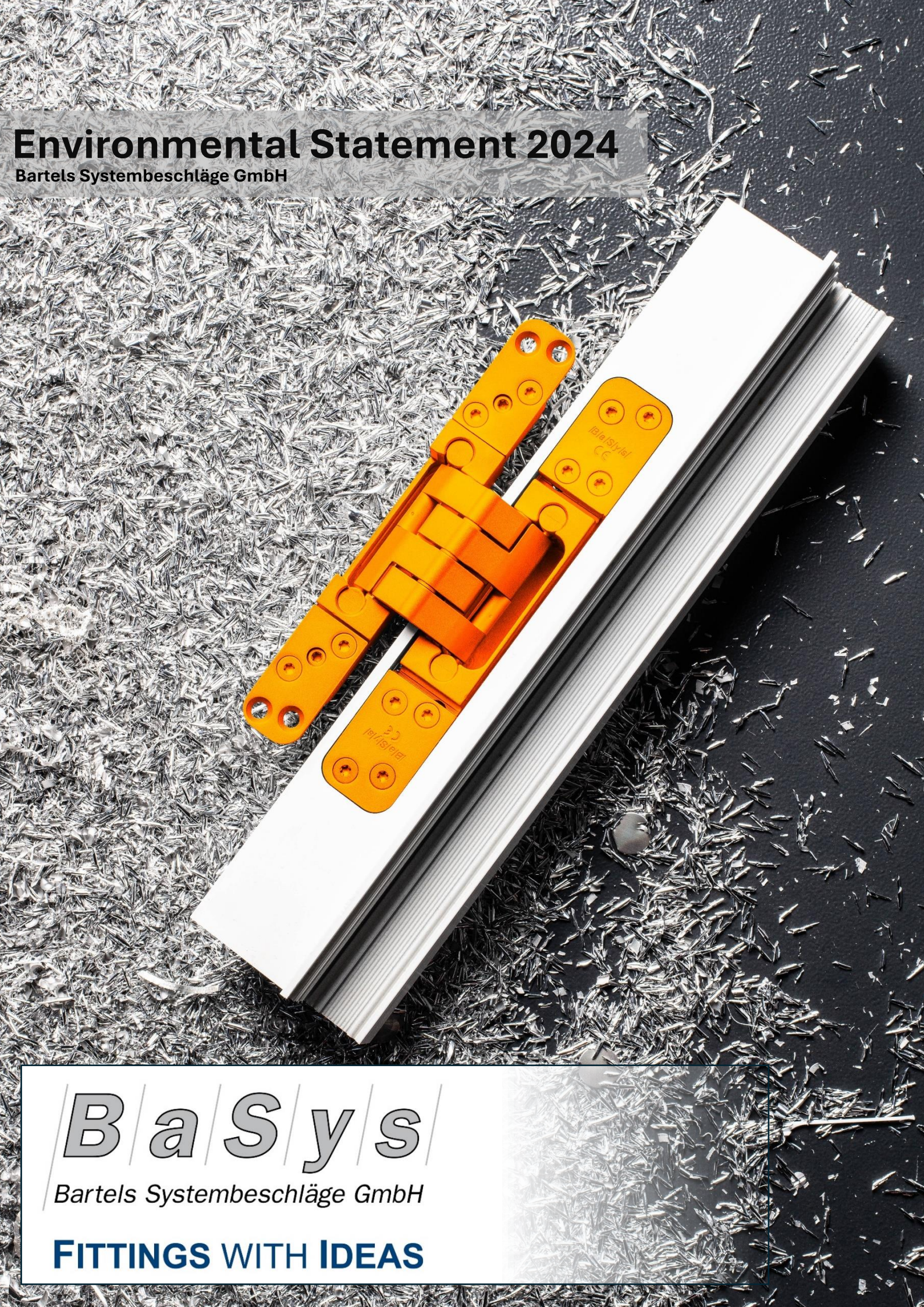
Environmental Statement 2024

Bartels Systembeschläge GmbH



BaSys

Bartels Systembeschläge GmbH

FITTINGS WITH IDEAS

Environmental Statement 2024

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Legal Notice

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Sitemap

1 Foreword

Our Environmental Statement ensures that we, as an innovative and future-oriented company, consistently fulfil our environmental responsibility. As part of this, our environmental performance is continuously improved and sustainability is integrated into our business processes. The aim is to contribute to environmental protection and conscientiously ensure a basis for future generations. As a metalworking company, we see it as our responsibility to use new findings from research and development to reduce the negative impact of processes at all levels to achieve our goal of climate-neutral production.

