



Food positive: driving change to decarbonise the UK food system

A REPORT FROM TETRA PAK UK

 Tetra Pak[®]

Foreword



Alex Henriksen,
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The global food system has delivered major human development benefits in recent decades. Food processing technology and packaging solutions, such as those that we at Tetra Pak have been so proud to develop, have helped to protect, improve and deliver food and nutrition across the world, safely and securely.

But the current way food is sourced, processed, packaged, and disposed of, needs to change to transition to more sustainable and resilient food systems.

The global food system accounts for over one third of global greenhouse gas emissions. Approximately a third of all food produced is lost or wasted, accounting for 8% of global GHG emissions. Our approach to food must change. But addressing this is a complex and challenging task.

It requires us to take a full life-cycle view of the food system, taking carbon out from every step of the food value chain.

We were pleased in 2022 to see the publication of the *Government Food Strategy*, following the work started by Henry Dimbleby via the National Food Strategy. Clearly, we now need to see concrete action from Government on measures to decarbonise food production, actions to develop healthier diets, in particular for children, and more generally see action to back up commitments.

Of course, effective recycling is key to this, but it is also about reducing food loss and waste, decarbonising the materials we use to package food and drink, and decarbonising the ways we process food for consumption.

And it is these considerations that drive our approach at Tetra Pak. We have an enabling role with our end to end solutions to drive decarbonisation of the food value chain, and are working to develop the world's most sustainable food package, made fully from renewable or recycled materials, fully recyclable and carbon neutral.

As a company, not only have we committed to achieving net zero GHG emissions in our own operations by 2030, but we also work with customers to reduce their emissions, through lower energy food processing equipment, and helping to combat food loss and waste.

But there is much more we can and must do. We are innovating for healthy diets, investing in school feeding programs, enabling sustainable dairy production, and improving supply chain transparency.

This report, and the discussion and research that have informed it, are an attempt to play our role in galvanising action to drive change in the UK's food system. This is the first stage and we look forward to the discussions and actions that it stimulates about driving a new approach to how we feed our world.

Introduction

The negative climate impact of our current approach to feeding the growing population of our planet is well understood. The UN has identified that 26%² of global greenhouse gas emissions come from food systems, with food loss and waste accounting for a staggering 8%³.

In short, the way we produce, process, consume and dispose of food is pushing us beyond the Earth's planetary boundaries - the limits within which humanity can continue to develop and thrive.

There is no time to waste in finding a new approach to feeding our population, particularly in the UK, where WRAP estimates that 35%⁴ of total emissions arise from producing and consuming the country's food and drink. At a time when global food and energy supply chains are under intense pressure, it is of paramount importance that we do not lose sight of our net zero ambitions; particularly those that can be achieved through the decarbonisation of the UK's food system.

There are a myriad of ways to achieve this. Chief amongst these is embracing more sustainable methods of food production and consumption,

whilst reducing food waste and loss throughout the system, and educating consumers to help them make more sustainable choices around their consumption.

Sustainable packaging and processing solutions play a crucial role – offering the security we need to ensure food remains safe and available, whilst embracing renewable and recyclable materials to reduce wider carbon impacts. And of course, recycling of food and drink packaging is at the heart of a solution – creating a circular economy to keep valuable materials in use for as long as possible.

The Government is already taking strides to transform the farm to fork pathway and there are leading sustainability initiatives and efforts being pursued by producers within the food and drink industry.





But to be effective, these solutions cannot be implemented in silos. They require close collaboration between policymakers, industry, and consumers. Indeed, new research from Tetra Pak found that **31% of food and beverage managers, directors and business owners in the UK and Ireland believe these are issues which can only be meaningfully addressed by numerous parties joining forces together.**

This sentiment is echoed by UK consumers too, with **over half (56%) stating the UK Government should do more in the next 12 months to raise awareness of sustainability issues and recycling processes amongst the general public** (29% state 'significantly more' should be done).

With this in mind, Tetra Pak brought together a group of experts from across the food and drink value chain to discuss how we can develop the recommendations, solutions and strategies that will drive greater decarbonisation of our food systems.

