

Sustainability at Krones

Environmental, Social, Governance



 **KRONES**

Sustainability as part of our corporate strategy



Our Vision

Sustainable and affordable beverages, food and essentials for everyone and everywhere.

We develop solutions beyond expectations for our customers, humanity and our planet.

Our Mission

We lead with innovative solutions to empower our customers, meeting their goals and beyond, making them successful and sustainable.

We enforce our creative power to preserve nature and safeguard society.

Why we take responsibility

Solutions beyond tomorrow



Our vision for "**Solutions beyond tomorrow**" puts sustainability at the centre of all our activities.

Our **solutions** are intended to make a significant contribution to three major **challenges** facing **humanity**:

Curbing climate change (1.5 °C target)



Using packaging materials responsibly



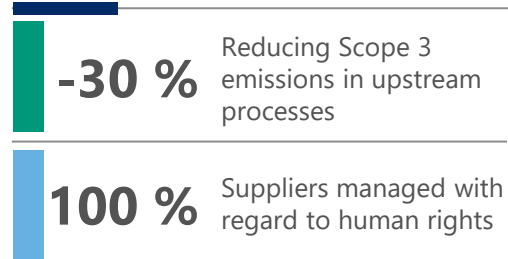
Feeding the world's population



What we are working towards

Sustainability goals 2030

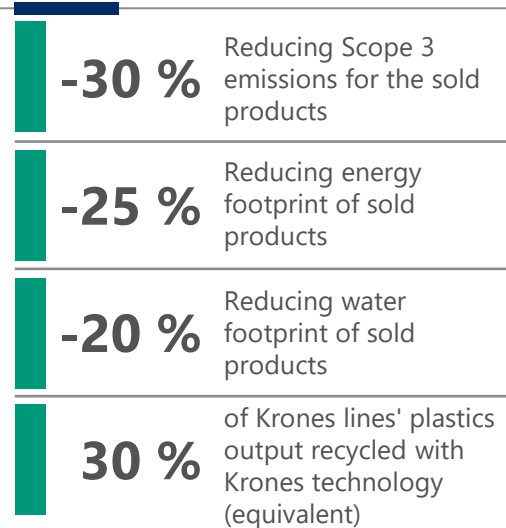
Upstream chain



Own operations



Downstream chain



12 KPIs in ESG (Environmental, Social, Governance) for directing sustainability along the value chain until 2030



Until 2040

NET-ZERO

Emissions along the entire value chain



A hand in a white shirt sleeve is pointing at a laptop screen. The background is a bright sunset or sunrise over a landscape, with the sun low on the horizon, creating a lens flare effect. The overall tone is warm and hopeful.

Curbing climate change

(1.5 °C target)

What we are working towards

Curbing climate change

By 2040 Krones aims to:

Cut 90 percent of greenhouse gas emissions



- Includes emissions from the entire value chain (Scope 1 to Scope 3)
- 2019 as the base year for achieving this goal

Neutralise the remaining 10 percent



In addition to the medium-term reduction goals for 2030, the entire Krones Executive Board adopted a **net zero emissions target** in April 2024.

This is based on the standard defined by the Science Based Targets initiative (SBTi).



How we are bringing more sustainability to the industry

enviro solutions



Our program for sustainable products

Start:

2008 as a certified management system

Since then:

Expansion to the entire Krones product portfolio

Basis:

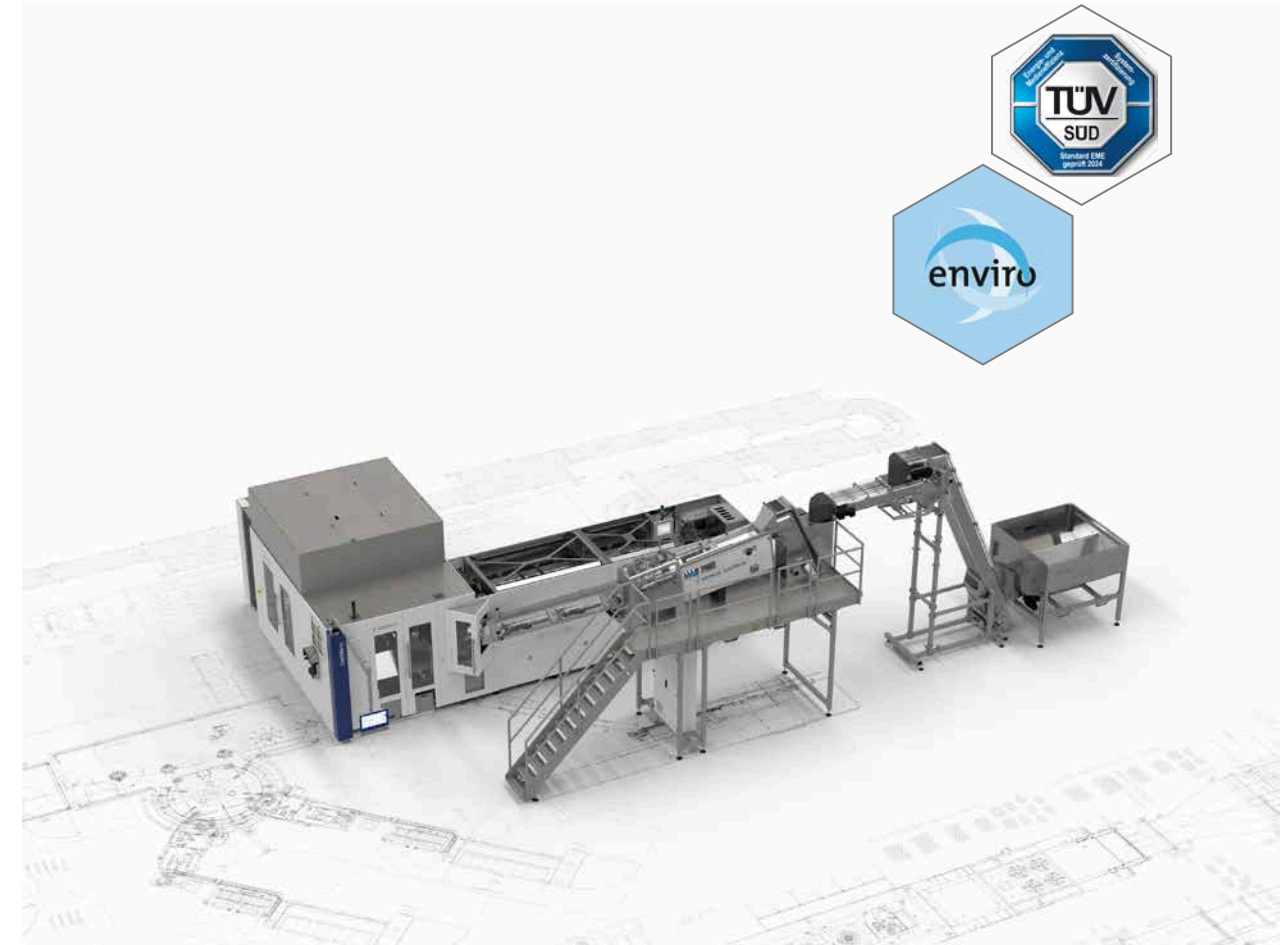
EME-Standard from TÜV SÜD (EME = Energy and Media Efficiency)

Validation:

External certification from TÜV SÜD

Outcome:

Machines and systems for proven energy- and media-efficient production, recognisable by the blue **enviro seal**



Where and how energy can be saved

Optimising processes, using synergy effects



Thermal energy

- Adjusting temperatures (e.g., warm filling)
- Using hot water instead of steam
- Hot or cold-water storage tanks in combination with heat pump or solar thermal energy
- Using waste heat from blow moulder, high pressure and / or low pressure air compressors and shrinking tunnels
- Central cooling system (incl. blow moulders)



Electrical energy

- Avoiding peak loads
- Generating renewable energy
- Energy efficient cooling of control cabinets
- Synchronous-reluctance drives for pumps (better energy efficiency compared to asynchronous drives, fewer materials and fewer rare minerals)
- Higher OEE results in less consumption per container, less waste, less stoppages