Especially as a smaller company, the challenges involved in achieving climate targets are often difficult to overcome. Nevertheless, these difficult tasks must be tackled with perseverance and team spirit, so that knowledge of climate-relevant issues is organized into various fields of action and necessary measures are derived. Through our guiding principle of the “3Rs”: Reduce, Reuse, Recycle, the life cycle of our products is being determined. In addition, the “Greenhouse Gas Protocol” is used to determine the environmental data, which divides the extent of the calculations into three scopes and thus makes it easier to get started. In addition, ISO 14064 is used to quantify and report greenhouse gases.

With this environmental statement we are following our claim to provide open information and reflect.

2 Bartels Systembeschläge GmbH

2.1 Who we are

The family-run company, managed by Albert and Jürgen Bartels, has been developing, producing and selling a complete range of hinges since 1995. With its hinge and striking plate systems, BaSys GmbH sees itself as a problem solver for door and frame manufacturers throughout Europe, as well as for national and international customers from the retail and trade sectors.

In 2001, Bartels Systembeschläge GmbH was the first German manufacturer to introduce a concealed and three-dimensionally adjustable hinge with the “Pivota” product family, thus initiating a new design trend in the door industry. BaSys GmH employs around 100 people at its headquarters in Kalletal, East-Westphalia. This is the company's only site to date and is the subject of this environmental statement.

2.2 Our Assignment

The guiding principle of Bartels Systembeschläge GmbH is to manufacture high-quality products produced in Germany while minimizing the environmental impact as much as possible. We are committed to a healthy environment and are approaching issues such as waste avoidance, water and air pollution as well as resource conservation. In the course of this, we continuously collect and evaluate data in order to identify potential improvements and implement them as part of our environmental projects. We are constantly working to identify and minimize our greenhouse gas sources, use energy as efficiently as possible and move closer to energy self-sufficiency. As a smaller company, BaSys GmbH sees itself as a pioneer when it comes to energy efficiency and environmental protection. As data collection alone involves a great deal of effort, we use various employees to manage this and work together with internal and external experts to achieve the best possible results.

