



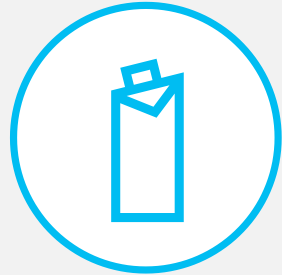
**Go Nature. Go Carton.**

**Let's GO further.**

 **Tetra Pak**<sup>®</sup>  
PROTECTS WHAT'S GOOD



# Supporting sustainability across all business areas



## PACKAGING

### CIRCULARITY

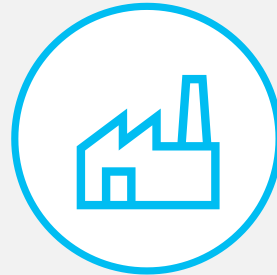
- Certified recycled polymers
- Tethered cap solutions
- Fibre-based barrier

### CLIMATE

- Fibre-based barrier
- Paper straws

### BIODIVERSITY

- Tetra Pak plant-based portfolio



## PROCESSING

### CLIMATE

- OneStep technology
- Separators with AirTight Technology & Encapt™ technology
- BPL for JNSD with aseptic blending

### FOOD

- Tetra Pak® Cooker Stretcher DDA
- Tetra Pak® Air Jet Cleaning
- Tetra Pak® Cheese former



## SERVICES

### CLIMATE

- Expert Services Solutions

### BIODIVERSITY

- Tetra Pak® Water Filtering Station



# Packaging





# Certified recycled polymers

*A solution that helps keep plastic out of landfills*

## Key features:

The certified recycled polymers are produced under the RSB chain of custody attribution method. This means that the plastics are made of a mix of recycled and non-recycled materials, but that the corresponding mass of recycled materials has been tracked throughout the Tetra Pak supply chain.

## Benefits:

Our end goal is to use responsibly sourced renewable or recycled polymers in all our packaging, ending the extraction of fossil feedstock.

## Available:

Caps, tops and coatings of some of our carton packages.



CIRCULARITY



# Tethered caps solutions

*A smart way to prevent plastic litter*

## Key features:

To help prevent plastic litter, our tethered caps stay attached to the rest of the carton package.

## Benefits:

Also available as plant-based options using sugarcane-based polymers, our tethered caps are designed to enhance convenience. For instance, they are easy to open and re-close, while featuring carefully sized diameters for smooth pouring and drinking.