Using packaging materials responsibly

How packaging material can be used responsibly

Solutions for packaging

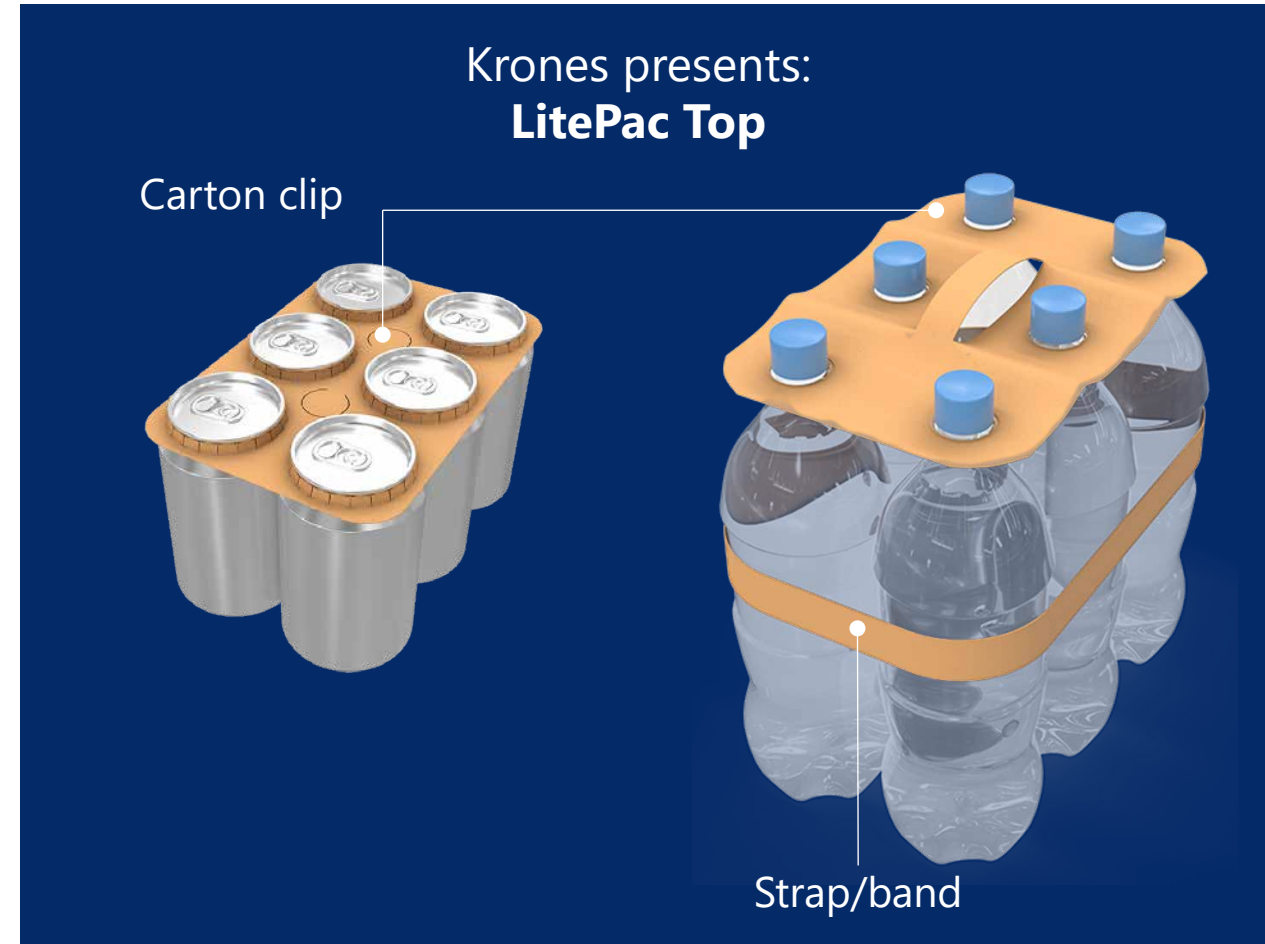


enviro program for sustainable packaging

- The enviro design also stands for environmentally friendly packaging.
- The enviro design considers all the environmental impacts of packaging according to the Circular Economy guidelines.

