



2025 SUSTAINABILITY REPORT

IN ACCORDANCE WITH THE VOLUNTARY SUSTAINABILITY REPORTING STANDARD FOR SMES (VSME)

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EDITORIAL

With our 2025 Sustainability Report, we are continuing our tradition of transparent reporting – while also opening a new chapter.

The past few years have been marked by rapid developments in sustainability regulation. In response to ever-increasing requirements – particularly those stemming from the European CSRD Directive – there have recently been further adjustments and discussions regarding simplifications at the European level. We, too, prepared early on for the upcoming requirements, established processes, and further developed our data infrastructure – even though we sometimes felt that the scope and level of detail of the required information were not appropriate for a company of our size and were overwhelming for our organization, a typical medium-sized business. We therefore welcome the new or forthcoming measures that have been decided upon, which will give us greater opportunity to report on topics relevant to us in a more practical manner.

That is why we have decided to transition our reporting to the voluntary VSME standard starting with the 2025 fiscal year. For us, this is a sensible and practical step: The VSME enables transparent and structured sustainability reporting that remains proportionate while meeting the needs of our customers and partners.

Our decarbonization pathway remains the central issue here. The transformation of energy-intensive industrial processes is a major challenge that requires long-term investment, technological advancement, and a reliable regulatory framework. That is why we continue to work on making our processes more energy-efficient and reducing emissions step by step. Our long-term climate goals remain just as important as ever. For us, sustainability also means not jeopardizing our economic foundation, which is a prerequisite for the upcoming investments. The challenge of balancing the pace of transformation with maintaining (international) competitiveness is a responsibility we must embrace. While much of this is within our own control, some basic

prerequisites are also the responsibility of policymakers and society: an efficient energy system that meets the needs of industry, and access to competitive green energy. The broader discussions about the necessary transformation are also reflected within our company.

At the same time, we also see great opportunities in other areas. This is particularly evident when it comes to the circular economy: Because we use recycled paper as our primary raw material, the circular economy has always been an integral part of our business model. In light of the upcoming European PPWR Regulation, which takes effect in August 2026, we see additional potential here for recyclable and resource-efficient packaging solutions.

Social issues also remain important to us. The development of our employees, a strong training program, job security, and long-term employee retention are crucial factors for our future success. That is why we are continuing to expand our activities in the areas of human resources development, workplace safety, and leadership culture. Overall, we view sustainability as a long-term development process – one that is pragmatic, ongoing, and focused on the issues where we can truly make a difference. We would like to thank all our employees, as well as our customers, suppliers, and partners, who are walking this path with us.



Kristian Evers

Shareholder at Papier- und Kartonfabrik Varel GmbH & Co. KG



GENERAL INFORMATION

ABOUT THIS REPORT

Everything at a glance: PKV's new sustainability report documents the company's progress for fiscal year 2025 in accordance with the EU's recognized Voluntary Sustainability Reporting Standard (VSME).

This document provides key stakeholders in PKV with a comprehensive overview of our sustainability efforts, achievements, and challenges since our last report. In this way, we offer interested parties a transparent look into our practices in the areas of environmental, social, and corporate governance (ESG) and aim to demonstrate our commitment to accountability and transparency. This report covers the activities and performance of Papier- u. Kartonfabrik Varel GmbH & Co. KG from January 1 through December 31, 2025. The report was prepared on an individual basis. The exact scope and boundaries of this report are detailed in this chapter.

In this sustainability report, we are voluntarily aligning ourselves for the first time with the VSME standard published by the European Financial Reporting Advisory Group (EFRAG). Our previous reports were based on the German Sustainability Code (DNK). Our new alignment with the VSME standard helps us prepare for future requirements in light of the ongoing regulatory uncertainty surrounding the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS).

We have decided to use both the core and supplementary modules of the VSME standard and to report additional data points and information that either serve other purposes (e.g., EcoVadis reporting) or are company-specific in nature. Our approach to addressing the various topics and modules of the VSME Standard is based on our identification and prioritization

of material sustainability issues, which we conducted as early as 2024 as part of the double materiality assessment in accordance with the ESRS. By prioritizing topics, we ensure that our report addresses all issues that are most significant to our stakeholders and our company based on their impacts, opportunities, and risks in these areas. We are committed to continuously improving our sustainability practices and also conduct an annual review to determine how we can enhance the scope, quality, and validity of our reporting.

We hope you enjoy learning more about our sustainability efforts, achievements, and other goals. Questions about this report can be directed to info@pkvarel.de at any time.

ABOUT US

Papier- u. Kartonfabrik Varel GmbH & Co. KG is reporting for the period from January 1, 2025, to December 31, 2025.

Key figure	2025
Legal form	GmbH & Co. KG (Limited Partnership)
NACE Sector Classification	17.12 Manufacture of paper and paperboard
Country of primary business activity	Germany
Geolocation	53.4029, 8.1363
Total assets €	€ 388,221,492.95
Total revenue €	€ 418,507,517.76
Total number of employees (headcount)*	661

Papier- und Kartonfabrik Varel (PKV) is a German manufacturer of paper and cardboard made from waste paper for use in the packaging industry. The company is based in Varel, Lower Saxony. Our annual production capacity is 970,000 metric tons, which is equivalent to approximately 11% of the consumption of our products in Germany – making us one of the largest production sites in the German and European paper industry. We achieved a turnover of €418 million in 2025 and employed around 660 people.

* This figure represents the average number of employees working at during the reporting year, as stated in the annual financial statements for the fiscal year.

We produce fluting and linerboard (white/brown) from waste paper, as well as grey and brown board in pigmented, white coated and laminated grades. PKV governs its operations through management systems and standards and holds the following certifications:

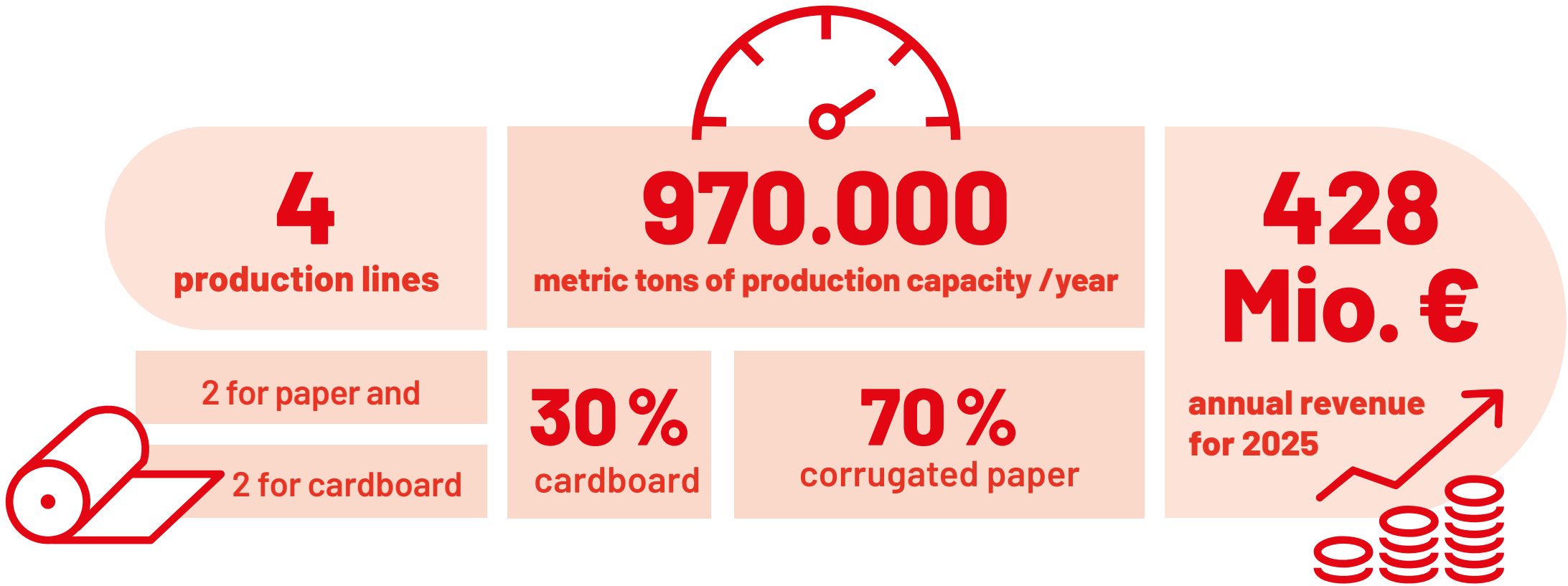
- ➔ FSC®-C074387 (Forest Stewardship Council® – Sustainable Management of Wood Fibres)
- ➔ DIN EN ISO 9001 (quality management)
- ➔ DIN EN ISO 14001 (environmental management)
- ➔ DIN EN ISO 22000 (food and product safety management)
- ➔ DIN EN ISO 45001 (occupational health and safety management)
- ➔ DIN EN ISO 50001 (energy management)
- ➔ Specialist waste management company (according to Section 56 Circular Economy Act – KrWG)

The processes in these areas of the management system are regularly reviewed by certified external auditors. These management systems/standards have defined or established processes at PKV that are geared towards implementing the sustainability strategy. The relevant sustainability aspects are incorporated into the processes and reporting of the management systems at regular intervals.





In the year under review, 59% of our products were sold in Germany and 41% abroad. Our customers from the German and international packaging industry use them to produce cardboard boxes made of corrugated board and cardboard, which can be used e.g. for food, consumer goods, industrial goods, pharmaceutical products or in online trade and then recycled again.



STRATEGY

**Business model and
sustainability at PKV**



OUR RESPONSIBILITY

SUSTAINABILITY IS IN OUR DNA – RECYCLING PAPER SINCE 1950.

Harnessing continuous improvement for the sustainable and competitive production of high-quality packaging papers and board grades is the most important goal of our company. We have been using almost 100% waste paper as a raw material since 1950 and are deeply convinced that the sustainability of our products and processes, their convincing quality and our economic success are inextricably linked. We are part of a closed-loop recycling system that has been established worldwide for decades and thus make a valuable contribution to resource-efficient development. Our sustainability strategy has therefore always been part of our DNA and is also an integral element of our corporate strategy.

We have been fulfilling our responsibility to contribute to sustainable development for many decades as a manufacturer of high-quality packaging paper and cardboard, both made almost entirely from recycled waste paper. It is our firm conviction that fibre-based, recyclable packaging delivers game-changing advantages in various areas of sustainability.

Building on this self-perception, we have always viewed sustainability aspects as vital to our investments, products and processes. Certification of all our products according to the relevant FSC® standards and our voluntary classification according to the EcoVadis standard underpin this approach even further. As a family business with strong roots in the region, we unfailingly embrace our responsibility for people and the environment.

Our vision is to maximise climate neutrality in the production of our papers and cardboards – and thereby make our best possible contribution to sustainable development. We believe that this vision is consistent with the goals of the Paris Climate Agreement of 2015 and the 17 Sustainable Development Goals (SDGs) of the United Nations.



Aside from recycling waste paper as the foundational aspect of our activities, we as a company are fully equipped to make other important contributions to sustainable development.

The strategic focus on sustainable development was once again underscored in the spring of 2025 by the 10-year strategy developed by management and approved by the shareholders. In an environment that is volatile both economically and politically, we want to seize the opportunity to prepare our company for the future. Our goal is to strengthen the competitiveness of PKV and maintain its reliability as a provider, partner, and employer. Our path toward climate neutrality lays one of the most important foundations for this. In addition, other aspects of sustainability also shape this strategy, including the most extensive use possible of available recycled fibres, our ongoing commitment to workplace safety, and our continuous efforts to develop a modern team and leadership culture.

