

# Sustainability at KAESER

## Efficiency meets responsibility

Economical and environmentally friendly.
Sustainable compressed air system solutions for tomorrow.

# Sustainability at KAESER

KAESER KOMPRESSOREN is a family business with over 100 years of history. Committed to tradition, sustainability means responsibility for the future. That's why we've made it our mission to integrate productivity, climate protection, and social responsibility - both in our manufacturing processes and our products. Because we take this seriously, KAESER has incorporated this commitment to greater sustainability into our corporate strategy. This ensures that all areas think and act responsibly.

We also align ourselves with the United Nations' Sustainable Development Goals (SDGs). We have defined strategic focus areas: energy efficiency, CO<sub>2</sub> neutrality, environmental protection, resource conservation and fair working conditions. To achieve these goals, we undergo a continuous transformation process, including transforming KAESER into a CO<sub>2</sub>-neutral company. We aim to be part of a sustainable manufacturing environment and to make a significant contribution to combatting global climate change, by committing to the Paris Climate Agreement.

## **Sustainable framework conditions**



By employing digital technologies and intelligently linking energy flows in our manufacturing processes, KAESER is already a leader in energy and resource efficiency. In our Smart Factory, production is carried out according to the latest standards, making it easier for us to save even more energy and reduce emissions through continuous improvements. Additionally, KAESER's sustainability management oversees the entire value chain concerning all market-relevant ESG topics.

To achieve our goal of continuous improvement, aspects such as regionality, social responsibility, circular economy, and above all, energy efficiency play a crucial role. In collaboration with our business partners, we are also working to reduce the carbon footprint in the value chain.

### **Goals for our sustainable development**

The United Nations has set **17 global sustainability goals**, the Sustainable Development Goals (SDGs), for socially, economically, and environmentally sustainable development. KAESER follows this future-oriented roadmap at our main site in Germany, focusing on the following eight SDGs::

### **Our sustainability goals: Shaping the future together!**



Comprehensive occupational health and safety are of utmost importance to KAESER. Our goal is to prevent workplace accidents, occupational illnesses, and hazards through proactive measures. As part of our corporate health management, we offer a wide range of sports and preventative services. Every year, several events and occupational health check-ups take place, which are well-received by employees.



As a family-run business with a rich tradition, KAESER stands for sustainable economic growth and fair working conditions. We are convinced that safe workplaces and productive employment are crucial for creating prosperity and achieving the best quality of life for everyone. Our work in regional economic development also contributes to this goal.



High-quality education and further training are central to our efforts to build a just and inclusive society. KAESER is already thinking about the future with its comprehensive training for young talents. All employees have access to extensive further training opportunities. Our goal is to nurture talents and develop people's skills and competencies.



KAESER supports and promotes sustainable industrialisation and develops forward-looking infrastructure. Through our initiatives, we strive to foster sustainable industries that are efficient and resource-conserving, and to build infrastructures that meet societal needs.



Gender **equality** is a key objective, aiming to promote equality and eliminate gender-based discrimination. As a company bound by collective bargaining, KAESER ensures equal pay and career opportunities for all genders.



One of KAESER's core goals is to reduce resource consumption, focusing on the intelligent use of resources, environmentally friendly production processes, and efficient management. We also develop strategies for an effective circular economy.



KAESER is committed to clean and CO<sub>2</sub>-neutral energy now and in the future. We are also working to electrify our vehicle fleet to actively protect the environment and reduce CO<sub>2</sub> emissions in all areas.



KAESER operates comprehensive energy management to increase energy efficiency and sustainably reduce emissions. The **circular economy** is a focal point within the context of environmental management. In addition, our efficient products help reduce greenhouse gases.

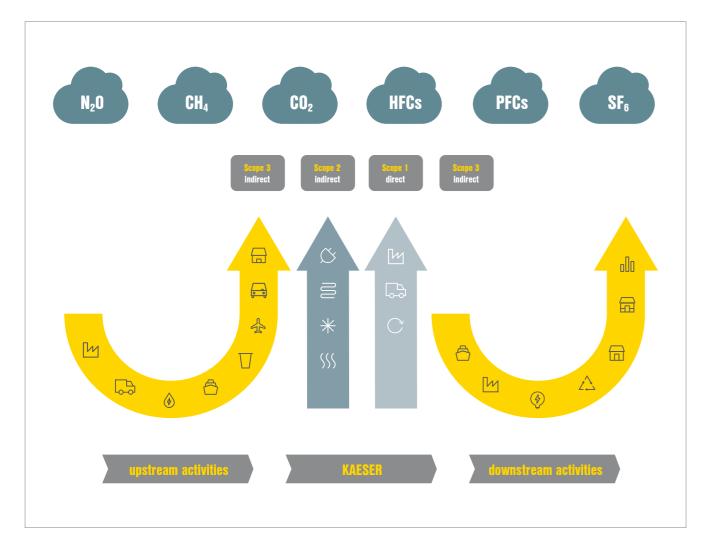
## Our CO<sub>2</sub> balance - today and tomorrow

The Paris Climate Agreement is a crucial step towards limiting global warming to well below 2 degrees Celsius and ideally to 1.5 degrees. To achieve this, no more climate-damaging gases should be emitted in the second half of this century than can be absorbed by carbon sinks such as forests.

This "greenhouse gas neutrality" can only be achieved if the world economy quickly and consistently emits significantly fewer greenhouse gases. The goal of this decarbonisation is net greenhouse gas neutrality, which means an almost complete reduction of all greenhouse gas emissions compared to today, especially carbon dioxide.

