



SUSTAINABILITY REPORT 2022

KRAIBURG TPE GmbH & Co. KG, Waldkraiburg site,
reporting period: 1 January 2022 to 31 December 2022

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Introduction

KRAIBURG TPE is a leading global manufacturer of customized thermoplastic elastomers. The company was founded in 2001 as an independent business area of the KRAIBURG Group. Today, it is the industry's competence leader for TPE compounds. The company is dedicated to offering safe, reliable, and sustainable products for customer applications. Production and the global executive along with management for the EMEA sales region (Europe, Middle East, and Africa) are located at the company headquarters, Friedrich-Schmidt-Straße 2, Waldkraiburg, Germany.

KRAIBURG TPE believes that sustainability is essential for the company's long-term survival and success. Therefore, KRAIBURG TPE is striving to establish sustainability as an additional core competency by the end of 2023. KRAIBURG TPE is consistently working toward this goal in cooperation with employees, customers, suppliers, business partners, public authorities, and shareholders.

Reporting as a whole is gradually being adapted to the European Sustainability Reporting Standards (ESRS) starting in the current financial year. The Corporate Sustainability Reporting Directive (CSRD) defines the rules, the European Sustainability Reporting Standards (ESRS) define the contents. Existing frameworks such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-Related Financial Disclosures (TCFD) are incorporated into the reporting standards, which set new benchmarks for compulsory transparent reporting, including double materiality. KRAIBURG TPE also reports on its progress toward reaching the UN Sustainable Development Goals (SDG).

On the basis of performance figures, KRAIBURG TPE measures and evaluates sustainability performance, notably in environmental protection, occupational health and safety, and energy management, and initiates corresponding measures for continuous improvement. KRAIBURG TPE has been certified according to the EN ISO 14001:2015 environmental standard at the Waldkraiburg site since 2002, and according to the DIN EN ISO 50001:2018 energy standard since 2013. Ongoing expansion of the data acquisition system creates transparency, facilitating verification of the effectiveness of the integrated management system accompanying DIN EN ISO 14001:2015 and DIN EN ISO 50001:2018 with regard to the environment and energy. This is evaluated and documented annually in the management review.

The **system and assessment limits** of the environmental and energy management system for the Waldkraiburg site have been established as follows:

a) **Plant K**

Teplitzer Straße (production building with infrastructure and production facilities – excluding the roller head equipment of the rubber plant KRAIBURG GmbH & Co. KG)

b) **Plant T**

Friedrich-Schmidt-Straße (land, production and administrative building)

Waldkraiburg, 2 May 2023



Monika Hofmann
Director EMEA



Karl-Heinz Ortmeier
Head of Sustainability Management

1. Strategy and management

1.1 | KRAIBURG TPE Germany mission statement: sustainability

KRAIBURG TPE is a manufacturer of thermoplastic elastomers (TPE) headquartered in Waldkraiburg, and positions sustainability as a key topic on the company agenda. Sustainability for the company is a balancing act between ecological action, social responsibility, and economic success. Sustainability means assuming responsibility for current actions in view of the future.

Based on the UN Sustainable Development Goals and the principles of the UN Global Compact, KRAIBURG TPE has established ambitious sustainability development objectives to be reached with defined planned measures. The welfare of employees, protecting society, the climate, and the environment, and resource conservation were identified as key sustainability topics. KRAIBURG TPE values transparency, integrity, and a long-term implementation orientation. Regulatory compliance is also of the highest priority here. The producer adheres to the strictest occupational health and safety guidelines with the “Safety First” principle.

KRAIBURG TPE as a global company does not walk this road alone, and therefore involves its employees and stakeholders. The fundamental concept of KRAIBURG TPE’s company culture takes center stage: Collaboration between departments is the most important element. Among other factors, the company became the TPE competence leader through a high degree of customer orientation. Aside from perfectly fitting solutions and outstanding 360° service, this now also includes support with reaching the sustainability targets. To hold this pole position, KRAIBURG TPE is extending its sustainability efforts to the supply chain over the long term.

Sustainability at KRAIBURG TPE	For KRAIBURG TPE, sustainability is the essential balancing act between economic success, environmental protection, and social responsibility.			
Motivation and objectives	Sustainability is essential for the company's long-term survival and success. KRAIBURG TPE will therefore establish sustainability as an additional core competency by the end of 2023. This means that all employees assume responsibility for their current actions in view of the future, and are aware of their obligation to the environment, social matters, and responsible corporate governance.			
Vision and mission	Sustainability is becoming a permanent part of the business mission and strategy. All employees are therefore encouraged to advance sustainable solutions in their daily decisions. The slogan "custom-engineered TPE and more" includes sustainability topics through the expansion of business relations and partnerships.			
Principles	<p>Solution orientation</p> <p>Proactive, cooperative, goal-oriented internal as well as external work on short and long-term solutions.</p>	<p>Continuous improvement</p> <p>Lifelong learning with the goal of achieving further development every day.</p>	<p>Reliability</p> <p>A sense of responsibility is practiced in order to build and maintain long-term business relations based on trust.</p>	<p>Communication</p> <p>Transparency and credibility in communication, internally as well as externally and at all levels.</p>

Figure 1: KRAIBURG TPE's sustainability engagement in 2022 (source: KRAIBURG TPE)

1.2 | What does sustainable business mean for KRAIBURG TPE?

KRAIBURG TPE values transparency, integrity, and a long-term orientation in the implementation of sustainability projects. A process-oriented, integrated management system that meets the requirements of the DIN EN ISO 9001:2015, DIN EN ISO 14001:2015, and DIN EN ISO 50001:2018 standards as well as the ISCC PLUS requirements, and takes all safety-specific aspects and requirements into account, has been established in order to achieve the objectives. The management system provides binding rules for the actions of all employees. The respective defined targets and indicators form the basis for a correction, prevention, and improvement process that is practiced in the interest of a learning organization's continuous further development. KRAIBURG TPE is able to consistently offer customers products of the highest quality with the help of its management system.

Target achievement, risks, and the effectiveness of KRAIBURG TPE's management system are regularly evaluated. Deriving targeted measures and projects ensures continuous improvement in all areas, in particular quality, the environment, occupational health and safety, and energy consumption.

The company's success depends directly on the success of customers and employees. Here the fundamental concept of KRAIBURG TPE's company culture takes center stage. Customer requests and expectations have to be understood, needs and future problems must be identified in a timely manner and reliably addressed. Aside from perfectly fitting solutions, helping customers achieve their sustainability goals has become a unique selling point for KRAIBURG TPE. Sustainability efforts will also be extended to the supply chain in the long term in order to hold and further strengthen this pole position. Customers and suppliers are partners, with a focus on the shared sustainable benefits.

KRAIBURG TPE as a company is part of a legally and officially regulated framework. Employees are required to meet all relevant legal and official requirements. The company culture is defined by the conduct of all managers and employees. An open, constructive communication and information culture with goal-oriented collaboration is maintained. KRAIBURG TPE invests in lifelong learning with systematic training and continuing education measures that go beyond sustainability aspects.

Sustainability is essential for KRAIBURG TPE's future viability. The company intends to help shape the transformation actively and courageously.

1.3 | Sustainability management and organization

Sustainability is a key success factor for KRAIBURG TPE. To ensure this topic is given the necessary priority, sustainability is organized in Local Sustainability Boards (LSB) that have been established at all sites worldwide under the leadership of the respective site management. Germany's LSB sets priorities and manages sustainability topics for the Waldkraiburg headquarters and the EMEA sales and business region. To expand sustainability expertise in the company, systematic training in this field is conducted throughout the company and continuing education is promoted. Examples include various climate and sustainability management courses as well as ISCC and sustainability reporting training.

A Sustainability Management Team (SMT) has been established to act as a driver for sustainability topics. The team assists the Local Sustainability Board with the preparation and further development of the sustainability strategy and the achievement of objectives. New positions with a pronounced focus on sustainability aspects, working closely with the SMT, have also been established in the Development, Purchasing, and Sales departments. Other departments get involved with specific topics and projects, such as Logistics, Production, and IT for implementation in the circular economy field. Information on various sustainability topics is exchanged between departments in regular meetings.

The transfer of knowledge between sites as well as uniform data acquisition and reporting structures are maintained by the Global Sustainability Team.

1.4 | Organization and structure

KRAIBURG TPE executive:

- **Oliver Zintner**, CEO
- **Monika Hofmann**, Director EMEA

Local Sustainability Team (LSB):

- **Monika Hofmann**, Director EMEA
- **Gerhard Berger**, Director Product Development
- **Winfried Egger**, Director Corporate Purchasing
- **Claudia Empl**, Director Human Resources EMEA
- **Rainer Klemisch**, Director Operations EMEA
- **Karl-Heinz Ortmeier**, Head of Sustainability Management
- **Michael Pollmann**, Director Sales & Marketing EMEA

Global Sustainability Team (GSMT):

- **Andrea Winterstetter**, Corporate Sustainability Manager and Circular Economy Manager EMEA
- **Ines Klemisch**, Environmental Manager EMEA and Climate Manager EMEA
- **Karl-Heinz Ortmeier**
Head of Sustainability Management,
Head of Environment & Safety Management EMEA
- **Amelia Ng Pui Yee**, EHS Executive
- **Nicole Schnitzenbaumer**, Corporate Integrated Management System Manager
- **Rachael See**, Quality Manager
- **Jonathan Surpris**, EHS Coordinator
- **Anton Weingartner**, Energy Manager EMEA
- **Daniel Wilson**, Quality & EHS Manager

Sustainability Management Team (SMT):

- **Karl-Heinz Ortmeier**
Head of Sustainability Management,
Head of Environment and Safety Management EMEA
- **Ines Klemisch**, Environmental Manager EMEA and Climate Manager EMEA
- **Reinhardt Lanzinger**, Safety Manager
- **Anton Weingartner**, Energy Manager EMEA
- **Andrea Winterstetter**, Corporate Sustainability Manager and Circular Economy Manager EMEA

1.5 | Sustainability communication: words and deeds

Employees, shareholders, customers, and society as a whole expect cross-sectoral sustainable economic activity from companies. Sustainability in all KRAIBURG TPE market segments is therefore on the agenda. KRAIBURG TPE is developing a local and global sustainability strategy, including a communication concept encompassing regional and global activities. It will contain both internal and external communication measures, because sustainability communication is not a one-way street. It develops in dialog with internal and external stakeholders.

1.6 | Stakeholder involvement

The involvement of key stakeholder groups is of central importance for KRAIBURG TPE's functioning and business operations. Obtaining the best possible result for society and the company is the goal. Key stakeholders include KRAIBURG Holding SE & Co. KG, legislators and public authorities, customers, suppliers, dealers, employees, neighbors, research institutes, associations, NGOs, society, the environment, and nature. Cooperation results in reasoned approaches to current and future challenges, such as the transition to a circular economy.

Employees

Employees are a key success factor for KRAIBURG TPE, also with regard to sustainability. Only through its employees is KRAIBURG TPE able to complete the planned sustainability activities and achieve the stated objectives. Employees are included in a variety of ways: KRAIBURG TPE employees acquire know-how and expertise, identify potential improvements, and develop innovative approaches for more sustainable solutions within the company and for business activities.

In order to realize and expand this key success factor, sustainability is the deciding basic principle in employee relations. The conventions for these interactions are firmly embedded in the company culture and based on mutual appreciation and respect, openness, and mutual understanding. KRAIBURG TPE as a company aims to retain employees over the long term with a high level of satisfaction and by serving as an attractive employer.

Suppliers and cooperation partners

Interactions with suppliers and cooperation partners are cooperative, defined by close coordination and mutual respect. In order to correctly assess trends and developments at all times, persons in charge at KRAIBURG TPE regularly attend conferences with companies along the value chain, including the plastics recycling sector. The company is also an active member of the Plastics Cluster, an initiative to promote development and cooperation in the plastics industry. In addition, KRAIBURG TPE takes part in industry events such as the HS2E Forum (Berlin), Environmental and Energy Forum (Vienna), and trade fairs around the world.

Customers

Society and customers are increasingly interested in industry contributions to sustainability and corresponding solutions. KRAIBURG TPE maintains active partnerships with interested parties and strives to anticipate their needs, also with regard to sustainability, in order to seize opportunities and minimize risks. The objective is to meet requirements even more effectively with customer and market-oriented solutions and to identify new business opportunities in a timely manner. As a competence leader, KRAIBURG TPE assists customers with their growing need to differentiate themselves through more sustainable products and solutions. KRAIBURG TPE observes and analyzes changes in the social and business environment that drive the demand for sustainable products.

2. Double materiality: key topics and objectives

Topics that are relevant for KRAIBURG TPE on the one hand but also for the company's stakeholders on the other hand were defined for the development of a sustainability strategy (see previous section). A comprehensive materiality analysis was completed in 2022. This identified five essential, key topics for KRAIBURG TPE that are relevant both for the understanding of the business results and the company's position as well as the effects on the environment and society.

Some of the exchange formats used in the reporting year to identify the key sustainability topics and their relevance for stakeholders included dialog with customers, dealers, and industry associations, exchange of expertise with universities, and the annual employee satisfaction survey. The resulting materiality matrix based on that was prepared in an extensive workshop at the executive level with the help of the Sustainability Management Team. Both the outside-in perspective (for example, the effects of climate change on the company) and the inside-out perspective (for example, the company's contribution to climate change) were examined for each topic. Direct (i.e. physical) and indirect (for example, associated with laws, market changes) risks for the company's success were uncovered for the former. Opportunities and risks for the environment and society emanating from the company were identified and evaluated for the latter. The relevance of each topic for various stakeholder groups was taken into account and is reflected by the diameters of the circles in Figure 2.

Since KRAIBURG TPE is first required to publish a full sustainability report for the 2025 reporting year, the company is currently disclosing information only for the topics identified as material. Corresponding data structures will be developed over the coming years to meet all the requirements of the European Sustainability Reporting Standard.