Sustainability responsibility

In view of the large number of regulatory requirements identified, some topics and projects were prioritised by the sustainability management division together with the management. Since 2023, sustainability has been included as a separate category in the strategic goals. The achievement of the prioritised strategic sustainability targets for 2026 will continue to be ensured by the respective project managers with their working groups and monitored by the sustainability manager in regular status meetings. The sustainability management team leader reports on the status of all sustainability activities and the achievement of targets within the company at the quarterly management meeting.

As one of our most pressing issues for the future, sustainability continues to be a matter for senior management to address (as well). As a reflection of its importance, sustainability management also reports directly to commercial management and remains in regular dialogue with the heads of department, who carry operational responsibility for implementation and also report on target achievement. These include, above all, human resources, the purchasing departments, sales, technical customer service, plant and product development, as well as management systems and compliance.

The internal officers for our management systems provide vital support within this oversight structure. Occupational health and safety management (ISO 45001), environmental management (ISO 14001), energy management (ISO 50001) and certification by the Forest Stewardship Council® (FSC®) warrant particular mention in the area of sustainability. All officers advise and support the company in complying with these strict voluntary standards. They also participate in regular internal and external audits (conducted by accredited certification bodies).

KEY SUSTAINABILITY ISSUES

In preparation for the Corporate Sustainability Reporting Directive (CSRD), which was previously expected to apply to PKV in 2026, an update of the CSRD materiality assessment for PKV was carried out in the first and second quarters of 2024. Originally, the identification of material sustainability issues would have been taken as the basis for reporting in accordance with the European Sustainability Reporting Standards of the CSRD Directive in the non-financial information contained in the annual financial statements for 2026. At the time of publication of this report, it is clear that PKV is not, for the time being, subject to CSRD reporting obligations due to the Omnibus procedure.

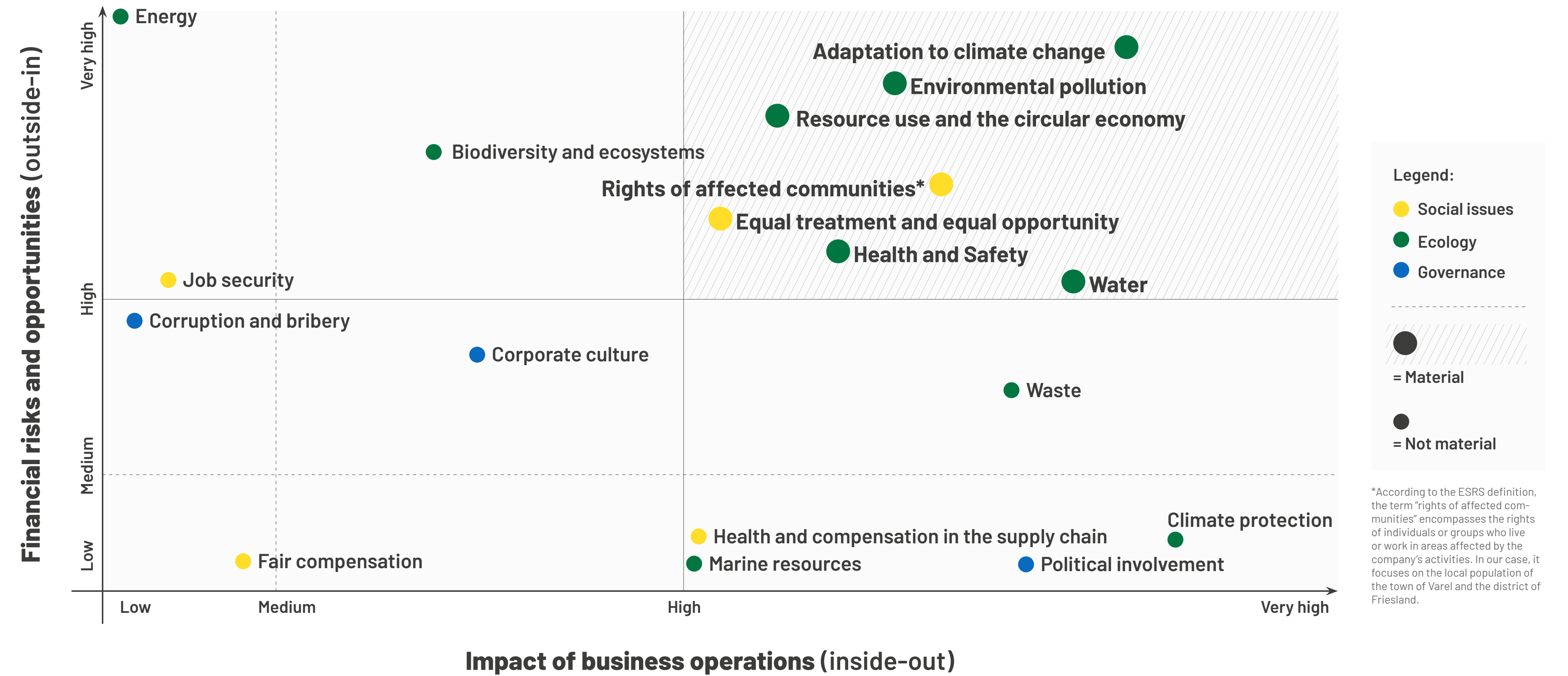


For the 2025 financial year, the sustainability topics identified as material continue to remain relevant and have been further pursued within the framework of our sustainability strategy, including the definition of corresponding targets and measures. As part of a strategic goals workshop in November 2025, some sustainability topics were further strengthened and anchored in concrete operational goals and measures for achieving the goals in 2026. **Accordingly, this report is structured below to address these sustainability topics, which are essential to us.** The results are presented in the chart below, the PKV materiality matrix.

The valuation methodology used complies with the dual materiality requirements under CSRD and ESRS. During the scoping phase, the company profile was established, defining the value chain, the time horizons, and the level of analysis. As a result, a list of aspects was drawn up that reflects both the CSRD requirements and the company's actual situation. In addition, the stakeholder approach for involving relevant stakeholders in the assessment was prepared as

a second step. The analysis involved a combination of various steps to analyse and define the key aspects from a holistic perspective: Narrowing down the long list of aspects to a company-specific short list; stakeholder surveys/interviews (internal and external); 360° analysis and desk research; validation of the results in consultation with the company. In the **results table**, each aspect is evaluated in terms of impact and financial materiality. The **materiality of impact** refers here to the extent, scope, and irreversibility of the impacts (positive/negative) on people, the environment, and society with regard to a specific aspect. The **financial materiality**, on the other hand, assesses the likelihood of occurrence and the magnitude of a financial risk or opportunity arising from an aspect that affects the company from outside. Only if an aspect was considered material in both respects and exceeded the threshold of 2.5 (on a scale of 0–5) was that aspect classified as material overall. As a result, two matrices emerge: one showing negative impacts and financial risks, and the other showing positive impacts and financial opportunities.

DOUBLE MATERIALITY ASSESSMENT – PKV MATERIALITY MATRIX



To illustrate this, we have used the following examples:

Aspect:
**Adaptation to climate change
(Negative/Risk)**

PKV uses fossil fuels (natural gas, diesel) to generate electricity and steam, for heating, and to power its company vehicle fleet. The combustion of these fuels produces greenhouse gas emissions, which contribute to climate change (= negative impact). Extreme weather events caused by climate change – such as floods or water shortages – could theoretically, in the long term, disrupt the company's own production as well as production along the entire value chain due to the high water requirements, jeopardize production capacity, and result in lost revenue (= financial risks). Additional financial risks arise from transitional risks associated with the energy transition and the shift to alternative energy sources, which entails significant investments.

Aspect:

**Resource use and the circular economy
(Positive/Opportunity)**

Including additional waste streams (such as (heavily) coated paper packaging, which is currently incinerated) offers a likely way to keep significant amounts of material in the cycle (= positive impact) Increasing consumer demand and, consequently, customer demand for recyclable PPK (paper, board and carton) packaging (potentially also in the context of the PPWR/circular economy strategy) could facilitate market advantages and thus support revenue growth. (= financial opportunities)

ECOLOGY





CIRCULAR ECONOMY

For 75 years, PKV has used almost exclusively waste paper as a raw material for the production of paper and cardboard – the only exceptions are small amounts of pulp from sustainably managed forests, which are added to specific grades for technical reasons, as well as a few external laminating papers made from virgin fibres, which consist of recycled content and a small proportion of virgin fibres. PKV was one of Germany's earliest paper mills to rely almost exclusively on waste paper as a raw material.

Since 1950, PKV has used almost exclusively waste paper as a raw material for the production of paper and cardboard – the only exceptions are small amounts of pulp from sustainably managed forests, which are added to specific grades for technical reasons, as well as a few external laminating papers made from virgin fibres, which consist of recycled content and a small proportion of virgin fibres. PKV was one of the first paper factories in Germany to rely almost exclusively on waste paper as a raw material.

As a result, PKV has been contributing for decades to a functioning circular economy encompassing paper and board production, the use of its products in industry and private households, and subsequent recycling, thereby conserving natural resources. Fibres used in the production of corrugated base paper and cardboard can be recycled to a high standard and reused more than 25 times (Eckhart, 2021; Kreplin & Putz, 2020)¹.

In Germany, on average, over 84 per cent of such packaging consists of recycled paper. The return rate for waste paper is similarly high: Around 78 per cent of paper, cardboard and carton products are disposed of properly (UBA, 2025; Die Papierindustrie e. V., 2025). With a recycling rate of 86.6% in 2023, paper and cardboard lead the way among packaging materials (annual surveys by Gesellschaft für Verpackungsmarktforschung mbH (GVM), 2025).

We also apply the principles of the circular economy to our other key resources – including, in particular, water and energy. The recycling of waste paper also requires natural resources – namely water and energy. However, these resources can be used more sparingly in the processing of waste paper compared to the production of virgin fibre products.

¹ Eckhart, R. (2021): Über die Rezyklierbarkeit von Faltschachtelkarton. In: Wochenblatt für Papierfabrikation, 11/2021, December 2021; Kreplin, F., Putz, H.-J., (2020): Ermittlung der Eigenschaftsänderungen von Wellpappe beim mehrfachen Recycling und Abschätzung der maximal möglichen Umläufe. Darmstadt, https://www.pmv.tu-darmstadt.de/media/fachgebiet_pmv/bibliothek_1/aif_veroeffentlichungen/AiF_19685_Schlussbericht.pdf



Water is the most important pulping, transport and sorting medium and is hence indispensable for paper and cardboard manufacturers. This applies from the preparation of raw materials to web creation and the finished web to comply with specific strength and appearance requirements. We use the fresh water required for this as carefully as possible and strive to reuse it as much as possible through multiple and cascading uses in our production processes (for more information, see the chapter on [Environmental Protection – Water](#)).



We do not simply dispose of all plastic waste, metals, and steel straps – which are used to bundle the bales of waste paper and which we cannot recycle – found in the waste paper. We use various systems to sort this waste out of the recovered paper that is dissolved in water. The reject processing plant we built in 2018 for this purpose is able to break down, crush, sort, dry and compact those parts of the waste that are suitable for further processing. Subsequently, we press this reject material into pellets, which are used as fuel, for example in the cement industry or in power plants that generate electricity and/or district heating, thereby replacing fossil fuels.

