

[ CLARASYS ]

# Possibilities of tomorrow

## Reimagining food and beverage supply chains

The climate crisis, global events, population growth, and evolving diets have increased pressure on food production. Add to this calls to secure fairer working rights, eliminate waste, reduce greenhouse gas emissions, and improve transparency, and it's clear the food and drink industry is under enormous pressure.

In this brochure, we discuss key sustainability issues at the different steps in a typical food and beverage (F&B) supply chain, explore the latest thinking and solutions about how to bring about positive change and highlight industry leaders in this space.

[clarasys.com/sustainability-consulting](https://clarasys.com/sustainability-consulting)



# Five Priorities for the Food and Beverage Industry to Address in 2023

## 1 Be an agent for system-wide change on regenerative farming.

Efforts on knowledge-sharing, collective engagement with supply chains, alternative economic models and policy advocacy can be bolstered through networks such as LEAF (Linking Environment and Farming), Land Workers Alliance, Future Food Solutions, Nature Friendly Farming Network, Soil Association, Sustainable Food Trust and Agreed Earth.

## 2 Embed circular economy principles and practices into operations.

This needs to start by designing products for circularity from inception to ensure waste can be eliminated before it is created. The Ellen MacArthur Foundation's 'The Big Food Redesign' provides useful guidance on this.

## 3 Align sustainability with your purpose and strategic priorities.

Food and beverage industry actors should identify the positive impacts they want to have in this space and embed these into their priorities and activities, as well as setting science-based, business-wide goals to set a level of ambition. The Forum for the Future's 'Compass for Just and Regenerative Business' is a helpful guide for exploring this.

## 4 Utilise data-driven insight to inform decision-making.

Assess circularity metrics across product life cycles to create better visibility of risks and opportunities, and enable more robust, trustworthy communications and progress tracking. See the Global Farm Metric framework for guidance.

## 5 Empower customers to participate in the circular economy at the point of sale and beyond.

This needs to involve an end-to-end approach of designing more circular and regenerative products, providing customers with accurate information about them and creating a better customer experience beyond the point of sale to enable them to act in line with circular economy principles. Engage with our continuing research on this topic.

# Meet the authors



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# Farmer

Research by the Agriculture and Horticulture Development Board (AHDB) recently found that farmers are the most trusted part of the food supply chain, with 65% of consumers agreeing that farmers care about the planet. However, their research has also shown that there is a great negative perception of the impact that farming has on the environment by consumers with vegetarian or vegan diets, which is a growing trend in the UK. As such, farmers are uniquely positioned to be able to build positive sustainability stories in the F&B industry, by improving transparency and communicating the benefits of the initiatives and practices used in the UK.

