

# Moving food forward.

Our ambition to play a part in shaping a world  
with secure and sustainable food systems.







# Join us in Moving food forward.

Towards a world with secure and sustainable food systems.

Everyone, everywhere deserves access to safe, nutritious food. But today, millions of people live without it. Too much food is lost or wasted, and all too often, food is grown, produced, processed, packaged, distributed and consumed in unsustainable ways. As the population increases and resources diminish, the challenge we face will only grow.

In order to meet these challenges, we need to work together to help transform the world's food systems, so we can improve food security and reduce negative impact on the planet. As a global leader in food processing and packaging, we, together with customers, governments, partners and NGOs, are committed to play our part in this transformation and helping to drive the change needed.

But transforming global food systems is no small undertaking. It will require long-term focus and

system-wide collaboration from all stakeholders across the food value chain. With decades of food safety expertise and innovations in food processing and packaging, we will focus on the areas where we can make the greatest contribution, collaborating closely with others to make a meaningful difference.

We are committed to play our part in moving the world's food systems forward. With our expertise, technology and partnerships, we believe we can help make a real difference to the way things work today. That's why we commit to making food safe and available, everywhere. And we promise to protect what's good: Protecting food, people and the planet.

We invite you to join us on our journey.

**Moving food forward.**



PART ONE

## World facts

**Why we  
believe that  
the world's  
food systems  
need to  
transform.**





#### GLOBAL INSIGHT #1

### Fighting hunger has been a world challenge for decades.

Fighting hunger has been on the global agenda for many decades, with a significant number of political, private and non-governmental initiatives working towards decreasing the rates of malnutrition worldwide.

Source: <https://www.globalhungerindex.org/issues-in-focus/2015.html>

#### GLOBAL INSIGHT #3

### Malnutrition is a global problem with 1/9 of people hungry and 1/3 overweight or obese.

More and more countries are experiencing the double burden of malnutrition, where undernutrition and overweight or obesity coexist.

Source: <https://globalnutritionreport.org/reports/2020-global-nutrition-report/inequalities-global-burden-malnutrition/>

#### GLOBAL INSIGHT #2

### Since 2014, global hunger has been rising.

For decades, global hunger was declining. However, in 2014, the number of undernourished people began to rise again. Today, this has been further accelerated by COVID-19, with more than 690 million people going to bed hungry every night.