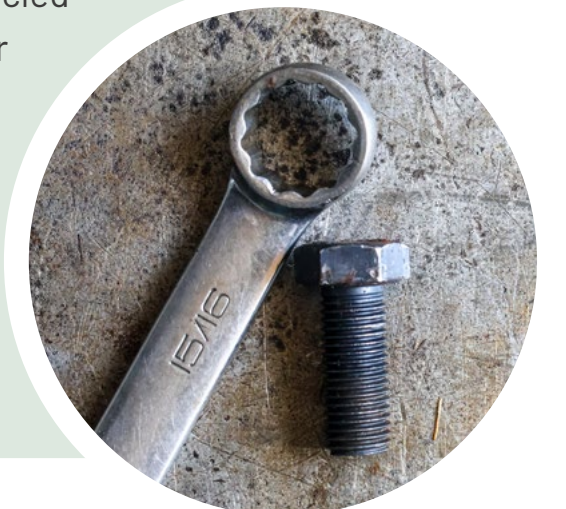
Our circular economy practices

The production of paper and cardboard from waste paper also requires energy. This comes in particular in the form of steam to dry the paper and cardboard webs, but also in the form of electricity to operate the systems. Our four gas turbines, five high-pressure steam boilers and four steam turbines use a highly efficient combined heat and power (CHP) process to generate up to 140 MW of steam per hour and more than 50 MW of electricity, depending on the steam off-take. By consistently focusing our energy production on combined heat and power, we are able to make the most complete use possible of our primary energy source, natural gas, while conserving resources.



In addition, the process water treatment plant produces its own biogas, which is primarily used in two gas engines with a combined electrical output of just under 2 MW to generate electricity. In addition, the flue gas heat is used for steam generation, and the engine heat is used to preheat boiler feedwater. Another quantity of biogas is used as a substitute for thermal purposes in a steam generator otherwise powered by natural gas.

When we look at our other operational processes, we are also constantly and intensively focused on maintaining our equipment and machinery at a high standard – simply because of their high cost and capital intensity, as well as their technological maturity – before we would consider replacing them. In keeping with our primary resource – recycled paper – all previously shredded office paper waste naturally finds its way back into the production process. We also recycle all kinds of paper waste, which the public can conveniently drop off in the paper bins on our premises.



Our **specific goals** in the area of waste (see the chapter on Environmental Protection – Waste), which are designed to increase recycling rates relative to waste disposal and to **minimizing fibre losses < 7.7% in 2026** – also contribute to the promotion of circular economy practices.

Goals and measures for 2026–2029

Goal	Measure
→ Ensuring and improving the recyclability of our products	→ Participation in the industry project to monitor potential recycling contaminants (Q4/2027)
→ Implementation of the PPWR requirements within our scope of responsibility as a supplier of corrugated base paper and cardboard to our customers	→ Fulfilment of PPWR disclosure and information obligations toward our customers within the scope of our area of responsibility (08/2026)
→ Use of alternative secondary fibres	→ Participation in the transregional/interregional research project DNL (Interreg Germany-Netherlands* program) on the use of alternative fibres and the production of a compostable agricultural fabric for agriculture from biogas production residues (2029)(Q4/2027)

In 2025, participation in the DNL project began with the first meetings.

Circular economy key metrics

Key figure	2023	2024	2025	Einheit
Annual mass flow of relevant materials (total) (VSME)	878,217	937,712	987,494	t
Breakdown by material**:				
Waste paper	828,141	880,776	925,470	t
Lining paper	18,864	21,973	25,048	t
Auxiliary materials	31,212	34,962	36,976	t

** This takes into account materials that ultimately contribute to value creation. The term "auxiliary materials" refers to everything needed for production, including chemicals, starch, glue, fillers, etc.



Deutschland – Nederland

Agro & Fibres

provincie Drenthe



Ministerie van Economische Zaken en Klimaat

≡ provincie
Gelderland

provincie Overijssel



**Niedersächsische
Staatskanzlei**

* Funding Information: The project receives financial support from the European Union and the Interreg partners as part of the Germany-Netherlands Interreg program.

ENVIRONMENTAL PROTECTION

Environmental protection and sustainable production processes and products are both a priority and a commitment for us. Our primary goal is to reconcile sustainable development – in social, ethical, and environmental terms – with economic development. This is a fundamental part of our corporate policy and reflects our responsibility toward the region and the people who live here. To meet our commitment to environmentally friendly and sustainable paper and cardboard production, we continuously optimize our production processes with an eye toward environmental sustainability.

AIR, WATER, AND SOIL POLLUTION

As an industrial company with complex production processes and large-scale facilities and machinery, our plant generates emissions that we cannot completely avoid but can regulate so that they do not have any harmful effects on people, the environment, or society.

As part of our ISO 45001-certified environmental management system, we identify our significant environmental aspects, along with their areas of impact, binding obligations, and stakeholder requirements. Based on this, we assess the relevant risks, develop measures, track key performance indicators, and continuously work to make improvements in the various areas of impact. The annual audit process and the environmental management system report provide detailed information on the status of the measures implemented, any changes affecting environmental management, performance, monitoring, and effectiveness, as well as opportunities for improvement.

Key issues in this context include air, noise, odours, waste, energy, and water. In this chapter, we discuss the relevant measures in the areas of air quality, noise, and odours.

Noise

Our plant is an industrial facility that will inevitably generate noise, whatever we do. We have been issued an operating licence by the Trade Supervisory Office on the basis of the Federal Immission Control Act, which provides the legal framework to mitigate this potential risk. This licence sets out a variety of limit values for noise perception at different points outside the factory premises, all of which we comply with. Compliance must be checked every three years by a measuring centre notified in accordance with Section 29b BImSchG. In addition, a noise specialist prepared a noise forecast model for our entire premises, which involved more than 300 individual measurements. The expert uses this forecast model to determine necessary noise protection measures in the case of modernisations or investments. This forecast model is updated regularly following changes. We take any reports from neighbours concerning disturbing noises seriously and eliminate the sources. At the same time, we are constantly reducing the noise emitted at our plant, for example by using electric stackers in the waste paper yards and new power plant technology.





Odour

PKV manufactures paper and cardboard almost exclusively from waste paper. Unfortunately, odours cannot be entirely excluded in this process. But we make regular investments in new technologies to reduce odour levels as far as possible. We are also subject to strict limit values set forth in our operating permit, and our compliance with these requirements is checked regularly by external experts according to the intervals stipulated by law.

Starchy waste paper as raw material, water and warm temperatures provide an ideal habitat for acidifying bacteria that produce naturally occurring organic acids. This cannot be eliminated entirely in the production of paper. Paper and cardboard machines use sieves, felts, rollers and drying cylinders to produce a homogeneous web from a liquid mixture (paper fibres and water). Most of the water is drained mechanically. The rest must evaporate during the drying process. Some of this water vapour passes through vents and escapes above our factory. People are able to smell even the slightest concentrations of the natural sub-

stances dissolved in this vapour. We are therefore unable to entirely prevent an odour of “wet paper” emanating from our plant. But it does not present any health risk. Our company is required to comply with the Federal Immission Control Act. This means that a permit or notice must be obtained from the competent authorities for any change to the facilities, during which any possible environmental impact is always evaluated. This applies in particular if it potentially impacts noise, odour, soil protection, immissions/emissions of substances, wastewater discharge and groundwater extraction. These permits and notices include regular monitoring to ensure compliance with emission/immissions guide values, which are measured by officially approved measuring stations and independent experts. We are therefore able to infer that we do not release any emissions in concentrations that may present a health risk.

There are a variety of ways in which we can counteract odour development. Some are mechanical, while others involve the addition of lime milk and soda lye

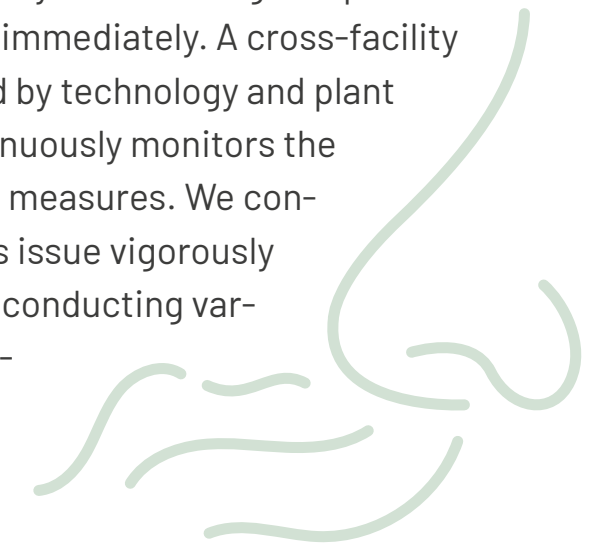
to stabilise the pH value and hence worsen the conditions for the growth of acidifying bacteria. Broadly speaking, though, we encounter another dependency at this point: It is our aim to reduce the consumption of fresh water as far as possible at our plant – but reducing odour development requires the use of more fresh water (dilution effect).

A suitable additive to reduce microbiological activity is also added at key points in the production process. In doing so, we strictly adhere to the principle of “as much as necessary, as little as possible” in order to ensure optimised operation of the downstream microbiological process water treatment system at our plant. The auxiliaries we use degrade completely in the water cycles, which prevents any impact on the environment.

As a final step, the previously unwanted process (acidification) is deliberately induced in the process water treatment system in order to break down the dissolved starch component in a controlled setting. Among other things, ongoing modernisation of the process water

treatment system also involves the installation of cutting-edge technologies to replace older components. This contributes to minimising odours and enables the return of more biologically purified process water to the production process for dilution purposes.

The reduction of odour emissions continued to be a high-priority goal in 2025. An odour-reduction plan was submitted to the Trade Supervisory Office; according to simulations, the plan is expected to have a positive effect, and its implementation will take several years. An agreement was reached with the Trade Supervisory Office to begin implementing Section A immediately. A cross-facility team of experts led by technology and plant development continuously monitors the status of goals and measures. We continue to pursue this issue vigorously and are constantly conducting various tests and measurements.





Materials

As part of our ongoing process optimization efforts, we are constantly exploring ways to further reduce our use of materials in production. Last year, we reported that a new dosing technology allows us to save approximately 114 metric tons per year in retention agents that we previously used. In 2025, we further reduced the use of retention aids and impurity fixatives and replaced them with bentonite on our Paper Machine 5 (by 50% and 29%, respectively).

Although we had to use more bentonite overall, in the event of an accident and subsequent leakage, bentonite offers environmental advantages due to its natural origin (a natural clay mineral); because of its high cation exchange capacity and low permeability, it helps bind pollutants naturally and can prevent them from entering the groundwater. In addition to this environmental benefit, we are also able to achieve energy savings of 13,000 MWh per year through this initiative.

Emissions into the air and water

Key figure	2023	2024	2025	Unit
Air emissions [by pollutant] <i>(VSME)</i>				
003 - Carbon dioxide (CO ₂) [pollutant release in air] according to PRTR	246,125,750	267,036,560	272,694,361	kg/a
008 - Nitrogen oxides (NO _x /NO ₂) [pollutant release in air] according to PRTR	137,974	133,081	132,712	kg/a
Emissions into water [by pollutant] <i>(VSME)</i>				
076 - Total organic carbon (TOC) (as total -C or COD/3) [pollutant release in water] according to PRTR	172,923	189,502	177,440	kg/a

Measures implemented in 2025

Odour working group:

- Probiotic trial completed: The biocenosis in the process water systems was to be adjusted to include fewer odour-producing strains, but unfortunately this effort was unsuccessful.
- Preparations for the biocide experiment have begun
- Additional pipeline cleaning to increase the use of biologically pure and biologically treated process water streams.

Goals and measures for 2026–2029

Goal	Measure
→ Reduction of odour and pollutant emissions	→ Conducting a biocide trial with the goal of reducing bacteria in the process water systems, stabilizing the pH level, and thereby reducing odour formation (Q4/2026)
→ Reduction of odour and pollutant emissions	→ Installation of continuous emissions monitoring systems at the power plant (ongoing through 2026)



WASTE

PKV operates facilities in accordance with the Federal Immission Control Act (BImSchG) with appropriate waste management. This guarantees lawful disposal at all times in cooperation with certified specialist waste management companies. PKV is also a certified specialist disposal company. The internal waste management officer advises management and other competent persons. The officer also prepares an annual report documenting waste pathways from generation to recycling or disposal, certificate review, waste performance indicator trends as well as compliance with legal requirements, mainly by conducting regular inspections of the company's own accumulation points, notifying the company of any deficiencies and suggesting ways for their elimination. Continuous improvement approaches are also an integral part of waste management.

