

Sustainable manufacturing for healthy living

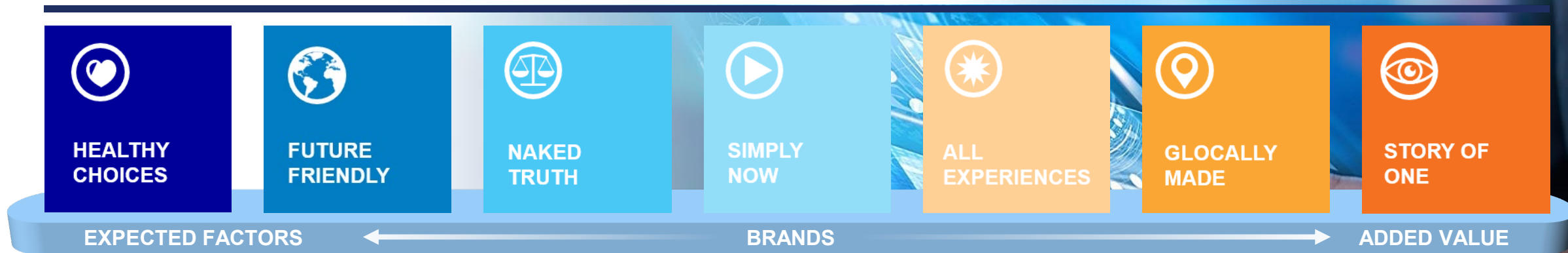
Ola Elmqvist
EVP Processing Solutions and Equipment
Tetra Pak