We examined three key areas during discussions:

1. **Establishing a new approach to feeding our planet**
2. **Changing the way we view our food – consumer education and tackling food waste**
3. **Driving a circular economy and increasing the use of renewable, low carbon materials**

We combined the insights and ideas shared at the roundtable with new data surveys of UK food and drink businesses and consumers, on perceptions and intentions around sustainability within food systems.

This report is a summary of these findings and insights, complete with recommendations for government and the food and drink industry. It is intended to begin a conversation that helps government, business and the public to rethink the way we produce, package, consume and dispose of our food and drink.

We hope that it will demonstrate that solutions do exist, but that meaningful change can only be realised when we work together to take steps towards creating decarbonised food systems and a healthier planet for all of us.

About the roundtable

Date: 26th October, 2022

ATTENDEES



Alex Henriksen
Managing Director,
Tetra Pak UK and
North Europe



Katie Carson
Director, Corporate
Affairs, Food &
Climate Policy,
Tetra Pak



Dragan Rajković
Sustainability
Director, North
and East Europe,
Tetra Pak



Wera Hobhouse MP
Liberal Democrat
Spokesperson
for Energy &
Climate Change



Shaunagh Duncan
Head of
Sustainability,
UK & BENELUX,
Oatly



Jenny Pidgeon
Head of
Sustainability &
Social Innovation,
Danone



Ruth Jones MP
Labour Shadow
Minister for
Agri-Innovation &
Climate Adaptation



**Lord Deben
(John Gummer),**
Chair, Climate
Change
Committee



Trewin Restorick
Founding CEO
of Hubbub



Emma Piercy
Head of Climate
Change and
Energy Policy,
Food and Drink
Federation



Paula Chin
Senior Policy
Advisor
(Consumption),
WWF-UK



Joanna Trewern
Head of
Consumption,
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Martin Kersh
Executive Director,
Food Packaging
Association



Hamish Forbes
Senior Analyst,
WRAP



Dr James Cooper
Deputy Director of
Food Policy, Food
Standards Agency



Dr Ximena Schmidt
Senior Lecturer,
Sustainable Food
Systems, Brunel
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About the research

Tetra Pak commissioned Censuwide to survey 150 food and drink business leaders across the UK and Ireland, and 511 consumers across the UK between 7th and 12th October 2022.



CHAPTER ONE:

Establishing a new approach to feeding our planet

As the world's population continues to grow, we will face an ever increasing challenge of how to feed more people without pushing us beyond the Earth's planetary boundaries – the limits within which humanity can continue to develop and thrive.

Recent global events have highlighted the fragility of these systems – with millions struggling to access the nutrition they need. Indeed, as many as 828 million people worldwide are affected by hunger each year, an increase of 150 million since the outbreak of Covid. And with continued socio-economic challenges adding pressure to an already delicate system, we need to find solutions.

Alex Henriksen, Managing Director, North Europe at Tetra Pak summed up the challenge during the food systems roundtable: “We are trying to find solutions to how we can provide food for the growing population, the 9.5 billion people that are estimated to be on the planet by 2050.”

Much of the science and statistics around a failure to decarbonise our food systems are already well known. However, in a challenging economic climate, progress on reaching our carbon reduction targets is at risk of falling victim to other commercial pressures.

“We are trying to find solutions to how we can provide food for the growing population, the 9.5 billion people that are estimated to be on the planet by 2050.”



This was echoed in recent research commissioned by Tetra Pak which found a staggering **93% of food and drink producers and manufacturers will prioritise other issues as a result of the current socio-economic climate**. Despite more than a third (36%) considering the pursuit of sustainable packaging important, with 70% believing their organisation should be doing more to address sustainability issues, respondents admitted other factors would have to take priority in the next 12 – 24 months. One respondent provided detail on the three most important challenges in the immediate term, all surrounding inflation and the current cost of living for consumers.

“By not tackling the climate impact of the food system now, we risk missing our net zero goals, which we cannot afford to do.”