3 Environmental Statement

3.1 Organizational Chart

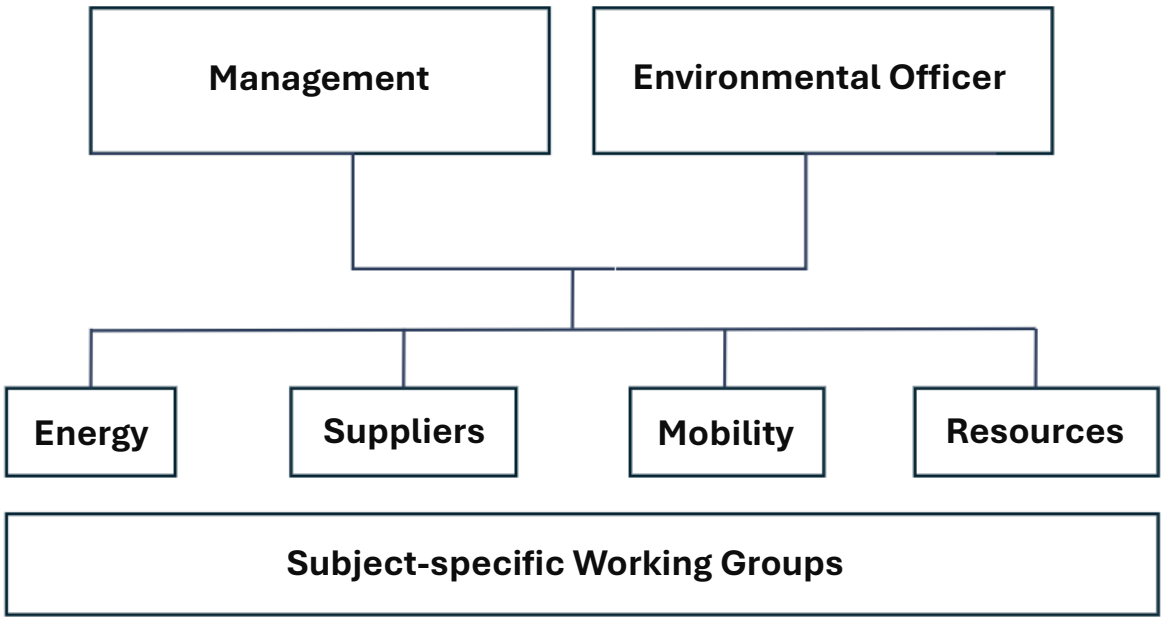

Figure 1 Organizational Chart of environmental matters

The responsibility for the environmental management system at Bartels Systembeschläge GmbH lies with the management and the environmental officer. The topics and working groups ensure that the entire company is involved in the environmental management system through technical and content-related support.

3.2 Environmental Guidelines

In our mission statement, the employees of BaSys GmbH set the following goals:

- to protect and preserve the environment,
- to support sustainability and
- to anchor the protection of nature and resources.

These goals are to be achieved throughout the company and beyond. The environmental management system is used for this purpose. BaSys GmbH is already contributing to environmental protection through various projects to reduce energy consumption and increase efficiency and is committed to continuously improving its environmental impact.

To reduce the negative impact on the environment

- we prefer to procure the most environmentally friendly materials
- we use energy, water, materials and space responsibly and in an environmentally friendly manner
- we take care of the prevention, recycling and disposal of waste
- we carry out regular environmental audits in order to constantly discover new potential savings

4 Environmental Performance

4.1 Environmental Aspects

Direct aspects

These include all emissions from sources that are directly controlled by the organization, such as emissions from combustion processes during production or water use.

Indirect aspects

These include emissions that are used by the organization but not directly controlled, such as electricity or emissions from the production of purchased materials.

The following aspects have been identified for Bartels Systembeschläge:

- Energy use
- Heating
- Materials
- Water
- Waste
- Emissions

4.2 Evaluation of the identified environmental aspects

Using the “ABC”- evaluation scheme, the identified environmental aspects were sorted in a matrix according to influenceability and relevance of action for the environmental aspects.

