



Notes to support packaging statement

November 2021

As a company who are involved in the placing of packaged goods on the market, Castell Howell Foods (CHF) complies with the Packaging (Essential Requirements) Regulations 2015. The main requirement place an onus on compliant businesses not to place packaging on to the market unless it fulfils the essential requirements and within the heavy metal concentration limits.

Castell Howell employ the services of European Recycling Platform (www.erp-recylcing.org) to collate our annual obligation tonnage, and to advise on how best to reduce our packaging. CHF further employs The Wastepack Group to purchase Packaging Recovery Notes (PRN's) to the value of the tonnage of packaging we supply to the 'end user' stage of our supply chain.

CHF have been engaged with Welsh Government and National Government on consultations to the proposed Extended Producer Responsibility for Packaging Policy.

It is critical that packaging fulfils its primary function of protecting the food, increasing shelf life and allows an effective medium for conveying product characteristics e.g. labels with allergen details, use by, origin etc. Issues such as difficulty emptying, packaging that is oversized, lack of clarity on labelling and food going to waste reinforces the idea that packaging design and functionality are critical.

Identifying all the different plastic substitute options (compostable, biodegradable, biobased etc) is a challenge for both CHF and our customers. CHF work closely with Waste Resource Action Plan (WRAP) and are members of their Courtauld agreement. Sitting alongside this agreement, The UK Plastic Pact encourages the reduction of complexity and the reduction of unrecyclable plastics, and aims to ensure that the collection, grading and processing infrastructure is able to meet the requirements of plastics available on the market. The Pact recognises that there must be no unintended consequences such as increased food waste and increased carbon emissions.

We have not asked our customers to complete a formal packaging survey, rather work on account management principles whereby problems and potential solutions are discussed during regular dialogue.

CHF were involved in a trial with a Welsh Health Authority to minimise plastic packaging vacuum shrink bags used for primal meat joints purchased. A reduction from the 70 micron PA/PE bags to a 50 micron equivalent, resulted in a 28.7% reduction in plastic. However an unintended consequence led to an increase in damaged packaging during transit, resulting in spoilt meat and food waste. After 6 weeks it was decided to revert to the 70 micron packaging.

There has been an increased focus on our colleagues using the correct size bags for butchery products. To facilitate this we have engineered racks that allow easy access to the correct sized bag. A member of the butchery team replenishes and a line leader periodically checks on usage.

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Castell Howell sell a range of non-single use plastic alternatives. The table below illustrates that our customers are moving away from plastic disposables in favour of wood and biodegradable solutions. We are working with our waste management partner to evaluate potential options of dealing with compostable cups and establish a circular solution.

		+/- %		+/- %
BLACK Flexi Straws	1x250	-50%	Black Paper Straw 200x6mm	1x250 999%
Black disposable Knives	1x100	-95%	6 Bio Deg Burger Box	4x125 999%
Plastic Dessert Spoons	1x100	-40%	9 Bio Card Round Plate	1x125 12%
Plastic Forks	1x100	10%	9 x6 Bio Deg Meal Box	2x125 597%
Plastic Teaspoons	1x100	-47%	Bio Wooden Dessert Spoon	1x100 343%
Striped Bendy Straws	1x250	-23%	Bio Wooden Forks	1x100 102%
			Bio Wooden Knives	1x100 70%
			Bio Wooden Stirrers 140mm	1x1000 56%

Sales comparison 01.08.19 – 30.09.19 vs 01.08.21 – 30.09.21

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CHF have worked with our customers, notably a local health authority, in decreasing the quantity of transit packaging used in the meat supply chain. Through the substitution of cardboard boxes with returnable plastic crates. The following figures are to April 2021.

Total KG of fresh meat sold to XXX Hospital Catering	:	10880kg
Typical weight of meat in crates	:	12kg
Estimated quantity of crates used in 6 months	:	10880/12kg = 906
Estimated quantity of crates used in 12 months	:	1812
Weight of cardboard boxes substituted	:	2000g

Total estimated weight of cardboard substituted in 12 months : $1812 \times 0.2 = \text{362.4 kg}$

We are mindful that of the 22 Local Authorities in Wales (with a further 343 in England) that a universal waste management system is not available. With this in mind, we recognise the individual challenges of each local authority in meeting the goals of the Public Sector Waste and Resource Efficiency Plan (the Public Sector Plan), allied to the objectives highlighted within the 'Towards Zero Waste' strategy for Wales.

We work with suppliers and customers to engineer plastic out of products. A recent example is the purchase of plastic water bottles with a higher percentage of recycled content, and the introduction of larger packs of toilet paper, reducing the plastic content by more than 50%.