This was a sentiment that **Wera Hobhouse MP, Liberal Democrat Spokesperson for Energy & Climate Change** warned against, highlighting that “by not tackling the climate impact of the food system now, we risk missing our net zero goals, which we cannot afford to do.”

Some positive steps are already being taken by policymakers to address these urgent challenges though, and businesses can also have a major impact in improving the resilience of food systems, and becoming catalysts for meaningful change.

Katie Carson, Director of Corporate Affairs Food and Climate Policy at Tetra Pak, welcomed the publication of the Government Food Strategy. However, she urged concrete action on it, echoing a feeling amongst **35% of business owners and 37% of directors in the UK and Ireland, said that the government could be doing ‘much more’ to provide guidance to organisations on the topic of sustainability**.

Katie called for greater support to “enable the decarbonisation of the food system”, pointing to Tetra Pak’s commitment to achieve net zero within its own operations by 2030.

Tetra Pak is of course not alone in these commitments and **Shaunagh Duncan, Head of Sustainability, UK and BENELUX, Oatly** described her company’s sustainability plan, which sets out ambitions across its full value chain from ingredient sourcing to business operations and distribution.

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Shaunagh pointed to the global imperative to reduce our reliance on meat and dairy if we're to reach net zero targets, and noted that "the Government's environmental land management scheme is a really promising step in the right direction."

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Joanna Trewern Head of Consumption at WWF UK echoed this sentiment, saying that she is "encouraged to see action coming from business on new food production techniques to protect biodiversity...there's been a lot of effort to support farmers to improve their production practices, and also up the supply chain, to support consumers to change their behaviour."

One positive step already in progress is DEFRA's upcoming land use framework, which was described as a 'key milestone' by **Emma Piercy**, Head of Climate Change and Energy Policy at the Food and Drink Federation. She suggested that "this is a major area where we can get growth in this country that will help businesses, help people, help the environment."



CHAPTER TWO:

Changing the way we view our food – consumer education and tackling food waste

An effective new approach to how we feed the UK's, and world's, growing population will in no small measure be reliant on consumer engagement and behaviour.

This was a point highlighted at the roundtable discussion by **Lord Deben, Chair of the Climate Change Committee and former Secretary of State for the Environment**, when he said that “we will not get a just transition unless people have choice. But they must have choice which is informed – without this, efforts to shift dietary habits will not meet with success, and this is something of which the government must become more mindful.”

One of the key ways to empower consumers with the information they need to make better choices for their health and the planet is through better environmental labelling, including the climate impact of a package.

This is something of which **Danone** is acutely aware, with **Jenny Pidgeon, Head of Sustainability and Social Innovation**, highlighting findings from the company's work with youth organisation, *Bite Back*, which found that young people are already looking for this information on labels and want to see more of it.

Indeed, Tetra Pak's research suggests that it is in manufacturers' interests to adopt environmental labelling, as despite the plethora of macroeconomic challenges currently being faced, consumers are showing high levels of support for companies that demonstrate a commitment to lowering their carbon footprints and offering sustainable packaging options. **Half stated the decarbonisation efforts or sustainability credentials of brands have a bearing on the purchases they make.**



Over two thirds (68%) highly value companies that take steps to provide recyclable packaging options for food/drink products.

Consumer opinions on the decarbonisation efforts of food producers and manufacturers have altered amongst 43% of consumers as well (13% 'significantly so') since the start of 2022.

A third of consumers now state they pay more attention to the issue because their feelings on sustainability have grown, and over a quarter (27%) have seen their feelings on the need for society to recycle become stronger too.

Shaunagh Duncan highlighted that **Oatly** was one of the first large brands to put carbon labelling on its packaging in 2018 to echo the company's belief that "consumers have the right to environmental information, just like they do nutritional information or price information, right there on the pack."

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However, to drive meaningful long-term change consumers must be able to compare labels across products and **Shaunagh** urged government to "make labelling mandatory and, more crucially, to standardise the methodology for that labelling."