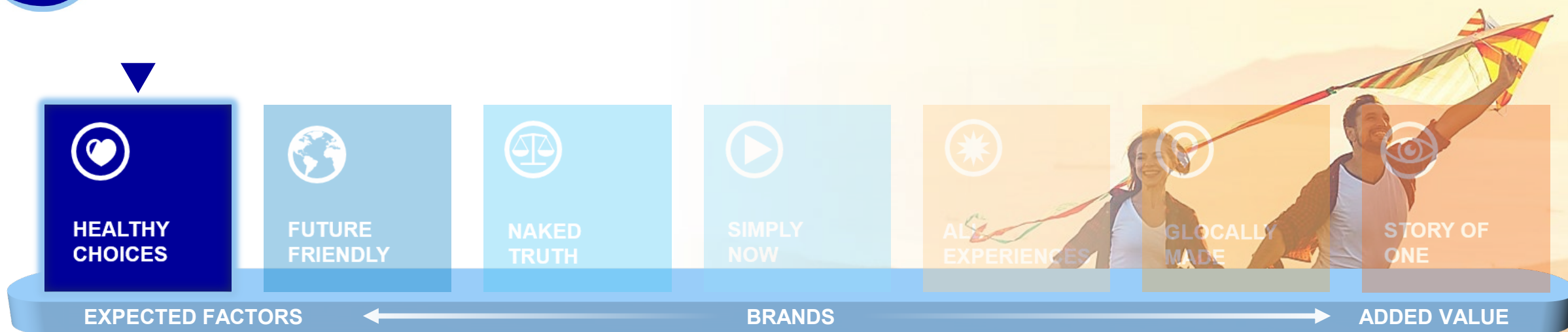
Global drivers of change towards 2030

TRENDIPEDIA CONSUMER TRENDS





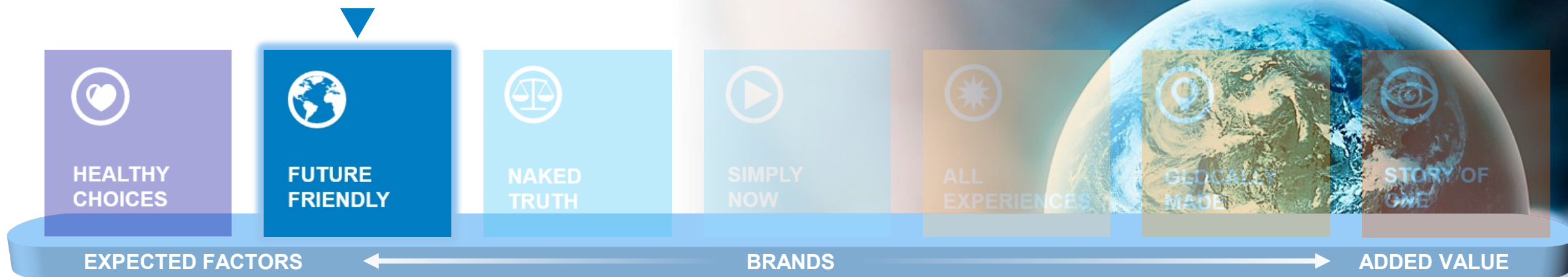
Consumer trends



Health has been a top trend for a long time, but it is now reaching new heights. Consumers are seeking a **healthy lifestyle** through all of life's perspectives – which impacts on **what we consume, how we work and exercise for mental wellbeing** – they all play a major role in projecting a healthy self image.



Consumer trends



With continuing population growth and an increase in extreme weather events, the planet and food supply are under a great deal of stress.

Consumers are becoming increasingly aware of the need to preserve and protect the world's resources for future generations. There is now almost an expectation that brands ensure what they offer is kind to the planet and to humans.



World's first fully renewable package

Tetra Rex[®] Bio-based

The first fully renewable carton package on the market

Using materials from renewable resources for the cap and the packaging material coating

Manufactured solely from a combination of plastics derived from sugarcane and paperboard

10 countries

23 customers

34 brands

9 awards





Strategic development direction

For processing equipment and solutions



Food safety

Ensuring the processing quality and safety



Environment

Improving energy/water efficiency, reducing product losses



Customer cost reduction

Providing operational cost reduction



Flexibility

Providing higher modularity

GETTING MORE PRODUCT
FROM FEWER RECOURES

Today's energy and environmental concerns call for technology that produces more and consumes less





Encapt™ Technology – inspired by low friction in space

New Tetra Pak® Separator technology launched in 2018

The further from Earth –
the lower the pressure



Lowering the
atmospheric pressure
reduces the friction

Less air friction around
the bowl means less
energy required to spin



40%

Reduced energy
consumption



New homogenization technology - less environmental impact

New digital Tetra Pak® Homogenizer 250 launched in 2018

Steam barrier solution

↓ 12%

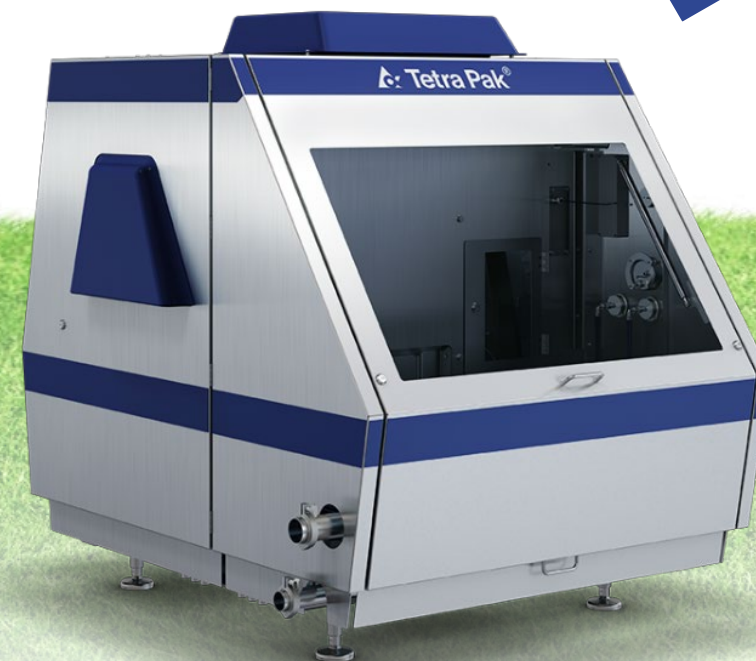
Water recycling
Smart Control

↓ 70%

‘Turnable’ parts
doubles the life time
+ self diagnostics

x2

Lower operational costs
– lower utility costs





Whey processing – reduces the environmental impact

‘Plug-and-play’ whey filtration units make it easy

What is whey?