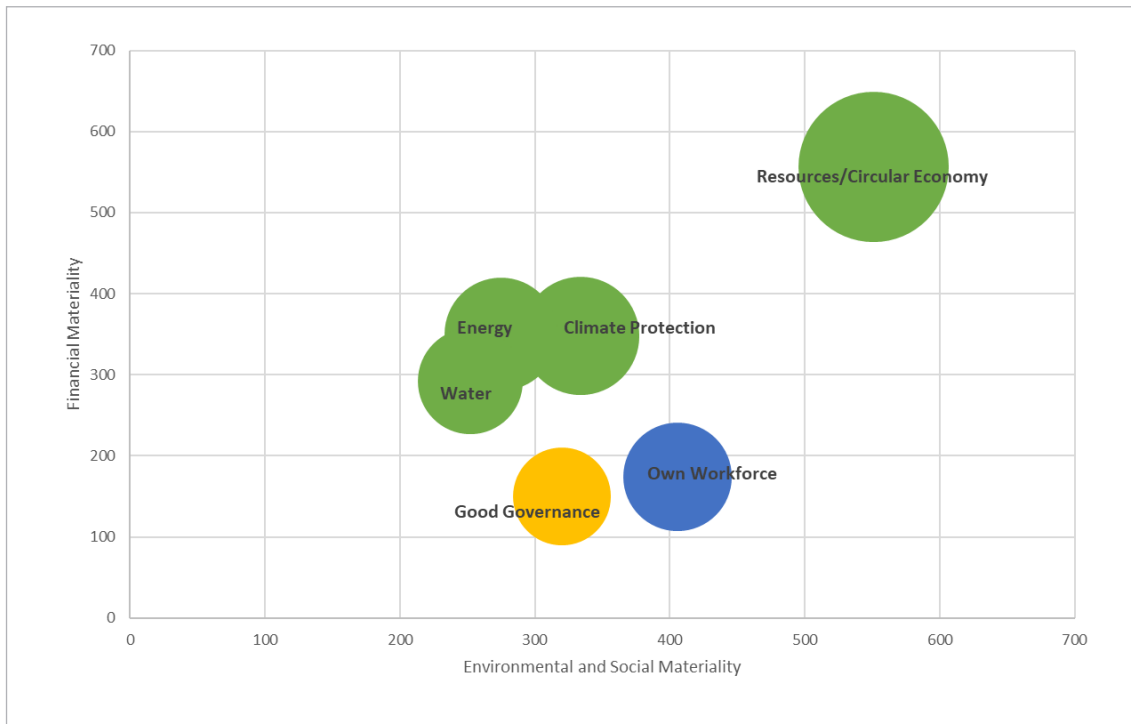


Figure 2: Double materiality matrix for KRAIBURG TPE in Germany, 2022. The diameters of the circles in the materiality matrix are proportional to stakeholder relevance. (Source: KRAIBURG TPE).

The following key topics were identified as material based on this double materiality analysis:

Responsible corporate governance

KRAIBURG TPE assumes responsibility for the environment and society. The company is managed responsibly and transparently, taking the interests of all relevant stakeholders into account. Compliance with the internal code of conduct, legal compliance, and establishing transparency through certifications and by adhering to standards have special priority.

Circular economy for resource conservation

KRAIBURG TPE contributes to resource conservation by expanding the product portfolio with innovative product solutions that support the circular economy. Suppliers and customers are actively included in the circular economy orientation process. Waste and emissions that damage the environment are being reduced at the same time.

Climate and energy

KRAIBURG TPE contributes to climate protection by identifying and realizing energy saving potential, continuously improving process and energy efficiency, continuing to expand the use of renewable energy, and thus reducing greenhouse gas emissions. The use of more sustainable raw materials also makes an important contribution.

Water

KRAIBURG TPE contributes to the conservation of valuable water resources by reducing the consumption of fresh water as well as waste water volumes to the essential minimum.

Responsibility to employees

KRAIBURG TPE assumes responsibility to employees because the general welfare of the employees is a high priority. Occupational health and safety standards are met at the highest level and health protection continues to be expanded.

<p>Key topic 1</p> <p><u>Responsible corporate governance</u></p>	<p>Objectives 1</p> <ul style="list-style-type: none"> ✓ Compliance with the internal code of conduct ✓ Ensuring legal compliance ✓ Transparency through certifications and by adhering to standards
<p>Key topic 2</p> <p><u>Circular economy for resource conservation</u></p>	<p>Objectives 2</p> <ul style="list-style-type: none"> ✓ Sustainable, circularity-capable product solutions ✓ Sustainability standards in the supply chain ✓ Sustainable production, packaging, and transportation ✓ Utilization of own production waste ✓ External partnerships and business relations for increased circularity ✓ Waste reduction, avoidance, and utilization
<p>Key topic 3</p> <p><u>Climate and energy</u></p>	<p>Objectives 3</p> <ul style="list-style-type: none"> ✓ Improve process and energy efficiency ✓ Reduce greenhouse gas emissions ✓ Continue expanding the use of renewable energy ✓ Improve energy supply security
<p>Key topic 4</p> <p><u>Water</u></p>	<p>Objectives 4</p> <ul style="list-style-type: none"> ✓ Reduce water consumption to the essential minimum ✓ Reduce waste water volumes
<p>Key topic 5</p> <p><u>Responsibility to employees</u></p>	<p>Objectives 5</p> <ul style="list-style-type: none"> ✓ Improvement of general satisfaction ✓ Prevention and reduction of workplace accidents as part of occupational health and safety ✓ Expansion of preventive measures to maintain employee health

Figure 3: Material topics for KRAIBURG TPE in 2022 (source: KRAIBURG TPE).

3.3. Review of 2022

3.1 | Input/output statement 2022

The input/output statement is an important element of environmental reports and recommended by DIN EN ISO 14001:2015. It makes the essential parameters of business activities transparent.

Input/output statement 2022 / Waldkraiburg site / plants T and K

Input	Quantity	Unit	Output	Quantity	Unit
Material consumption, production	31,949	t	Production volume	31,440	t
Energy	12,670	MWh	Waste	363	t
Electricity	10,792	MWh	Non-hazardous waste	328	t
Natural gas	1,878	MWh	Special hazardous waste	30	t
			Luwax hazardous waste	5	t
Water	22,088	m³	Waste water	22,088	m³
Drinking water	7,680	m³	Sewerage	15,094	m³
Fully softened water	14,408	m³	Evaporation	6,994	m³

Figure 4: Input/output statement 2022 for plants T and K (source: KRAIBURG TPE)

Key indicators

The following key indicators are used to monitor and control performance (Figure 5). They were in part derived from the energy, environment, and occupational health and safety management requirements, and relate to KRAIBURG TPE’s direct environmental, occupational health and safety, and energy aspects. These measurable key areas support the transparent representation of effectiveness and potential for improvement.

Key environmental performance indicators 2022 / Waldkraiburg site / plants T and K

Indicators	Definition	Dimension	Value
Material efficiency	Production volume (yield) / material consumption (production)	t / t	0.984
Electrical energy efficiency	Electricity / production volume	kWh / t	338
Cooling efficiency	Heat of evaporation / production volume	kWh / t	151
Heating efficiency	Heating energy / (daily temperature figure x heated area)	kWh / (Kd x m ²)	51
Water	Fresh water / production volume	l / t	790
Greenhouse gas emissions	Emissions** / production volume	t CO ₂ e / t	3.65
Waste	Waste / production volume	kg / t	11.38
Accident rate per 1000 employees	Number of reportable accidents / 1000 employees	1	5.09
LTIF*	Frequency of lost time due to accidents / year	1	7.45

Figure 5: Key environmental performance indicators for 2022 (source; KRAIBURG TPE)

*LTIF = Lost Time Injury Frequency

** Details on the scope, page 48

Environmental, energy, and occupational health and safety performance trends compared to reporting year 2021:

- Specific water consumption improved by 11%.
- Cooling efficiency improved by 17%.
- Heating efficiency improved by 10%.
- Specific electricity consumption increased by 1%.
- Specific waste decreased by 4.5%.
- The accident rate per 1000 employees decreased by 68%.
- LTIF decreased by 48%.



4. Responsible corporate governance (ESRS G1 Business conduct)

4.1 | Background

Responsible corporate governance is crucial for the responsible and transparent operation of a company. It takes the interests of all stakeholders into account.

Responsible corporate governance at KRAIBURG TPE follows these principles

- **Transparency:** The organization should be open and transparent regarding its objectives, performance, and decision-making processes.
- **Responsibility:** The organization should act responsibly toward its stakeholders and assume responsibility for its actions.
- **Participation:** The organization should actively contact its stakeholders and include them in decision-making processes.
- **Fairness:** The organization should ensure that its decisions are fair and just, and that all stakeholders are treated equally.
- **Responsiveness:** The organization should respond to the needs and concerns of its stakeholders and take appropriate steps to solve problems. This includes a whistleblower process for stakeholders to report violations of any kind.

KRAIBURG TPE is guided by the UN Global Compact that helps companies act responsibly in the areas of human rights, labor standards, the environment, and anti-corruption based on the 10 principles, and to advance innovative solutions for realizing the Sustainable Development Goals.

4.2 | Opportunities and risks – responsible corporate governance

	Evaluation
Transitory risks	
Increasing demand for certifications and evidence, and for meeting reporting obligations	High
Risks	
Planning, prioritizing, and complying with (re)certifications and reporting obligations	High
Complying with standards and legal changes	High
Opportunities	
Respecting and promoting human rights and labor laws by meeting high standards at all sites	High
Information management and data protection	High
Codetermination of employees, active works council	Medium
Zero tolerance for corruption and fraud	Medium

Table 1: Opportunities and risks – responsible corporate governance (source: KRAIBURG TPE)

4.3 | KRAIBURG Group code of conduct and sustainability

The code of conduct and sustainability for employees and business relations outlines binding requirements for behavior. It contains guidelines for legally correct, ethical, and social employee behavior and business relations. KRAIBURG TPE’s code of conduct and sustainability is established by the KRAIBURG Group and requires business worldwide to be conducted in compliance with legal regulations. Legal violations must be prevented and employees are obligated to act according to the highest ethical standards. Carefully reading the code of conduct and acting in accordance with these rules is expected for all business relations. The KRAIBURG Group does not tolerate violations of this code of conduct.

4.4 | Legal compliance

KRAIBURG TPE as part of the KRAIBURG Group conducts business worldwide in accordance with legal regulations and official rules in order to effectively safeguard its lasting business success. Each employee is obligated to comply with the legal regulations of the legal system under which they operate. Legal violations must be avoided under all circumstances. All employees of the KRAIBURG Group are obligated to consistently act based on the highest ethical standards, and to treat third parties with respect and integrity.

With internal compliance guidelines, KRAIBURG defines binding rules that apply for all employees worldwide and are intended to help master legal challenges during day-to-day work.

As another measure to prevent legal violations, a company officer (“Compliance Officer”) has been appointed to advise employees on all relevant matters and serve as a point of contact in their working environment in case of legal concerns regarding their own conduct or when there are indications of legally questionable activity. This person treats all disclosed information as confidential on request.

A compliance whistleblower system has also been set up in the form of an external help hotline and an external e-mail address. These are open to the public on the company website. At the Heuking Kühn Lüer Wojtek law office, legal professionals take questions and suggestions, treating them as confidential on request, or anonymously and according to the Whistleblower Protection Act (HinSchG). KRAIBURG TPE warrants that no employee will suffer harm or be otherwise disadvantaged for contacting the Compliance Officer in good faith or utilizing the external compliance hotline or e-mail address.

Compliance is a key task for every company today due to the numerous new and revised European directives and national laws, resulting obligations, and official requirements for companies. KRAIBURG TPE strives to ensure full compliance with the respective applicable laws and legal requirements. Transparency and an understanding of legal requirements are prerequisites for this.

The former is achieved with the help of a “Legal Compliance” software system. Legal requirements are updated regularly and reviewed at defined intervals in cooperation with external experts. This improves the understanding of the persons responsible for legal requirements. The implementation of any measures to comply with legal requirements is also ensured with the help of this software.

An external service provider conducted 143 reviews in 2022 to ensure legal compliance. 534 legal regulations were recorded in the corresponding software. KRAIBURG TPE was affected by 109 legal changes.

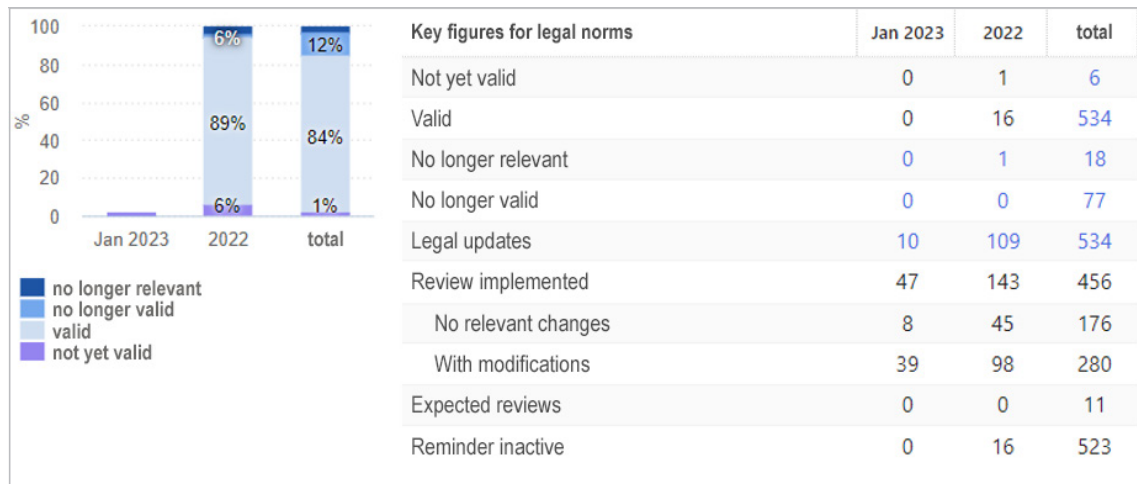


Figure 6: Legal changes/amendments 2022 (source: KRAIBURG TPE)

KRAIBURG TPE attained a very good level of transparency, notwithstanding numerous legal changes, thanks to the external service provider’s systemic approach. Further improvements were made by KRAIBURG TPE in the timely completion of reviews and systematic recording of permits and notices.

4.5 | Corruption and bribery

KRAIBURG TPE and business partners, including the executive, employees, and subcontractors, act in accordance with applicable criminal and administrative offense laws. In particular, negotiations regarding corruption and bribery are liable to prosecution and/or fines, both in private industry and in the public sector.

The executive, employees, and subcontractors shall not demand, accept a promise of, or receive any benefits for themselves or a third party as consideration for granting unfair advantages immediately or in the future (corruptibility). Offering, promising, or granting such an unfair advantage is conversely prohibited as well (bribery). The latter applies especially in relations with officials and people with special public functions with regard to their official position, but also regarding private individuals without the legally effective approval of the respective supervisor.

Granting and accepting benefits that are customary and socially acceptable in view of the respective business relationship is permitted in private industry. As a rule, such benefits must not exceed a value of USD/EUR 50.00. Accepting or granting benefits in excess of this amount requires the prior approval of the respective Compliance Officer and/or the executive. Approval can be given when the possibility that the benefit is associated with favoritism can be excluded. There were no violations in reporting year 2022.

