Krones enviro

Responsibility as a chance

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Climate strategy: Net-zero

In April 2024, the entire Krones Executive Board decided on a net-zero emissions target by 2040.

Short-term
SBTi approved ✓

Krones **reduces 80 percent** of its scope 1+2 and **30 percent** of its scope 3 emissions (base: 2019) by

2030

Long-term net-zero
SBTi authorisation in progress ▶▶

Krones will **reduce 90 percent** of its greenhouse gas emissions in scopes 1 to 3 (base: 2019) and

Krones will reach net-zero emissions by **neutralizing the remaining 10 percent technologically** by

2040
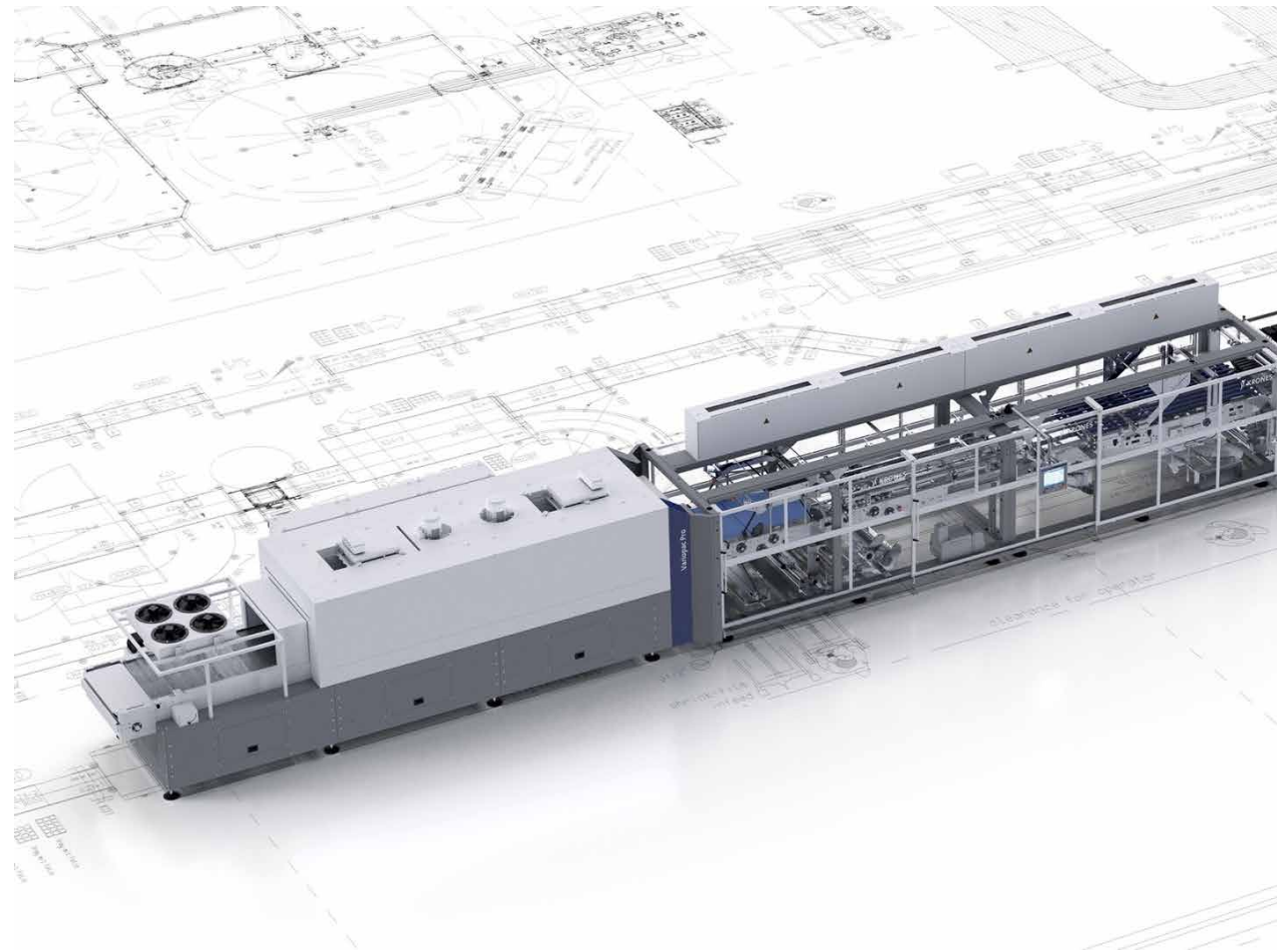
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Technology with a vision