- Yellow-green liquid remaining after cheese making
- 1 kg of Cheese production generates 9 kg of Whey
- Nearly 50% of the solids in milk are in the whey
- It's mainly water
- 75% of the solids is lactose and 5% are valuable whey proteins
- Valuable as food ingredient

Why process whey?

- Reducing food losses
- Reducing effluents loads
- Water savings by water reuse
- Low energy consumption

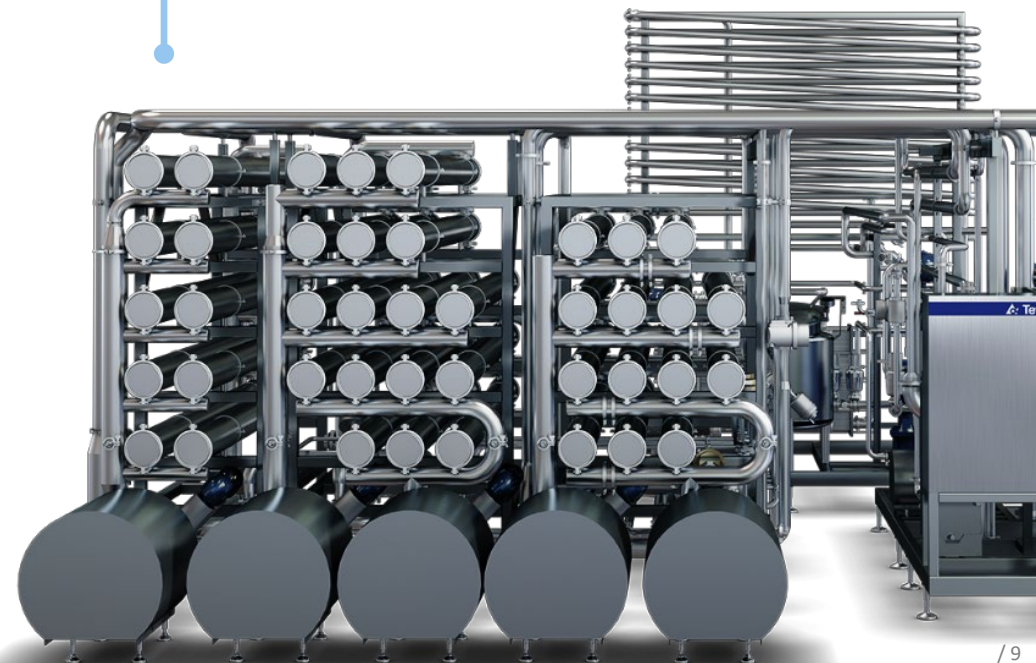
Membrane filtration

Plug-and-play units for whey filtration

Water savings

Lower energy consumption

Cost-effective way to eliminate volume





New Ice Cream Filler - designed for lesser impact

Tetra Pak® Ice Cream Filler A3



18%



Reducing effluents thanks to reduced product waste and “give-away”