4.6 | Anti-competitive practices

Competition and a free market economy are essential elements of a free society. Safeguarding and protecting this is in the interest of the KRAIBURG companies and business relations. The executive, employees, and subcontractors must comply with applicable European and international competition and antitrust laws at all times. The following in particular is prohibited:

- Agreements on prices, price increases, and other pricing parameters (rebates, discounts, payment terms, etc.)
- Exchange of sensitive market information between competitors, for example, turnover, prices, strategies, customer data, or market share
- Allocation of markets, in particular the mutual assignment of clientèle and sales regions
- Enticement and exclusivity undertakings, insofar as they are not exempt from the cartel ban
- Price fixing agreements, meaning an undertaking of customers to resell at a minimum or fixed price
- Abuse of a dominant market position
- Coordination of offers in a public or private tendering procedure

4.7 | Transparency and anti-greenwashing standards

KRAIBURG TPE strives for transparency and credibility by operating and acting according to recognized standards.

- **Sustainability report** based on the European Sustainability Reporting Standard (ESRS)
- **Integrated quality, energy, and environmental management:** In the interest of continuous improvement in environmental and energy management, KRAIBURG TPE at the Waldkraiburg site, has been certified according to the DIN EN ISO 14001:2015 environmental standard since 2002, and according to the DIN EN ISO 50001:2018 energy standard since 2013. Determining and evaluating environmental aspects is a central element of the environmental management system according to DIN EN ISO 14001:2015. Significant environmental impacts are identified and measures are summarized in an environmental program. The evaluation of environmental aspects has been carried out, documented, and optimized using corresponding software. This evaluation meets the requirements of the standard (risks/opportunities) and the life cycle assessment.
- **The Product Carbon Footprint (PCF)** of KRAIBURG TPE compounds is reported according to the strict requirements of the Greenhouse Gas Protocol and the DIN EN ISO 14067/14044 standards. Customer inquiries and communication on the topic of PCF were largely standardized as well. Provided that all basic requirements for calculating the PCF are met, existing customers receive informative values within a few days.
- KRAIBURG TPE is in the process of establishing climate targets according to the guidelines of the **Science Based Target Initiative (SBTi)**. These are climate targets for business according to strict science-based standards and guided by the Paris Agreement.

- **RWTH Aachen University’s circular economy benchmark:** In the course of a company comparison by RWTH Aachen University’s two competence centers, KRAIBURG TPE was recognized as a top performer. This means we are among the best 19% of participating companies. The ranking is based on various circular economy aspects of the participating companies, assigned to the categories of closed cycles, digitalization, implementation, data acquisition, and indicators. Especially in the “closed cycles” category, KRAIBURG TPE positioned itself clearly and received very good ratings regarding supply chain cooperation, return systems, treatment and recycling processes, and handling waste and scrap.
- **ISCC PLUS:** KRAIBURG TPE made all necessary preparations for ISCC PLUS certification in the reporting year. This certification was successfully completed for the Waldkraiburg site in January 2023. It certifies that high social and environmental standards are met in the supply chain for ISCC PLUS raw materials.
- KRAIBURG TPE has been voluntarily participating in selected external sustainability rankings since 2020. Environmental impacts in the climate and water categories have been disclosed to the non-profit organization **CDP (Carbon Disclosure Project)**, earning the “Awareness” rank. **Ecovadis** evaluates companies with regard to corporate sustainability using integrated ratings. The Silver ranking from Ecovadis regarding the environment, labor practices, ethics, and sustainable procurement confirmed that the TPE manufacturer is among the best 25 percent of assessed companies in the chemicals industry.





5. Circular economy for resource conservation (ESRS E5: Resource use and circular economy)

5.1 | Background

The circular economy is an important focal point for the plastics industry in general and KRAIBURG TPE in particular. Discussions regarding plastic waste in the oceans as well as microplastics in the air, soil, and water have intensified in politics and industry. Plastic waste is a worsening hazard for the ecosystem as a whole and through the food chain, also for humanity.

The discussion about the use of recycled materials and bio-based raw materials as well as the recyclability of materials is increasingly gaining importance in this context. This is driven by various European and national legislative initiatives as well as customers. More thought is also being given to ways to keep materials in the system longer, for instance by using materials of higher quality and reusing or recycling products and materials. Business models moving away from products and toward services should also help improve resource efficiency and contribute to decarbonization.

According to the EU Parliament’s definition, the circular economy is an economic system in which existing materials and products are shared, leased, reused, repaired, reprocessed, and recycled or as long as possible. This extends the product life cycle and reduces waste to a minimum. It means a transition away from a linear economic model to a regenerative system of closed cycles, driven by renewable energy.

KRAIBURG TPE has identified the following five points as motivators for a company-wide circular economy:

1. Conservation of valuable resources and energy

Reducing climate-relevant emissions and negative environmental impacts from the production of primary raw materials

2. Security of supply

Safeguarding the availability of raw materials, in particular recycled materials

3. Waste avoidance or minimization

Minimizing disposal costs, climate-relevant emissions, and negative environmental impacts of waste management

4. Meeting customer requirements

5. Compliance with legal requirements regarding recycling input and recyclability

It is important for implementation that cycles can and must be closed at various levels (see Figure 7).



Figure 7: Closing cycles at various levels (source: KRAIBURG TPE)

KRAIBURG TPE also uses the waste hierarchy defined in the EU Waste Framework Directive 2008/98/EC for guidance. It is considered the priority sequence for waste avoidance and management in legislation and politics.

5.2 | Opportunities and risks – circular economy

	Evaluation
Physical risks	
Availability/prices of raw materials	High
Transitory risks	
Recyclability of TPE in 2-component applications/products	High
Demand for the use of bio-based/recycled materials	High
Laws such as the Closed Substance Cycle Waste Management Act (KrW-AbfG), Packaging Act (VerpackG), and EU provisions with increased need for action	Medium
Certifications, rating platforms, and reporting	High
Public image as a plastics producer	Medium
Circular business models of customers	Medium
Risks	
Cycles not closed, within the company and externally	High
PCF as the leading KPI for sustainability at the product level does not represent the full spectrum of impact categories	Medium
Monitoring of environmental and social standards	Medium
Opportunities	
Co-recyclability of TPE with PP/HDPE	Medium
Partnerships with mechanical and chemical recyclers and suppliers	High
Internal recycling	High
Circularity compass for development (within the company and externally)	High
More active communication of the use of recycled material within the company and high quality of materials	High
New business areas by adapting to customers quickly	High
Evaluation of the sustainability KPIs at the product level, full life cycle assessment including impact categories	High

Table 2: Opportunities and risks – circular economy (source: KRAIBURG TPE)

Policy and action plans

KRAIBURG TPE already has processes, work instructions, and guidelines in place for waste and recycling. A general, more comprehensive circular economy strategy is in development at the time of this report.

5.3 | KRAIBURG TPE circular economy objectives

The following six circular economy objectives have been established:

- 1) Sustainable, circularity-capable product solutions
 - High-quality materials for lasting applications
 - Recyclability of products
 - Raw materials from bio-based sources and recycling
 - Planned reduction of the environmental impacts of products, from the product's CO₂e footprint to the full product life cycle analysis (PEF/LCA)
 - ISCC PLUS certification

- 2) Sustainability standards in the supply chain

- 3) Sustainable production, packaging, and transport to conserve energy, water, and resources

- 4) Utilization of own production residues and returns through internal recycling or sale to third parties

- 5) External partnerships and business relations for increased circularity

- 6) Waste reduction, avoidance, and utilization

5.4 | Objective 1: Sustainable, circularity-capable product solutions

Design for sustainability as an extension of "custom-engineered and more"

- The goal is to develop products and services that meet the needs of the current generation without endangering the ability of future generations to meet their own needs.

- Design for sustainability considers sustainability issues throughout the product life cycle, from the conceptual design to the selection of materials and production processes to the end of life/use.
- General customer consulting regarding processing, product design, in the utilization phase, and at the end of the product's life.
- Consulting regarding the sustainable processing of TPE materials with regard to energy consumption and scrap rates.
- Consulting regarding the selection of TPE materials for improved sustainability throughout the product life cycle: Smaller CO₂e footprint, high proportion of recycled materials, recyclability, lightweight materials, durable products, safe for human health and the environment.
- Consulting regarding end-of-life options for TPE materials to close material cycles.

Meaning of product sustainability in concrete terms

- a) High-quality materials for lasting applications
- b) Recyclability of products
- c) Socially and ecologically sustainable production
- d) Safe for people and the environment: Planned reduction of the environmental impacts of products, from the product's CO₂e footprint to the full product life cycle analysis (PEF/LCA)
- e) KRAIBURG TPE products are currently available with:
 - > Proportion of recycled material
 - > CO₂e footprint of the product

From 2023:

- > Mass balanced bio-based proportion with ISCC PLUS
- > Measurable bio-based proportion

Status quo and important activities for objective 1

The further development and transformation of the product portfolio progressed in 2022. For KRAIBURG TPE, the focus was and remains on the needs and requirements of the target markets – Consumer, Industry, Medical, and Automotive – in general and of prospects and customers in particular. For bio-based raw materials in particular and the new compounds developed from them, a new technological direction was taken. The stated objective to continue expanding more sustainable products and innovative material solutions was implemented throughout the organization in 2022. Planning and implementing the portfolio transformation was part of the Sustainability Road Map created and approved in 2021 with the support of an external agency and the Local Sustainability Board.

The following material developments were developed and/or advertised in reporting year 2022:

1. Exterior PIR TPE

Available in 60-90 Shore A hardness with 20-40% post-industrial recycling content. The series was introduced to the market in 2022. Currently this first generation of recycling compounds is of great interest to the automobile industry in particular.

2. Interior PIR TPE

Available in 60-90 Shore A hardness with up to 38% post-industrial recycling content. The series addresses needs and requirements of applications for the automobile interior, including liner mats and floor mats, cup holders, etc.

3. Lightweight TPE

The demand for the reduction of weight as well as CO₂ emissions throughout the vehicle life cycle remains very high. OEMs are expressing great interest, in particular for sealing applications. KRAIBURG TPE primarily aims to replace poorly recyclable and/or environmentally harmful materials with Lightweight TPE.

4. Universal PCR TPE

Available in 40-90 Shore A hardness with 13-41% post-consumer recycling content. This first-generation series was introduced to the market in 2022. Initial consumer and industry applications have been successfully realized already.

5. Project: Investigating the influence of polyolefin recycling streams

The influence of polyolefin recycling streams was investigated to verify recyclability. According to the latest findings, compatibility in the PP and HDPE stream with products from KRAIBURG TPE is proven and confirmed. This unique selling point is being continuously expanded to the product range.

Innovation projects 2022

Work on innovative new material generations continued in 2022. In particular, the topic of sustainability was further examined and advanced in 2022. Available and technically sensible sustainable raw materials as well as recycled and bio-based raw materials were extensively evaluated:

2022/2023 product solution outlook

Additional possibilities for product solutions in financial year 2023 based on further development of the recycled and bio-based series are as follows:

1. Attaining recycling rates of more than 40%

- a) The Universal PCR TPE product is being further developed in the consumer segment, striving for a recycling rate of more than 40% and adhesion to PP in a larger range of hardnesses.
- b) In the automotive sector, further development of the products Interior PIR TPE and Exterior PIR TPE is striving for a recycling rate of more than 40% and adhesion to PP.

2. Compounds with ISCC PLUS certification

Significant, extensive further development in the direction of a circular economy was measurable in the reporting year overall. New possibilities were also created with the additional expansion to include bio-based and ISCC PLUS-compliant raw materials (in preparation for certification in 2023). In summary, the transformation to more sustainable TPE solutions on the portfolio side was successfully pursued and implemented in 2022.

3. Bio-based and renewable-based TPE

KRAIBURG TPE has intensified its efforts to develop non-polar and polar adhesion compounds with a high proportion of biological materials.

4. Recycling series with polar adhesion

KRAIBURG TPE has intensified its efforts to develop polar adhesion compounds containing recycled materials, with adhesion to PA, ABS, and PC.

5.5 | Objective 2: Sustainability standards in the supply chain

Supplier involvement: sustainability standards

Supplier management is regulated by Raw Materials Procurement with a corporate standard describing the topics of supplier qualification, supplier evaluation, and supplier development. Raw material manufacturers are asked about environmental management aspects, both in the qualification phase and in the annual supplier evaluation. The Ecovadis platform will be increasingly used in the future as the tool for evaluating suppliers regarding sustainability and social responsibility.

For the status quo and important activities for objective 2, see "Suppliers and raw materials"

5.6 | Objective 3: Sustainable production, packaging, and transport

The goal is to make production, packaging, and transport as efficient as possible regarding the consumption of energy, water, and materials. This includes minimizing production waste and maximizing internal recycling.

Optimizing the production process to minimize the scrap rate

The proportion of internal production waste and other off-spec materials, such as returns, quarantine after release, etc., has to be as low as possible. This means internal recycling or selling these materials to third parties as recyclate. In addition, the amount of energy and water used per compound is to be kept as low as possible. Introducing what is known as a water footprint is planned to monitor this more systematically.

KRAIBURG TPE reduced the specific quantity of own packaging by 10% in the last three years. A further reduction of packaging waste is to be realized through close communication with suppliers going forward.

5.7 | Objective 4: Utilization of own production residues and returns

KRAIBURG TPE worked on closing internal material cycles: The bulk of TPE waste (such as returns, primary material, etc.) is recycled rather than discarded. Internal recycling has a long tradition at KRAIBURG TPE. Production residues of similar quality and color are collected separately. After internal consultation, the materials are either supplied to appropriate own production processes in an internal processing step or sold to third parties.

Expansion of recycling expertise in the company

Continuing to expand the company's recycling expertise is a stated goal. Internal recycling, which has been ongoing for decades, is based on the collection and reuse of similar internal waste materials and returns. Instead of discarding TPE, KRAIBURG TPE recycles nearly 100% of selected compounds, for example, returns, process start-up materials, and other production waste. The recycling team's objective is the economically efficient utilization of TPE recycling materials. Incoming material has to be minimized to keep stock levels as low as possible while achieving a high recycling rate with the least possible effort. Quality control and usage decisions are regulated in the business process.

KRAIBURG TPE intends to expand and optimize this activity, which has been highly successful for a long time, in the interest of the internal circular economy, communicating these efforts to customers. It is important in this context to also illustrate the corresponding reduction effects in the calculation of CO₂ balances/life cycle assessments going forward.

Status quo and important activities for objective 4

Continuous development from recycling to circular approaches is intended to further develop this competency. Stock levels increased from 190 t (end of 2021) to 230 t in 2022. The target of < 180 t could not be reached due to the stagnation of production figures toward the end of the year.