Source: <https://www.un.org/sustainabledevelopment/hunger/>

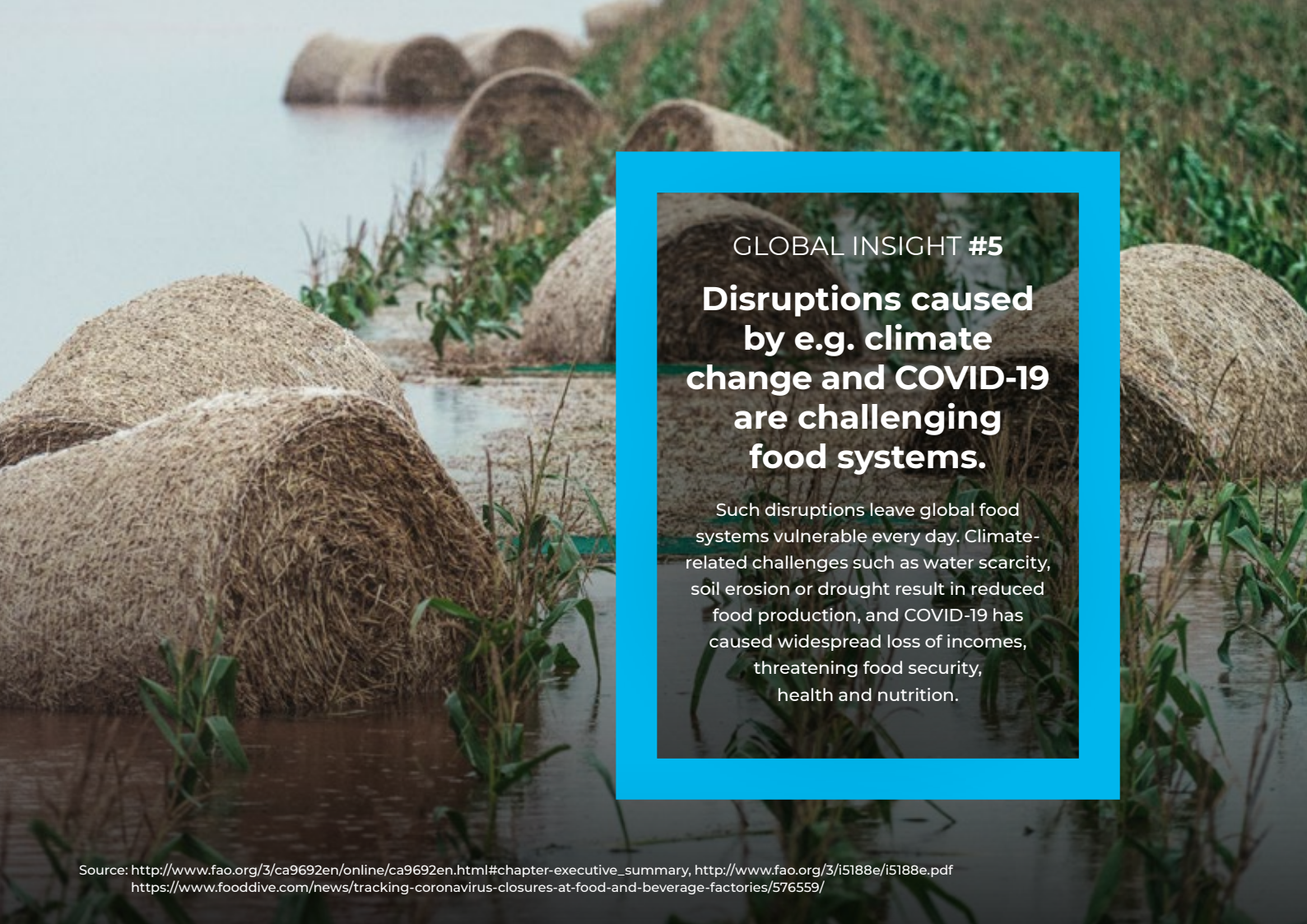
#### GLOBAL INSIGHT #4

### By 2050, the population will reach 9.7 billion and this will require significantly more food.

The demand for food is expected to continue to grow as a result of both population increase and rising incomes. This puts additional pressure on food systems.

Source: <https://www.statista.com/statistics/262875/development-of-the-world-population/>





GLOBAL INSIGHT #5

**Disruptions caused by e.g. climate change and COVID-19 are challenging food systems.**

Such disruptions leave global food systems vulnerable every day. Climate-related challenges such as water scarcity, soil erosion or drought result in reduced food production, and COVID-19 has caused widespread loss of incomes, threatening food security, health and nutrition.

Source: [http://www.fao.org/3/ca9692en/online/ca9692en.html#chapter-executive\\_summary](http://www.fao.org/3/ca9692en/online/ca9692en.html#chapter-executive_summary), <http://www.fao.org/3/i5188e/i5188e.pdf>  
<https://www.fooddive.com/news/tracking-coronavirus-closures-at-food-and-beverage-factories/576559/>



GLOBAL INSIGHT #7

**Food systems account for over 1/3 of global greenhouse gas emissions.**

Global food systems are becoming more energy intensive, reflecting changes in processing, packaging, transportation and retail practices. The emissions produced by global food systems are increasing rapidly, especially in some developing countries. In addition, a significant amount of the world's CO<sub>2</sub> emissions stem from agriculture.

Source: <http://www.fao.org/news/story/en/item/1379373/icode/>



GLOBAL INSIGHT #6

**1/3 of all food produced is lost or wasted.**

Food loss predominantly occurs in the developing world and food waste is driven by consumers and retailers in the developed world. Food loss is mainly caused by food grown not being preserved and inefficient production practices, whereas food waste is driven by short shelf life of food and unsustainable consumption practices.

Source: <https://www.saveonethird.org>



GLOBAL INSIGHT #8

**The lack of infrastructure in many countries challenge food security.**

Much of the food grown in developing countries is lost and are not able to be formally processed and packaged before it is past its best. The lack of ability to get food from farms to people's homes is a key driver of hunger in some developing countries.

Source: <http://www.fao.org/3/mb061e/mb061e.pdf>



PART TWO

## Our ambition

How can we  
play our part  
in moving  
the world's  
food systems  
forward?