#### Our goals

KAESER has set itself ambitious goals. We aim to reduce direct emissions (Scope 1) and indirect emissions (Scope 2) by 80% by 2030 (compared to the base year 2019). Additionally, our indirect emissions from the upstream and downstream value chain (Scope 3) should decrease by 15% over the same period.



We calculate emissions according to the GHG Protocol, which categorises greenhouse gas emissions into different areas known as 'Scopes'.

#### Where do we stand currently?

To sustainably reduce energy consumption in our production processes, we have initiated a transformation process. This includes transforming KAESER into a CO<sub>2</sub>-neutral company.

All buildings are being successively renovated for energy efficiency, new buildings are constructed to the highest energy standards, and designed to integrate renewable energy sources. We already cover a significant portion of our energy needs through our own photovoltaic systems and heat pumps. Our explicit goal is to continually increase the degree of autonomy in production. We already source 100% green electricity and CO<sub>2</sub>-neutral heat.

Our main site is supplied with CO<sub>2</sub>-neutral district heating, providing a number of advantages: as it originates from a central heat source and is distributed via a network, it enables highly efficient energy use. This eliminates the need for individual heating systems using heating oil or natural gas, thereby saving resources and reducing emissions. Another benefit is flexibility; the heating supply can be adjusted according to demand. We also produce cooling from excess heat for our buildings and production processes, making our processes more efficient and environmentally friendly.



# What KAESER has accomplished on its journey to net-zero at its production sites



#### CO<sub>2</sub> reduction

 $CO_2$  reduction of over 50% compared to the base year 2019



#### **District heating**

Efficient use of CO<sub>2</sub>-neutral district heating



#### Electromobility

Targeted advancement of electromobility



#### Green electricity

Use of 100% green electricity

Net-zero means that all greenhouse gas emissions produced are offset by measures that remove them from the atmosphere.

As a provider of compressed air systems, we efficiently utilise the exhaust heat from our compressors in both our compressed air stations and test rooms. Our KAESER heat recovery systems enable the use of thermal energy to heat production halls. Additionally, the compressed air generated during our product testing processes is fed into our compressed air network, further increasing our energy efficiency. Another advantage: environmental friendliness. By utilising recovered heat energy and compressed air, the need for external energy is significantly reduced, thereby also lowering CO<sub>2</sub> emissions.

The road to CO<sub>2</sub>-neutrality begins with the details. Recognising this, we have implemented numerous measures that may seem minor at first glance but have a significant impact. For example, we have upgraded the lighting at all production sites to energy-saving LEDs. Moreover, we are making substantial progress in promoting electromobility on multiple fronts.

## **Resource-saving product development**



KAESER products are designed not only to be exceptionally efficient during operation; energy consumption is also minimised as far as possible during their production. When it comes to investment and procurement, we focus on acquiring ever more energy-efficient and sustainable goods and services.

KAESER innovations help our customers significantly increase their energy efficiency and reduce operating costs. Moreover, they contribute to conserving resources and reducing emissions.

### Sustainability down to the smallest detail

True to the KAESER philosophy of "More compressed air for less energy", our products not only operate with exceptional cost-efficiency and eco-friendliness, but also minimise the use of valuable environmental resources during production, distribution, and service.

To meet our commitment to minimising resource consumption, we have developed a future-forward sustainability concept: **Rethink. Research. Reduce. Repair.** We integrate sustainable processes into product development right from the start. From production to maintenance, everything is designed to meet our responsibility for sustainability.

## **Our resource-saving product development**



#### **Rethink - Think and rethink anew**

Sustainable product development requires new approaches and ways of thinking. KAESER trains selected employees in Design Thinking at the Hasso Plattner Institute, thereby achieving new and innovative approaches to product development.



#### **Research - Develop knowledge**

KAESER has continuously advanced its expertise in compressed air technology for over 100 years. Today, state-of-the-art simulation and calculation tools, together with the validation of prototypes, provide the basis for the acquisition of knowledge. This in turn establishes the basis for a highly efficient, dependable and resource-friendly compressed air supply.



#### **Reduce - Minimise resource consumption**

The highest resource consumption in compressed air technology occurs over long-term operation. Accordingly, the compressed air supply must be as energy-efficient as possible. For KAESER, efficiency is paramount.



#### **Repair - Maintenance-friendly design**

Maintenance-friendly design and repairability are evaluated and optimised by KAESER's Service Technicians during the development process.

## Sustainable product packaging and logistics

For KAESER, sustainability doesn't end with production processes and products. Shipping and logistics also make a significant contribution to achieving our goals. Greenhouse gas reduction requires a holistic approach.



We offset the transport emissions from our land logistics by supporting certified climate protection projects.

#### **Environmentally friendly packaging**

To significantly reduce our carbon footprint, we have switched from Styrofoam protective packaging to eco-friendly die-cut packaging made from honeycomb cardboard. This material is easily recyclable and provides excellent cushioning, ensuring no compromises in protective performance.

To combat plastic pollution, we now use only biodegradable bubble wrap. This not only supports the natural circular economy but also saves considerable CO<sub>2</sub> during shipping due to its lighter weight.

The same applies to our packaging tape, where plastic has been replaced by a sustainable paper alternative.

#### **Sustainable logistics**

One of the largest emitters of climate-damaging greenhouse gases is transportation. Recognising this, we offset the transport emissions from our land logistics by supporting certified climate protection projects.

In close collaboration with our logistics partners, we continuously strive to reduce the emissions generated during the transportation of goods.