Further Solutions

- Consulting: Environmental footprint of packaging depending on what best meets the customer's needs
- Use of recycled material
- Lightweighting



A closed plastics cycle

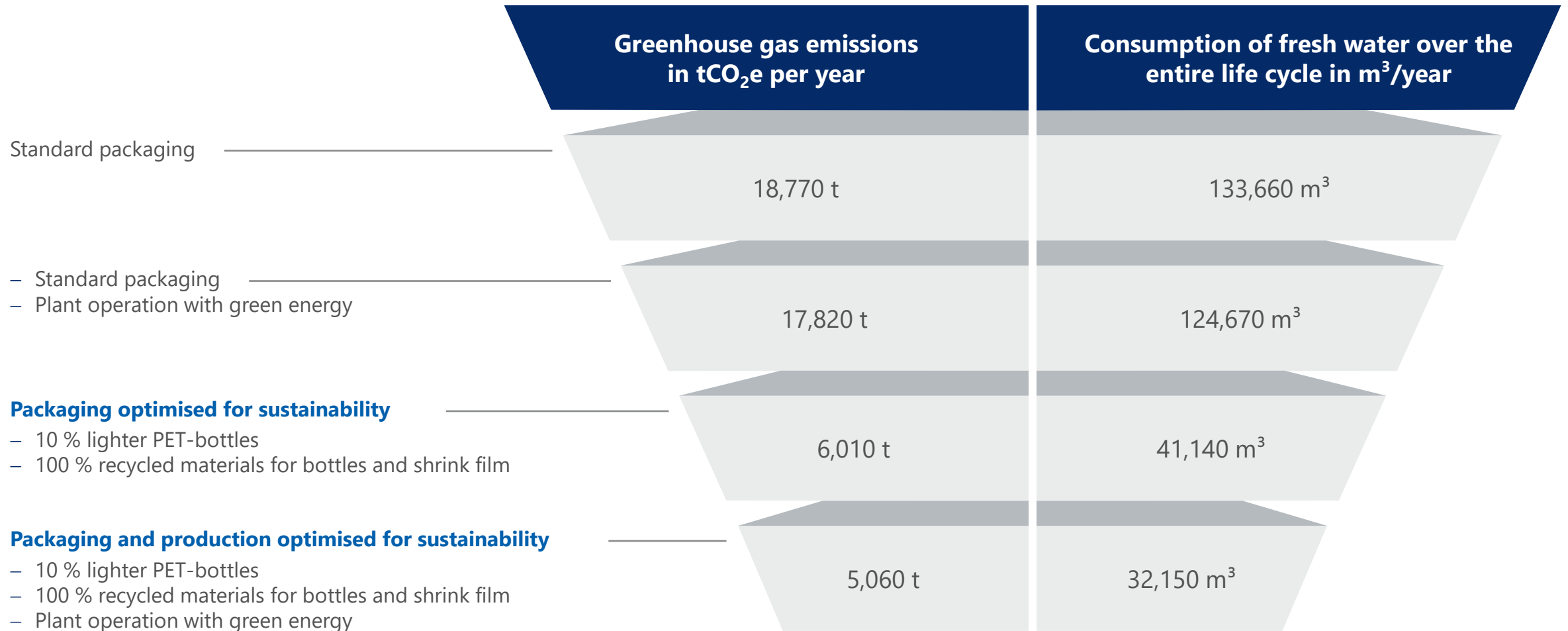


Form a single source - With the injection moulding machine, we close the PET plastic cycle with Krones solutions and enable in-house manufacturing for the customer.



Why investing in product sustainability pays off

Consumption in comparison





Feeding the world's population

How to feed the world's population

Solutions to save water



enviro program to save water

- enviro not only stands for energy efficiency, but also for media efficiency, for example with water.

Further solutions

Examples on the line level:

- Reusing rinsing water
- Vacuum pump: Dry running, no water needed
- Reasonable production planning
- Specifying cleaning requirements
- Dry lubrication for conveyors
- Warm filling: Less water and energy for cooling