Waste paper also increasingly contains plastic waste. Unwanted, but too good to just throw away. We use various systems to sort this waste out of the recovered paper that is dissolved in water. These rejects consist of wet, shredded plastic waste mixed with paper fibres or even scrap metal and sand. This waste was disposed of directly in the past (the plastic was generally sent to waste incinerations plants), which required a significant number of transports and incurred high costs.

Currently, our strategy is to process even these rejects into a usable product as much as possible. The reject processing plant we built in 2018 is able to break down, crush, sort, dry and compact those parts of the waste that are suitable for further processing. We primarily use waste heat from paper and cardboard production for drying. Then we press the rejects into pellets.

The pellets are used as fuel, for example, in the cement industry or in power plants that generate electricity and/or district heating, thereby replacing other energy sources.

In the future, however, we plan to use this energy ourselves in a planned alternative-fuel steam generator to ensure sufficient energy supplies as part of our decarbonization efforts and the gradual phase-out of natural gas, since we will not be able to obtain 100% of our electricity from the utility grid via the 110 kV line for the foreseeable future. We cannot meet 100% of our energy needs with electricity (from renewable sources) – in part because the power grids cannot handle that volume, including redundancies and peak load coverage, even after the planned expansion of the power grid.



Our **current specific goal** in the area of waste – which is designed to increase recycling rates relative to waste disposal – is

- **Minimizing fibre loss < 7.7% in 2026**
- **Measure:** Through rigorous monitoring and analysis of fibre loss, this goal is expected to be achieved by Q4 2026.

In 2025, preparations were made to divert our felts and screens from thermal recovery to a recycling process in which they are turned into plastic pellets that can be used in recycled plastic products. This describes another measure that is in line with our ongoing approach to recycling waste, such as the plastic rejects from the reject processing plant.

Waste statistics

Key figure	2023	2024	2025	Unit
Total weight of waste <i>(PKV)</i>	57,163	63,701	62,113	t
Total annual waste generation, broken down by type (hazardous) <i>(VSME)</i> / Total weight of hazardous waste	33.5	52.0	65.3	t
Percentage of hazardous waste <i>(EcoVadis)</i>	0.06	0.08	0.1	% of total waste
Waste intended for disposal (hazardous) <i>(VSME)</i>	17.4	19.8	17.7	t
Waste diverted from disposal for recycling or reuse (hazardous) <i>(VSME)</i>	16.1	32.1	47.6	t
Total annual waste generation, broken down by type (non-hazardous) <i>(VSME)</i> / Total weight of non-hazardous waste <i>(EcoVadis)</i>	57,129	63,648	62,048	t
Percentage of non-hazardous waste <i>(EcoVadis)</i>	99.9	92.9	99.9	% of total waste
Waste intended for disposal (non-hazardous) <i>(VSME)</i>	2,998	2,959	3,672	t
Waste diverted from disposal for recycling or reuse (non-hazardous waste) <i>(VSME)</i>	54,132	60,688	58,376	t
Production waste for recycling	32,021	43,313	40,020	t
Waste from reject processing plant for recycling	15,226	16,542	16,997	t
Other waste for recycling	4,900	867	1,406	t
Total annual waste volume sent for recycling or reuse <i>(VSME)</i> / Total weight of the waste sent for recovery <i>(EcoVadis)</i>	54,148	60,722	58,424	t

WATER

We use water for a variety of purposes in the production of paper and cardboard from almost 100% waste paper: for cooling, preparation, dilution, and cleaning, as a pulping, sorting and transport medium in raw material preparation and as a production medium for high-quality, homogeneous web formation.

Exclusively groundwater has been available for these tasks at PKV's site in Varel since the plant was established. But this always comes with a risk of conflicted use. This fact alone encourages us to install a necessary water management system that ensures efficient use of this natural resource from the outset. At present, we are able to use just one litre of water up to thirty times in various stages and cascades before it is purified and returned to the ecosystem.

Based on our location, this highly efficient management system enabled us to achieve a top position in the industry ranking with a use of just **4.04 m³ of fresh water per tonne of finished product in 2025**. The most recent data indicates that the German paper industry used an average of around **6.7 m³ of fresh water per tonne of fresh product**. It is important to note, however, in regard to this comparison that, for technical reasons alone, our recycling processes will always require less water than other production processes in the paper industry (e.g. the processing of virgin fibres).

FRESH WATER USAGE
PER TONNE OF FINISHED PRODUCT



With our current water management system, we are operating at the very limit of what is technically feasible; if we reduce fresh water usage any further, odour emissions into the environment will increase, as will the risk of odour problems in the product and wear and tear on the equipment, which will then need to be replaced sooner. Nevertheless, we are constantly striving to improve our processes here. Our aim is to harness technical and process solutions to keep fresh water consumption consistently below or at 4 m³ per tonne of finished product. Moreover, we are currently testing how a percentage of purified municipal wastewater could be added to the groundwater in order to preserve resources going forward. To this end, a technical pilot project has been brought to a successful conclusion with the Oldenburgisch-Ostfriesische Wasserverband (OOWV), and initial ideas for further collaboration have been explored.

We obtain groundwater from 15 wells situated in a radius of up to 5 kilometres. In 2013, after extensive testing, we received a corresponding permit from the district of Friesland, which is valid for 30 years. It permits us to extract 4.5 million m³ per year. We utilised 3.5 million m³ of this quota in 2025, as our current production is still below the volume targets set out in our investment strategy.

Our permit also imposes regular and comprehensive reviews of various issues that may be associated with the extraction of groundwater (impact on agriculture and forestry, impact on soil settlement and impact on the saline/freshwater boundary etc.). This means that we are subject to extremely strict monitoring. Our more than 200 groundwater measuring points are inspected monthly. None of the inspections to date have returned anomalous measurement values.

Interesting facts



How do we handle water at our plant? We also follow the cascade principle when using water as a natural resource to ensure that we conserve resources as much as possible.

Water for cooling

The groundwater comes in at a temperature of between seven and ten degrees Celsius and is used initially to cool the turbines in the power plant, the switch rooms, the control rooms and the hydraulic stations in multiple stages. Doing so eliminates the need for a large number of refrigeration machines or cooling circuits with evaporative coolers and hence reduces electricity, coolant and water consumption.

Water at the ideal temperature

We aim to bring the water as close as possible to the ideal temperature for use in the wet section of the paper and cardboard machinery – also by harnessing additional heat from the recirculation condensate in the dryer section and waste heat from the exhaust air. This water temperature allows us to cut primary energy consumption in the form of steam (by a reduction in heating energy and through a higher dewatering speed and greater dry contents after the wire and press sections). In the dryer section, some of the process water is discharged as steam through the exhaust vents in the

hall roof during the production of our cardboard and paper.

Purifying and reusing water

During the production process, the remaining process water acquires a greater carbon load (COD) in particular. After it is used around 30 times, this load must be removed by purification before the water is discharged into the North Sea or reused in parts of the production process. This task is performed by our process water treatment plant, which has a current daily capacity of 90 tonnes of COD. The system has an anaerobic and an aerobic part, which means that the carbon loads are eliminated by means of bacteria and sedimentation processes. We then reuse around 20% of this water in production. Finally, we discharge purified water into the North Sea via a seven-kilometre pressure pipeline. We measure wastewater values on a daily basis. They are also checked twelve times a year during unannounced inspections by the Lower Saxony Water Management, Coastal Defence and Nature Conservation Agency (NLWKN).

We are continuously working to reduce our specific freshwater consumption as much as possible.

Our **strategic goal < 4.1 m³/t of specific fresh water consumption per year** is always at the forefront of our minds:

Measures implemented in 2025

- Formation of the “Water Balance Management” working group and development and presentation of project ideas to reduce our freshwater consumption

Measures for 2025

- Monitoring and measures to reduce fresh-water demand from the Water Management Working Group (Q4/2028)

Water metrics

In reporting our water metrics, we adhere to the requirements and definitions of the VSME standard and EcoVadis. Consequently, due to changes in the calculation logic, the figures for the previous years 2023 and 2024 have been adjusted. In addition, key performance indicators with identical content are reported; however, their composition varies depending on the requirements and scope of analysis used by VSME and EcoVadis.

Key figure	2023	2024	2025	Unit
Total water withdrawals <i>(VSME)</i>	3,419,285	3,636,700	3,551,903	m³
Water withdrawal in areas with high water stress* <i>(VSME)</i>	3,419,285	3,636,700	3,551,903	m³
Total water discharge <i>(VSME)</i> / Total volume of treated and discharged wastewater <i>(EcoVadis)</i>	2,181,105	2,562,500	2,340,970	m³
Total volume of treated and discharged wastewater (per metric ton of finished product) <i>(PKV)</i>	2.8	3.1	2.6	m³ per tonne of finished product
Total water consumption <i>(VSME)</i> / Total water consumption <i>(EcoVadis)</i>	1,238,180	1,074,200	1,210,933	m³
Volume of recycled/reused water (= water returned from the process water treatment plant)*** <i>(EcoVadis)</i>	1,319,555	1,342,071	1,426,574	m³
Fresh water usage (per metric ton of finished product) <i>(PKV)</i>	4.38	4.41	4.04	m³ per tonne of finished product

* Our company is located in an area with moderate-to-high water stress; we have only one location (Source: Aqueduct Water Risk Atlas)

*** At present, we are using data in adequate quality to keep complete logs of the recycling process for biologically pure water and anaerobic water, which is fed back for reuse in the production processes after purification in the process water treatment plant (PWTP). Water is already used multiple times in the production process itself.

BIODIVERSITY

Biodiversity was not identified as a material issue in our materiality assessment. While this may come as a surprise for a company in the paper industry, it can be explained by the dual materiality principle: The use of pulp is a key assessment criterion, since timber harvesting requires the conversion of forest areas for forestry purposes, which can affect biodiversity and the forest ecosystem. Pulp accounts for only a very small portion of our total raw material usage, as we use nearly 100% recycled paper. In addition, we source the small amount of pulp we use exclusively from sustainably certified forests (FSC®), which are explicitly focused on protecting biodiversity and the ecosystem.

Another factor is our single production site in Varel; since we do not have multiple production facilities spread across a wide area, we do not contribute to any further direct conversion of biodiversity areas. Nevertheless, as an industrial company – as described in detail in the previous chapters – we are aware of our environmental impact and therefore participate in various projects to promote biodiversity within the scope of our direct influence and our responsibility toward the local Varel area.

The slogan “Blossoming Friesland” is the motto for several projects that are being organised in the district of Friesland with the aim of preserving and promoting biodiversity. PKV participated in the “Blossoming Trade” project in 2024. It encourages companies in the district of Friesland to sow a small area of flowering plants and to allow other areas to grow and develop naturally. The aim is to help counteract the alarming and progressive loss of native flora and fauna. This will create a very tight network of natural structures and biotopes that will allow native plants to flourish and hence ensure the development and sustainable survival of insects and animals that depend on them.





In addition to participating in this “Blossoming Trade” campaign, PKV donated twelve fruit trees in 2024, which will be distributed to all six primary school locations in close coordination with the town of Varel as the school authority. Ten of them were planted in 2024, while two more followed in 2025 due to a conversion project at the Langendamm comprehensive school.

In addition, PKV contributed to the “900 Trees for Varel” project with a donation of 5,000 euros, which

enabled us to plant numerous trees on land being used for this purpose for the first time, in support of climate protection and regional biodiversity. By November 2025, more than 100 trees had been planted. The donation from PKV will be used in March 2026 for a tree-planting campaign at the Varel harbour.

PKV – as a waste paper recycling company – uses this and other campaigns to remind us of the importance of biodiversity for many natural cycles.