"Measuring biodiversity loss, because consumers need to see that full picture in terms of environmental impact of a product."

Joanna Trewern, Head of Consumption at WWF UK noted that labelling needs to be about more than just the climate impact of a product, and should include other important indicators such as "measuring biodiversity loss, because consumers need to see that full picture in terms of environmental impact of a product."

Alex Henriksen pointed to Tetra Pak's work to educate consumers through its *Connected Packaging* platform. This makes it possible for members of the public to digitally engage with each carton they buy, allowing packaging to become a channel for information and interaction.

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Food waste, a huge contributor to climate change in the UK, is an area in which action can be driven by greater consumer awareness, alongside efforts by government and industry too.

Emma Piercy, of the Food and Drink Federation, noted the significance of domestic food waste and the volumes of edible products that are regularly thrown away. With a cost-of-living crisis, and food and drink inflation at 14.6% in September 2022, she suggested that “tackling food waste in the home can make a real difference to a consumer’s bills, and make a major impact on carbon emissions.”

Katie Carson from Tetra Pak highlighted how the company is seeking to “support customers in their decarbonisation journeys across the food value chain, including around food waste, for example by ensuring that Tetra Pak packages are designed to prolong the life of food and help prevent it from perishing.”

Recognising that food waste and loss starts even before products hit supermarket shelves, more must be done to create innovative approaches to food processing, to reduce spills and spoils during production.

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of businesses saying supply chain challenges or disruption, such as shortages of raw materials and price increases, are currently the biggest barriers to adopting sustainable packaging options.

CHAPTER THREE:

Driving a circular economy and increasing the use of renewable, low carbon materials

A third aspect to driving decarbonisation of the food system is ensuring that the materials we use for packaging are sustainable and recyclable.

Circularity offers a huge opportunity for economies and businesses to address growing climate concerns while generating growth and new jobs. But with the world caught up in increasingly frequent and fierce geopolitical, economic, and demographic tensions, efforts are being undermined. Each new crisis reveals and emphasises Europe's external resource dependency, with each passing day laying bare the competition for scarce resources, forcing us to do more with less.

A key challenge today in the quest for a circular economy is ensuring adequate access to materials that are renewable and low carbon. This is proving tough amidst current socio-political backdrops, with **41% of businesses saying supply chain challenges or disruption, such as shortages of raw materials and price increases, are currently the biggest barriers to adopting sustainable packaging options.**

With almost three quarters believing their organisation should do more to address the topic of sustainability in 2023, **a fifth cite high investments in the supporting technologies needed to do so as a top hurdle preventing sustainability efforts, alongside rising fuel and operational costs in over a quarter (28%) of cases.**

Paula Chin of WWF acknowledged the complicated landscape but stressed the need for greater supply chain transparency: "There is significant focus on the impacts of plastic pollution, but less attention on the impacts of all material supply chains. Understanding those and tackling some of the hot spot impacts is absolutely critical."



Of course, a holistic view of materials is also required, with businesses needing to exercise caution against rushing to replace one material to achieve a particular sustainability goal, without considering other goals, such as the replacement material in fact having a higher carbon footprint.

Trewin Restorick, Founding CEO of Hubbub

explored this further commenting that “we need to be strong on carbon, because the ‘war on plastics’ has led to people taking steps such as putting bottled water into higher carbon packaging. So, we need to be really clear about what the end environmental effect is across all materials.”

Turning to the question of recycling, **Trewin** shared a sense of frustration felt across industry that the UK’s recycling and waste management system is inconsistent and works for neither businesses nor consumers – or indeed local authorities.

He suggested that “Tetra Pak, currently falls into the chasm that’s been created by this lack of clarity. It is a good carbon package but the waste management and collection systems don’t work, because local authorities won’t or can’t collect cartons.”