How to feed the world's population

Solutions to counter food waste

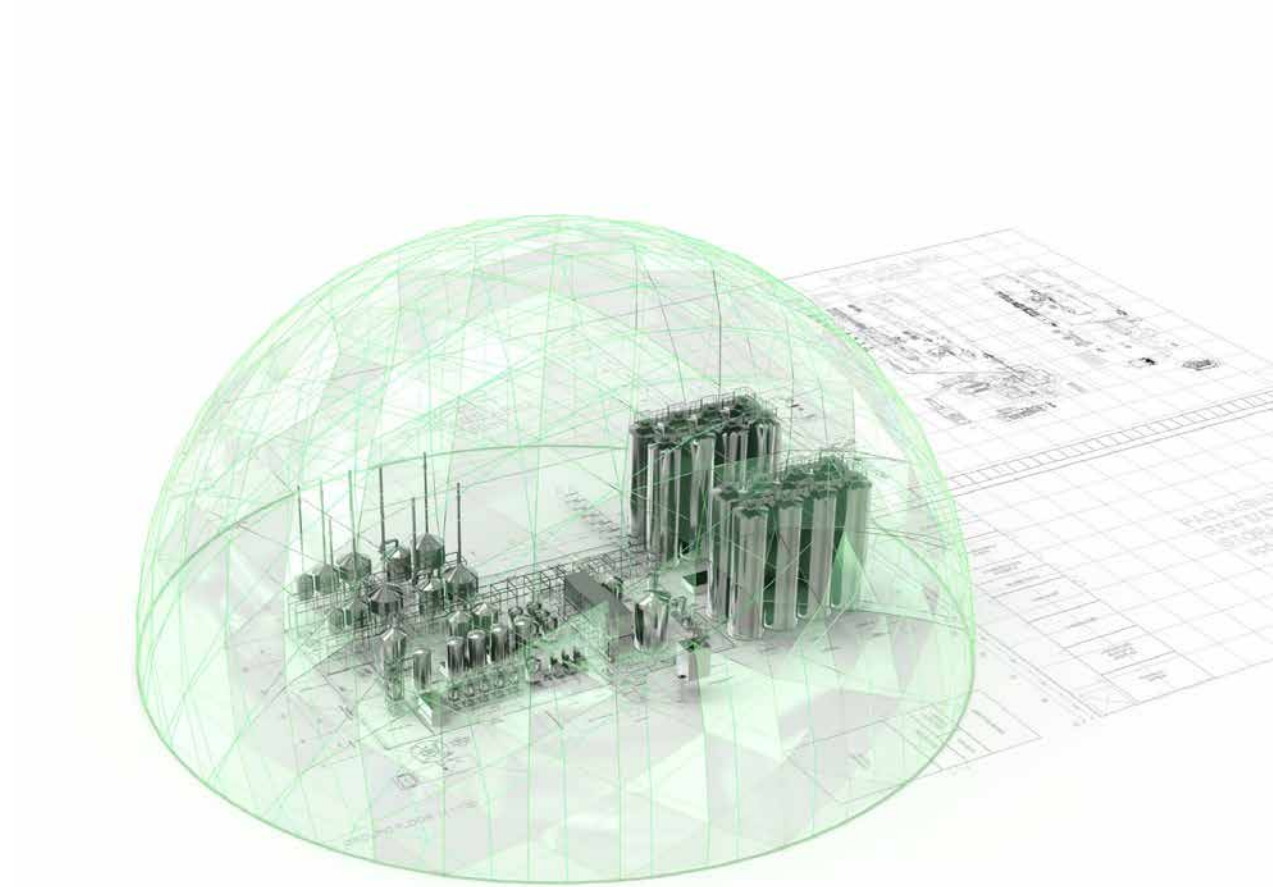


Brewnomic

- Reusing energy from residual materials from the brewing process to produce biogas
- Closing the gap between the current energy consumption of a modern brewery and the potential of recycling residual materials and materials and natural energy sources

Biomass conversion with Phoenix BMC

- With Phoenix BMC: → Expanded emissions reduction target to zero-waste production
- Converting biomass to upcycle material (protein base, fertilizer) and recover energy (biogas) from brewery residues



How to feed the world's population

Alternative sources of protein



Plant-based proteins

Complete process technology from Krones for the production of alternative proteins.



Advanced fermentation

Cruelty-free New Food Products with Krones fermentation technologies.



Plant-based milk alternatives

Turn-key facilities for plant-based milk alternatives from nut, legumes or grains.