Key figure	2023	2024	2025	Unit
Number of sites located in or near protected areas or important biodiversity areas that are negatively impacted by the company	1	1	1	Number
Area of sites located in or near protected areas or important biodiversity areas that are negatively impacted by the company	79.89	79.89	79.89	ha

CLIMATE PROTECTION

ENERGY

As part of the paper industry, we belong to an energy-intensive sector. This comes with the risk of producing emissions that harm the climate and have a negative impact on sustainable development.

This places us well below the average. It is important to note nonetheless that this average also includes companies that, for technical reasons relating to the



This area has experienced considerable progress over recent years and decades – data released by the Die Papierindustrie e.V. industry association indicates that **the specific energy consumption per tonne of finished product in the paper industry** fell from 3,413 kWh in 1990 to **2,724 kWh** in **2024**.

At PKV, we are glad to report a **natural gas energy consumption of 1,492 kWh** per tonne of finished product in **2025**; **total energy consumption** amounted to **1,577 kWh** per tonne.

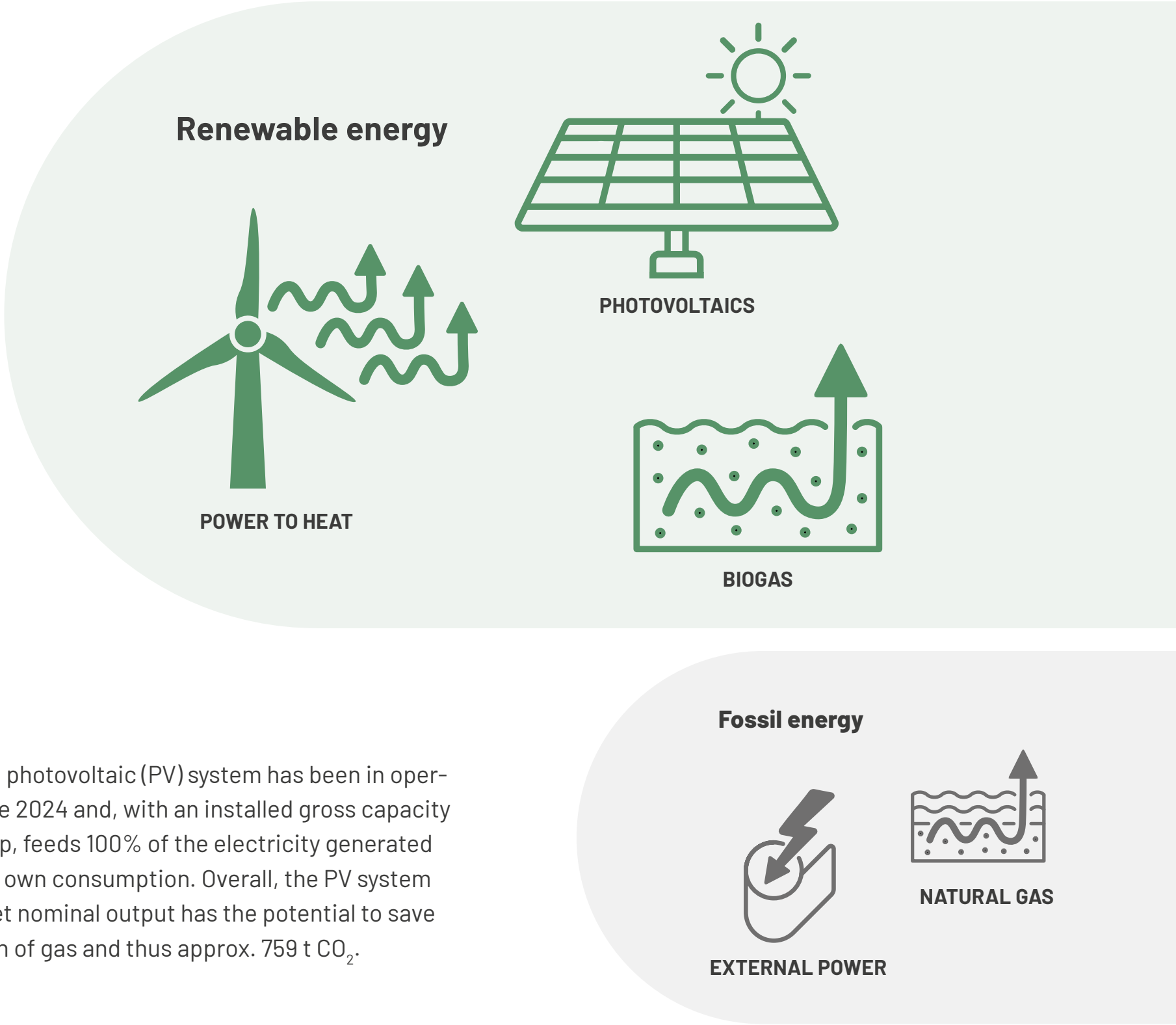
products they make, are compelled to use more energy, for instance in the processing of virgin fibres. Recycling of waste paper, like at PKV, is less energy-intensive by comparison. We have nevertheless set ourselves ambitious goals to progress from where we are now.

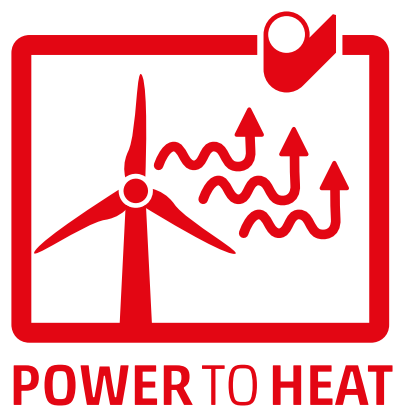
PKV has its own power plant and is almost entirely self-sufficient in regard to energy requirements. The power plant systems are rigorously designed for combined heat and power generation, thus ensuring virtually complete exploitation of the energy source. Among other things, our ISO 50001-certified energy management system maximises efficiency in the use of resources, and ensures continuous improvements in energy efficiency.

By harnessing natural gas and biogas as energy sources, the power plant makes PKV largely self-sufficient. For process-related reasons, we also purchase small quantities of electricity externally, but also feed unused electricity that we generate ourselves back into the public grid.

PKV's own photovoltaic (PV) system has been in operation since 2024 and, with an installed gross capacity of 2.4 MWp, feeds 100% of the electricity generated into PKV's own consumption. Overall, the PV system with its net nominal output has the potential to save 4,057 MWh of gas and thus approx. 759 t CO₂.

PKV ENERGY SOURCES





In addition, the power-to-heat module (electricity to heat/steam) we tested is, in principle, technically capable of easing the strain on the public grid, especially in the event of increased wind power generation, which will, at the same time, save on primary energy and therefore CO₂.

The energy performance indicators are recorded and evaluated monthly based on our energy management system. We then conduct an annual comparison with the matching energy baseline from 2012 to review the continuous improvement process.

As part of the energy efficiency improvements, the following projects were completed and evaluated in 2025:

- Modernization of the production cooling water circuit
- Absorption refrigeration system
- Preliminary design / Detailed engineering for the optimization of the KM2 steam system

The optimisation of the steam and condensate system on paperboard machine 2 is intended to ensure that the generated flash steam is used more efficiently for paperboard drying, thereby reducing fresh steam demand and, consequently, natural gas consumption. At full production capacity, this results in a 7% reduction in specific steam consumption (t steam/t card-board) and approximately 1,900 t in CO₂ emissions.

While we are well aware that, ultimately, the transition to an alternative fuel is necessary to achieve European and German climate goals, we are nonetheless continuously working – regardless of the energy source – to reduce our energy consumption in line with our annual strategic goal. As part of a technical review and analysis of potential energy savings throughout the plant, an assessment of the energy systems currently in use was conducted, and projects to be developed were identified based on the areas with the greatest savings potential.

The following projects were prioritised in 2025, and detailed planning commenced towards the end of the year:

Strategic goal	Measures
→ < 1.7 MWh/t of specific energy consumption per year	→ Tail steam optimisation BT2 → PKV water system and energy balance optimisation → Boiler feedwater optimization (Q3/2027) → Optimization of heat recovery BT2

Optimizing heat recovery and utilization, taking heat pump design into account, is being developed as part of decarbonization strategies. It aims to improve the recovery and reuse of heat that would otherwise be released into the atmosphere.

In addition, several energy optimization projects are currently underway, such as the main project to optimize the KM2 steam system (completion: September 2026) and the implementation of a load management system for the power plant (completion: July 2027).

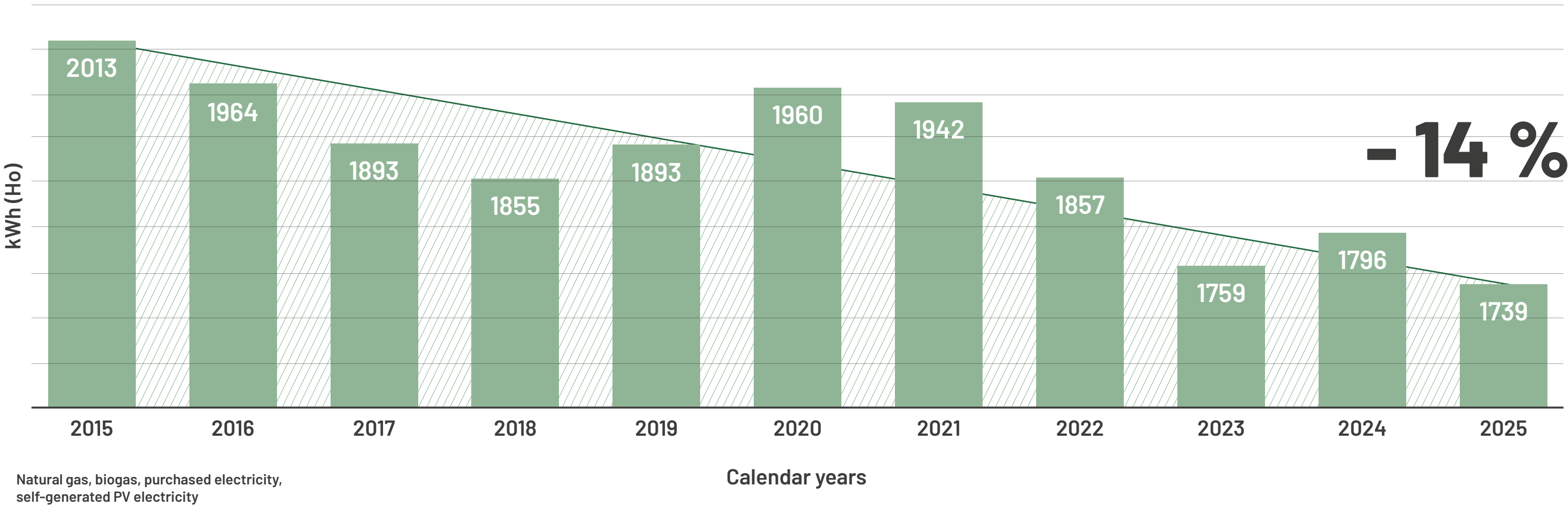


Compared to the previous year, we have succeeded in reducing our natural gas consumption per metric ton of finished product by approximately 4% and our electricity and steam consumption per metric ton of finished product by approximately 5%. This represents a particularly notable improvement in the year-on-year comparison.



The figures shown in the chart here serve as an essential foundation for the internal management of PKV. We use the higher heating value as the reference value for total energy consumption, as it is more representative of our energy performance metrics because it takes into account the energy required to operate the power plant. Consequently, the calculation of this specific value of 1,739 kWh/t in 2025 differs from the other figures in this chapter, since those are based on the lower heating value in accordance with the VSME definition.

REDUCTION IN TOTAL SPECIFIC ENERGY CONSUMPTION (KWH (HO)/T) FROM 2015 TO 2025



Energy metrics

In reporting our energy metrics, we adhere to the requirements and definitions of the VSME standard and EcoVadis. Consequently, due to changes in the calculation logic, the figures for the previous years 2023 and 2024 have been adjusted.