# To address global food challenges, we need to look at food systems in their entirety.

**Future food systems need to become more secure and sustainable – how do we achieve this?**

**Secure food systems**

As defined by the UN, food security means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food.<sup>1</sup>

**Sustainable food systems**

Sustainable food systems means growing, producing, processing, packaging, distributing and consuming food without negatively impacting the planet.<sup>2</sup>

Food  
production

Food  
processing

Food packaging  
and distribution

Food  
consumption


**The 4 stages of food systems as defined by the United Nations<sup>3</sup>**

<sup>1</sup> Source food security: <https://www.oecd.org/agriculture/topics/food-security/>

<sup>2</sup> Source sustainable food systems: <https://www.oecd-ilibrary.org/sites/c6fd4d2f-en/index.html?itemId=/content/component/c6fd4d2f-en>

<sup>3</sup> Source: <https://www.un.org/en/food-systems-summit/about>




A photograph of two men shaking hands in a field. The man on the left is wearing an orange jacket, a grey cap, and sunglasses. The man on the right is wearing a red and blue plaid shirt and blue shorts. They are standing in front of a large, white, curved structure, possibly a greenhouse or a large tent. The background is a lush green field with some trees in the distance.

**Transforming the world's food systems is not a small undertaking. It requires system-wide collaboration.**

We know we cannot move food forward alone. That's why we will work together with others in our ambition to play a part in shaping:

**A world with secure and sustainable food systems.**





**Together with our customers,  
partners, NGOs and governments,  
we want to address three  
key challenges.**



**Increase access to safe,  
nutritious food:**

690 million people go to bed hungry every night. At Tetra Pak, we want to change that by helping increase access to safe, nutritious food.



**Reduce food loss & waste:**

Today, a third of all food is lost or wasted. Since the very beginning, we have been committed to developing innovative technologies that reduce food loss and waste.



**Build sustainable  
food value chains:**

Food systems account for over a third of global greenhouse gas emissions. Together with our suppliers and partners, we are committed to reducing climate impact not just in our operations, but right the way across our value chain.



PART THREE

## Our contribution

**The journey  
towards  
secure and  
sustainable  
food systems.**





# Increasing access to safe, nutritious food.

## **Making food safe and available, everywhere**

We deliver solutions that play a significant role in giving more people access to safe food. Our packaging protects food without preservatives, additives or refrigeration, helping make safe, nutritious and flavoursome products available to more people. Together with our customers and partners, we help ensure millions more people have access to safe food.

## **Innovating with customers to improve the nutritional value of food**

We help food and beverage manufacturers to improve the nutritional value of food and to launch fortified and nutritious food and beverages. Working closely together, we look for innovative new ways to reduce the sugar, salt and fat content while maintaining the essential nutrients consumers need.



## **TETRA PAK'S JOURNEY:**

### **Increasing access to safe, nutritious food.**

#### **Ensuring access to safe nutrition for millions of children around the world**

Over the past 60 years, we've worked with customers, governments, partners and NGOs in the development of school feeding and nutritional programmes for children. In Mexico, for example, the first School Feeding Programme using Tetra Pak packages was introduced in 1962 and still reaches millions of children today. School Feeding Programmes have demonstrated to have many benefits for children around the world, including improved health and nutrition, increased school attendance as well as lower dropout rates. They are a good investment: a study based on World Food Programme (WFP) school feeding programmes in 14 countries reported an economic return of between US\$3 and US\$9 for every US\$1 invested.

#### **Enabling local dairy production for smallholder farmers**

Nearly a billion people live on dairy farms, smallholdings or in households that keep dairy animals. Launched in 2011, the Dairy Hub model aims to help secure a long-term supply of locally produced, quality milk without raising collection costs. In Kenya, for example, we have helped customers provide on farm-management, training and advisory services to smallholder farmers. Since the launch of the first project in 2017, milk collection has increased by 37% and yield per cow by 150% on reference farms, resulting in increased incomes for the farmers involved.





# Reducing food loss and waste.

## **Increasing efficiency to reduce food loss**

With the right food processing equipment, it is possible to get more out of raw materials. By increasing the efficiency of raw material handling and food processing, more food can be processed and packaged instead of being discarded.

## **Improving shelf life to decrease food waste**

Our processing and packaging solutions extend the shelf life of food and protect it so it can be transported and stored without refrigeration. As a result the food can reach consumers in remote areas and sit on the shelf without refrigeration for significantly longer than non-aseptic packages, all helping to reduce the waste of packaged food.