Prior to Covid-19 we had a target to review all packaging materials by December 2020. Regrettably this target has been moved to 2021.

Whilst a reduction in all packaging is welcome, care needs to be taken to ensure that the packaging retains its functionality, durability and does not compromise the integrity of the product, thus inadvertently increasing food waste.

Materials identified by Castell Howell Foods as not desirable in the supply chain are PVC, Polystyrene, Oxy degradable materials, Acrylic (for food applications), PLA – Polylactic acid, Industrial compostable, Polycarbonate, Rigid Water soluble plastics, Expanded/Foamed Polymers, PVdC, Black Plastics (refers to all dark coloured plastics that are non-detectable in recycling plants).

A key supplier of ready meals to a local authority changed their specification for trays, from black to new trays manufactured by Faerch. These trays aim for circularity in food packaging, and are easier to segregate at Materials Recycling Facilities to be forwarded for further recycling. Faerch, manufacture a tray that contains 80% post-consumer recycled content (PCR) that maintain their functionality in our supply chain.

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CHF are working with a key online retail customer to establish the environmental impact of fresh salmon sold. Insofar as total impact on CO₂ emissions, packaging is estimated to be at 6.2% and not the most significant impact.

By Stage Salmon (260g)

By stage, your impacts are as follows - Farming is obviously the biggest area of impact for the Salmon product based on the stage of the supply chain we have assessed you for.

Stage	 Carbon (g CO ₂ eq)	 Water Usage (L eq)	 Water Pollution (g PO ₄ ³⁻ eq)	 Biodiversity (Species loss index)
Farming	89%	~100%	~100%	~100%
Transport	4.4%	< 0.5%	< 0.5%	-
Processing	< 0.5%	< 0.5%	< 0.5%	-
Packaging	6.2%	0. < 0.5%	< 0.5%	-

Nevertheless, an analysis of the packaging used in the supply chain, including the Styrofoam boxes and absorbent pad, concluded that there were very few changes that could be implemented in the short term.

Transit Packaging from fishery to processor	Retail packaging	
Single Styrofoam boxes (empty weight 560g) capacity of 20- 24kg salmon	Base Single use Mono-R Pet base, 34g. Made from >50% recycled material	Absorbent Pad PE, PET or biopolymer film layer, centre layer made from a blend of cellulose and bonding fibres

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packed in approx 3kg ice.		
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The study highlighted the success of diverting the Styrofoam boxes from the conventional waste stream to a recycling stream. In 2019, CHF purchased a Styromelt machine to manage the volume of Styrofoam boxes generated. Instead of entering the waste stream, the Styromelt melts the boxes into small briquettes that can be sold for use in the construction industry, consequently diverting them all from landfill.



As a wholesaling and manufacturing business we take care to manage our resources, to reduce our waste and to recycle by-products where we can. This encompasses many aspects of the organisation including reducing the amount of packaging used, and working with supply chain partners to minimise the quantity and type of packaging used in the products we sell.

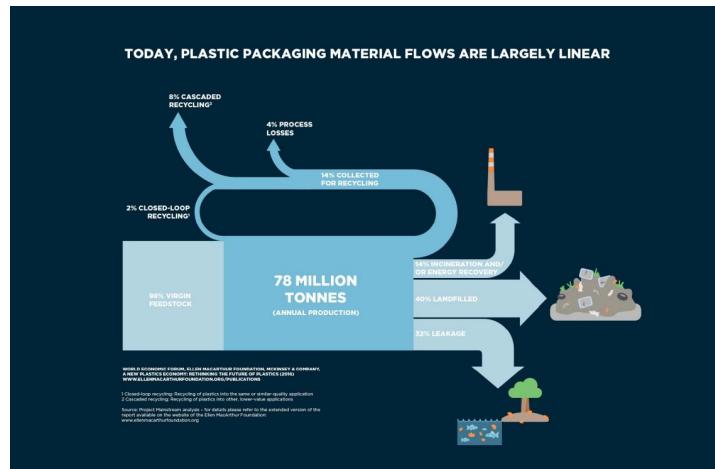
We recognise that we are reliant on our suppliers to provide products in packaging that is functional without compromising the integrity of the product. Packaging must ensure that the product remains safe and not incur damages and waste.

A key principle of our environmental policy is to work with our supply chain partners and external contractors to reduce our impact on the environment, in terms of carbon emissions, water usage and biodiversity. Our supplier questionnaire asks suppliers to minimise their packaging, and consider using materials that can be widely recycled. Under the proposed UK Government Extended Producer Responsibility requirements, provided that the waste management infrastructure is fit for purpose, we anticipate that a higher volume of readily recycled materials will be introduced to the market.