**All solutions
at a glance**

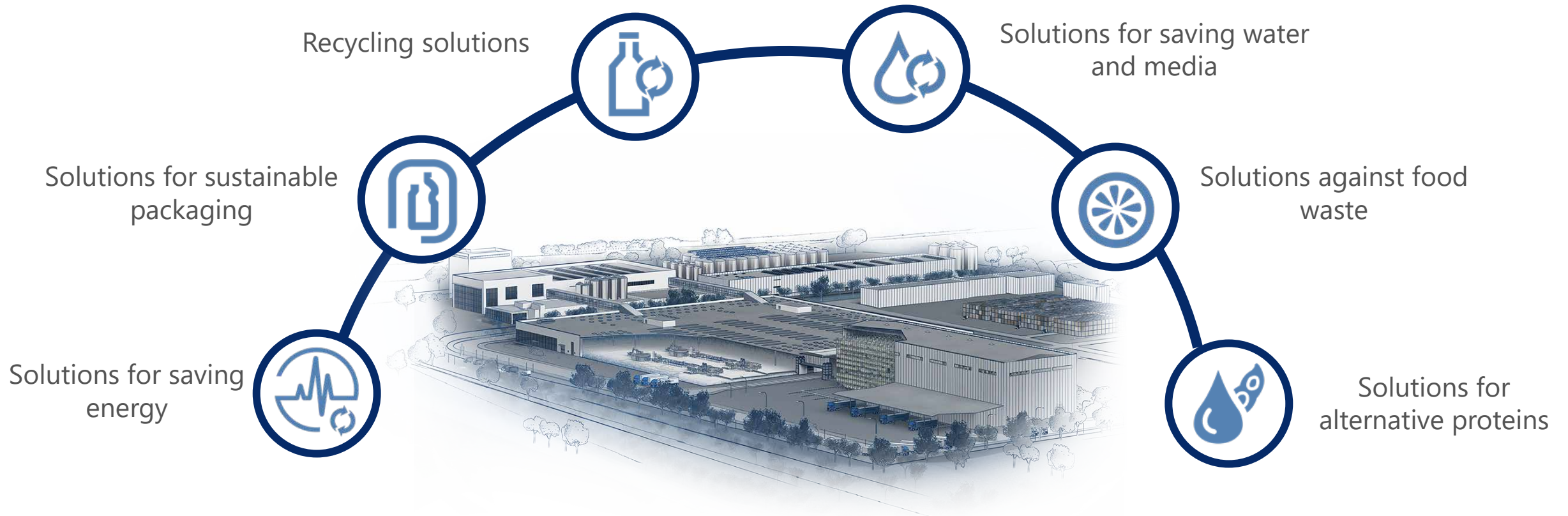
Optimising the entire system with Krones

Krones holistic approach



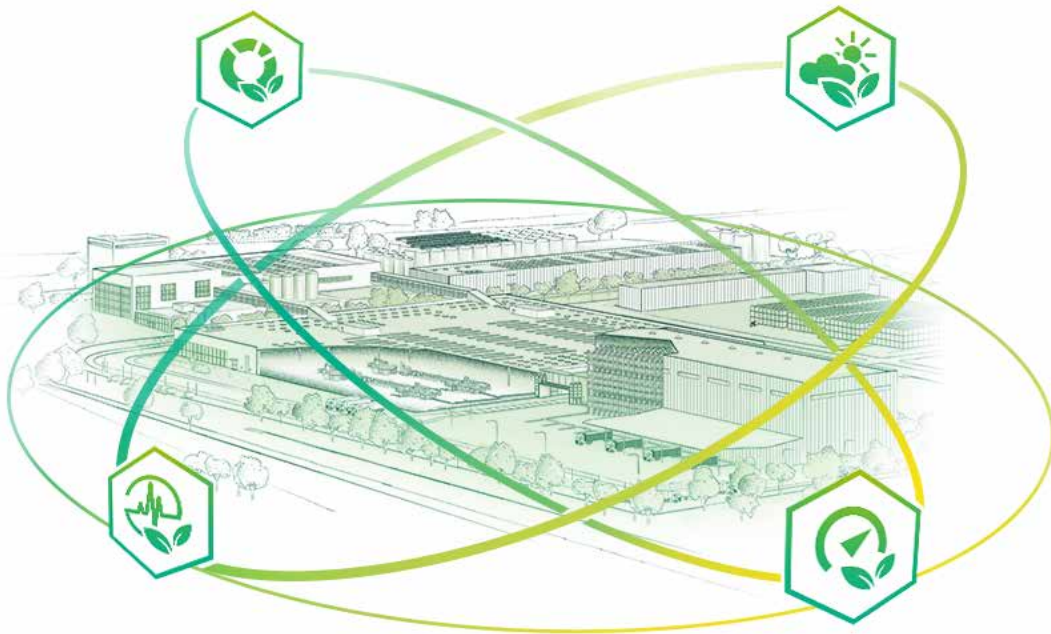
Krones can offer a variety of sustainable solutions at different levels:

Machine, line or plant level



Optimising the entire system with Kronos

Resource efficiency at factory level through sustainability consulting



Energy solutions

Energy storage unit

- Hot and cold water storage
- Batteries and H2-storage

Procuring green energy

Self-generated thermal and electrical energy:

- Photovoltaics
- Solar heating
- Biomass
- Heat pump
- Wind turbines
- Combined heat and power plant

Water solutions

- Waste water concept
- Water treatment
- Water saving concepts

Digitalization

Digital solutions enable us to track the environmental performance of our customers' systems.

Social & Governance



How we assume our responsibilities

Social issues

Key topics

- **Diversity:** Promoting diversity and inclusion through targeted programs and a company-wide Diversity Board
15.7 % women in management positions (goal: 20 % by 2030)
- **Training and Development:** Employee appraisals, needs-based qualification and further training programs, training, Profile 21
- **Health and Safety:** ISO 45001 certifications, "Shaping healthy work habits", campaigns for physical and mental well-being
-28% reduction in work accidents (goal: 30 % by 2030)
- **Appropriate working conditions:** New Work concepts, flexible working hours, mobile working

How we assume our responsibilities

Social issues



As an international **company**, Krones is **committed** to **respecting human rights** as well as **labour** and **human rights related environmental standards** along the entire **value chain**.

Risk analysis

Risk analysis in our own business areas and along the supply chain



Preventative measures

- Own business unit: audits and risk analysis, certifications, training, code of conduct, guidelines
- Suppliers: social audits, due diligence, supplier evaluation, code of conduct for suppliers



Corrective measures

In the event of critical findings, the corrective measures to be taken are decided on a case-by case basis. Depending on the severity, frequency and type of violation, the next steps are determined based on an in-depth investigation.





How we assume our responsibilities

Governance

Compliance along the value chain

- Anti-corruption program consisting of guidelines, training and prevention measures
- Fraud prevention through implemented due diligence processes
- Avoiding conflicts of interest
- Krones Integrity whistleblower system: Publicly accessible online system for reporting compliance risks

Dealing with knowledge and information

- ISO 27001 certification of our Krones Information Security Management System
- Maintaining information security for internal data and systems as well as for products and services
- Security Operation Center (SOC) as an active IT security service provider (24/7 monitoring)

Sustainability performance



How our performance is rated

Current rating results



EcoVadis 2024

Rating-Focus

- Environment
- Labor and human rights:
- Ethics
- Sustainable procurement



CDP 2023

Rating-Focus

Transparency in the disclosure of information and performance in relation to climate change, deforestation or water security



A-

Climate change

B

Water security



How our performance is rated

EU-Taxonomy



EU-taxonomy



- **EU-wide system** for classifying sustainable economic activities
- Part of the "**Action Plan on Financing Sustainable Growth**"
- **Objective:** To channel financial capital from banks and investors into sustainable companies

| | Turnover | CapEx | OpEx |
|--|---|--|--|
| Taxonomy-eligible activities (Potentially sustainable) | 15.5 % 731.1 Mio. € | 22.6 % 52.5 Mio. € | 3.0 % 4.0 Mio. € |
| Taxonomy-aligned activities (sustainable according to the EU-taxonomy) | 15.2 % 718.3 Mio. € | 22.6 % 52.5 Mio. € | 2.1 % 2.8 Mio. € |
| Activities considered: | enviro Portfolio, ecomac (sale of used machines), sale of spare parts | Individual measures: Photovoltaics, energy-efficient measures, charging stations for electric vehicles | Research & Development activities, maintenance |
| | 98 percent of taxonomy-eligible activities are taxonomy-aligned. | Of the revenue that could be sustainable (eligible), a very high percentage is actually sustainable (aligned) according to the EU-taxonomy criteria. | |

How and with whom we work

Partner and networks



Standards



Norms



Memberships



Commitments



**SOLUTIONS
BEYOND
TOMORROW**