Achieving more by using less: The call for ecologically efficient production has long reached the industrial goods sector.
And this for good reason: On the one hand, legislative bodies and consumers are focussing more and more on using production equipment that uses less resources. On the other hand, they also offer their operating companies huge benefits - but obviously only if they do not affect performance or profitability. This is why the cumulative innovative strength of Krones development work is invested in enviro machines. Only this way, we can meet our own expectations: and this is, to equip the beverage and food industry with future-oriented technologies which will enable high-performance production which saves resources at the same time over many years.

At a glance

The Krones enviro sustainability programme ...

– has received certification from the technical inspection authority TÜV SÜD, an independent appraiser.

– has been consistently extended to cover the entire portfolio since 2008.

– is already utilised in the development of new products.

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What is enviro?

Basic conditions

enviro is ...

- a certified management system.
- an inherent part of Krones product development and services.
- an objective standard for
  - energy efficiency
  - media efficiency and
  - environmental compatibility.

The result

enviro has an effect on all our product developments, services and solutions. Optimum consumption data with regard to energy and media efficiency of both existing and new lines in breweries and beverage plants are part of the Krones day-to-day tasks.

Management system certified by TÜV SÜD!

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Why enviro?

Because sustainable production has many benefits!

Added value through savings and resource conservation

- Reduced operating costs
- Exploitation of savings potential
- Obtaining objective proof of effectiveness through a certified evaluation procedure

Environmentally efficient production

- Reduction of environmental impact
- Avoiding environmentally harmful materials and media
- Meeting the requirements of stakeholders

Energy efficiency

Media efficiency

enviro

Environmental compatibility

Meeting regulatory requirements

For example
- Eco-Design directive
- Machinery directive
- Regulations

Utilising technological innovations

- Energy and media efficiency as the driving force for innovations for a sustainable development roadmap
- Resource-saving components based on the latest developments

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Sustainable Krones products

The enviro program: A certified management system, which is a fixed part of the Krones product development since 2008

Our R&D value driver

- **Minimum energy and media consumption:**
  - Optimisation of all resources
  - Optimisation of the total consumption
  - Recycling of energy, liquids and gases
- **Zero-waste production:**
  - Optimised production and cleaning
- **Sustainable packaging, which reduces the impact on the environment:**
  - Reduction, recycling, re-use as well as use of renewable material

Safe and secure

Affordable

Flexible

Thermal energy in the entire brewery: **-55 %** through Brewnomic

-16 % Saving energy at the fourth generation of the stretch blow moulder Contiform
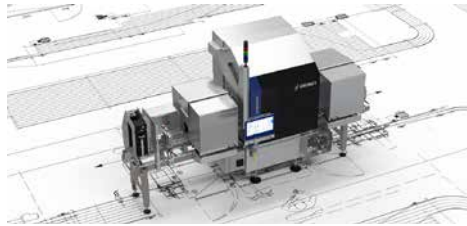
Thermal energy in the brewhouse: **-45 %** through EquiTherm

Thermal energy in the washer: **-25 %** with enviro compared to standard variants

product pump size: only **1.1 kW** in the integrated mixer at Modulfill VFS-M instead of 11 kW at the conventional Modulfill with Carboflow
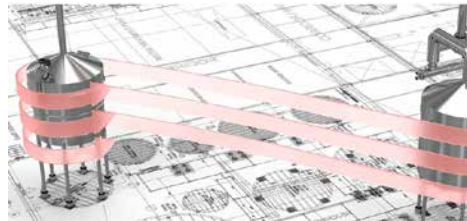
Equipping the food and beverage industry with future-oriented technologies for the establishment of energy efficiency and product processes which save resources

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What is checked in the enviro process?