In addition, key performance indicators with identical content are reported; however, their composition varies depending on the requirements and scope of analysis used by VSME and EcoVadis.

Key figure	2023	2024	2025	Unit
Total energy consumption <i>(EcoVadis)</i>	1,280,699	1,390,671	1,436,362	MWh
Total fossil energy sources <i>(VSME)</i>	1,228,246	1,333,350	1,363,139	MWh
Fuels from fossil energy sources (natural gas) <i>(VSME)</i>	1,218,392	1,330,846	1,361,182	MWh
Electricity from Fossil Fuel Sources (purchased from external sources) <i>(VSME)</i>	9,854	2,504	1,956	MWh
Total renewable energy sources <i>(VSME)</i>	52,453	57,321	73,223	MWh
Fuels from renewable energy sources (biogas) <i>(VSME)</i>	52,453	57,248	71,075	MWh
Electricity from renewable energy sources (PV) <i>(VSME)</i>	-*	73	2,148	MWh
Total electricity (purchased and PV-generated) <i>(VSME)</i>	9,854	2,574	4,104	MWh
Total fuels (natural gas and biogas use) <i>(VSME)</i>	1,402,322	1,531,706	1,432,257	MWh
Total energy consumption from renewable energy sources <i>(EcoVadis)**</i>	28,568	34,180	40,422	MWh
Share of renewable energy in total energy consumption <i>(EcoVadis)</i>	2.2	2.5	2.8	%
Total amount of renewable energy consumed from biogas (on-site electricity consumption) <i>(EcoVadis)</i>	7,299	9,544	10,584	MWh
Total amount of renewable energy consumed from biogas (thermal utilization and substitution of natural gas) <i>(EcoVadis)</i>	21,269	24,563	27,690	MWh
Total amount of renewable energy consumed from PV (on-site electricity consumption) <i>(EcoVadis)</i>	-*	73	2,148	MWh
Total amount of renewable energy consumed from biogas (electricity fed into the public grid) <i>(PKV)</i>	23,885	23,140	32,800	MWh
Total amount of renewable energy consumed from PV (electricity fed into the public grid)*** <i>(PKV)</i>	-	0	0	MWh
Specific total energy consumption <i>(PKV)</i>	1,570	1,578	1,577	kWh per tonne of finished product
Specific natural gas energy consumption <i>(PKV)</i>	1,545	1,548	1,492	kWh per tonne of finished product
Specific electricity consumption <i>(PKV)</i>	362	357	345	kWh per tonne of finished product
Specific steam consumption <i>(PKV)</i>	949****	1,004	944	kWh per tonne of finished product

*The PV system was not commissioned until 2024

** Unlike the metric “Total renewable energy sources (VSME),” this calculation – in accordance with the EcoVadis definition – excludes electricity generated from biogas that is not consumed within the company itself but is instead fed into the public grid. That is why the amount is smaller here.

***Because it is eligible for subsidies, our second solar power system is prohibited from feeding electricity into our company's own power grid. Therefore, we do not report any electricity consumption here until it is used for self-consumption.

****Lower annual value due to slow steaming caused by the war in Ukraine

GREENHOUSE GAS EMISSIONS

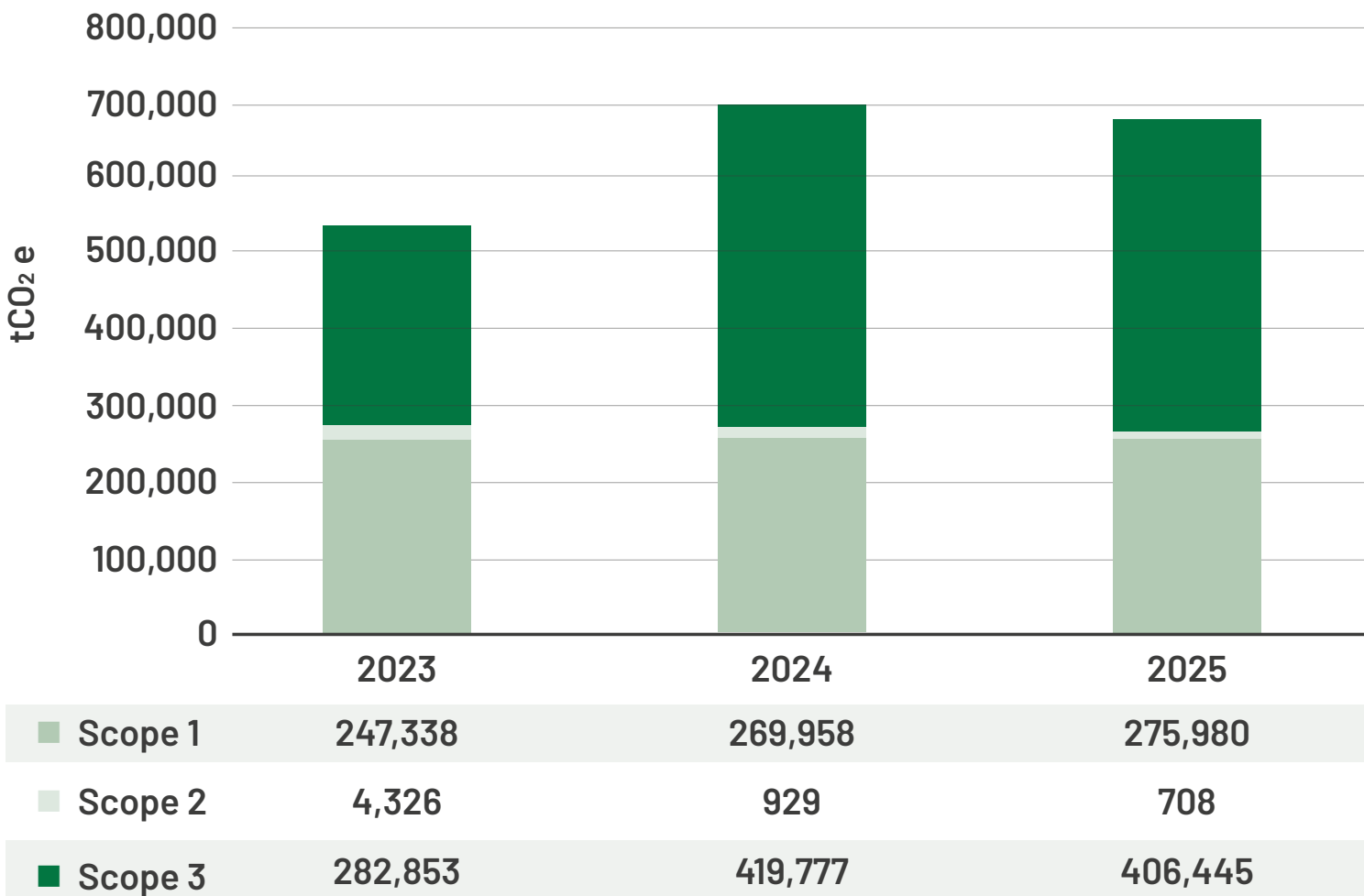
Our company mainly produces greenhouse gas emissions through the use of natural gas. Its energy is converted in our power plant into electricity and process heat in the form of steam. The paper industry is an energy-intensive sector, in particular due to the process heat used to dry the paper and cardboard webs.

The principal challenge in this regard is the need to use water to produce the paper, which then has to be removed from the product once a paper web has been formed. Mechanical and thermal methods are used in this context, all of which require substantial quantities of energy. The goal to continue increasing our energy efficiency by means of process optimisation and technical innovation and in doing so to reduce energy input per tonne of finished product therefore remains the top priority. Recognising that achieving the stated target of climate neutrality by 2045 requires a reduction in absolute greenhouse gas emissions, we have defined our decarbonisation pathway and corresponding measures with the aim of achieving a reduction of up to 42% in our absolute greenhouse gas emissions by 2031 compared with the base year 2021.

Maintaining a transparent representation of our greenhouse gas emissions remains a key component in order to gain an overview of all our emissions across the value chain and, as a result, to gradually reduce them. We again calculated our corporate carbon footprint (CCF) in Scopes 1-3 for 2025 based on the guidelines set out in the Greenhouse Gas Protocol (GHG).

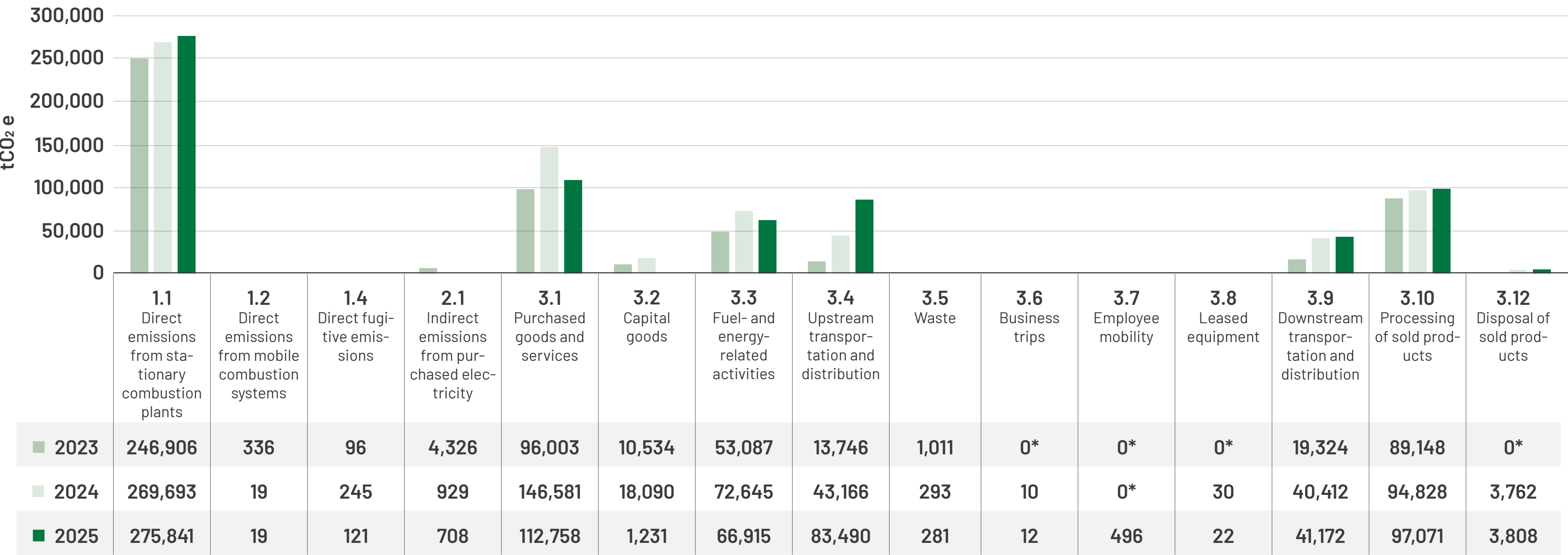
This results in calculated total greenhouse gas emissions for the year 2025 of 683,134 metric tons of CO₂ equivalents, excluding biogenic and FLAG emissions. Scope 3 emissions are lower due to improved data quality (96% material-based compared to spend-based calculations in 3.1, and a higher proportion of primary supplier factors) as well as the exclusion of a non-material category. As shown in the [overview of Scope 3](#) categories below, aside from emissions generated by the supply chain (3.1, 3.4, and 3.10), upstream emissions from energy sources account for a significant share (16%). These emissions will in future be reduced slightly and linearly in line with the reduction of our Scope 1 emissions through a decrease in natural gas consumption. In Scope 2, we are seeing another reduction, as we purchased even less electricity from external sources, while in Scope 1 we are seeing an absolute increase due to higher production volumes.

GHG emissions metrics



(excl. 3.5, 3.6, 3.7, 3.8)

SCOPE 3 EMISSIONS CATEGORIES



*The emissions here were not exactly 0; they were simply not calculated.