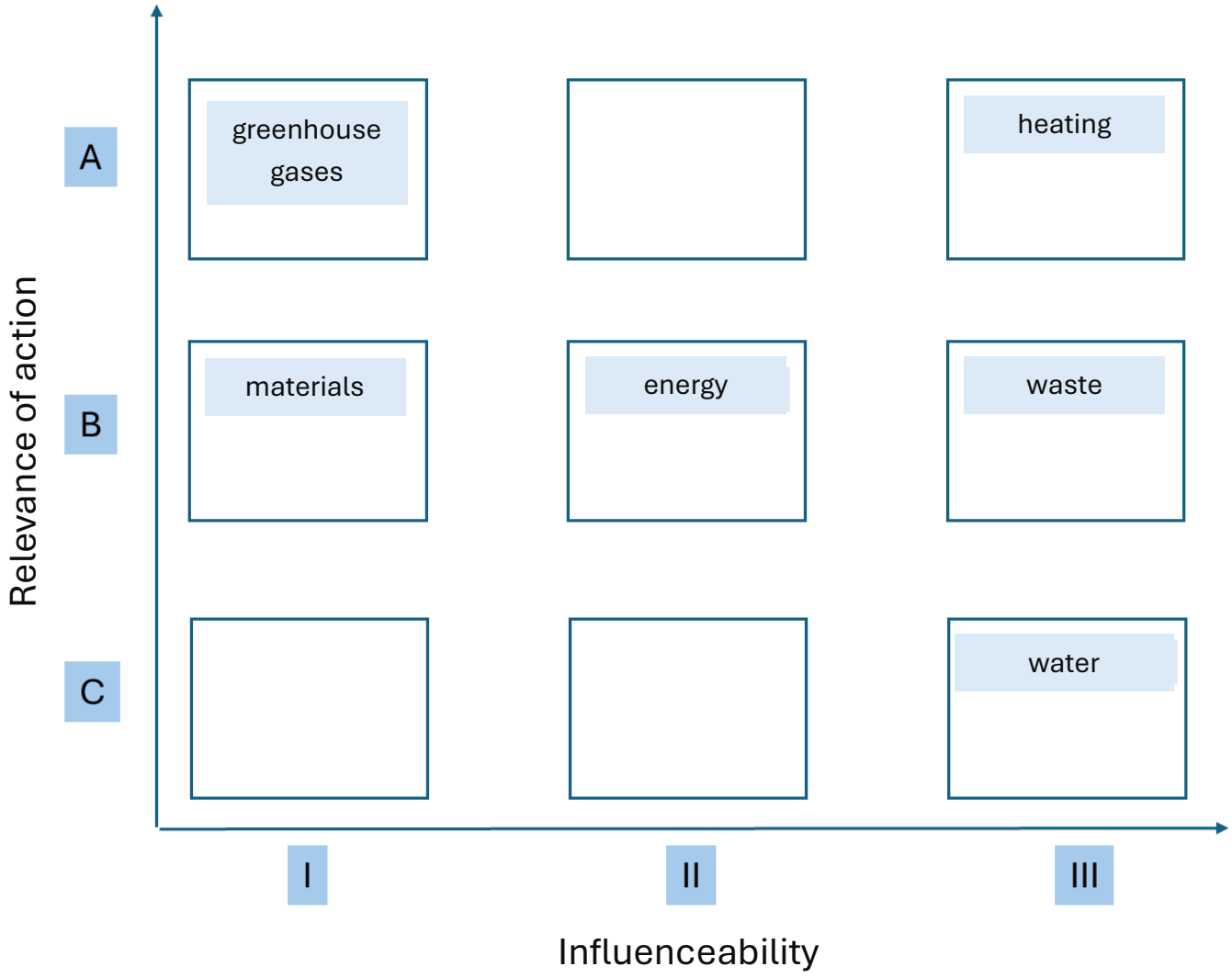

Figure 2 ABC-evaluation scheme of BaSys GmbH

A = highly relevant aspect
B = average relevance aspect
C = low relevance aspect
I = low influenceability
II = average influenceability
III = high influenceability

The evaluation of the environmental aspects is company-specific and can be partially subjective.

4.3 Projects to improve environmentally

In 2024 diverse projects to improve the environmental impact of the company Bartels Systembeschläge were planned and realized.

4.3.1 Energy Usage and Origin

Initial Situation:

Despite the electricity mix already largely consisting of renewable energies, the company's own solar power infrastructure was further expanded in 2024. The origin of the purchased electricity used is communicated transparently by the supplier and is broken down as follows:

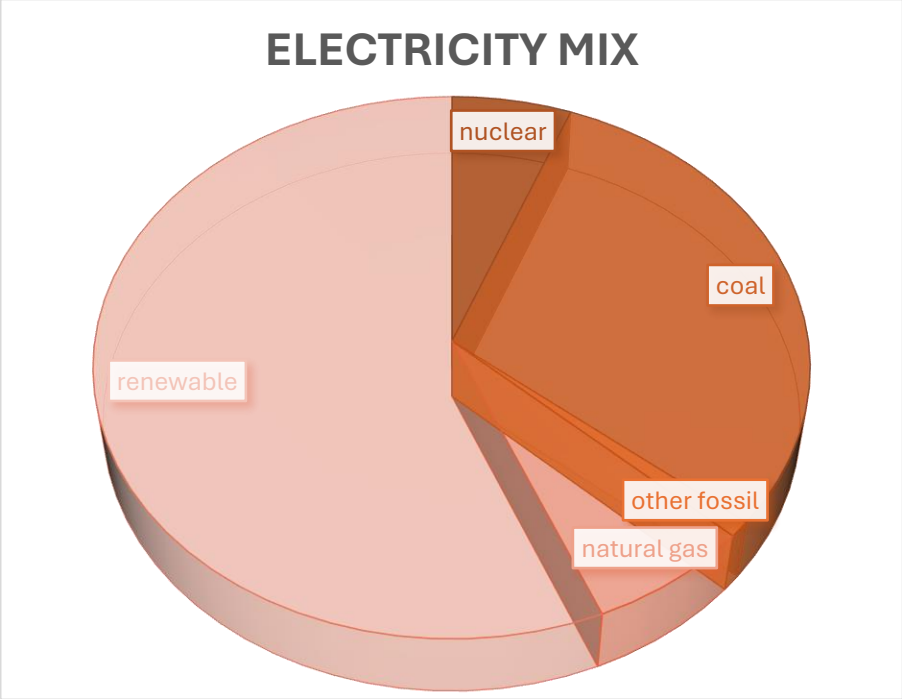

Figure 3 The electricity mix used by BaSys GmbH

Total electricity consumption in 2024 amounted to: available soon

Activity:

In order to further increase the amount of renewable energies, the maximum capacity of solar elements was installed and put into operation this year. This enabled the share of renewable energy to be increased from 56% to approx. 73%. This figure can fluctuate in different years due to inconsistent hours of sunshine.