In the machine concept

Our portfolio is examined in accordance with the TÜV (technical inspection authority) standard EME* and must meet the requirements.
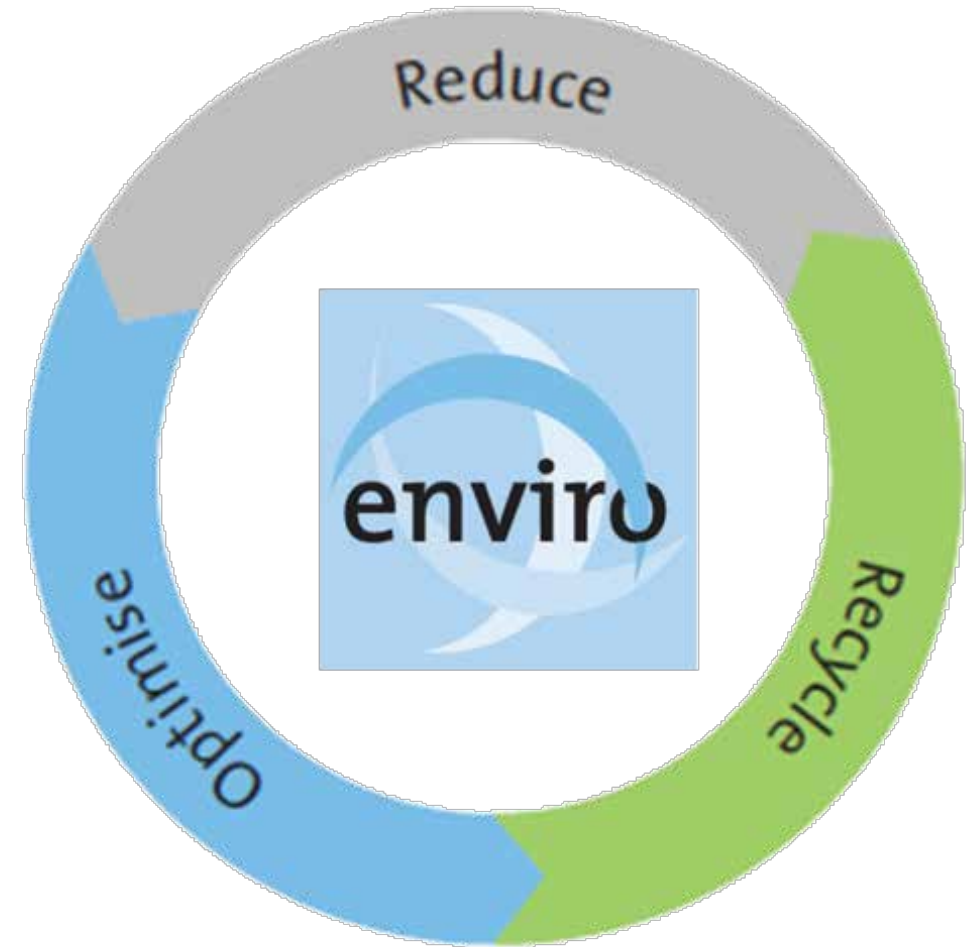
In systems