We will continue to work with our supply chain partners to help innovate and trial new packaging types, whilst also continuing our drive to reduce and manage waste generated through our activities.

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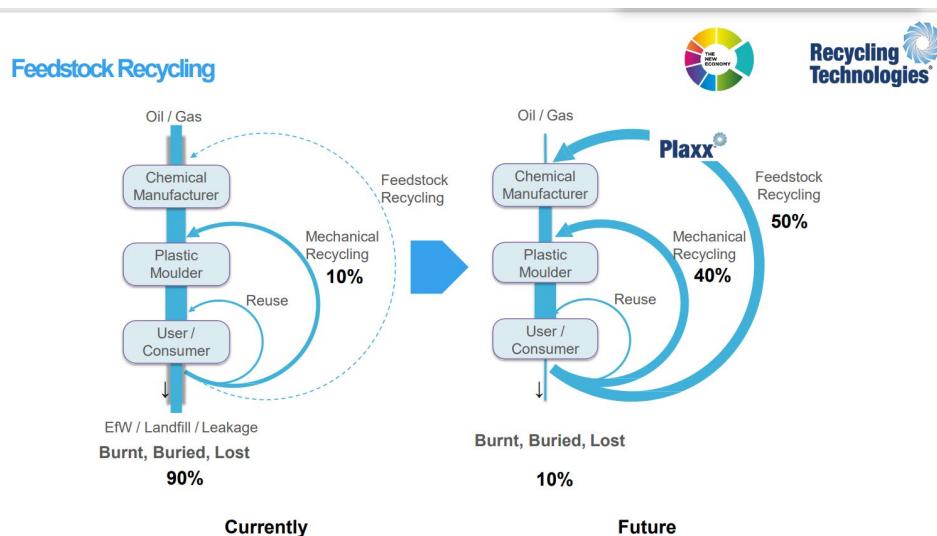
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The above image shows how linear the plastic we use in the food supply chain is i.e. very little returns to the 'circular economy'. Meat packaging, is particularly difficult to manage due to the additional contamination by blood and other organic matter.

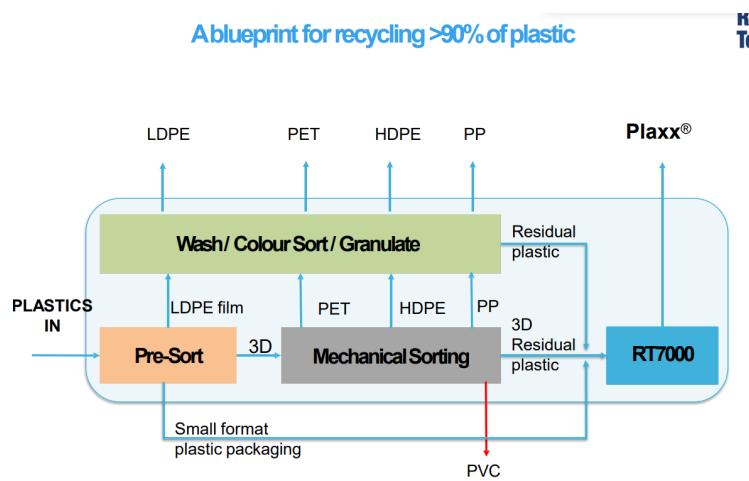
As a supply chain we are very reliant on emerging technologies, especially chemical recycling.

Multivac UK are one of our major suppliers of plastic film used at the butchery. They supply packaging machinery and film to the food industry, and are used universally in the sector. The machines pack in numerous formats that are typically seen on supermarket shelves, protecting and adding shelf life to meat, fish etc. They are working collaboratively with both academic and industry partners to develop new innovations for packaging, that aim to reuse/recycle 90% of all plastic packaging.



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CHF will work with the suppliers of our plastic packaging to introduce innovative materials that are suitable for improved recycling and 'circularity'.

Multivac, is trialling an OPRL approved film, the structure is PE/EVOH/PE. This has been trialled as vacuum packs in a sous vide operation. There are positive developments here, however we doubt whether Local Authorities universally have the capacity to manage this type of material.

PLA film (that could be used for packaging ready meals etc) is usually 3 times the price of conventional film and can be prone to 'fracture' that may cause issues in the supply chain, potentially compromising food safety.

Nevertheless, if the supply chain has the correct infrastructure, from manufacture to recycling/composting, we are confident that manufacturers will be able to evolve to film and bags that are compliant to the standards.

For more information about our environmental policies, please contact Ed Morgan via edward.morgan@chfoods.co.uk

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