25%

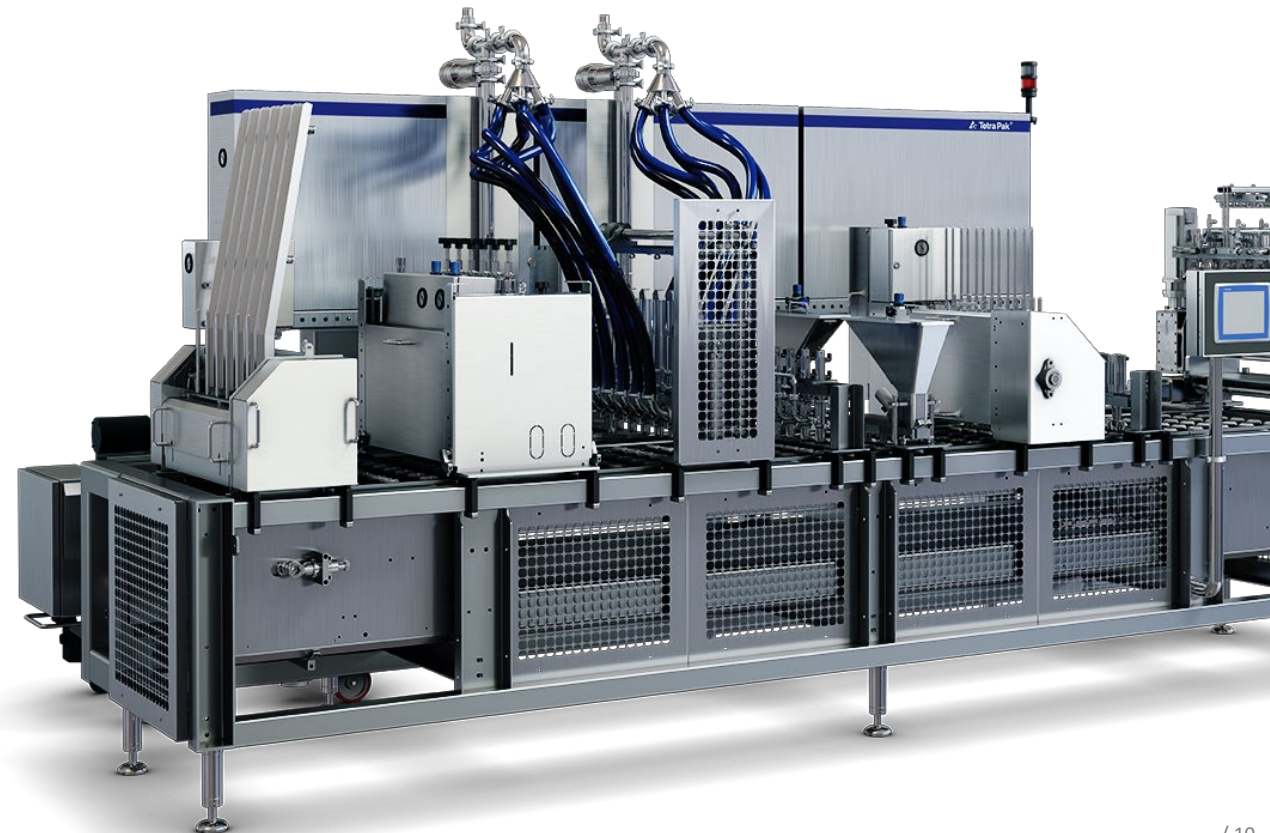


Fast and easy cleaning reducing detergent and water usage

17%



Optimizing equipment and systems secure minimized CO₂ impact





Partnership enables uniform high quality

Tetra Pak® Standardization unit with continuous protein control

Launched 2019:



The only method for the continuous accurate measurement and control of protein and fat



Unique collaboration between the experts in milk standardization and milk analysis



Unique guaranteed ratio performance for continuous fast and accurate data and reaction to data