CIRCULARITY



# Alternative Barrier

## *Substituting aluminium with a fibre-based barrier*

### Key features:

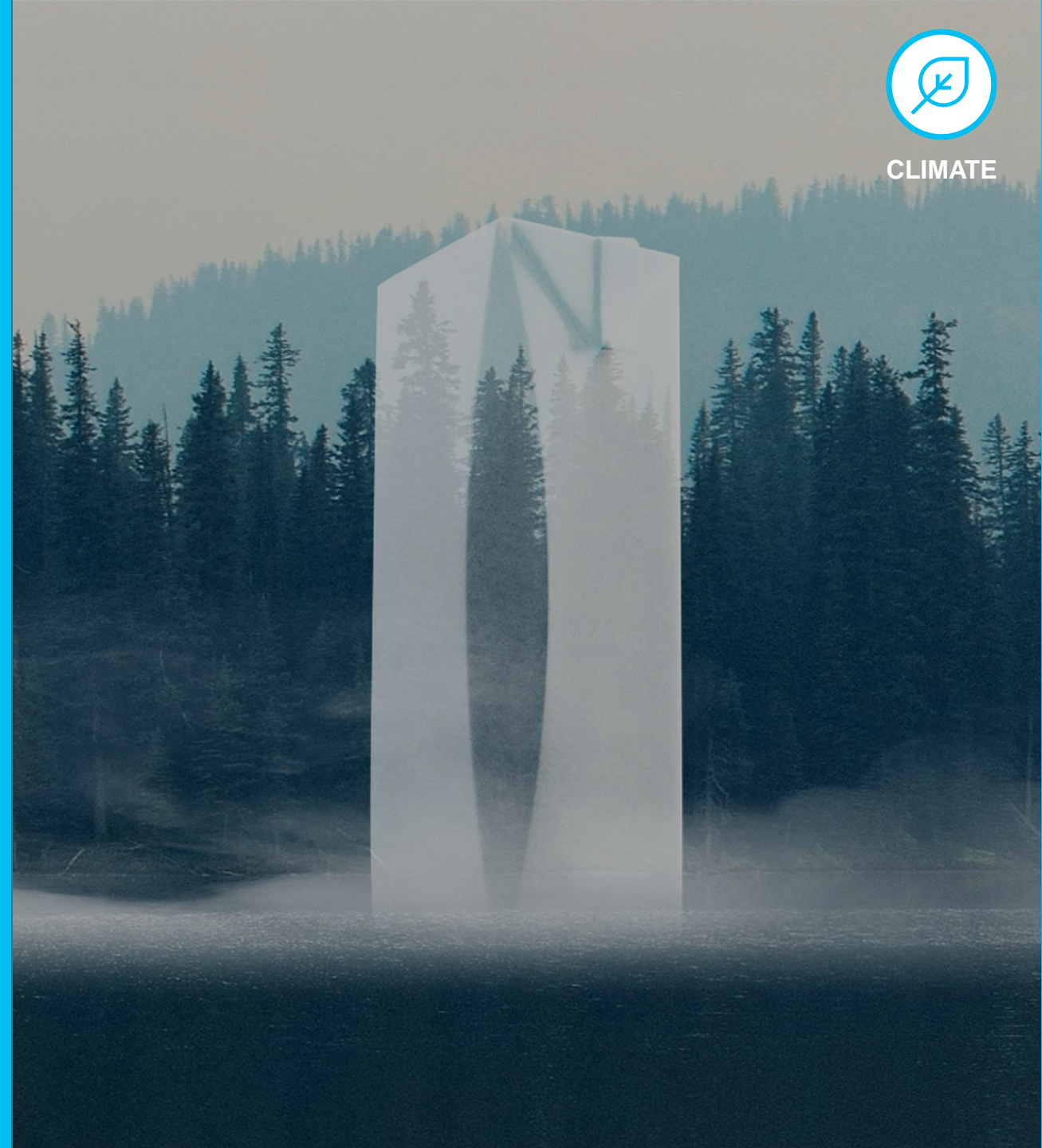
Following the successful completion of a 15-month commercial technology validation of a polymer-based barrier replacing the aluminium layer, we are testing a fibre-based barrier that is a first within food carton packages distributed under ambient conditions. Early results suggest that the package with a fibre-based barrier can reduce CO<sub>2</sub> compared to traditional aseptic cartons.

### Benefits:

Cartons with higher paper content are also more attractive for paper mills; thus, this concept presents clear potential for realising a low carbon circular economy for packaging.



CLIMATE





# Paper straws

*Reduce climate impact with paper straws*

## Key features:

Made from paperboard from forests certified by the Forest Stewardship Council™ (FSC™) and other controlled sources, paper straws reduce the package's impact on climate change by 3%<sup>1</sup>.

## Benefits:

Paper straws can help address consumer preferences for sustainability and changes in regulations without compromising food safety – while delivering a satisfying user experience.

## Available:

Straight U-shaped and telescopic variants for a variety of portion-sized beverage cartons, including Tetra Brik® Aseptic and Tetra Prisma® Aseptic packages.



CLIMATE





# Tetra Pak plant-based portfolio

*All certified from responsibly managed and controlled sources.*

## Key features:

100% of the paperboard and plant-based polymers in our carton packages comes from controlled or certified sources – and our plant-based portfolio, comprising plant-based straws, caps and protective materials, is increasing every year.

## Benefits:

In 2021, we sold 17.6 billion plant-based packages, resulting in 96 kilotonnes of CO2 saved compared to the CO2 that would have been emitted using fossil-based plastic.



BIODIVERSITY







# Processing





# OneStep technology

*Reducing water and steam consumption, creating less wastewater*

## Key features:

Combining separation, standardisation, blending, UHT heat treatment, and more in a single step, OneStep Technology makes the dairy production process more efficient. By removing the pasteurisation and intermediate storage steps, the processing time is shortened from as much as two days to just a few hours.