4.3.2 Heating

Initial Situation:

The usage of gas and oil for heating have already been significantly reduced by 65% in recent years. Nevertheless, the businesses premises and production halls were still heated with fossil fuels, which contributed to the site's carbon footprint.

In 2023, a total of approx. 3400 m^3 of gas and approx. 7000 liters of heating oil were used to provide the required heat.

Activity:

In 2024 a project for heat recovery was completed. The waste heat of the production can now be led back with high efficiency to heat up the spaces and rooms through the help of a heat exchanger.

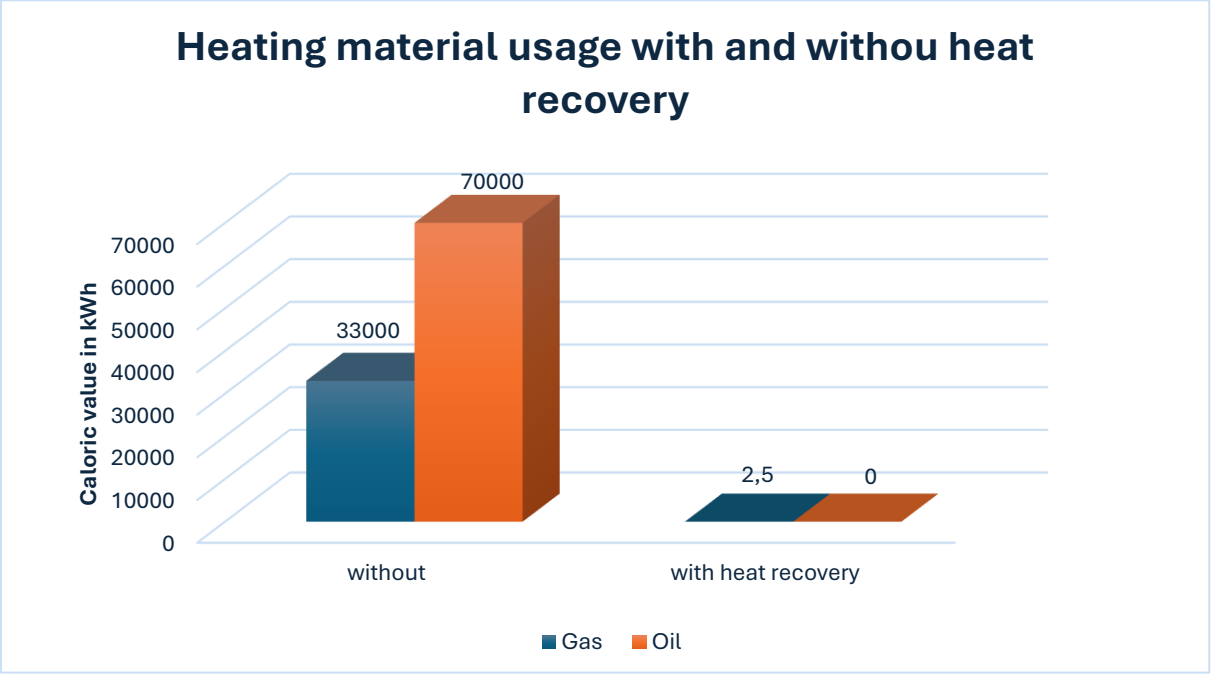

Figure 4 Heating materials usage of BaSys GmbH

Thanks to the high amount of heat energy from the production halls, the heating system can now run almost entirely without fossil fuels.

4.3.3 Material

Initial Situation:

The products of Bartels Systembeschläge GmbH are largely made of various steels or aluminum. The production of these materials is very energy-intensive and places a high burden on the environment through the emission of various greenhouse gases. These emissions are primarily influenced by the metal manufacturers and suppliers.

Activity:

In order to reduce the ecological footprint of the manufactured products, not only the production itself must be considered, but also the upstream supply chains and material production. By selecting metal suppliers that are as close as possible, delivery costs and CO_2 emissions from logistics can be kept to a minimum. The project to determine the CO_2 footprint according to the Greenhouse Gas Protocol (GGP) in Scope 1-3 is also underway. This has already enabled the first product lines to be accounted and identify potential savings. We work continuously to automate information flows and calculations so that BaSys GmbH can consistently account the very large product portfolio and communicate product emissions transparently.