FOR THE BEST ROI ON THE MARKET

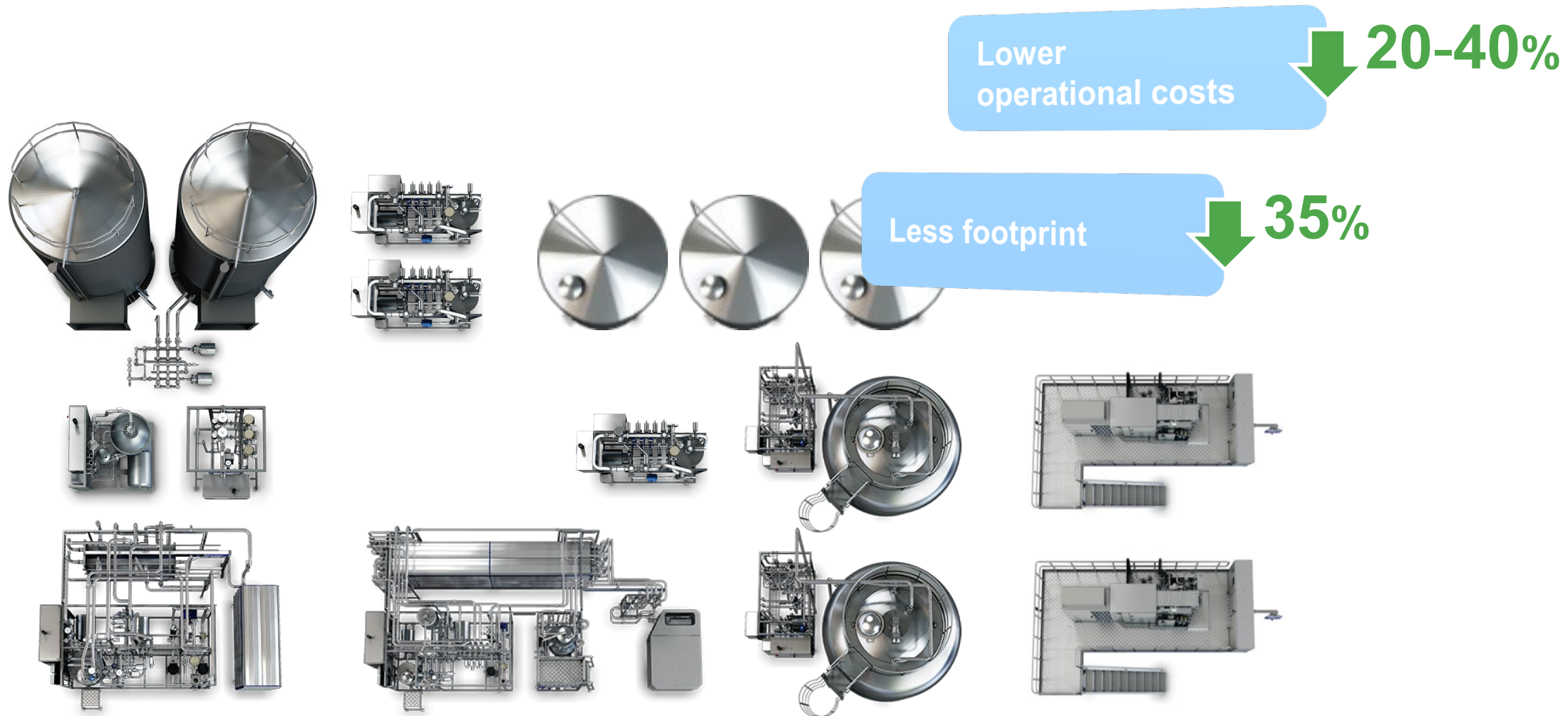
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A holistic view on line design

Example: 'OneStep' UHT line reduces the environmental impact





Whatever you produce. Whatever your priorities.

Environmentally sound solutions and equipment



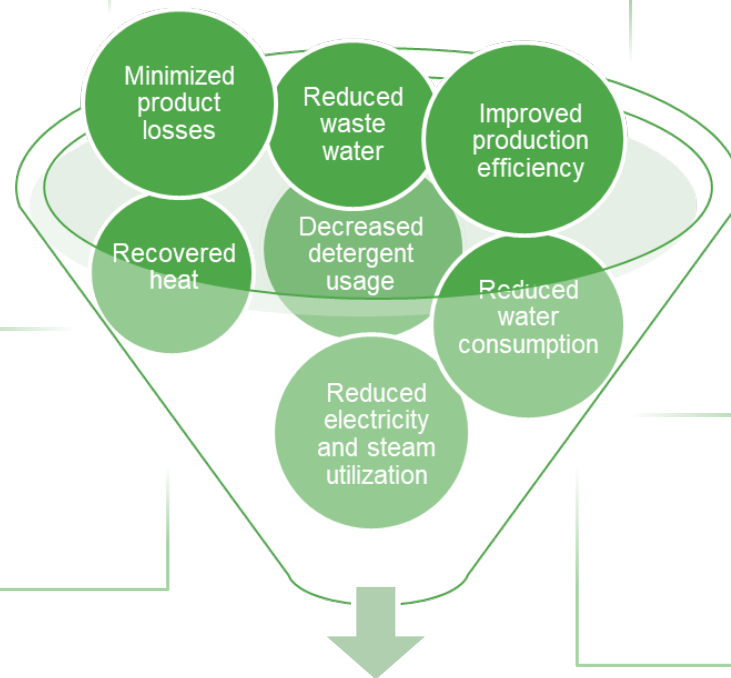
OneStep
technology for UHT
milk production **7**