Comparison of two systems with the same limits according to the enviro principles
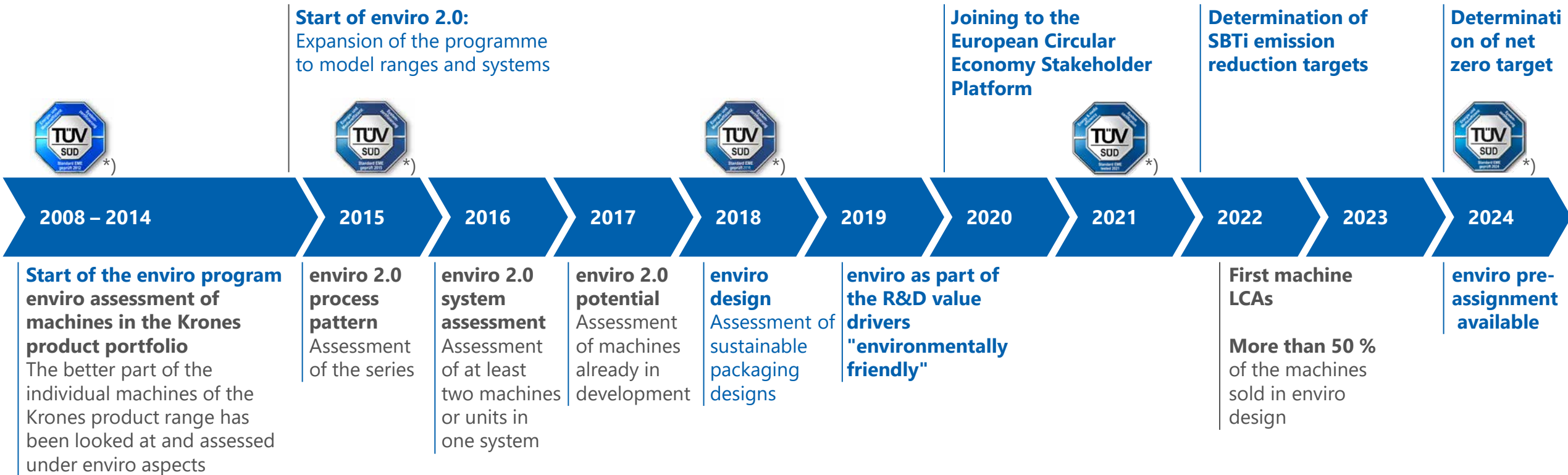
enviro design

The enviro design puts all environmental impacts of the packaging into consideration according to the Circular Economy.

* EME: *Energy and Media Efficiency, Environmental Sustainability

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The enviro story of success

Start of enviro 2.0: Expansion of the programme to model ranges and systems

Joining to the European Circular Economy Stakeholder Platform

Determination of SBTi emission reduction targets

Determination of net zero target

2008 – 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

Start of the enviro program enviro assessment of machines in the Krones product portfolio
The better part of the individual machines of the Krones product range has been looked at and assessed under enviro aspects

enviro 2.0 process pattern
Assessment of the series

enviro 2.0 system assessment
Assessment of at least two machines or units in one system

enviro 2.0 potential
Assessment of machines already in development

enviro design
Assessment of sustainable packaging designs

enviro as part of the R&D value drivers "environmentally friendly"

First machine LCAs

More than 50 % of the machines sold in enviro design

enviro pre-assignment available

The result: Consistent checking of the product portfolio for energy efficiency and media efficiency as well as environmental compatibility

* TÜV certified management system according to EME standard

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Benefits to you

Best available technology

– The components for saving resources included in our machines are based on the latest developments and incorporate energy-efficient and media-efficient technologies.
– Technological progress is continually taken into consideration in the enviro process.

Use of environmentally sound media

– The use of enviro machines will always prevent materials and media which are harmful to the environment. We will be only too pleased to provide you with relevant documentation.

Traceable savings of resources

– The objective evaluation process verifies the resource savings achievable with the enviro machines.
– The enviro system evaluation process also makes it possible to check the ecological efficiency of processes performed on more than one machine, such as process technology.
– The enviro design stands for particularly environmentally friendly packaging.

Optimum consumption data

– enviro flows into all Krones product developments, services and solutions.
– Results are optimal consumption data with regard to energy and media efficiency of existing and new lines.

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