Additional GHG metrics

Key figure	2023	2024	2025	Unit
Scope 1 GHG Emissions	247,338	269,958	275,980	t CO ₂ e
Scope 2 GHG emissions (site-based)	3,824	931	688	t CO ₂ e
Scope 2 GHG Emissions (market-based)	4,326	929	708	t CO ₂ e
Total GHG emissions by location (Scope 1 and 2)	251,162	270,888	276,668	t CO ₂ e
Scope 3 GHG Emissions	282,853	419,776*	406,445	t CO ₂ e
Total upstream Scope 3 greenhouse gas emissions	174,381	280,775	264,393	t CO ₂ e
Total downstream Scope 3 greenhouse gas emissions	108,472	139,002	142,052	t CO ₂ e
Total GHG emissions (site-based)	534,015	690,666	683,113	t CO ₂ e
Total GHG emissions (market-based)	534,517	690,663	683,134	t CO ₂ e
GHG intensity - site-based (per revenue)	0.0006	0.0006	0.0006	t CO ₂ e/€

*The sharp increase in Scope 3 emissions is not fundamentally attributable to a rise in GHG emissions, but rather to the fact that, in 2024, more categories were included in the accounting for the first time, which led to a greater level of detail in the methodology and compliance with additional requirements.

OUR DECARBONISATION PATHWAY

As reported last year, we defined our specific decarbonization pathway in 2024. This pathway is currently a viable plan from our point of view, which should help us to meet the European climate targets and the 1.5°C target.

With the definition of the decarbonisation pathway and corresponding measures, we are aiming to achieve a reduction of up to 42% in our absolute greenhouse gas emissions by 2031 compared to the base year 2021.

The pathway is based on complex analyses developed in collaboration with an external service provider as part of the creation of a transformation concept in accordance with BAFA's "Module 5: Transformation Plans." In doing so, we analysed various transformation pathways based on market, political, social, and technological criteria and developments specific to our company, and – as part of CO₂ avoidance cost analyses – identified a mix of different technologies that will be explored in greater depth in future projects.

To achieve this goal, we are implementing the following measures:

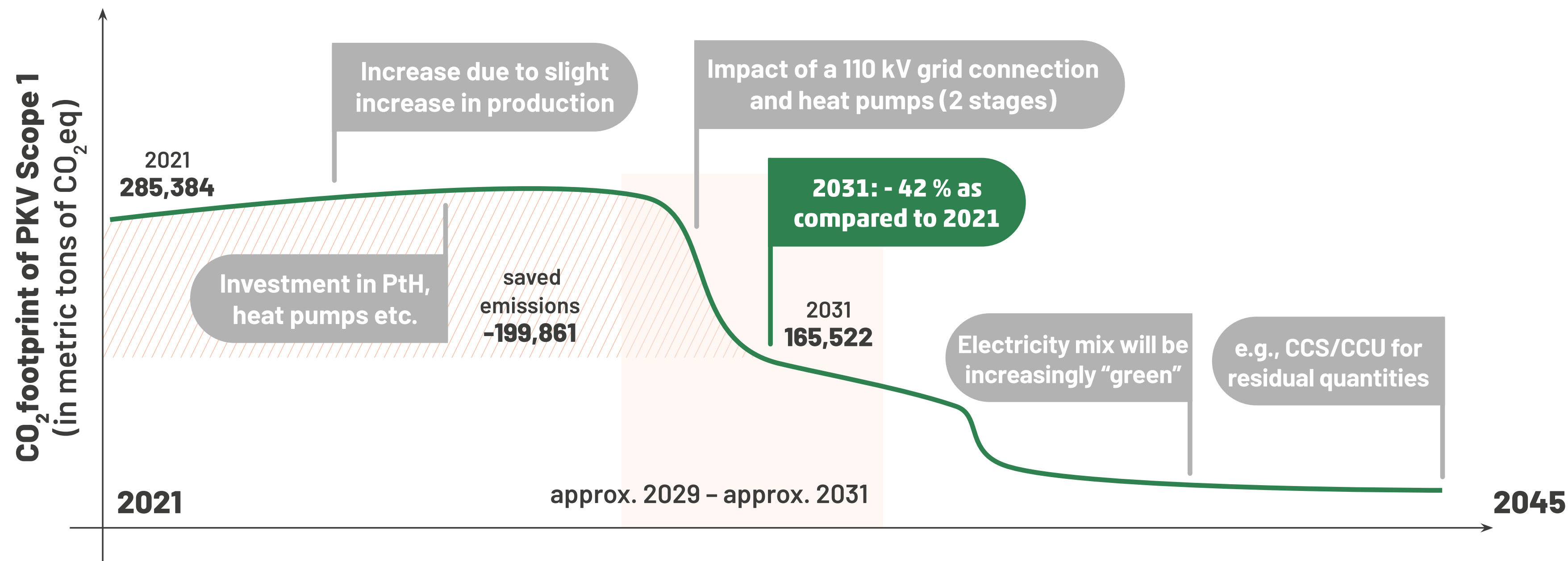
- Our top priority is the electrification of our processes. Heat pumps – which are increasingly powered by green electricity and utilize the waste heat generated at our facility – produce the majority of the steam required for the drying processes. We generate the heat that we cannot produce with heat pumps using PtH modules. The electricity needed to power our plants and machinery – which currently still comes from burning natural gas – will be gradually converted to green electricity over the long term. Heat pump technology results in significantly higher energy efficiency.
- In this scenario, it will be necessary to expand the previously limited grid connection to include access to the 110-kV grid and to use a large-scale heat pump in order to achieve greater efficiency in steam production.
- In addition, we aim to generate energy from waste that is already available on our site. We are already carefully sorting this waste and processing it into fuel pellets, which are then burned – for example, in cement plants or combined heat and power plants – to generate energy. In the future, we plan to use this energy ourselves in a new EBS power plant (EBS = alternative fuels) on our premises. This is because approximately 35 percent of this waste consists of biomass. This biomass is classified as a renewable energy source because it releases only as much CO₂ as it absorbed during its growth in nature.
- Additional measures include further developing load management at our own power plant to increase its efficiency, the use of an energy storage system, and energy-saving initiatives.

We currently estimate that implementing our decarbonization pathway will cost a substantial three-digit million amount; however, it is not yet possible to quantify all associated costs with a high degree of certainty over the long term. We will strive to take advantage of appropriate funding opportunities. As of the publication of this report, we have already posted the decarbonization pathway on our website, along with detailed information and FAQs. Through this website, we keep interested parties up to date on the latest developments.

In 2025, our project partners, EWE Netz and Avacon, conducted an in-depth review of various options for the route of a new 110-kV transmission line and the location of a new substation. For the alternative fuels (EBS) power plant, we have begun the design and permitting processes in accordance with the Federal Immission Control Act (BImSchG), as well as the preparation of a zoning plan and its approval by the city of Varel. We have also launched the feasibility study for the heat pump, which examines the technical requirements for its use in our facility.

The goal for 2026 is to complete the key preliminary projects, which primarily involve measures to introduce an alternative fuels (EBS) power plant and a 110-kV power connection, as well as the completion of the heat pump feasibility study.

HOW PKV AIMS TO BECOME CLIMATE-NEUTRAL



Reduction of greenhouse gas emissions

Key figure	2025	Unit
Absolute value of the reduction in greenhouse gas emissions <i>(Scope 1)*</i>	199,861	t CO ₂ e
Percentage reduction in greenhouse gas emissions <i>(Scope 1)</i>	42	%
Absolute value of the site-specific reduction in Scope 2 greenhouse gas emissions**	199,861	t CO ₂ e
Percentage reduction in site-specific Scope 2 greenhouse gas emissions (relative to base-year emissions)	42	%
Absolute value of market-based reductions in greenhouse gas emissions under Scope 2***	199,861	t CO ₂ e
Percentage reduction in market-based Scope 2 greenhouse gas emissions (relative to base-year emissions)	42	%
Absolute value of the reduction in Scope 3**** greenhouse gas emissions	0	t CO ₂ e
Percentage reduction in Scope 3 greenhouse gas emissions (relative to base-year emissions)	0	%

* Compared to the base year 2021

** Due to the transition from natural gas to electrification, our target focuses on reducing Scope 1+2 emissions

*** No separate targets are set for site-specific or market-based Scope 2 emissions

**** There is not yet a specific reduction target for Scope 3

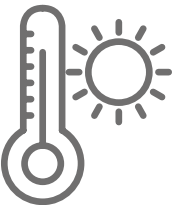




ADAPTATION TO CLIMATE CHANGE - CLIMATE RISKS

As part of the materiality assessment, climate risks – and, consequently, the company’s adaptation to climate change – were also identified as a material issue for PKV. Formally, the topic “Impact of climate change on the company and the company’s impact on climate change” was included in and assessed as part of the PKV opportunities and risks matrix in 2024. The impact of climate change on the company is primarily focused on the product, supply availability, environmental impact, the effect on working conditions, and employee health and safety.

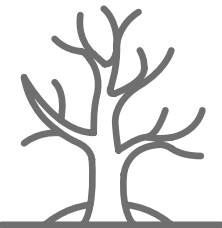
The following theoretical climate-related hazards were identified:



RISE IN TEMPERATURE
→ HEAT



NATURAL DISASTERS
→ FLOODS



WATER SUPPLY
→ DROUGHT / ARIDITY

The company's own impact on climate change includes greenhouse gas emissions resulting from its business operations and its current use of natural gas as a primary energy source. Consequently, plans have already been developed to reduce and prevent greenhouse gas emissions (see the chapter “Our decarbonisation pathway”).

To date, management has classified this risk with a probability of occurrence of 2 (= conceivable) and a severity of 2 (= low), resulting in a risk score of 4 and classifying the issue as a risk with a comparatively low priority for action.

We have always implemented measures at our facility designed to protect us against risks, including fires, heat, and flooding. Accordingly, emergency, alarm, and (flood) disaster response plans have been developed in this regard, accompanied by appropriate training.

To prevent health risks to employees, particularly those caused by heat, all machine rooms in production and all switch rooms are equipped with air conditioning; in the production halls themselves, we use mechanical ventilation to bring fresh air into the halls. To date, there has been no air conditioning in the administrative offices due to the availability of intermittent ventilation and standing fans – however, the risk of overheating here is also considered to be significantly lower than in the production area. Additional measures in the administrative offices to prevent heat-related issues and water shortages in the production process are being considered. However, the monitoring data on groundwater

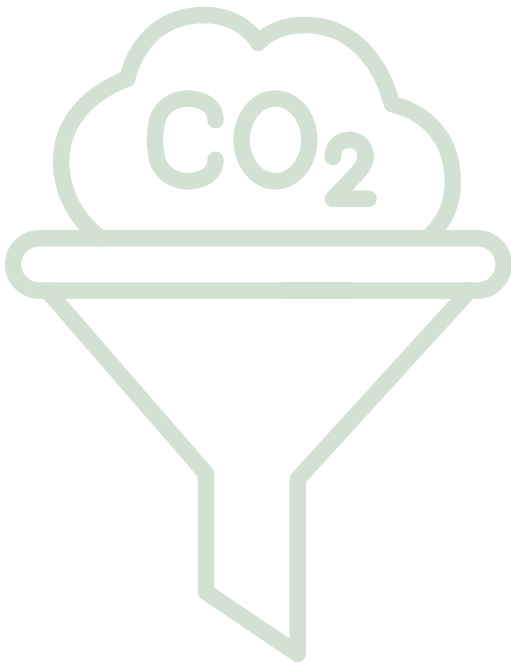
withdrawal indicates that there is no risk of water level decline within the areas covered by the valid permit for the entire period of use. In 2024, we received a storm surge warning from the NLWKN; however, we were also informed that no measures need to be taken in accordance with the flood disaster plan in the event of a disaster, as the design of the dikes prevents overtopping.