4.3.4 Production

Initial Situation:

Production at BaSys GmbH is energy-intensive due to the numerous metal processing steps. The largest source of energy here is electrical energy, which already consists mainly of renewable energies. Processes that are energy-intensive are used, e.g. compressed air or welding.

Activity:

In order to improve production from an environmental point of view, potential savings and new technologies for production were sought this year. The project that was completed this year is the replacement of certain welded joints with the new clinching joining technology. According to current measurements by the Laboratory for Materials and Joining Technology at Paderborn University, clinching can save up to 90% of the energy compared to spot welding, meaning that significantly less CO_2 is emitted. This technology is now being used for selected products of BaSys GmbH. This is illustrated

Figure 5 CO_2 emissions of welding versus clinching

4.3.5 Mobility

Initial Situation:

The fleet of BaSys GmbH has always consisted of multiple passenger vehicles, a van and several forklift trucks. Although most of the passenger vehicles are already fully electric, the van and forklift trucks are still dependent on fossil fuels. As the van is only used very rarely, it makes sense to focus on the vehicles in daily use first.

Activity:

In 2025, the forklift trucks, some of which are already old and powered by gas, are to be replaced by all-electric trucks. This is still in the planning stage and is expected to be implemented in the course of the year. In addition, only fully electric passenger vehicles will be added to the fleet.

5 Facts and Figures

5.1 Energy Usage

It can be seen that significant savings in various types of energy have been achieved both through the measures implemented and through favourable weather conditions.

Table 1: Energy usage at the site location Kalletal

Energy type	2022	2023	2024
Electricity (MWh)	983,238	842,4	655
Heat (MWh)	210,3	118,94	48
Water (m^3)	863	905	875

Electricity usage has been significantly reduced thanks to energy-saving measures and the expansion of the solar infrastructure. The heat energy generated by oil and gas was reduced to almost zero thanks to the new heat recovery system.

5.2 CO_2 Emissions

The CO_2 emissions of the Kalletal site are largely made up of the combustion of heating oil or gas and electricity, so that the CO_2 emissions in the last three years amounted:

Table 2: Emissions of the Kalletal site

2022	2023	2024
322,25 tCO_2	259,56 tCO_2	177,2 tCO_2

As is evident from the figures, BaSys GmbH has been able to reduce the emissions associated with its operations in recent years. The main reason for this was that more renewable energy was used and fewer fossil fuels were required for heating.

6 Objectives of the Environmental Management

6.1 Fields of action

Bartels Systembeschläge GmbH will operate a greenhouse gas-neutral production site by 2030. Major steps towards achieving this goal were already taken in 2024. Fields of action have been identified into which the company's activities can be divided, making it easier to assess and keep track of the targets.

1. Buildings and Machinery
   This field of action includes the provision of electricity and heat associated with the operation of buildings and machinery.

2. Mobility
   This area of activity includes the company vehicles, business trips and other vehicles on the premises.

3. Sourcing and Materials
   This area of action focuses on climate-relevant, purchased materials such as metal, water and office supplies.

4. Waste and Recycling
   The waste and recycling field of action relates to all commercial waste, hazardous waste and the recycling of such.

6.2 Goals

Buildings and Machines

- Further reduction in electricity consumption by switching to new, more energy-efficient production processes
- Further reduction in electricity consumption through the use of even more renewable energies
- Select new machines under the boundary condition of power consumption
- Inclusion of a new measuring system for the continuous monitoring of energy consumption in the halls and at individual workstations

Mobility

- Optimization of the vehicle fleet
- Continue to focus on electromobility and select any new vehicles on this basis
- Replacing the old forklift trucks with electric forklift trucks

- Avoid business trips, make essential trips as environmentally friendly as possible, e.g. no short-haul flights and more public transportation

Sourcing and Materials

- Determining the environmental footprints of suppliers, materials and products delivered
- Selection of new suppliers based on the environmental impact and environmental presentation of the company concerned
- Manufacture as material-efficiently as possible and avoid scrap
- Select suppliers as close as possible

Waste and Recycling

- Increasing recycling
- Minimize waste

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