The volume of production waste, returns, quarantined product, etc. fell by about 5% to 754 t. On the other hand, the quantity of material utilized in 2022 increased by 15% from 707 t in 2021 to 812 t.

The goal of reducing stock levels while achieving the highest possible internal recycling rate was reached in 2022.

5.8 | Objective 5: External partnerships and business relations

The requirements of the ESRS reporting standard, results of the sustainability ratings (Ecovadis, CDP), and the external circular economy benchmark study by RWTH Aachen University are being analyzed to determine requirements for the circular economy. Thus material cycles are to be closed with regard to climate targets as well. Valuable resources need to be conserved while reducing waste, the supply of recycled material has to be safeguarded, and customer requirements have to be met as effectively as possible. Partnerships are essential to achieve these circular economy objectives.

Status quo and important activities for objective 5

- KRAIBURG TPE cooperates with suppliers, universities, and research institutes to expand circular economy knowledge.
- KRAIBURG TPE works with customers to promote the circular economy along the value chain and assist them in their sustainability efforts. Examples include clarifying the return of production waste by customers, high-quality materials for long-lived applications, lightweight materials for lower vehicle emissions in the usage phase, and using sustainable/low-carbon raw materials.
- KRAIBURG TPE is a member of the WDK and Plastics Cluster Austria with the aim of developing a network of potential new partners, such as recycling firms.

5.9 | Objective 6: Waste reduction, avoidance, and utilization

Reducing and avoiding waste and emissions wherever possible are key objectives. The principle of “avoidance before utilization before disposal” applies.

Waste avoidance at KRAIBURG TPE

- Transition from disposable to reusable coffee cups in 2017
- Employees pre-ordering lunch in the cafeteria to avoid food waste
- Strict product quality control to minimize customer complaints
- Options for the return of TPE material for recycling are being worked out in cooperation with customers
- Customer consultations regarding optimal further processing with the reduction of scrap rates
- Support for customers by providing material data for simulations
- Reduction of the use of auxiliary materials, such as wet film release agents

Status quo and important activities

The specific waste volume fell by around 5% to 11.38 kg/t in 2022. This was because the volume of used oil for disposal was reduced by nearly 40% and non-hazardous waste decreased by 9%. Around 90% of commercial waste is collected separately according to the Commercial Waste Regulation. If utilization cannot be realized, waste is properly disposed of in an environmentally sound manner. The Closed Substance Cycle Waste Management Act (KrW-AbfG) regulates proper waste disposal for all waste producers, owners, and disposal firms.

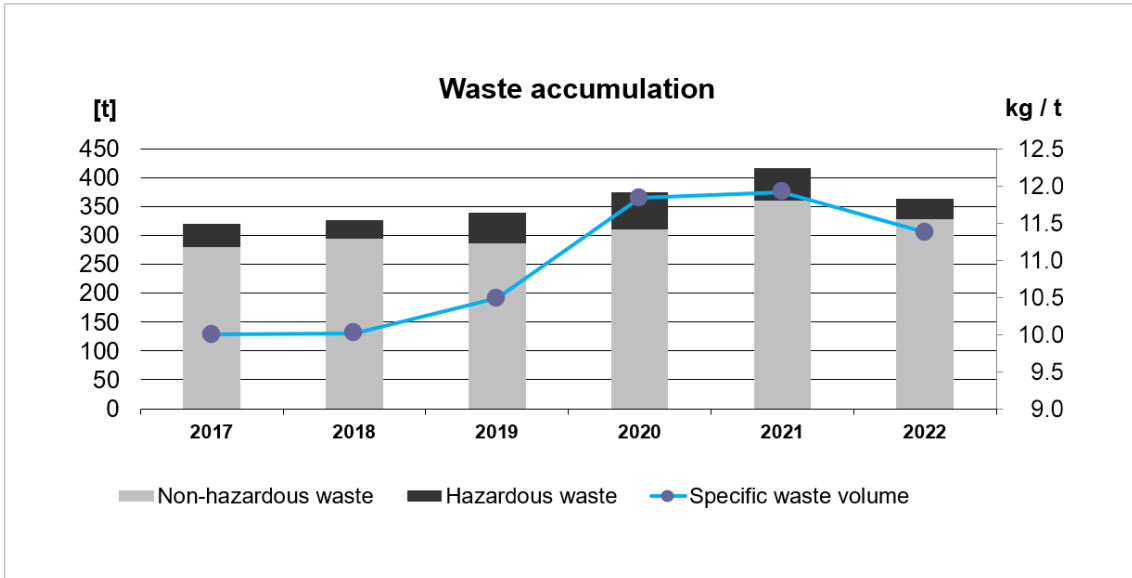


Figure 8: Waste accumulation in relation to annual production volume in kg/t (source: KRAIBURG TPE)

Non-hazardous waste

Non-hazardous waste, in part recycled externally and in part used as fuel, is composed of residual waste, plastic waste, paper, wood, etc. The volume of non-hazardous waste fell by 9% in 2022. This is due to the reduced volume of waste granulate for disposal (-10%), mainly consisting of machine purgings that cannot be utilized or sold, and materials contaminated with metal. The total production volume fell by 8% compared to the prior year. Iron and steel waste increased from 3.24 t in 2021 to 9.15 t. Expenditures for the disposal of steel and iron waste do not influence this performance figure.

Hazardous special waste

Special waste mainly consists of used oil and contaminated waste water from cleaning processes. Hazardous special waste decreased by 31% compared to 2021. KRAIBURG TPE decided to switch to a different wet film release agent starting in 2021. The new wet film release agent exhibits a better efficiency factor. This has significantly reduced the amounts that are used. Figure 9 illustrates the consumption over the last 3 years. This had a positive impact on the volume of hazardous waste:

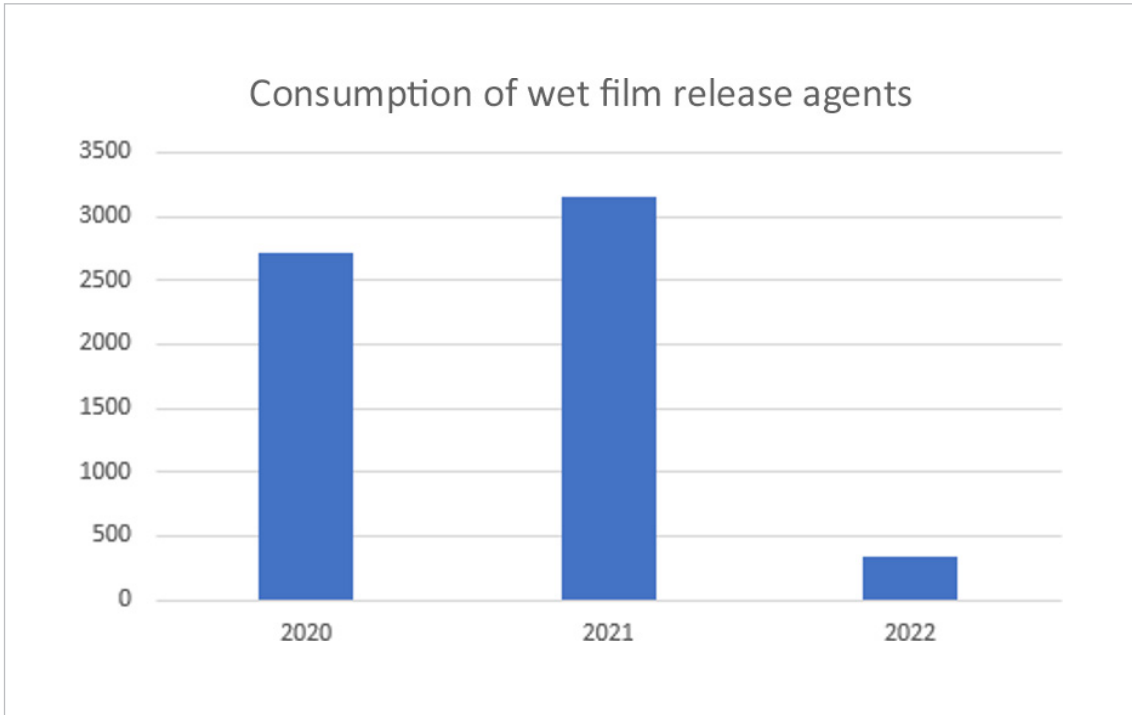


Figure 9: Development of wet film release agent consumption, 2020 – 2022 (source: KRAIBURG TPE)



6. Climate and energy (ESRS E1: Climate change)

6.1 | Background

The United Nations negotiated the Paris Agreement at the 2015 UN Climate Change Conference. This master agreement aims to limit global warming to 1.5 °C. 196 countries have voluntarily committed to national targets that are continuously tightened. Climate policy requires balance, considering all pillars of sustainability – including energy supply security and global competitiveness. German companies are facing a special challenge in this regard. Using energy intelligently therefore has to be the goal, harmonizing cost effectiveness and climate protection. Growth and innovation must be embedded in a framework of reduced greenhouse gas emissions across value chains.

Political and economic environment

- Ongoing high volatility in the energy market is expected for the coming years.
- Fluctuating electricity prices on the energy exchange are expected due to geopolitical circumstances.

6.2 | Heat waves/hot days

The German Weather Service has statistically defined the term “hot day”. Accordingly every day with a high temperature exceeding 30 degrees Celsius is a hot day. Germany followed the global warming trend in 2018. According to the German Weather Service, the federal territory experienced the warmest year on record in 2018. Average temperatures were more than two degrees higher compared to the reference period, the mid-20th century. The rising trend for hot days is also being observed in the region where the company is headquartered, albeit with significant annual fluctuations. (Source: Hot days in Mühldorf). There were 13 hot days in 2022. 73 summer days were recorded on site in 2022 according to measurements.

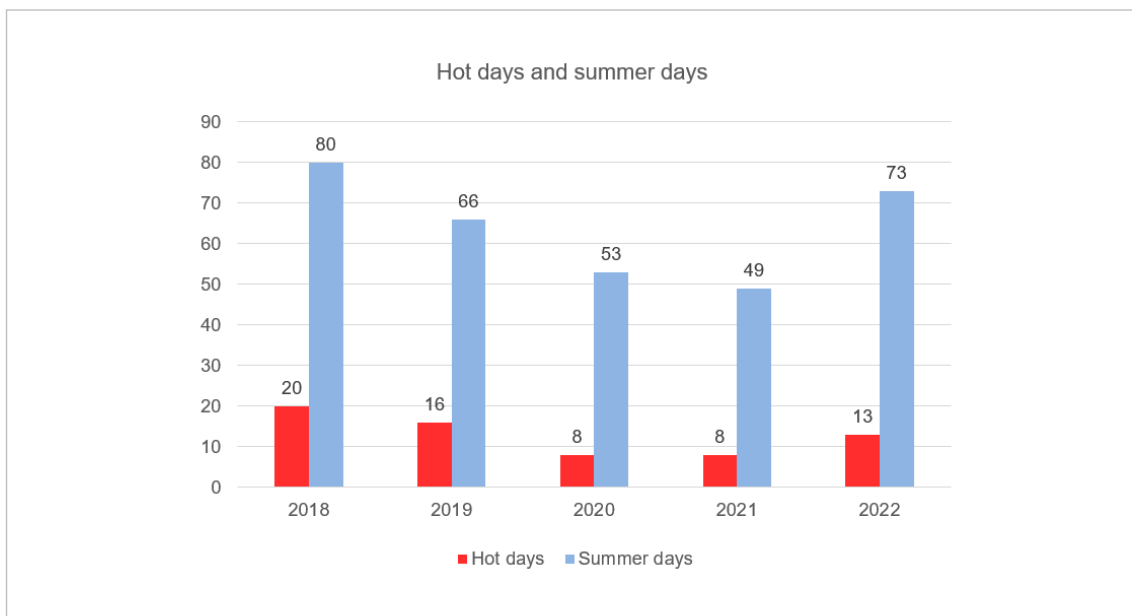


Figure 9: Hot days and summer days in Mühldorf, Upper Bavaria (source: KRAIBURG TPE)

6.3 | Opportunities and risks – climate protection and energy

	Evaluation
Physical risks	
Increase in hot days	High
Extreme weather events, impacts on production	Medium
Transitory risks	
Public image	High
Laws	Medium
Certifications, rating platforms, and reporting	Medium
Emission certificate costs	Medium
Changed technologies and product requirements of customers	Medium
"Green credits"	Medium
Risks	
GHG emissions	High
Currently no quantified reduction targets/no voluntary commitment	High
Opportunities	
CO ₂ e footprint of products (PCF)	High
Greenhouse gas reduction targets (SBTi)	High
Timely implementation of the electromobility concept	High
Plan for the recording of climate risks	Medium

Table 3: Opportunities and risks – climate protection (source: KRAIBURG TPE)

	Evaluation
Physical risks	
Increased costs due to peak electrical load	High
Security of supply and allocation of electricity and gas	High
Transitory risks	
Rising prices due to geopolitical distortions	High
Risks	
Peak electrical load infrastructure	High
Opportunities	
Expansion of renewable energy	Low
Improve process and energy efficiency	Medium
Peak electrical load management (storage)	High
Electromobility concept with charging infrastructure	High
Communication about climate and energy topics	High

Table 4: Opportunities and risks – energy (source: KRAIBURG TPE)

Political and economic environment

KRAIBURG TPE is developing a 10-year climate program 2031 (base year 2021) to reach climate targets based on the Science Based Targets initiative. This means reducing annual Scope 1 and 2 emissions by 4.5% on average and Scope 3 emissions by 2.5% on average.

<p>KRAIBURG TPE sets ambitious targets for the reduction of CO₂e emissions for all its sites worldwide in line with the Science Based Targets Initiative (SBTi).</p>	<p>KRAIBURG TPE commits to reducing absolute CO₂e emissions of Scopes 1 and 2 by 46.2% by 2031, starting from the base year 2021.</p>	<p>KRAIBURG TPE commits to reducing absolute CO₂e emissions of Scopes 3 by 27.5% by 2031, starting from the base year 2021.</p>
<p>KRAIBURG TPE is developing a Climate Program 2031 with various reduction measures to achieve these targets.</p>	<ul style="list-style-type: none"> a) KRAIBURG TPE is permanently striving to optimize energy efficiency at all production sites. b) KRAIBURG TPE continues to push the use of renewable energy sources and the procurement of green electricity. 	<ul style="list-style-type: none"> a) KRAIBURG TPE works in partnership with customers and suppliers to find sustainable solutions that advance all stakeholders. b) KRAIBURG TPE has identified circular economy as lever for reducing Scope 3 emissions. c) Recycled and bio-based raw materials from sustainable sources are part of the solution to also meet the strict Scope 3 criteria of the Science Based Targets Initiative.