## Benefits:

With fewer, smaller tanks, there is less CIP (cleaning-in-place) and a smaller footprint, with less maintenance and lower product losses. This helps cut your carbon footprint by up to 38% and reduces water consumption by up to 41%. Furthermore, with less equipment to operate, you can cut electricity usage by up to 29%<sup>1</sup>.



CLIMATE



11. Benchmark is based on Tetra Pak conventional UHT milk production line



# Separators with AirTight & Encapt™ technology

*Energy efficient high-capacity separators*

## Key features:

The combination of AirTight with the patented Encapt™ technology enables superior performance and end-product quality combined with a broad operational flexibility.

## Benefits:

AirTight Technology & Encapt™ combined technologies use up to 40% less energy than semi-open separators.

## Available:

Tetra Pak® Separator H60, H75, D70, BB45, BB55, BM40, BM50, C40, C50, W50, W60, T45, A16 and WD50.



CLIMATE





# BPL for JNSD with aseptic blending

## *Squeeze more out of Juice Nectar and Still Drinks production*

### **Key features:**

Our best-practice line for Juice, Nectar and Still Drinks with aseptic blending combines existing technology in an entirely new configuration to reduce energy, water consumption and costs. To reduce energy use, our best-practice line heat-treats only the concentrate and treats water with UV light and filtration. To cut water use, it drastically reduces the full system volume in your pasteurizer, leaving you with less equipment to clean.

### **Benefits:**

Our best-practice line produces commercially sterile high-acid beverages while cutting energy use by 67% and water use by 50%. This is compared to a conventional setup where the entire product stream is pasteurized.



CLIMATE





# Tetra Pak® Cooker Stretcher DDA

*Reducing loss and waste compared to wet cooking methods*

## Key features:

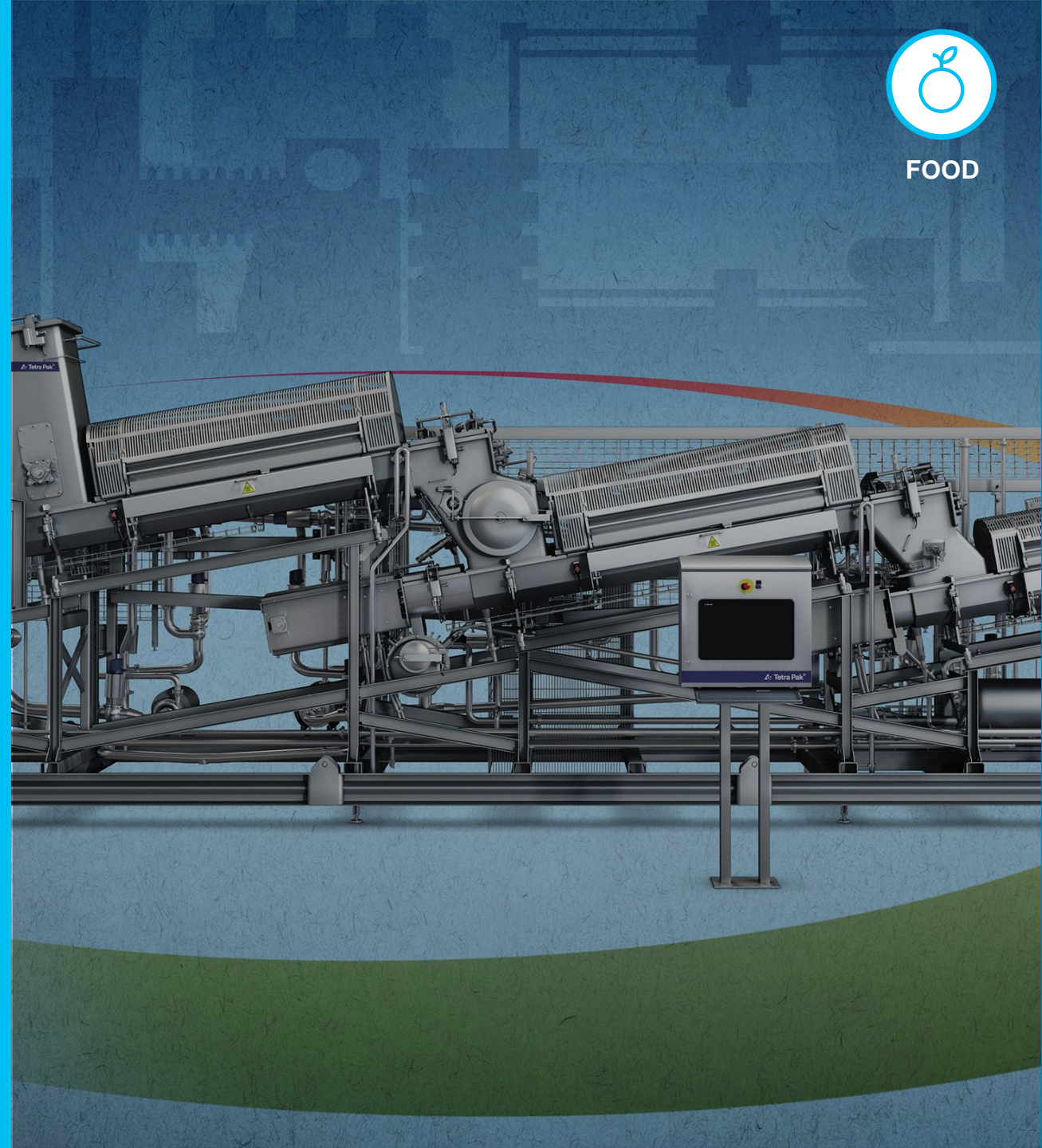
Using precision heating, the Tetra Pak® Cooker Stretcher DDA reduces fat loss which leads to increased yields.