Tetra Pak® Standardization unit
with continuous protein control **6**



Membrane filtration in
cheese production &
whey treatment **5**



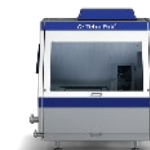
1

Tetra Pak® Separator
with Encapt™ and
AirTight technology



2

Tetra Pak®
Homogenizer 250



3

Tetra Pak®
Tubular Heat Exchanger
with P2P technology



4

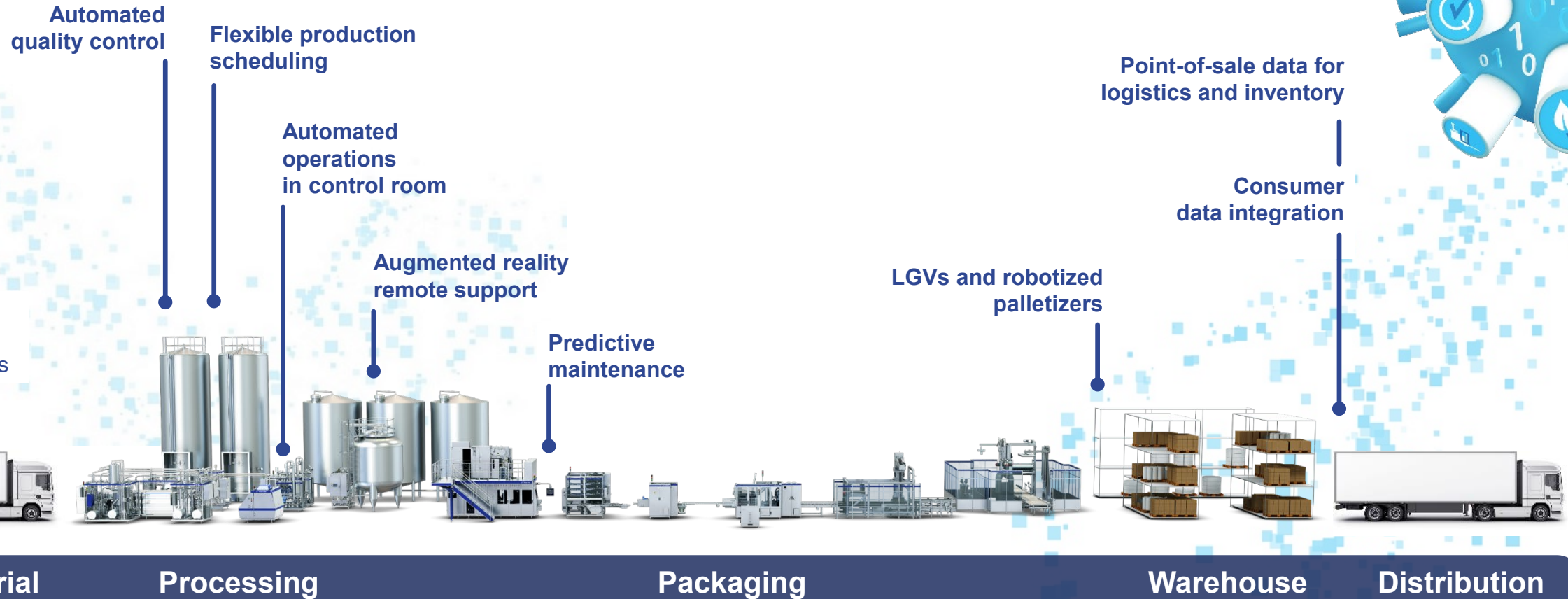
Tetra Pak®
Ice Cream Filler A3





Industry 4.0 & Tetra Pak® PlantMaster for our industry

Fully integrate key process data and secure quality



Cross-site benchmarking, planning optimisation and market-based capacity allocation



A global network of facilities to support customer success

Customer Innovation Centres and Product Development Centres





Thank you!