Figure 11: KRAIBURG TPE's climate targets (source: KRAIBURG TPE)

KRAIBURG TPE has been operating an energy management system according to DIN EN ISO 50001:2018 since 2013. Continuous improvement of energy efficiency has been ongoing ever since.

Energy team/process

The energy team works on the energy action plan and other energy topics. It is made up of representatives from all parts of the company that are relevant for energy, including Production, Engineering, and Maintenance.

Energy conservation education

Teams with a significant influence on the company's energy consumption, such as Production, Maintenance, and Process Technology, receive regular energy efficiency training.

6.4 | Climate and energy program 2022

Most of the measures from the climate and energy program 2022 were implemented with 96% realization overall.

Focal points:

- Energy optimization in process technology
- Modernization of air compressors: Waste heat is used to heat water for the showers.
- LED retrofitting
- Charging infrastructure for electromobility

6.5 | KRAIBURG TPE climate and energy objectives

- Objective 1: Improve process and energy efficiency
- Objective 2: Reduce greenhouse gas emissions
- Objective 3: Continue the expansion of renewable energy
- Objective 4: Improve energy supply security

6.6 | Objective 1: Improve process and energy efficiency

Improving process and energy efficiency is a key objective. Both the energy demand and the associated, climate-relevant emissions can be reduced in this way.

Status quo and important activities for objective 1

Specific energy consumption

Specific energy consumption, including both electricity and gas consumption, fell by 3% to 397 kWh/t in the reporting year in relation to the annual production volume. For detailed examinations regarding the development of specific energy consumption, the specific electricity and natural gas consumption are analyzed in the following sections.

Electricity consumption

Electricity consumption for the two production facilities in Waldkraiburg fell by 8% to 10,791 MWh in 2022. This was mainly due to the lower TPE production volume. Specific electricity consumption increased by 1% to 338 kWh/t. The lower production volume made itself felt here as well.

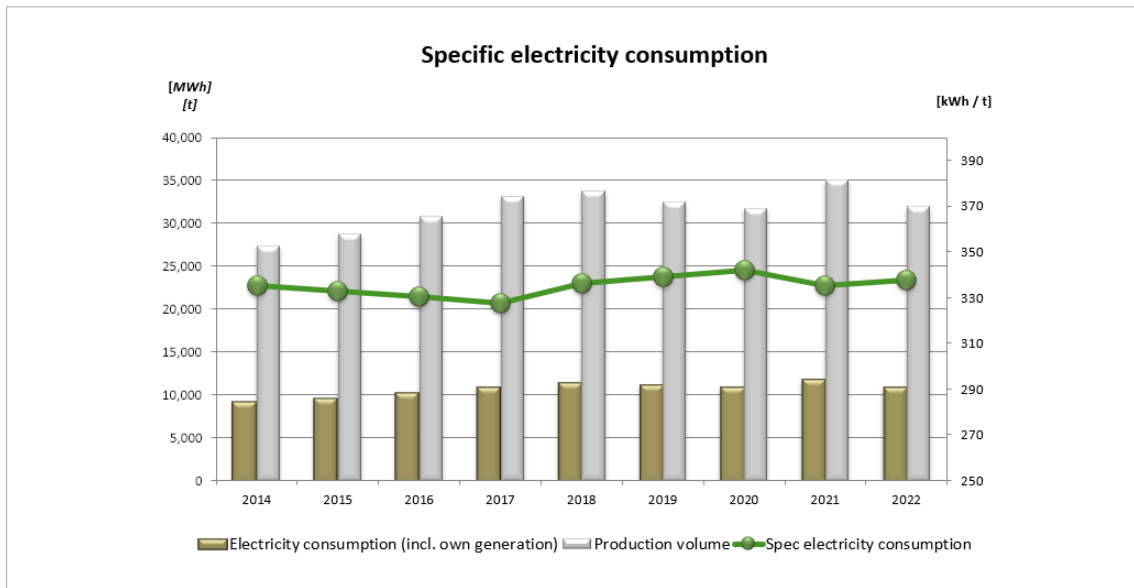


Figure 12: Specific electricity consumption in relation to the annual production volume, 2014 – 2022.

KRAIBURG TPE has also set the goal of procuring 100% of its electricity from renewable sources by 2025.

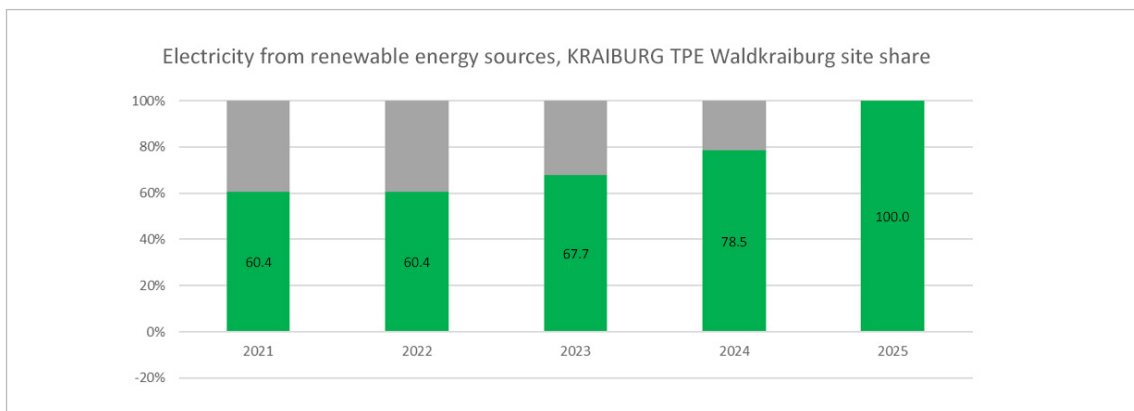


Figure 13: Development of the share of electricity from renewable sources.

Natural gas consumption

Natural gas is used almost exclusively to heat buildings at the Waldkraiburg site. The heat demand fell by 23% to 1,878 MWh in 2022 (Figure 12). This is mainly because the heating demand decreased by 15% and the number of heating days fell by 10%.

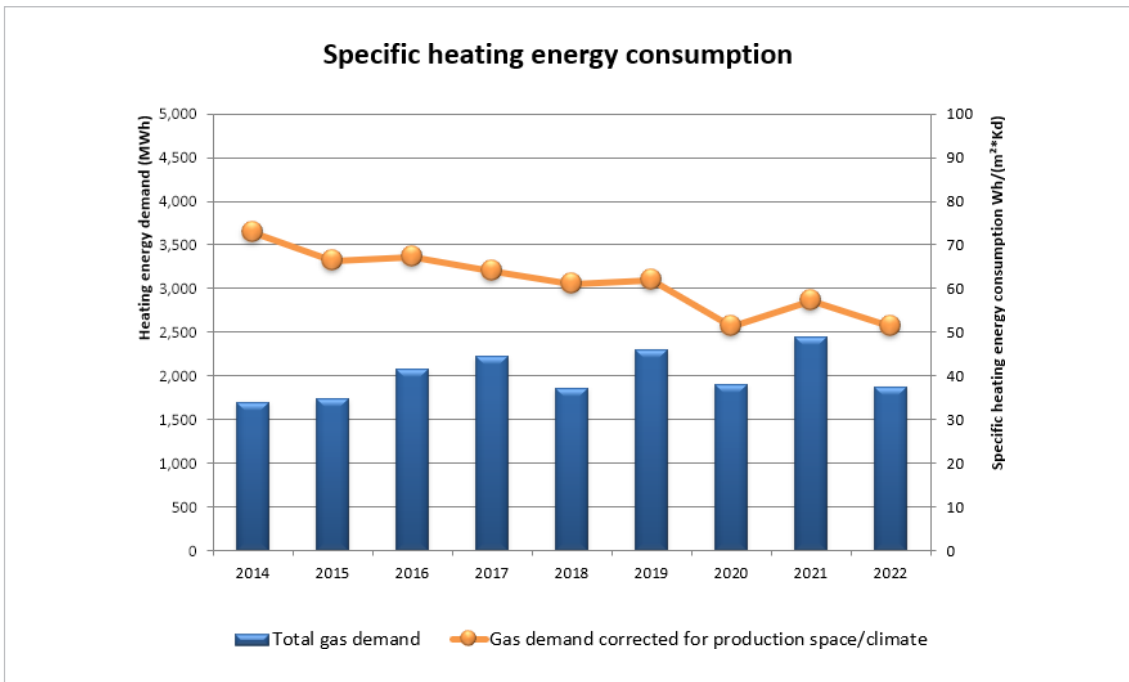


Figure 13: Specific heating energy consumption in relation to production space, 2014 – 2022 (source: KRAIBURG TPE)

KRAIBURG TPE is working on the implementation of an energy strategy to keep pace with change in the energy sector. Focal points such as optimizing process technology in the extruder section and installing electromobility charging infrastructure are expected to reach their conclusion in Q1 2023.

6.7 | Objective 2: Lower climate-relevant emissions

KRAIBURG TPE has been preparing greenhouse gas emission balances since 2013. This allows conclusions to be drawn regarding adjustments to avoid greenhouse gas emissions. The company's own contribution to climate protection can be monitored as well.

At the product level, KRAIBURG TPE has been reporting the product carbon footprint since 2021. It provides information about the CO₂e emissions of compounds within the established system limits. The requirements of the Greenhouse Gas Protocol and relevant ISO standards are observed in its calculation. KRAIBURG TPE makes the PCF available on customer request when defined basic conditions are met.

The circular economy is a key to reaching climate targets, in particular for the Scope 3 emissions.

Various preparatory work has been completed at the company level for the calculation of the corporate carbon footprint (CCF). A comprehensive inventory of greenhouse gas emissions was taken for 2021 and 2022 (Scope 1 through Scope 3, see "Greenhouse gas balance").

KRAIBURG TPE sets climate targets for itself based on the SBTi with 2021 as the base year. In order to reach these ambitious targets, KRAIBURG TPE has developed a climate program.

GHG Inventory

in t CO₂e

	2021	2022	2021 - 2022 in %
Total- market based	129,693	114,904	-11.4
Scope 1 emissions	692	648	-6.4
Scope 2 emissions - market based	3,205	2,565	-20.0
Scope 2 emissions - location based	6,708	6,144	-8.4
Scope 3 emissions	125,796	111,691	-11.2
3.1 - Purchased goods and services	92,802	80,544	-13.2
3.3 - Fuel- and energy related activities	1,652	1,519	-8.1
3.4 - Upstream transportation and distribution	10,854	11,367	4.7
3.5 - Waste generated in operations	584	492	-15.8
3.6 - Business travel	19	199	947.4
3.7 - Employee commuting	324	346	6.8
3.9 - Downstream transportation and distribution	336	403	19.9
3.10 - Processing of sold products	19,225	16,821	-12.5

Figure 14: Climate-relevant emissions balance (t CO₂e) at the company level (source: KRAIBURG TPE)

Scope 1:

Includes: Gas consumption, volatile gases, fuel consumption for company vehicles

Scope 2:

Includes: Electricity purchases and own generation using PV systems

Scope 3.1:

Purchased goods and services, raw materials, packaging materials, contracts

Scope 3.3:

Fuel and energy-related emissions, including production emissions of individual energy sources

Scope 3.4:

Transport and distribution (upstream), including road haulage, ocean freight, air freight, transport of material and packaging

Scope 3.5:

Waste: Non-hazardous and hazardous waste

Scope 3.6:

Business travel: Flights, rental cars, train travel

Scope 3.7:

Employee commutes

Scope 3.9:

Transport and distribution (downstream), including ex works transport

Scope 3.10:

Processing of products sold: Electricity consumption for injection molding

Status quo and important activities

Specific Scope 1 and Scope 2 CO₂e emissions at the Waldkraiburg site have already been reduced significantly in the last seven years.

Key reasons:

- Energy efficiency improvements
- Own electricity generation using PV systems
- Conversion to LED lighting

Outlook – climate and energy processes

KRAIBURG TPE is developing a standardized process for CO₂e recording and balancing with the help of external specialists. An SBTi-compliant CO₂e reduction path with corresponding long-term targets is being developed based on the 2020 and 2021 balances (climate program 2031).

6.8 | Objective 3: Continue increasing the renewable energy share

Expanding the own renewable energy share is intended to help reduce the dependency on external energy sources.

Status quo and important activities for objective 3

Using low-carbon energy sources is an important approach to generating CO₂-neutral growth. The two company-owned PV systems produced a total of 128.5 MWh of emission-free electricity in 2022.

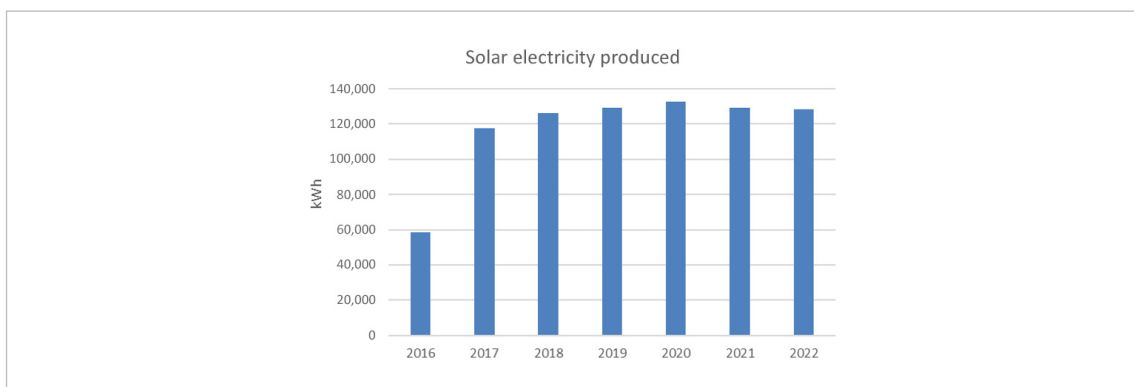


Figure 15: Development of solar electricity production by own PV systems, 2016 – 2022 (source: KRAIBURG TPE)



7. Topics of environmental relevance

7.1 | Environmental protection/occupational health and safety program 2022

The measures of the environmental protection/occupational health and safety program 2022 have largely been implemented, with 86% realization overall.

Focal points:

- Ensure legal compliance
- Explosion protection measures: Plant safety
- Noise reduction measures: Health protection
- Sustainability measures

7.2 | Environmental status

The DIN EN ISO 14001:2015 environmental standard requires the monitoring of environmental status indicators. The objective is to identify and respond to changes in the environment sooner.