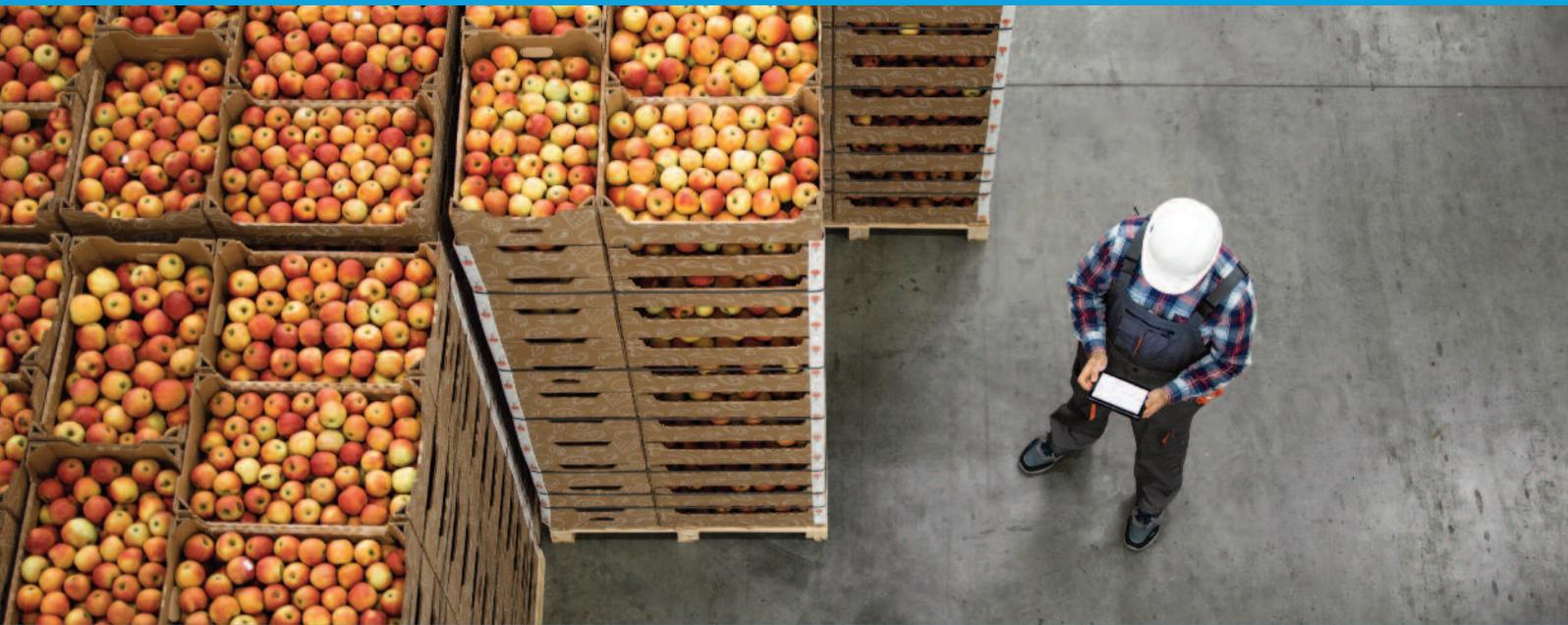
## Challenges

**In response to several factors such as globalisation, population growth and changing diets, modern farming practices typically rely on a system of growing monoculture crops that maximise yields at the expense of the environment - often taking more from nature than it can replenish. As an alternative, regenerative methods of farming can deliver holistic benefits while remaining productive and profitable.**

## Opportunities What can Farmers do?

- Carbon sequestration (capture, removal and storage)
- Improving efficiency of water management
- Biodiversity enhancement to deliver robust and resilient agriculture
- Collaborating with other farmers through industry networks, such as LEAF (Linking Environment and Farming), Landworkers Alliance and Agreed Earth, to foster knowledge sharing and innovation
- Undertaking a 'double materiality' assessment to understand the impacts of climate change on their land and practices, as well as the impact of their practices on people and the environment
- Engaging with their supply chain to understand the implications of any changes in practices.





# Processor

The companies at the Processor stage in the supply chain are involved in the conversion of the raw materials produced by farmers into the food and beverage products we see in our retailers. They also play a key role in ensuring compliance with rigorous safety standards and are involved in the packaging of the final product.

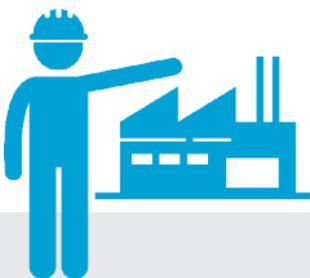
## Challenges

**A key challenge for Processors lies in driving the transition to a circular economy (CE). The motivation behind this transition is the recognition that our current linear model of take-make-waste is exacerbating global issues like climate change, biodiversity loss, waste, and pollution.**

## Opportunities What can Processors do?

Processors can act as a conduit for unlocking transformative action in the supply chain, particularly around driving the transition to a CE. Upstream, Processors can engage farmers by setting ambitious targets in contractual agreements. Downstream, they can facilitate the sustainability objectives of distributors and retailers, while directly influencing consumer behaviour (e.g. through innovation in packaging). Specific opportunities include:

- Maximising the value of 'waste' - using discarded ingredients and by-products for additional value creation such as redistributing surplus food and utilising food waste for alternative applications such as organic fertilisers, biomaterials, and medicines
- Prevention - digitisation of manufacturers' end-to-end supply chain, and using automation, AI, and analytics for data to facilitate waste reduction
- Data analytics - assess circularity metrics across the lifecycle to create better visibility, insight and communication to enable prioritisation of quick wins and identify longer-term, big-ticket opportunities
- Establish a CE vision, objectives and KPIs and measure and monitor progress against these - collaborating with supply chains to understand their waste reduction plans and priorities
- Bring employees on the journey - including your people in setting the vision, developing solutions and supporting them with necessary CE training will enhance an organisation's capability to deliver a strategy to its full potential.





# Distributor

Distributors in any industry have a big impact on a product's ecological footprint due to the activities they typically perform. In the F&B industry where refrigeration may be required around the clock to keep products fresh, distributors can generate a particularly large footprint in the supply chain. Responsible for warehouse storage, distributors need to also plan timely onward transportation of these products to retailers through their networks.

## Challenges

**Keeping perishable products fresh for customers requires effort and energy. Add in high Scope 3 emissions from long-distributing networks, customer expectation of speed (e.g. small and next-day deliveries) and rising costs pose a number of sustainability challenges for Distributors.**

## Opportunities What can Distributors do?

Given the nature of many F&B products such as perishability and global supply chains, it is challenging to create a perfect network but there are steps that can be taken to manage impacts:

- Optimising travel infrastructure e.g. improve vehicle loading, storage, and order processing to reduce waste and emissions
- Use of low and zero-emissions transport throughout the distribution network
- More localised distribution centre networks
- Invest in technology to improve transparency - real-time tracking, temperature management etc. can reduce costs
- Where feasible, use renewable energy sources in warehouses, factories and storage.





## Retailer

Retailers are under significant pressure from multiple stakeholders to better manage their F&B supply chains. Recent food scandals mean that consumers want greater visibility about where their products have come from, and governments are placing more regulatory oversight on how F&B supply chains are managed.