## Benefits:

Compared to traditional wet cooking methods, dry cooking eliminates the need for around 2,500 litres of cook water, as the heating media is recirculated in enclosed augers and jackets. The water used for indirect heating through the cooker bodies and augers is retained and can be used day after day. The result is reduced water consumption.



FOOD





# Tetra Pak® Air Jet Cleaning

*A new way to clean and save water in powder production*

## Key features:

The new Tetra Pak® Air Jet Cleaning system for powder production uses jets of air combined with vacuum extraction, and there is no need for liquid cleaning or manual intervention.

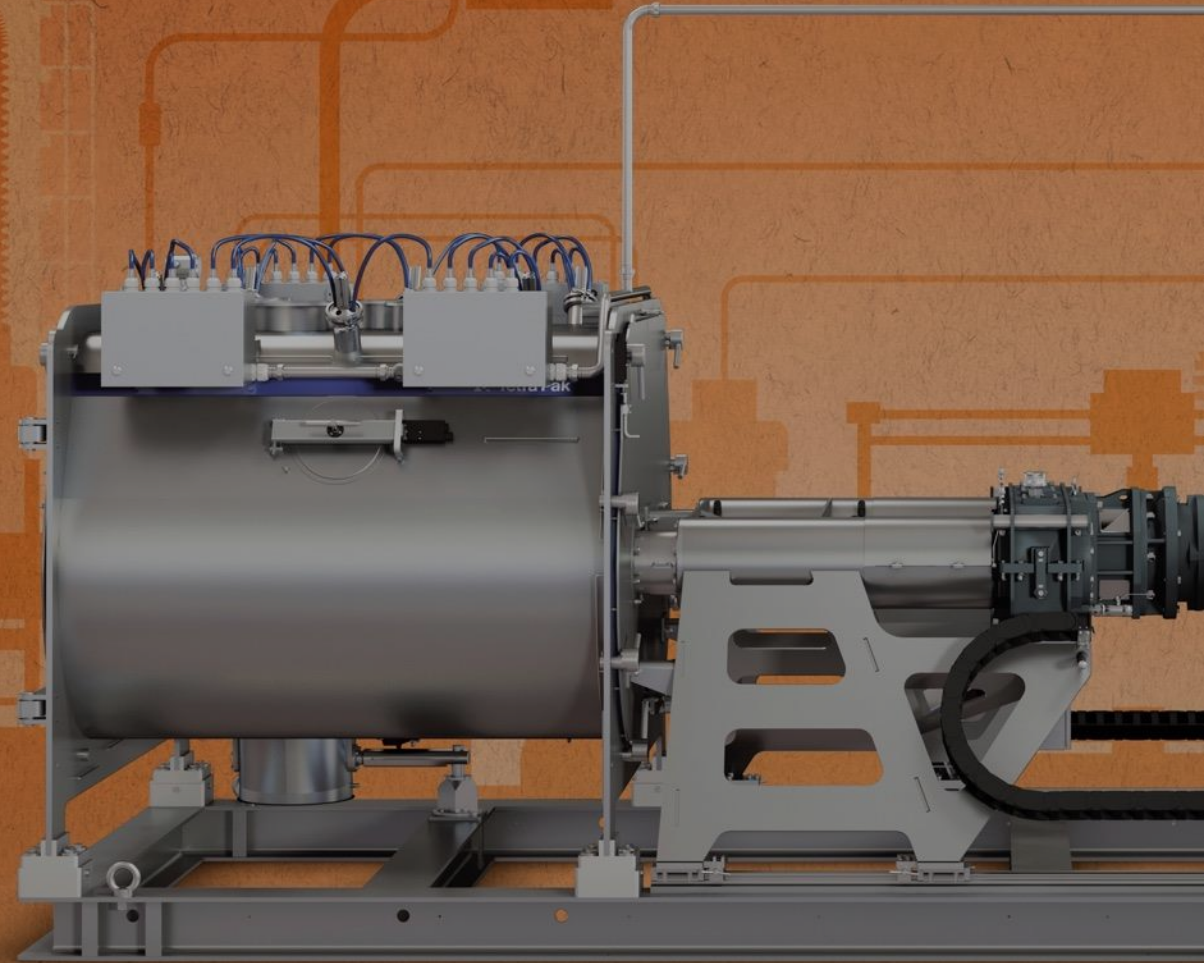
## Benefits:

The Tetra Pak® Air Jet Cleaning system reduces the operational downtime required for cleaning, leading to improved production rates and operational cost savings.

This reduces product loss by as much as 50 litres per 2,000-litre batch compared to a wet CIP (clean-in-place) and eliminates water use from the process, saving 10 m<sup>3</sup> of water per cleaning cycle at 70°C.



FOOD





# Tetra Pak® Cheese former

*Get more out of your cheese production*

## Key features:

The Tetra Pak® Cheese Former system offers whey draining, cheese forming and final shaping in a single unit.

## Benefits:

Its no-mould design means less need for cleaning which leads to water, steam and energy savings along with less detergent usage and a substantial reduction in product waste compared to a traditional cheese line.



FOOD





# Services







# Expert Services Solutions

*Identifying ways to save water, CO<sub>2</sub> and waste*

## Key features:

We offer a complete portfolio of Expert Services that help you optimise food safety and operational performance. Our experts help you evaluate operational and environmental performance as well as food safety and quality. They identify exact challenges, losses and waste before eliminating them, striking a balance between performance, cost and risk.

## Benefits:

In the America's, 8 customers used our Expert Services to optimise operational performance. All combined, we reduced CO<sub>2</sub> emissions by 7.62 kilotons, which is equivalent to 8.91% of their total plant emissions.