7.3 | Land use, biological diversity, and nature conservation

The land use indicator identifies changes in the use of space on plots of land. Because of ongoing growth, the developed area is also increasing. In 2018 this was mainly due to construction of the new modules MVT 2 and production module 3. The total area and green space increased in 2019 with the purchase of land between the parking lots and Daimler Straße.

Land use Friedrich-Schmidt-Straße	2018	2019	2020	2021	2022
Total area in m ²	59,487	61,648	61,648	61,648	61,648
Green space in m ²	29,668	31,829	31,829	31,829	31,829
Developed area in m ²	29,819	29,819	29,819	29,819	29,819
Biodiversity (developed area/ton)	0.89	0.92	0.94	0.85	0.93

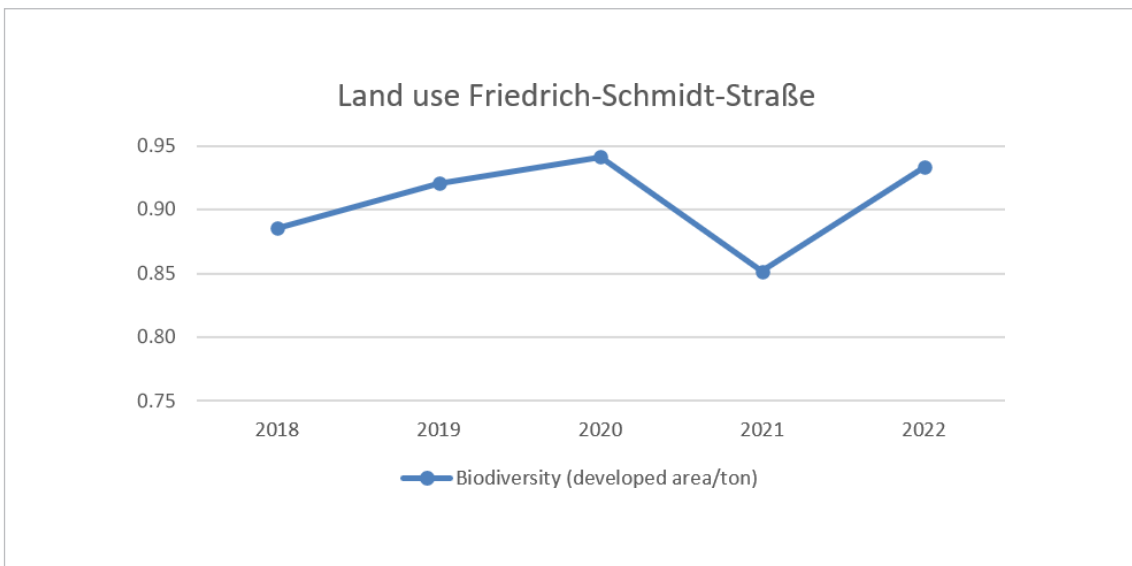


Figure 16: Developed area in m² in relation to the annual production volume in t (source: KRAIBURG TPE)

The developed area in relation to the annual production volume in tons increased between 2021 and 2022. This is because the production volume was lower than in 2021. KRAIBURG TPE’s stated goal is to minimize the impact of its business activities on the region’s biodiversity. KRAIBURG TPE therefore establishes buffer areas to keep land use as low as possible.

7.4 | Environmental incidents

KRAIBURG TPE had no incidents impacting the environment in 2022.



8. Water (ESRS E3 Water and marine resources)

8.1 | Background

Water is a valuable and increasingly scarce resource. It is of fundamental importance in the production of chemicals. KRAIBURG TPE’s policy is to use this resource responsibly. Water is a prominent part of quality, environmental protection, occupational health and safety, and energy policy.

8.2 | Opportunities and risks – water

	Evaluation
Physical risks	
Drought, water supply	Medium
Heavy rainfall and flooding	High
Transitory risks	
Legal requirements regarding waste water discharge	Medium
Public image regarding water use (conflicts of interest)	Medium
Risks	
Cooling water evaporation	High
No recirculation	High
Opportunities	
Groundwater cooling	Medium

Table 5: Opportunities and risks – water (source: KRAIBURG TPE)

Policy and action plans

With regard to environmental management and water in particular, KRAIBURG TPE strives to conserve resources and to reduce or, where possible, avoid waste and emissions that damage the environment. Larger measures are part of the annual environmental program (action plan) approved by the executive.

KRAIBURG TPE water objectives

Objective 1: Reduce water consumption to the essential minimum

Objective 2: Reduce waste water volumes

Abnormal water usage, such as leakages, is identified quickly with the installed water meters (KBR system) to ensure a timely response. Fluctuating water consumption was significantly reduced thanks to shorter response times. Better root cause analysis is given as well.

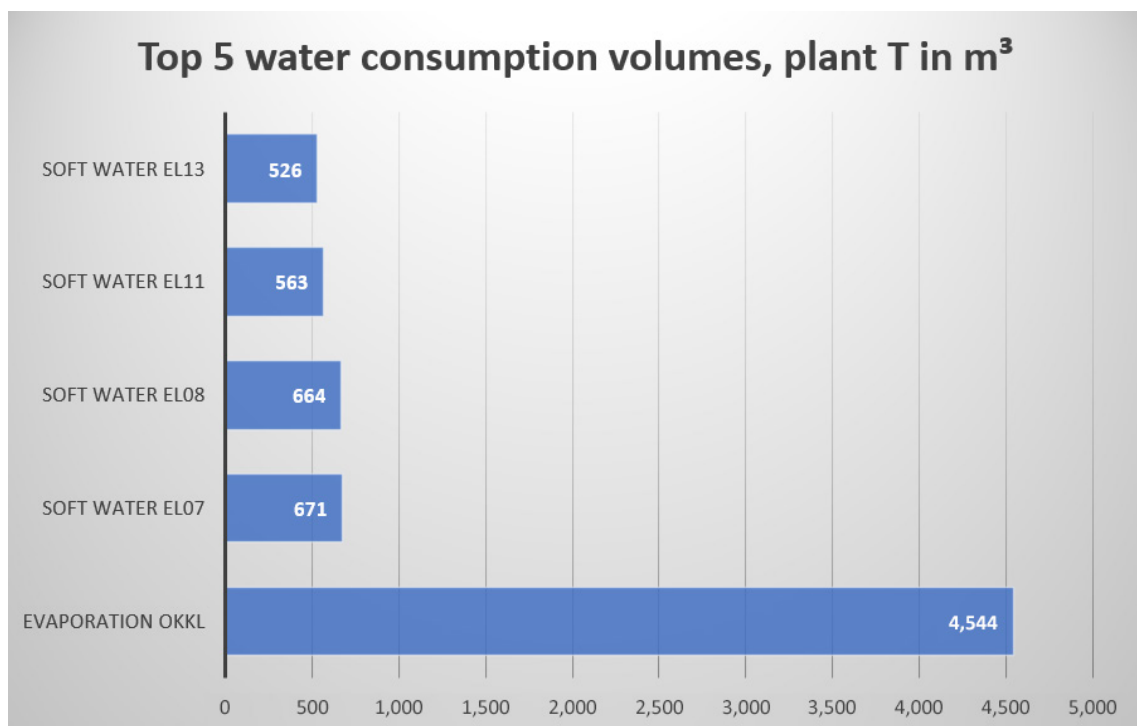


Figure 17: Highest water consumption in plant T, in m³ (source: KRAIBURG TPE)

8.3 | Objective 1: Reduce water consumption

Water consumption is to be reduced to the essential minimum. Evaporation during cooling processes accounts for the largest water volume. Total water consumption can be lowered significantly by reducing cooling water consumption in the open cooling circuit (OCC).

Status quo and important activities for objective 1

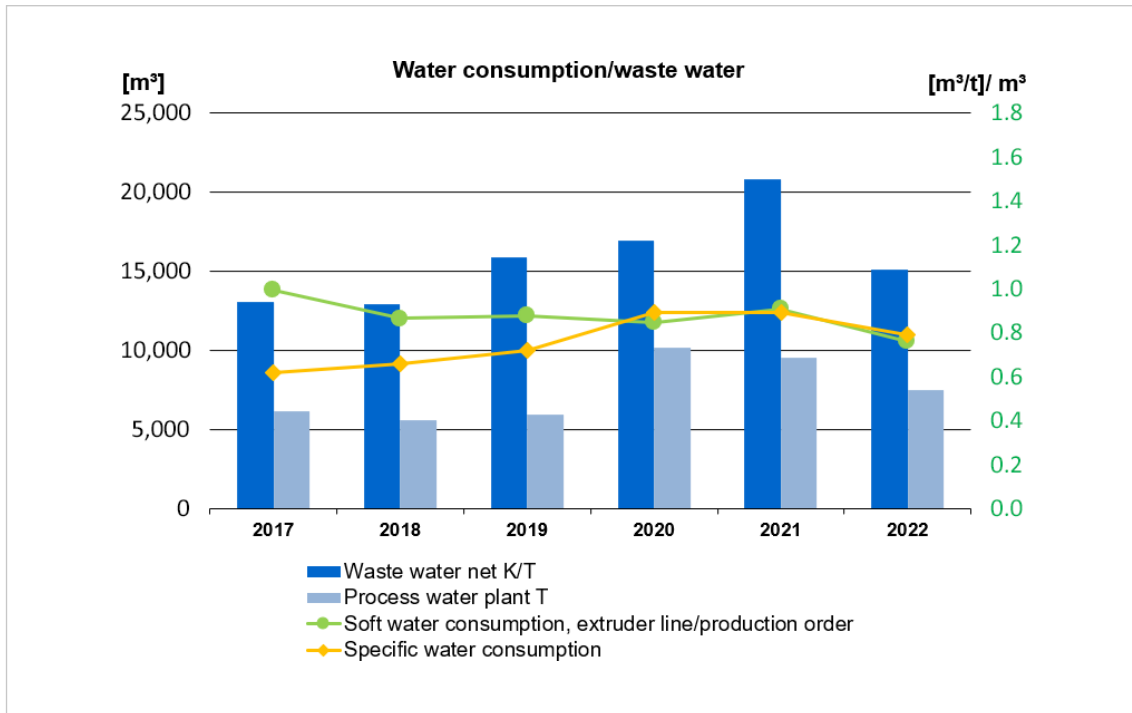


Figure 18: Water consumption and waste water in m³ (source: KRAIBURG TPE)

Absolute water consumption fell by 25% in 2022. The average soft water consumption per production order was 761 liters in 2022. That is a 16.3% reduction compared to 2021. Specific water consumption fell by 11% compared to the previous year. This was mainly due to the reduction of rinsing processes that were no longer needed. The volume of used process water in plant T was reduced.

Climate effects are most apparent with regard to the cooling systems. The cooling demand placed on the systems increased by 46% (+158 m³) compared to 2021. There were more summer days and hot days in 2022 than 2020 and 2021 (see Figure 14 "Hot days and summer days").

Reducing water consumption requires consistent, systematic water management; strategic requirements have to be implemented, potential needs have to be identified continuously, and improvement measures need to be derived. The water footprint calculated as part of a comprehensive life cycle analysis is used as a tool in this context.

Different effects can be identified for the cooling water demand regarding evaporation in plants T and K. Evaporation increased by about 36% in plant K because production was shifted from extruder line EL23 to EL04. In contrast, the cooling water demand in plant T fell by 34% because of the lower production volume.

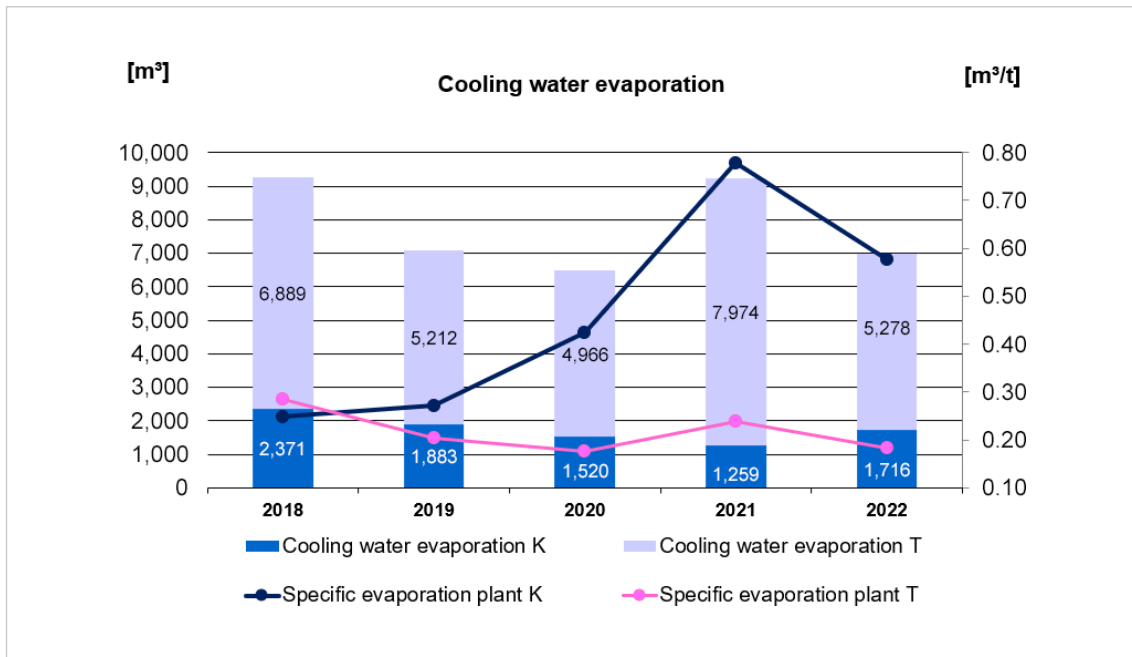


Figure 19: Evaporation of cooling water in m³ (source: KRAIBURG TPE)

Evaporation was reduced in plant T because the newest production module including the new evaporative cooling system 2 was considered in the calculation. Increased evaporation in plant K is explained by the higher cooling demand caused by the shift in production.

The same effects are observed in plants T and K regarding cooling efficiency (specific evaporation). This value is lower for plants T and K. The production shift in 2022 is the main cause for plant K. In plant T, the new evaporative cooling system 2 made the entire cooling system more efficient than in 2021.

¹EL = extruder line

8.4 | Objective 2: Reduce waste water volumes

Waste water volumes are to be reduced. Targets will be set in reporting year 2023.

Status quo and important activities for objective 2

The volume of discharged waste water fell by 27% in reporting year 2022 compared to 2021. The specific waste water volume was reduced by 21% compared to 2021 (see cooling water demand for details).



