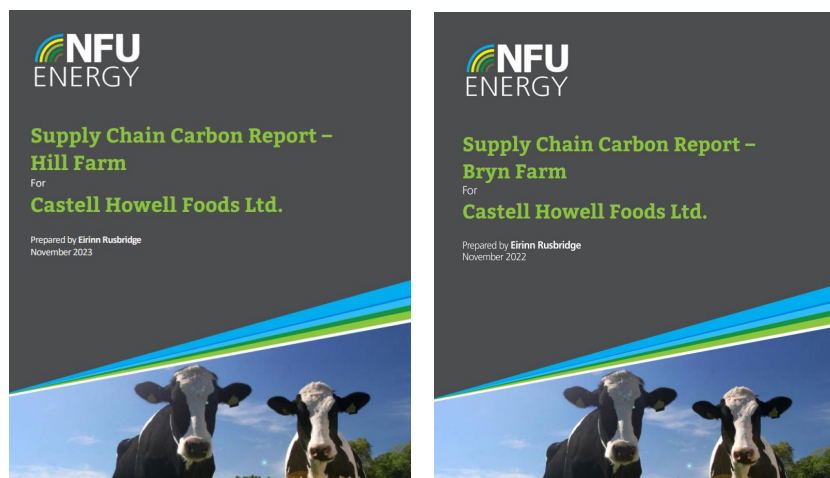
Scope 3

With in excess of 14000 products and supply chains that extend across Wales, the UK and globally Castell Howell Foods are considering the best approach to measure Scope 3 activities with a degree of accuracy.

We will start with a modelling approach to highlight areas of both high volume and high intensity. Working with industry consultants and the Federation of Wholesale Distributors, by 2026 the company will have commenced our 'Measure-Plan-Reduce' strategy, and will have generic figures for Scope 3, using these to focus on areas of greatest impact.

Castell Howell already recognise that the animal protein sector has the highest carbon impact. As we source from a range of suppliers, including our Welsh beef supply chain, there can be significant carbon emission variances between meat, dairy produce and eggs purchased and reared via different production systems.

To start our measuring journey for high intensity categories, we are working with two of our beef suppliers, The Rees Family, Bryn Farm, Pendoylan, Vale of Glam and at Hill Farm, Haverfordwest. In collaboration with NFU Energy (National Farmers Union) the environmental impact of our Welsh beef supply chain is under review. Bryn Farm are a predominately grass based system with minimum artificial inputs, consequently they sequester nearly 50% of the carbon, with their total carbon 27% less than the national average for similar operation.



Carbon Reduction Projects

To reduce total impact, working in collaboration with our customers, in terms of menu options and product/supplier options is critical to ensuring that the products featured are working towards a lower environmental impact supply chain.

We are collaborating with a Llaeth Y Llan, based in Denbighshire, to establish how to best measure our scope 3 emissions. Here's an example of an effective backhaul operation, reducing scope 3 emissions.

Purchases of Yoghurt 2022	
576 pallets	
12 pallets per week	
Distance Cross Hands Depot to Denbigh	Total miles
130 miles	
130 x 48 weeks	6240 miles

A standard carbon calculator that uses DEFRA data calculates that this backhaul has negated approx. 6197 kg of CO₂.

Calculate CO₂ by mileage:

Distance	Consumption	Fuel Type	CO ₂ produced
6240	12	Diesel	6192.27 kg
mi	MPG	▼	

Burning a litre of **diesel** produces around **2.62 kgs** of carbon dioxide, whereas **petrol** has a lower carbon

A key priority for Castell Howell is to work with our customers to establish shared goals and agree on a pathway to provide solutions that are practical, yet ambitious. Adopting an holistic view of the supply chain is critical, as it is important that food products that feature on menus help drive innovation and influence change. This can only be achieved with the collaboration of catering and procurement teams.

The ambitions of the Celtic Pride Premium Beef Scheme is to be the most sustainable Welsh beef supply chain partnership for foodservice customers. Wynnstay Agriculture supply finishing and winter housing feed for cattle reared for the Celtic Pride scheme and purchase sustainable soya credits on a mass balance basis for the mills, through a couple of the sustainable soya schemes (e.g. RTRS or Cargill's SSS).

Castell Howell are working with Aberystwyth University to develop a range of frozen added value meat products that have sustainability and nutrition as core principles. We recognise that Welsh lamb is expensive at certain times of the year, therefore adding value to cuts that are cheaper at certain times of the year is pragmatic solution.

Developments will align with HCC's 'The Welsh Way' ([Red meat the 'Welsh Way' | HCC / Meat Promotion Wales](#)). We have experience of working in collaboration with HCC, and successfully worked together delivering the Welsh Beef Quality project ([BeefQ results and the way forward for beef eating quality in the farming industry | HCC / Meat Promotion Wales](#))

Key Features of the 'Welsh Way'

- Beef and sheep farming in Wales is non-intensive, with animals reared in tune with our landscape using natural grass and rainwater
- Welsh farmers manage grassland in ways that help capture carbon, making a positive difference to climate change
- 80% of Wales's farmland isn't suited to growing crops; keeping cattle and sheep is the best way to produce high-quality food from marginal land
- Sustainable types of livestock farming are part of the solution to climate change according to [international reports](#)
- All this makes the environmental impact of sheep and beef farming in Wales very different to the global figures often cited in the media, and far less than other sectors such as transport, industry and energy.

What is HCC's role?

- Seven years ago, we launched our [Red Meat Roadmap](#) which set out a vision of sustainable farming for Wales which was in tune with the modern consumer's needs, and gave advice to farmers and the whole supply chain on practical actions to take
- Currently, HCC is working with leading experts to refresh and update this work to produce a new sustainability action plan in 2020
- HCC has worked with many organisations on projects to reduce food waste and promote sustainable ways of farming
- The current [Red Meat Development Programme](#) will have a positive effect on the environmental sustainability of the red meat sector

We are working extensively with our supply chain to introduce elements of sustainability. We have identified one of our dairy supply chains to work in partnership to establish how we can introduce biodiversity measure, these learnings will be replicated across our meat supply chain. One of our key suppliers is South Caernarfon Creameries (SCC), and although their produce is not specific to this contract this supply chain work highlights our ambitions.

The purpose of the discussions was to establish at what stage SCC were in regards to achieving Net Zero targets and to establish how Castell Howell could support the process. Of particular interest was the proportion of contribution from Scope 3 activities (purchased goods and services that originate from the primary producer) in which the co-operative has less control over and relies on its members to comply.

A recent Welsh Government funded project with CHF, Aberystwyth University, Authentic Foods saw the development of nutrient dense 'hybrid' meals for NHS Wales.

We look forward to inviting caterers, and growers across Wales to join our horticulture supply chain initiative and work on new product development of **frozen** Welsh based meat/vegetable products. From December 2023 we have been working with Professor John Draper and Dr Tom Wilson at Aberystwyth University/Aberinnovations to develop a range of Welsh Lamb and Beef/Welsh veg meatballs, kofta's and sausages for public sector catering (see image below).

We feel that innovation in product and menu design is key to help us achieve our goal of increasing the percentage of nutritious and sustainable produced meat to our customers, meeting commercial price points.

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting².

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of Castell Howell Foods:

Name : Matthew Lewis

Position: Managing Director

Signature: 

Date: 2nd February 2024

¹<https://ghgprotocol.org/corporate-standard>

²<https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>