CLIMATE



# Tetra Pak® Water Filtering Station

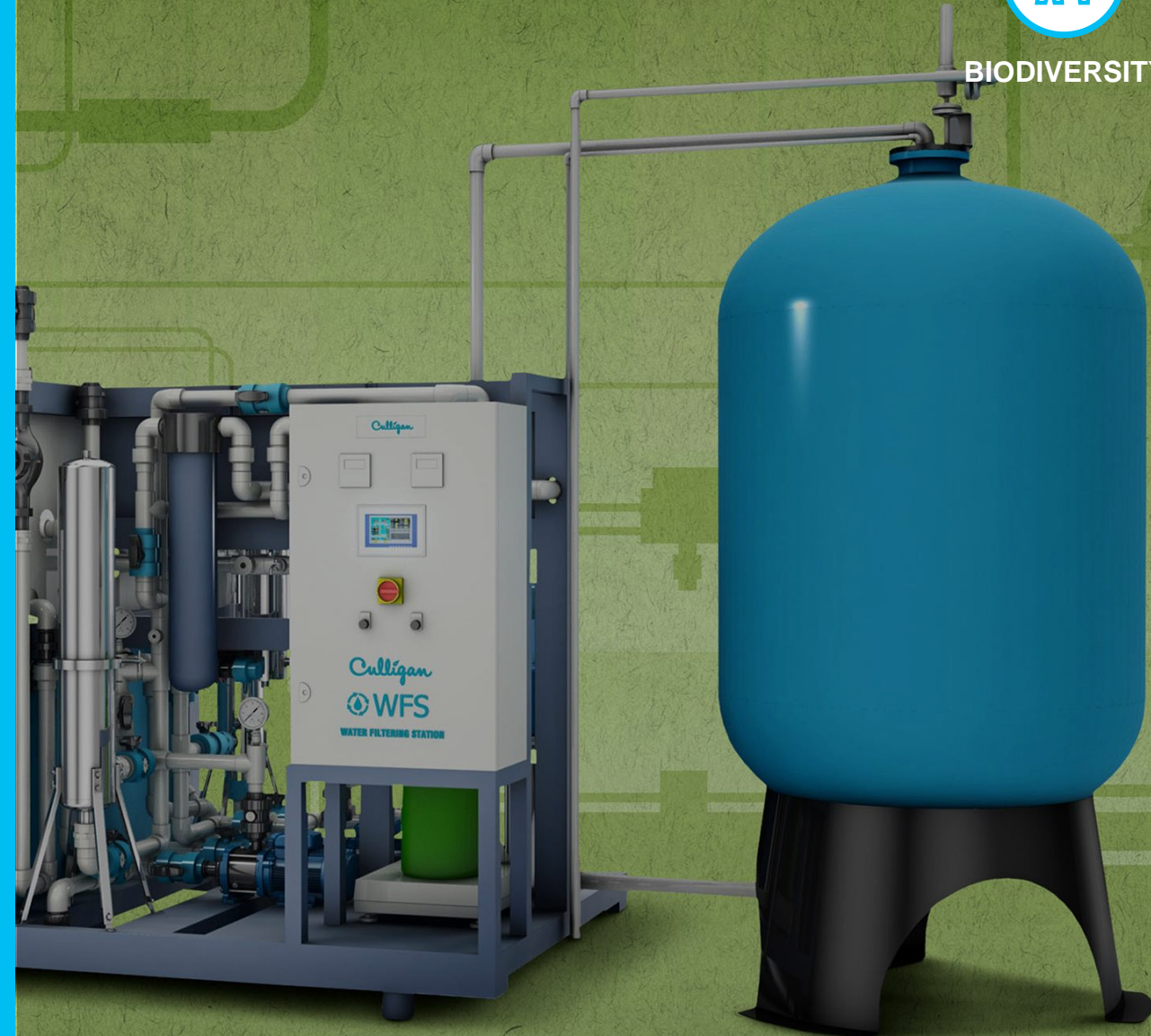
*Reducing water consumption in your operations*

## Key features:

The Tetra Pak® Water Filtering Station (WFS) removes lubrication, residues from packaging material, hydrogen peroxide and alkaline pH and circulates clean water, free from all contaminants, back into the system. This reduces water consumption in filling lines by up to 95%.

## Benefits:

By improving water quality, the Water Filtering Station also increases the lifetime of components in the filling machine, because filtered water is free from H<sub>2</sub>O particles, oil, grease and other contaminants that damage parts.



BIODIVERSITY



Tetra Pak is a world leading food processing and packaging solutions company. Working closely with our customers and suppliers, we provide safe, innovative and environmentally sound products that each day meet the needs of hundreds of millions of people in more than 160 countries. With more than 25,000 employees around the world, we believe in responsible industry leadership and a sustainable approach to business.

[www.tetrapak.com](http://www.tetrapak.com)