9. Responsibility to employees: Occupational health and safety (ESRS S1 Own workforce)

9.1 | Background

Personal health and safety is the highest priority for KRAIBURG TPE in any situation and at all times. The health and wellbeing of company employees is a particular focal point, along with protecting employees along the supply chain and society as a whole against negative effects of business activities.

Since employees form the foundation of KRAIBURG TPE's success, the company has established clear guidelines to protect and support them. KRAIBURG TPE places special emphasis on the following spheres of activity:

- Values and culture: Focus on respect, trust, and co-determination
- Health and safety: Accident avoidance and prevention
- Diversity and equal opportunities: Equal treatment and a health company culture
- Education and further training: Employees are the most valuable asset, and receive internal and external further training
- Work-life balance: A healthy work-life balance is sought

9.2 | Opportunities and risks – responsibility to employees

	Evaluation
Physical risks	
Occupational health and safety in the context of hazardous substances	Medium
Mental stress and workload	High
Transitory risks	
Shortage of skilled workers	Medium
Risks	
Occupational health and safety culture	High
Reevaluation of hazardous substances and identification of alternative raw materials	Medium
Opportunities	
Attractiveness as an employer	Medium
Balance between family and work	Medium
Expansion of education and further training	Medium
Internal transfer of knowledge	High
Health management	Medium
Office equipment	Medium
Internal communication and greater transparency	High
Participation in decision making by employees and active works council	High

Table 6: Opportunities and risks – responsibility to employees (source: KRAIBURG TPE)

Policy and action plans

Own employees are prominently mentioned in quality, environmental protection, occupational health and safety, and energy policy.



Figure 20: Eight principles of the safety culture at KRAIBURG TPE (source: KRAIBURG TPE)

KRAIBURG TPE occupational health and safety objectives

The goal of occupational health and safety is to identify possible hazards and risks in advance, thereby avoiding accidents and possible illnesses. Through forward-looking analysis, the respective people in charge ascertain possible hazards in cooperation with competent experts (safety officer, safety representative, etc.). This sharpens awareness. KRAIBURG TPE also strives to create healthy workplaces and work conditions. Occupational health management (OHM) supports the personal responsibility of employees to maintain and improve their health and capacity for work.

9.3 | Occupational health management (OHM)

Occupational health management (OHM) in terms of an integrated strategy comprises all measures that contribute to individual health and a “healthy” business organization. Systematic OHM provides orientation for employees and managers, and promotes well-being and health at work.

OHM is a structured, planned, and coordinated process with the goal of effectively maintaining the health and performance of employees over the long term. The planned and structured approach differentiates occupational health management from workplace health promotion. OHM goes beyond occupational health and safety as well as individual health promotion. The challenge lies in networking existing competencies in terms of an integrated approach, combining individual measures with each other in a meaningful and effective structure, and making their effects on employee health measurable.

The OHM steering committee meets quarterly and forms the foundation for all strategies and measures to be implemented. This steering committee is made up of experts such as the prevention and health manager, safety officer, representative for employees with disabilities, works council, and HR manager. The fundamental objectives of occupational health management are discussed with the executive, planned by the prevention and health manager, and realized in cooperation with internal and external providers. Results from the evaluation of individual measures are incorporated in further planning.

Focal points of occupational health management 2022

1. Under consideration of demographic trends, KRAIBURG TPE wants to improve in the Structure, Strategy, and Performance categories of a benchmark for Germany's chemicals industry. This is evaluated annually through the continuous further development of occupational health management and the Corporate Health Awards benchmark.
2. Existing OHM offers are adapted in response to unexpected challenges resulting from events such as a crisis.
3. Reaching and sensitizing industrial employees regarding a healthy lifestyle and work habits is assured.
4. Employees are supported in maintaining a healthy and balanced diet.
5. Education is provided regarding clinical pictures, their manifestations, and conditions for developing an addiction. Managers have received decision-making and responsibility training. The Employer's Liability Insurance Association for Raw Materials and the Chemicals Industry provided training.
6. Building awareness of healthy habits is supported by screenings and information for all employees.

Status quo and important activities for occupational health and safety

Environmental protection/occupational health and safety meetings are held quarterly (Safety Committee). Environmental as well as occupational health and safety topics are intensively discussed and evaluated by experts such as the safety officer, environmental officer, company doctor, etc. together with the works council and site manager. Corresponding measures are initiated and implemented, for example, in the environmental protection/occupational health and safety program. COVID-19 was the focus of central health protection for KRAIBURG TPE in 2022. Essential coronavirus protection measures such as a hygiene and testing concept were established by the coronavirus crisis management group. The situation was also evaluated promptly and required measures were initiated. Health and infection risks were minimized as a result.

9.4 | Occupational health and safety

KRAIBURG TPE analyzes accidents, incidents, and their causes in detail to learn from them. Incidents are extensively investigated in cooperation with the affected individuals and the findings are used to derive appropriate measures. Hazard determination is not only required by law (Section 5 of the Occupational Health and Safety Act (ArbSchG)), but also serves as the central occupational health and safety tool for the assessment of occupational risks. Uniform, systematic hazard assessments are prepared and implementation of the measures is monitored with the help of occupational health and safety software.

The accident figures are important indicators for the accident risk at the Waldkraiburg site. They also measure how effectively KRAIBURG TPE is realizing the accident prevention policy. Two reportable occupational accidents occurred in reporting year 2022. The resulting accident rate per 1000 employees is 5.089. The LTIF (7.454 excluding commuting accidents) fell significantly year-on-year. These positive developments result in the lowest level for the last eight years, well below the industry average.

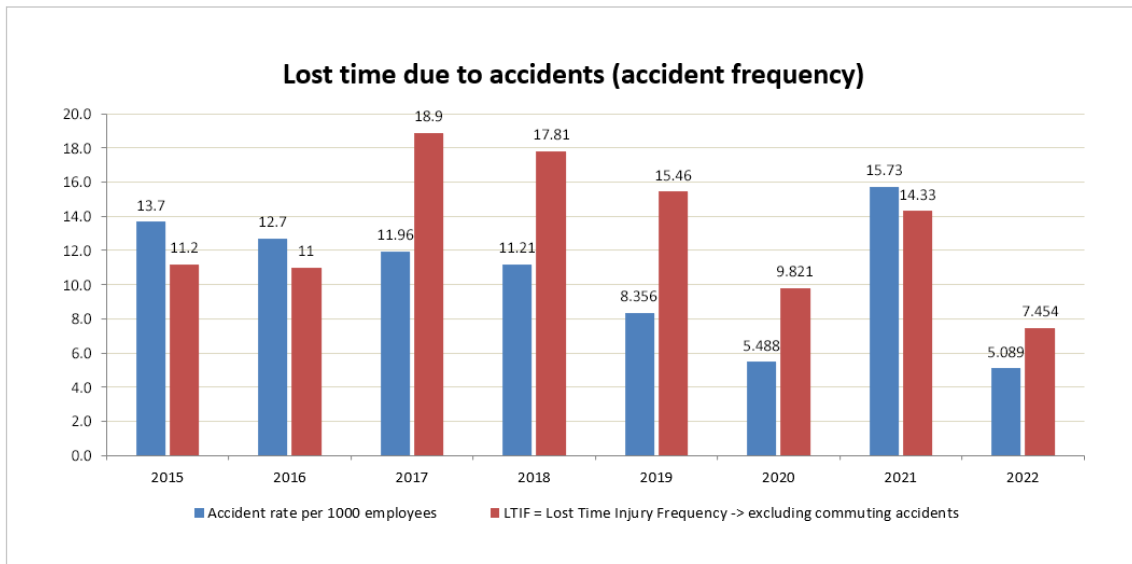


Figure 21: Development of the accident frequency, 2015 – 2022 (source: KRAIBURG TPE)

The actively practiced safety culture (building awareness, conduct, etc.) will play a crucial role in a long-term trend reversal. KRAIBURG TPE demands the participation of all employees based on the eight principles. Managers serve as safety role models and promote the safety culture.

9.5 | Plant safety

Plant safety is the key element of safe, effective, and therefore sustainable production. Experts identify and evaluate possible risks in the planning and conceptual design of new plants, the operation of existing plants, and plant changes. The most important aspects of environmental protection, health protection, and safety are taken into account and corresponding protective measures are established.

To maintain the safety of plants throughout their life cycle, protection concepts are reviewed regularly with the operators. Legal requirements are continuously updated and their implementation is reviewed regularly in audits and safety inspections. Plants are inspected at established intervals. Like the safety concepts, they correspond to the changed state of the art to the extent required.

9.6 | Explosion protection

Plants using potentially explosive hazardous substances are subject to particularly strict safety and inspection regulations. The explosion protection concept has to be reviewed by external specialists every six years. This is done in close cooperation between the responsible authorities and external experts.

9.7 | Fire protection

In addition to the applicable legal provisions, KRAIBURG Holding issues a mandatory fire protection directive. Insurance and official requirements also have to be observed (fire protection concept, for example). The Fire Protection Officer and other experts monitor and review compliance on a random test basis. A fire protection report is prepared annually.

9.8 | Noise protection

All of the noise registers are updated every two years. The results form the basis for KRAIBURG TPE's noise reduction program. Reducing noisy areas (> 85 dB(A)) is the main objective. KRAIBURG TPE strives to reduce noise throughout production to < 85 dB(A), a level that is not harmful. The prescribed limit value for noise exposure at the property line is met.

9.9 | Hazard prevention, emergency management, and crisis prevention

When it comes to hazard prevention, being well prepared for possible incidents is crucial. KRAIBURG TPE introduced crisis management in 2015 according to KRAIBURG Holding's directives. This ensures that incidents both on and outside the site are handled appropriately. Expertise has been established in the following areas:

- Safe product handling in emergencies (fire, product spill)
- Preventive fire protection and initial measures
- Supporting emergency personnel and working with the respective authorities

Regular practical exercises are essential for the success of the hazard prevention concepts in case of an incident. The crisis management team, emergency manager, employees, fire department, and required emergency personnel carry out emergency exercises at intervals. Crisis management team exercises with emergency managers and emergency personnel are carried out regularly to put the teamwork of participants to the test. The exercises are analyzed by observers and improvement measures are derived. KRAIBURG TPE considers itself well prepared for crisis situations.

9.10 | Drinking water hygiene status

Legionella limit values are monitored. Possible risks are recorded in a hazard assessment and measures required for risk minimization are implemented. A Water Safety Team has been established to implement the recommended measures.

9.11 | Handling hazardous substances: control and approval

The goal is to replace hazardous substances with less critical or non-critical substances. This ensures that possible risks for employees are reviewed regularly and reduced to a minimum as far as possible. At the same time, the health of employees handling the remaining hazardous substances has to be protected with technical and innovative solutions. Workplace concentration limit measurements are taken regularly to determine the effectiveness of implemented measures and to confirm that the protection level is sufficient. These measurements, hazard assessments, and safety inspections form the basis for the implementation of any additional protective measures that may be required.

Using suitable personal protective equipment is an important aspect of occupational health and safety. KRAIBURG TPE provides a selection of personal protective equipment for employees according to the latest standards. The results of the workplace concentration limit measurements confirmed the high protection level. In order to maintain this, the implementation of protection concepts and the timely completion of the prescribed safety assessments and resulting technical safety measures are reviewed with the operators at regular intervals. The essential aspects of safety, health protection, and environmental protection are considered and corresponding protective measures are established.

Maintaining high health protection standards for employees is ensured by the directive "Introducing new raw materials". Hazardous substances are evaluated by trained experts before use. In the "Substitution testing of hazardous substances" work group, KRAIBURG TPE is working hard on possible substitutes for hazardous substances being used.

9.12 | Hazardous goods in reporting year 2022

No hazardous goods accidents and no incidents with hazardous goods in which persons were harmed or goods/assets of material value were damaged occurred in the reporting year.



10. Responsibility to employees: employment relationships

Employees are a key success factor for the company. Long-term employee retention is therefore an important aspect, especially since the shortage of skilled workers is worsening. Work-life balance is playing an increasingly important role. KRAIBURG TPE therefore offers a number of options for flexibility. The following rules and provisions are selected and in part abridged excerpts. KRAIBURG TPE employees have access to the original documents at any time.

10.1 | Working time at KRAIBURG TPE

The regular collectively agreed weekly working time according to Section 2 of the framework collective agreement is currently 37.5 hours, not including breaks. For part-time workers, the corresponding individually agreed, percentage weekly working time applies in proportion to the part-time employment (for example, 18.75 hours/week for 50% part time).

The customary regular weekly working time of 37.5 hours is distributed over the weekdays from Monday through Friday. As a rule, Saturday is not a workday.

KRAIBURG TPE fundamentally has two types of working time

- **Flexible working time:** Under consideration of company and personal interests, employees can determine the distribution of working time themselves in coordination with their supervisor.
- **Fixed working time:** The working time is determined using company shift models.

10.2 | Mobile work

Mobile work is possible for KRAIBURG TPE employees under consideration of various principles such as suitability of the activity, suitability of the workplace outside the company, data protection, and occupational health and safety. Employees are obligated to observe and comply with the respective applicable legal provisions for occupational health and safety in the course of mobile work. Appropriate occupational health and safety information is provided to the employees.

10.3 | Maternity protection and parental leave

In setting up and maintaining the workplace and managing tasks, KRAIBURG TPE takes the necessary steps to protect the life and health of expectant and nursing mothers. A corresponding hazard assessment for the workplace forms the foundation. Suitable places to lie down are provided in the company.

The Maternity Protection Act (MuSchG) defines phased employment bans (for example, individual employment ban, employment ban for hazardous activities).

All employees are entitled to parental leave, including part-time and marginal employees as well as fixed-term and permanent employees. Employees in vocational training are also entitled to parental leave.

10.4 | Leave

Employees are granted leave according to the collective agreement provisions, with no offsetting against holidays and no reduction of earnings, as outlined below (examples, not an exhaustive list):

- Marriage (1 day)
- Birth of children (2 days)
- Severe illness of family members in the household (2 days)
- Death of spouse, parents, children (2 days)

Longer-term unpaid leave is also possible, for example, if a child falls ill. Statutory health insurance pays benefits for lost earnings in this case.

10.5 | CareFlex Chemie supplementary long-term care insurance

Industry-wide supplementary long-term care insurance for employees under collective agreements was first agreed in 2019 with the supplementary long-term care insurance collective agreement for the chemicals industry. With the goal of looking after people in need of care and offering relief for their family members, the parties at KRAIBURG TPE decided to also extend this coverage to managerial employees and employees not covered by collective agreements. In case of an insured event according to Book XI of the Social Security Code (SGB), the insured person receives the benefits for outpatient and inpatient care agreed in the respective applicable group agreement for the chemicals industry.

10.6 | Child care subsidy

Providing care for children is a prerequisite for a sustainable work-family balance. KRAIBURG TPE therefore supports the care of preschool children of its employees with a child care subsidy.