## **TETRA PAK'S JOURNEY:**

# **Reducing food loss and waste.**

## **Packaging designed to be transported and stored efficiently**

When transporting and storing food, waste can occur due to breakdowns in the cold chain and poor product handling. Our aseptic process and packaging technology means food and beverages can be stored without refrigeration, thus extending shelf life helping to ensure that food products are less likely to go to waste.

## **Reducing food loss with advanced technology**

By advancing processing technologies, we enable our customers to get more out of the raw material while reducing the food loss that occurs during production. We are also working on connected smart technology and other innovations to further minimise food loss in our production and filling lines.

## **Prolonging the shelf life of food**

Food waste accounts for approximately 8% of total global GHG emissions. Our innovative technologies focus on delivering low-waste processes and packaging solutions that prolong the life of food and keep it from spoiling or go to waste.

## **Turning food loss into new products**

Together with customers we are developing solutions that can capture food that would otherwise be lost or go to waste. For instance, when producing soy milk and tofu, a part of the puréed soybeans remains and is usually discarded. Together with our customers, we have developed a processing solution to capture these remains and incorporate them into soy drinks.<sup>1</sup>

<sup>1</sup> Source: <https://www.tetrapak.com/content/dam/tetrapak/publicweb/gb/en/insights/documents/Tetra-Pak-Index-2020-report.pdf>





# Sustainable food value chains.

## **Sustainability in every link of the value chain**

Current food systems are exhausting the earth's resources. That's why with our suppliers and partners, we are striving to develop solutions that encourage more sustainable production, processing, packaging, distribution and consumption of food.

## **Building trust through transparency**

We are working on creating cartons that function as full-scale data carriers. This means that producers can access to end-to-end traceability of the food value chain, retailers can gain supply chain insights and consumers can learn where, when and how their product was produced.



## **TETRA PAK'S JOURNEY: Sustainable food value chains.**

### **A Tetra Pak carton package has a lower carbon footprint than other packages**

A life cycle assessment conducted in 2020 concluded that Tetra Pak carton packages have a lower carbon footprint than glass, plastic or metal packages. The study states, for example, that if for one full year consumers and food producers in Europe would choose beverages packed in Tetra Brik® Edge Aseptic 1L with Light-Cap™ 30 opening instead of PET bottles, this would save the equivalent of the CO<sub>2</sub> emissions produced by 60,500 cars.<sup>1</sup>

### **A sustainable paper-based food package made solely from plants**

A traditional Tetra Pak® carton package is made from an average of 70% paperboard, 25% plastic and 5% aluminium to protect the food inside. Our carton packages are already recyclable but to further reduce their impact on nature and increase recycling rates, we are investing heavily to develop packages with a simplified material structure and increased paper-based content. We aim to create the world's most sustainable food package, solely made of responsibly sourced renewable or recycled materials, fully recyclable and carbon-neutral.

### **Energy and water management across the value chain**

We strive to make a positive contribution to global water resilience by pursuing water management and reduction solutions across our operations and the full value chain. We are also helping our customers to reduce their impact through better and more efficient equipment that reduces their needs for energy and water.

### **Connected packages can increase transparency**

Traceable and connected packages can increase transparency and improve sustainable practices. Transparency is enabled on our connected packages that allow producers to turn their products into data carriers. Full traceability of individual packages will be possible in the future, adding value to stakeholders along the value chain.

<sup>1</sup> Life Cycle Assessment of Tetra Pak® carton packages and alternative packaging systems for beverages and liquid food on the European market. von Falkenstein, E., Wellenreuther, F. & Detzel, A. LCA studies comparing beverage cartons and alternative packaging: can overall conclusions be drawn? Int J Life Cycle Assess 15, 938–945 (2010). \*\*1.96 billion packs of Tetra Brik® Edge Aseptic 1L with LightCap™ 30 were sold in 2019; the average annual distance for a vehicle in Europe is 12,000km (Source: Odyssee Mure indicators database). Source: ifeu 2020, "Comparative Life Cycle Assessment of Tetra Pak® carton packages and alternative packaging systems for beverages and liquid food on the European market"





# Let's move food forward together.

What if everyone, everywhere had access to safe and nutritious food? What if food was never lost or wasted? And what if we could grow, produce, process, package, distribute and consume food in more sustainable ways?

Together we can transform the world's food systems, improving food security while reducing the negative impact of food systems on the planet.

At Tetra Pak we want to play our part, and we encourage you to join us on our journey to move food forward and help shape a world with secure and sustainable food systems.



# Moving food forward.