The importance of recycling to consumer purchasing choices is something that Tetra Pak’s research highlighted, with **69% of consumers highly value companies that are clearly taking steps to provide recyclable packaging options for food and drink products. Two thirds (70%) believe packaging companies have a responsibility to the public to create and develop sustainable packaging now (with over a third believing strongly so).**

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Dragan Rajkovic, Sustainability Director for North and East Europe at Tetra Pak, stressed the need for “packaging and packaging waste regulation to provide assurance, guidance and certainty to manufacturers, as well as provide equal treatment of different materials.”

Alongside stronger regulation sits government support for investment in recycling infrastructure, and consumers clearly now feel strongly motivated to participate in the collection process. Research commissioned by Tetra Pak identified the sentiment amongst food and drink manufacturers, that more can be done to bring about change, one respondent citing “No one I speak to seeks guidance directly from government sources on what they should do... It’s almost always from speaking to other people in the industry who’ve been in touch with research organisations or speaking directly with private companies that have solutions from research they’ve done or products they’ve developed.”

There was strong agreement amongst roundtable attendees that the UK Deposit Return Scheme has a key role in driving better recycling, but to do this must be easily understood by consumers, future proofed by including the latest technology, and as wide in scope and ambitious as possible. It is therefore disappointing that the Government has instead elected to pursue a DRS that only includes PET plastic and aluminium and steel cans.

Jenny Pidgeon from **Danone** urged “a unified approach to the DRS across the UK” for fear of creating a confusing system that creates “inertia amongst consumers to engage.” She also noted Danone’s current trial of a Digital DRS, and stressed the importance of implementing futureproofed systems that will suit the evolving needs of consumers.

Trewin Restorick welcomed the Government’s efforts to ‘sort out the UK’s broken recycling system’ but urged greater clarity for businesses, noting continued delays to legislation. He commented, “what I hear from business after business is the continual round of consultation and prevarication is actually hindering the solution because not one business knows with any confidence where it should be investing. So, I think the first thing policymakers could do is get some clarity around timelines.”

Roundtable attendees acknowledged the good intentions of many government policies, but highlighted the problem of policies tackling climate change, and those tackling recycling, being developed in silos.



Recommendations

Following the conclusion of the roundtable, and an assessment of all the valuable contributions provided, the following recommendations have been drafted:

Recommendation one: Meaningful engagement is needed between suppliers, processors, distributors and supermarkets to develop more sustainable sourcing, production and distribution methods for food. Such collaboration must prioritise innovation within processing and packaging to ensure consumers are able to access high quality, safe food with a reduced carbon impact.

Recommendation two: The development of a clear set of metrics by businesses is needed, to provide greater transparency for consumers on the carbon footprint of products (across value chains), enabling more informed and sustainable choices.

Recommendation three: Further financing and development of technologies which help to combat food waste and loss prevention is needed, including the upcycling of side-streams of the food manufacturing process, which too often are viewed, unnecessarily, as waste.

Recommendation four: Greater clarity on regulations surrounding food and drink packaging recycling is needed for businesses, as is encouraging and promoting the use of circular materials.

Recommendation five: Businesses must come together in support of the design and implementation of future recycling policies, ensuring that adequate infrastructure for the separate collection of used packaging is put in place.

Conclusion

No single solution will lead to the decarbonisation of our food systems. However, working in collaboration across government and industry and with the consumer at the heart of decision making, finding a range of practical and effective solutions will be far easier.

Furthermore, these solutions must be delivered urgently. Climate change goals are rapidly approaching, and decisive and swift action must be taken around the way we produce, consume, package and dispose of food and drink, not only in the UK but around the world. A failure to do this dramatically compromises our ability to reach net zero, which will have devastating impacts on the health of the planet. We all have a responsibility and must act collectively now.

At Tetra Pak, through continued innovation we have created a reality of not only being able to replace or reduce our consumption of foods which have higher carbon impacts, but being able to package these in a way that embraces renewable, low carbon materials. We must pursue these opportunities with accelerated determination to make the vital gains that our planet needs.

Tetra Pak has published this report in a bid to further the necessary collaboration and bring together the industry and policy players that could effect change across the UK. We hope that this is the start of an ongoing dialogue that will result in tangible action on decarbonising our food systems.