10.7 | Social benefits

KRAIBURG TPE offers numerous social benefits for its employees. Examples include:

- Wedding and birth bonuses
- Company anniversaries
- Granting of employee loans

10.8 | Working time account

A working time account is set up for each employee and actual working time is recorded electronically. The regular collectively agreed working time has to be worked within a 12-month period, that is within a calendar year.

10.9 | Collective agreement classification, remuneration

“The federal collective agreement on remuneration in conjunction with the respective regional collective agreement on remuneration forms the basis for establishing remuneration. Employees are assigned to pay groups according to the tasks they perform. Not the job title but solely the employee’s tasks are relevant for assignment to a pay group” (Section 3(1) and (2) of the federal collective agreement on remuneration).

Numerous collectively agreed and voluntary additional benefits are granted as well.



11. Responsibility to employees: company culture

KRAIBURG TPE’s employees are the company’s key success factor. To utilize and build on this important success factor, sustainability serves as the crucial guiding principle in dealings with employees. The principles of interaction are firmly rooted in the company culture and based on mutual appreciation and respect, openness and understanding for each other. KRAIBURG TPE as a company strives for long-term employee retention, a high level of satisfaction, and attractiveness as an employer.

11.1 | Business mission

The business mission is currently being revised.

11.2 | Aspects of the company culture

- Each employee is deployed according to their abilities, strengths, and resources to the greatest possible extent.
- As an employee and supervisor, I strive for open, honest interactions and mutual appreciation.
- We are open to and respectful of other cultures and mindsets. We are committed to equal opportunities.

- Working time is managed within the framework of the company rules and provisions. Breaks are respected and freedom is used responsibly.
- Since KRAIBURG TPE competes globally, working times and conditions are subject to change. Smartphones make it possible to be reachable anywhere at any time. This poses a threat to time off for rest and relaxation. The need of employees to unwind is respected. Responding to e-mails after hours or on weekends is not expected. Special attention is paid to not sending e-mails with work orders after hours (between 7 pm and 7 am) or on weekends.
- Rules and directives are observed. This includes the compliance rules and the code of conduct and sustainability in particular.

11.3 | Equal treatment principle

The general equal treatment principle under employment law obligates the employer to treat employees equally on principle. It forbids disadvantaging individual employees in comparable positions without an objective reason. Like is like, and unlike shall be treated unlike according to its characteristics.

The general equal treatment principle under employment law must be observed by employers in all types of measures and decisions. It is separate from specific nondiscrimination rules. Granting voluntary social benefits (such as bonuses, company pension) is the main field of application. However, it is also relevant for general remuneration increases, the granting of extra pay, preparing social compensation plans, exercising the right to give instructions, and rehiring the employee (for example, in case of seasonal work, short-term employment).

The General Act on Equal Treatment (AGG) has to be observed to prevent discrimination due to certain characteristics.

Gender equality is separately regulated by Article 3(2) of the Basic Law (GG) with the objective of actual equal rights for men and women, also in terms of equal participation.

KRAIBURG TPE supports these legal foundations. Implementation examples include:

- Collective agreement on remuneration – the job is decisive for remuneration > same pay group for the same task
- Internal job postings – career development opportunities
- Employee appraisal – personal development
- Continuing education planning – vocational and/or personal development
- And much more

11.4 | Code of conduct

Forced labor including prison labor, compulsory labor, and child labor is strictly prohibited. Employing school age children and children less than 15 years of age is prohibited. Higher age limits imposed by the respective national laws must be observed. The provisions of the ILO (International Labor Organization), agreement no. 138, are excluded. Dangerous work and night work by people aged less than 18 years is prohibited. Pay and other benefits must not be less than the minimum wage prescribed by law. Compliance with all other employment law provisions is required, for example, regarding maximum working hours. The right of employees to freedom of association and wage negotiations must be respected.

11.5 | Equal opportunities, non-discrimination, and respectful treatment

All KRAIBURG employees and business partners treat other people, especially people with different origins and experiences, with respect and integrity. Discrimination based on ethnicity, gender, religion, ideology, disability, age, sexual orientation, or political leanings is not tolerated. KRAIBURG and its business partners are committed to a cosmopolitan, tolerant company culture with integrity, and are dedicated to the protection of human rights. Employees must not be subject to physical, mental, sexual, or verbal harassment or assault.

11.6 | External advice for employees

External advisers support all KRAIBURG TPE employees and their families as independent points of contact in stressful life situations and crises. Personal consultations form the confidential framework for addressing work-related, private, or health problems and finding the best solutions. Consultations are free of charge for employees, absolutely confidential, and anonymous on request. The external advisers are subject to professional secrecy according to Section 203 of the Criminal Code (StGB).

Possible reasons for a consultation:

- Stress, exhaustion, burnout
- Addiction (for example, alcohol, drug, gambling, or work addiction)
- Physical and mental illnesses
- Work-life balance
- Relationship crises, separation, divorce
- Dealing with conflicts or illness in the family
- Caring for and nursing family members
- Indebtedness or the threat thereof
- Life crises (grief, death)

11.7 | Inclusion of people with severe disabilities and equivalent status

The executive, inclusion officer, representative for employees with disabilities, and works council agree that employing people with disabilities, protecting their jobs, and promoting job creation is a social and socio-political task of special importance. Therefore, ensuring accessibility and equal opportunities for all employees along with fighting discrimination and social exclusion of people with disabilities are among the company's goals.

The inclusion agreement according to Section 166, Book IX of the Social Security Code (SGB) supports the participation of people with disabilities in working life and operational management. It contains provisions for personnel planning, design of the workplace and working environment, working time, qualification, prevention and rehabilitation, work organization, and the integration commission.



12. Responsibility to employees: lifelong learning

With various measures such as vocational training and continuing education for employees, KRAIBURG TPE pursues the objective of developing and retaining skilled workers internally according to the company's needs and requirements.

12.1 | Vocational training at KRAIBURG TPE

- Trainees are employed at KRAIBURG TPE as part of their vocational training. According to Section 1 of the Vocational Training Law (BBiG), vocational training is part of vocational education in addition to vocational training preparation, further vocational training, and vocational retraining.
- In the course of dual vocational training, KRAIBURG TPE teaches the occupational skills, knowledge, and abilities required for performing a qualified occupational activity according to the respective training regulations. In addition, KRAIBURG TPE provides opportunities for obtaining the necessary work experience. Personal instructors are appointed for each occupation.
- Trainees receive a certification bonus for good vocational school performance. A maximum of 1000 euros is granted per school year. Up to 750 euros is granted in addition for the examination of the Chamber of Industry and Commerce.
- To make the transition to a subsequent job easier for trainees, they are offered a fixed-term employment contract for 3 months according to Section 14(1), sentence 2 of the Part-Time and Temporary Employment Act (TzBfG). The term can be extended up to 6 months in case of need on the employer side.

12.2 | Continuing education and training at KRAIBURG TPE

Employee qualification and lifelong learning are keys to maintaining the company's competitiveness, protecting jobs, and safeguarding the employability of each employee. Against this background, employee education and training are becoming increasingly important as qualification and personnel development measures. KRAIBURG TPE offers various training modules for management development. Topics such as the KRAIBURG TPE leadership concept, situative leadership, conflict resolution, change management, etc. are covered. Foundation topics are repeated every 5 years.

12.3 | Continuing education planning

The HR department obtains continuing education needs for the coming year from the departments and teams in the course of annual continuing education planning. This serves as a basis for budgeting as well as the planning and approval of continuing education measures.

Based on the ascertained demand, the HR department submits a proposal for budget allocations to the various departments. The overall budget is allocated to the departments with the help of prioritization and differentiation of continuing education measures.

12.4 | Works Council and company agreements

The Works Council is a representative body elected by a company's employees (4-year mandate) and entitled to co-determination rights, in particular regarding social matters. The rights of the Works Council are distinguished from those of the unions, which are tasked with regulating the employees' work conditions through collective agreements.

Cooperation between the Works Council and employer is based on mutual trust and collaboration with the unions and employee associations represented in the company, for the good of the company and its employees.

12.5 | Tasks of the Works Council

The Works Council has a right to unobstructed internal communication with the employees. According to Section 80(1) of the Works Constitution Act (BetrVG), the Works Council has sweeping authority to adopt all measures that are in the interest of the employees and, according to Section 80(2), a comprehensive right to information within the framework of its statutory participation rights. The law grants numerous participation rights of varying intensity to the Works Council, from the right to information to genuine co-determination rights where the employer requires the consent of the Works Council.

Examples of the co-determination rights (excerpt from Section 87 of the Works Constitution Act (BetrVG)):

- Matters of order in the company and employee behavior
- Distribution of working time and breaks
- Payment of remuneration
- Establishment of general principles for leave
- Form, design, and administration of the company's social services
- Etc.

Voluntary agreements (excerpt from Section 88 of the Works Constitution Act (BetrVG)) on various topics can be concluded in addition, for example:

- Measures to support the accumulation of capital
- Measures for the integration of foreign employees
- Measures for the integration of people with disabilities
- Etc.

12.6 | Company agreements

Company agreements are collective provisions that establish company-specific basic conditions. They are directly applicable and mandatory for the respective scope. According to Section 77 of the Works Constitution Act (BetrVG), company agreements have to be concluded jointly by the Works Council and employer, and recorded in writing. They must be signed by both parties. The employer has to display the company agreements in a suitable location in the company.

The Chair of the Works Council is relieved from general duties and has their own space that can be locked. All employees have the opportunity to voice their concerns to the Chair or other member of the Works Council.



13. Suppliers and raw materials

13.1 | Sustainable procurement

KRAIBURG TPE views sustainable procurement as one of the key topics for responsible corporate governance. The company strives to build responsible supply chains with regard to social and ecological aspects. This applies to responsibility for human rights as well as ecological and social standards.

As the basis of values for requirements in the supply chain, KRAIBURG TPE is guided by external frameworks including the UN’s Universal Declaration of Human Rights, the UN’s Sustainable Development Goals, the UN Global Compact, the principles of the International Labor Organization, and the OECD principles for multinational companies. Suppliers are asked to sign and correspondingly recognize the current version of KRAIBURG TPE’s code of conduct and sustainability (also see “Responsible corporate governance”). Standardized self-assessment questionnaires are used in addition since 2020.

KRAIBURG TPE condemns forced and child labor. The company also distances itself from all forms of discrimination and provides equal opportunities. The company complies with national employment laws and provisions for the protection of its employees, and expects similar standards from its suppliers.

Supplier management by Raw Materials Procurement is regulated by a corporate standard describing the topics of supplier qualification, supplier evaluation, and supplier development. Manufacturers of raw materials are asked about environmental management aspects, both in the qualification phase and in the annual supplier evaluation. The Ecovadis platform is increasingly being used as a tool for the evaluation of suppliers regarding sustainability and social responsibility going forward.

13.2 | KRAIBURG TPE guidelines for sustainable procurement

- In accordance with the German law on the duty of care in the supply chain, KRAIBURG TPE has pledged to continuously monitor and support compliance with social and environmental standards along the entire supply chain.
- KRAIBURG TPE was engaged in the ISCC PLUS certification process during the reporting period. This certification mechanism promotes social and environmental standards and guarantees continuous monitoring of the supply chain.
- KRAIBURG TPE is Ecovadis certified (silver for 2022) and expects comparable performance from its suppliers.
- Suppliers have to sign the KRAIBURG TPE code of conduct for suppliers and meet its requirements. These include responsible environmental management, safe work conditions, respectful and dignified treatment of employees and third parties, and responsible corporate governance.
- KRAIBURG TPE is expressly in favor of certification according to DIN EN ISO 9001:2015, DIN EN ISO 14001:2015, and DIN EN ISO 45001:2018.

13.3 | Material compliance

KRAIBURG TPE strives to comply with all relevant specifications for the materials and substances that are used.

Relevant legislation includes Regulation 1907/2006/EU concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Regulation 1272/2008/EU on classification, labeling and packaging of substances and mixtures, Regulation 2019/1021/EU on persistent organic pollutants, Directive 2011/65/EU on the restriction of the use of certain hazardous substances (RoHS), and the chemicals regulation. Various channels are used for communication with customers regarding the aforementioned regulations and directives. These include safety data sheets according to Regulation 1907/2006/EU, the automobile industry's IMDS system, and customer-specific single documents.

Relevant specifications and legal requirements are continuously monitored with the goal of identifying changes in a timely manner. The objective is to inform customers early on about necessary changes to the products or their regulatory classification. In this spirit, existing raw materials that are already in use are also re-evaluated when the provisions relevant for them change. Their use can be questioned and a substitution process may be initiated. Aside from whether and to what extent substitution is technically possible for the raw material in question, this process also produces a schedule for informing customers and, where applicable, for the implementation of the intended substitution.

15. Conclusion

Expanding the range of sustainability topics continued in reporting year 2022. Formulating qualitative objectives and strategy development were the top priorities. Day-to-day business processes and other routine procedures were reviewed. Identifying optimization potential was and remains the goal. Further progress can also be observed on the product level for this reporting year, with KRAIBURG TPE helping customers take the next step toward the circular economy. For example, the certification process for ISCC PLUS-compliant products was prepared and launched in 2022. With THERMOLAST®R, KRAIBURG TPE introduced a new category of products and services at the leading trade fair for the plastics industry, “K 2022”, that supports the sustainability projects of customers.

Various reporting obligations such as those of the Corporate Sustainability Reporting Directive have already been central topics for KRAIBURG TPE since the past reporting year and will remain a top priority. Standardizing the company information to be published with regard to sustainability leads to greater transparency, comparability, and measurability. This makes it easier to evaluate and readjust individual measures in the areas of safety, the climate, and energy among others. Other important, key topics for the next reporting year include the following spheres of activity: Improvements in energy, climate, and water management, establishing and implementing the 2031 climate program, and further development of circular management. KRAIBURG TPE also feels obliged to build awareness for occupational health and safety and a practiced safety culture. The development of expertise and transfer of knowledge regarding sustainability across departments also remain on the agenda for every KRAIBURG TPE employee.

Waldkraiburg, 2 May 2023



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Responsibilities:

Monika Hofmann and Karl-Heinz Ortmeier are responsible for the contents of KRAIBURG TPE's 2022 sustainability report.

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List of abbreviations

- CDP = Carbon Disclosure Project
- CSRD = Corporate Sustainability Reporting Directive
- EL = Extruder Line
- ESRS = European Sustainability Reporting Standards
- GRI = Global Reporting Initiative
- OKKL = Open Cooling Circuit
- PCF = Product Carbon Footprint
- SDG = Sustainable Development Goals