### Challenges

**In the wake of several F&B supply chain scandals in recent years, customers demand greater transparency from retailers whilst legislative pressure for traceability is also growing. Being transparent about the true impact of their products can be challenging for retailers, especially when they have to look beyond their tier-one suppliers.**

### Opportunities What can Retailers do?

Products are the basis for F&B retail; supply chains used to create these are often multilayered, globally distributed and whose outputs often rely on single-use items. Retailers looking to make impactful changes to improve their sustainability metrics and credentials should look to their supply chains, including the customers who they supply, to shift the dial in the right direction.

- Build a supply chain that has trust; pay suppliers without exploitative payment terms and create a culture of sustainable champions across the supply chain
- Create a collaborative environment amongst suppliers where information is shared and ESG consideration is rewarded
- Reduce and reuse packaging as well as utilise biodegradables to reduce waste across the lifecycle of their F&B products
- Engage consumers in the CE, improve labelling and communicate sustainability initiatives to build trust and education
- Incentivise appropriate disposal of waste and product circularity e.g. rewards for returning F&B packaging or promotion of partner food waste initiatives.





## Customer

The changing voice of the end customer should be an important consideration throughout the F&B supply chain but the higher cost of sustainable products, confusion over labelling, and a lack of trust in producers are the story for many. Customers are increasingly concerned with the behaviours of the companies they spend their money with, but the widespread adoption of sustainable products still has many barriers to overcome.

### Challenges

**No industry standard labels for sustainably-produced F&B products and a lack of visibility beyond the marketing of retailers means customers have uncertainty about ethical claims. The cost of living crisis increases consumers' price sensitivity, and the product's price can become more important than its ESG credentials. Reduced consumption is also inherently difficult, especially as people are now accustomed to modern-day convenience.**

### Opportunities What can Customers do?

Clarasys and the University of Exeter have highlighted the role of customers when moving towards a circular business model (CBM) in the first part of their research project, and there are many opportunities for customers in the F&B space to make a difference. Customers have a lot of bargaining power when it comes to influencing other stakeholders; particularly retailers. Holding influential stakeholders to account is important, but consumers should also think about the opportunities they can contribute to by adopting new behaviours.

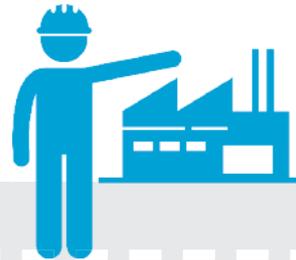
- Research before you buy, look at the behaviours of the companies you are buying your F&B products from and purchase accordingly
- The UK throws away 9.5m tonnes of food waste every year yet there are many F&B initiatives across the country that ESG-conscious customers can utilise if they have waste to dispose of
- Look to buy local and seasonal produce to reduce the resources needed to create and distribute
- Engage retailers about the ESG addressing challenges which customers face - e.g. confusing labelling
- Be part of the regenerative movement in the F&B space; food waste can be used as compost for gardens or fertiliser for the next generation of crops.





**The produce of farmers instigates the flow of food and beverage supply chains. Fruit, vegetables, milk, grains and oats are just some of the examples which farmers may create.**

**Processors in the supply chain take the produce from farmers and convert them into the food and beverages we consume. Processors also play a key role in product packaging and safety.**



**Distributors take food and beverages in bulk quantities and are responsible for their storage. They also facilitate the onward transportation of goods to retailers based on their demand.**



**Retailers provide the space where customers go to make their food and beverage purchases. Their understanding of the F&B demands and bargaining power drives much of the supply chain activity upstream.**



**Customers head to retailers to make their food and beverage purchases. Factors such as price, quality, convenience, experience and ethics play a significant role in purchasing decisions.**



# Conclusion

Organisations should look beyond just their own operations to make a difference. Collaboration is key to developing, implementing, and continuously improving CE measures in supply chains. A stronger, progressive regulatory landscape is also crucial, including Government subsidies, tax credits and incentives across the supply chain to promote innovation and disincentive price undercutting. A systems-thinking approach is vital to bring in governments, businesses, NGOs and local communities and ensure CE efforts are aligned with positive outcomes for eliminating poverty and fostering racial and gender inequity. By focusing on sustainable supply chains, we can build resilience throughout the value chain.



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## About us

**We are an [ independent ] consultancy firm based in central London, UK and Boston, MA (USA).**

We believe in a better way of doing business consultancy; working closely with our clients to ensure we understand their business as well we understand our own, leaving them with the knowledge that enables [ rapid and sustainable] change .

Sustainability lies at the core of that ethos. It's how we run our own company, and also drives the passion behind our sustainability consulting arm which offers clients an end-to-end service, from advisory to implementation across a spectrum of challenges such as:

- Maximising your Impact
- Getting to Net-zero
- Creating sustainable experiences
- Ensuring transparency and compliance
- Embracing circularity

**For more information or to chat through your sustainability challenges please contact us on: [sustainability@clarasys.com](mailto:sustainability@clarasys.com)**



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