We have thoroughly analysed and assessed transition risks in connection with the definition of our decarbonization strategy. In the context of this transformation, PKV faces primarily financial risks, as the investment costs of decarbonization amount to at least hundreds

of millions. It is therefore necessary to consider many scenarios, conduct CO₂ avoidance cost analyses, and perform a detailed assessment of the trends in CapEx and OpEx across various scenarios and technologies.

Assuming that the effects of climate change will become even more noticeable in the future, we will continue to monitor this issue closely and (further) develop appropriate internal adaptation and prevention measures. The consequences of climate change are taken into account in risk assessments, in the evaluation of environmental aspects, and in the hazard analysis of the food and product safety management system.

The opportunities and risks matrix is reviewed on an ongoing basis (at least annually), and as part of this process, previously identified and potential climate risks, as well as corresponding adaptation measures, are updated.



SOCIAL ISSUES

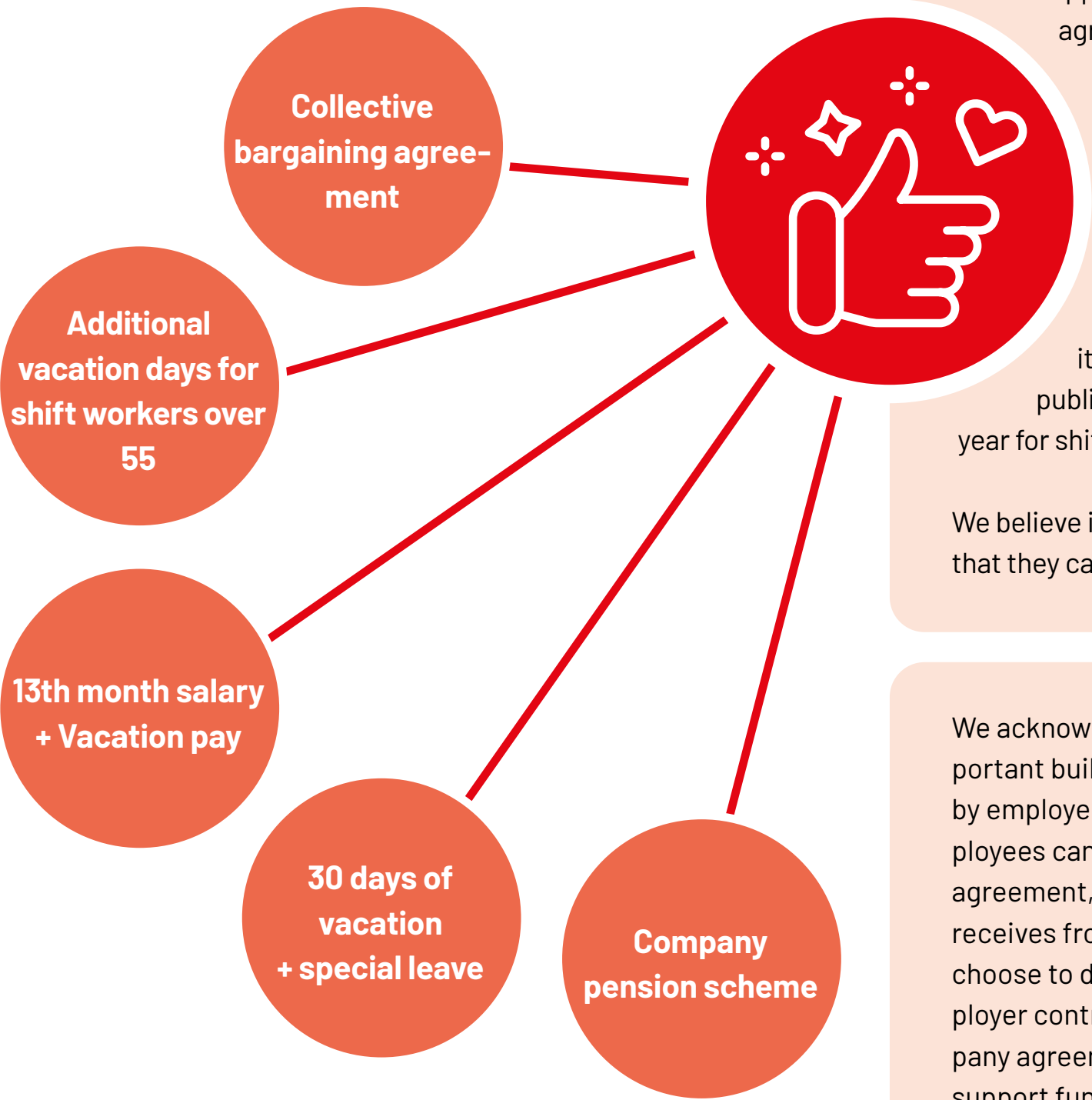
OUR EMPLOYEES – WORKING FOR PKV

For us, sustainability also means: Responsibility for people. With fair pay and attractive benefits. For a job with a future and a work environment everyone can count on.

FAIR & ATTRACTIVE WORKING CONDITIONS

We are committed to social responsibility and accountable corporate governance. Compliance with applicable laws is the basis for our actions, which are shaped by the principles of integrity, fairness, sustainability and environmental protection.

We believe that sustainable management and sustainable corporate success are inextricably connected not only to productivity, quality and efficiency, but also to humanitarian standards. In our view, sustained business success is not possible without qualified and committed employees. The working conditions described in the following make a significant contribution to this and are firmly embedded in the corporate culture at PKV.



Wages and social benefits

PKV guarantees that all employees receive remuneration that is fully compliant with the applicable laws and collective agreements (in particular the general collective agreement for employees in the paper industry and the associated wage and salary agreements). The Minimum Wage Act (MiLoG) should be perceived as the absolute minimum standard and is exceeded by far in our various collective agreements and provisions that go beyond those agreements. Included in this are a collectively agreed holiday entitlement of 30 days per year (32 days for shift workers, which exceeds the collective bargaining agreement), special leave for particular, collectively agreed occasions, a 13th month salary, a separate holiday allowance, a profit-sharing bonus and additional payments for night work, work on Sundays, public holidays and overtime. We also offer an additional 15 days' holiday per year for shift employees aged 55 and over as part of our semi-retirement plan.

We believe it is self-evident that each employee should receive a monthly payslip so that they can document and verify correct payment.

We acknowledge the significance of a **company pension scheme** as another important building block in this regard. There are two company plans in place – either by employer contributions or deferred compensation – through which our employees can supplement their pension provisions. Under the collective bargaining agreement, there is a paper industry subsidy of 713.55 euros that every employee receives from their pension scheme if they sign a corresponding contract. If you choose to defer additional portions of your salary, we will match this with an employer contribution of 13 euros for every full 100 euros deferred. Based on a company agreement, an annually increasing employer contribution is paid into the support fund; employees can voluntarily increase this amount through deferred compensation. From our perspective, these measures ensure that we provide our employees with a particularly attractive retirement savings plan.



38-hour week

Work schedule models that promote work-life balance

Working hours

We fully comply with the provisions of the Working Hours Act (ArbZG) and associated regulations. Our working week according to the relevant collective agreement is 38 hours, which is well below the limits of the Working Hours Act.

It will never be possible to eliminate overtime completely. But we do pay attention that it does not become routine at any workplace and always remains the exception. We have installed a company policy stipulating that specific justification must be provided if working hours exceed 10 hours in one day. This ensures that we proceed in accordance with the strict exceptions afforded under the Working Hours Act. We have a time clocking system to ensure transparent documentation of overtime and its settlement by means of free time or payment.

At PKV, we have concluded a company agreement on part-time work with various models that allow each employee to reduce their working hours by up to 50%. This increases the compatibility of professional and family life and improves the work-life balance. In addition to industry standards, we have part-time models for shift work that enable our employees to work a reduced number of days per year and therefore reconcile their professional lives with personal needs.



Suggestion system

Sustainability podcast "MitSprache"

No disadvantages from unionising



Freedom of association & employee participation.

We fully respect the fundamental right to freedom of association. Every employee is at liberty to join a trade union and no one shall experience any disadvantages as a result. We maintain a cooperative and constructive relationship with our works council and – together with the employer representatives – with our collective bargaining partner, the IG BCE trade union for mining, chemicals and energy.

All of our employees are kept up to date on sustainability issues at the company via our social intranet and other channels – and encouraged to do their part. Consultation and participation procedures are organised to ensure that employee representatives remain involved. At the same time, each department has specific targets to make sure that all employees are closely involved in implementation of the sustainability strategy. Our suggestions scheme also encourages them to submit regular ideas to support the strategy, for instance in the area of energy efficiency. An additional channel for obtaining information and participation was also introduced at the start of 2024, with employees receiving insights into and information on various relevant sustainability topics and projects via a sustainability podcast hosted by the sustainability manager herself.

Financial incentive systems at PKV that were linked to sustainability issues in 2025

Financial support for volunteer work

- Our aim in this regard is to emphasise how much we value cohesion and commitment – in professional and personal life. PKV established the PKV Extra programme in 2020 to provide annual funding for donating to/sponsoring projects in which our employees are actively involved.



Since 2025 – The new profit-sharing plan

- Since early 2025, this incentive system replaces the old PKV bonus system and sets out a direct system of profit-sharing for employees, which is even more closely aligned with actual business success than before and also provides more opportunities for increases in good years. The new profit-sharing scheme consists of six components, which are weighted differently and influence the final payout depending on the result. The components are the strategically important performance indicators of volume, contribution margin 1, energy consumption, maintenance costs, occupational safety and complaints. The aim is to create even greater transparency, incentive and motivation in the daily work of employees by providing them with insight into the status of their forecast payment amount for the following year on the intranet.

Employee suggestion program

- Since 2001, sustainability goals such as occupational safety, health protection, and environmental protection have been integrated, and the goal of energy efficiency was later added as well. All PKV employees are invited to submit relevant suggestions, which are checked for feasibility and then classified by an evaluation committee (representatives from the management, works council and various departments). If a suggestion is adopted, bonuses are paid out that reflect the value of the suggested improvement. The continuation of the suggestion program is currently under review.

Goal achievement in 2025

Our adopted policy statement for labour and human rights establishes the principles and guidelines that form the foundation for the well-being of our employees. Based on these principles and our strategic goals in the area of goal-oriented teams, we continuously derive goals and measures.

Last year, as part of our strategic goal **unplanned turnover < 4.8%**, we set a goal to optimize and standardize the collection of data on the reasons for employee turnover so that, based on this information, we could develop appropriate measures to further improve working conditions for our employees and retain them at PKV for as long as possible.

We have achieved this goal, and the existing data collection on reasons for employee turnover has been optimized in terms of content. In addition to the existing description of reasons for employee turnover, new categories have been introduced that allow for the grouping of these reasons by their main themes. This file is based on the discussions that the human resources department, as well as line managers, have with departing employees.

Measures implemented in 2025

- The introduction of the new profit-sharing program – based on the six key components of business success (workplace safety and energy consumption as strategic priorities)
- Conducting an employee survey to measure employee satisfaction, including the development of department-specific improvement measures (to be implemented in 2026)

Goals for 2026

- (Continuation) of the annual employee survey (November 2026)

Key personnel metrics

Key figure	2023	2024	2025	Unit
Total number of employees (headcount) <i>(VSME)</i>	612	624	656	Headcount
Employees, of whom women (number) <i>(VSME)</i>	74	73	73	Headcount
Employees, of whom men (number) <i>(VSME)</i>	538	551	583	Headcount
Employees, of whom non-binary (number of employees) <i>(VSME)</i>	0	0	0	Headcount
Total number of permanent employees <i>(VSME)</i>	550	562	583	Headcount
Permanent employees, of whom men <i>(VSME)</i>	483	494	513	Headcount
Permanent employees, of whom women <i>(VSME)</i>	67	68	70	Headcount
Permanent employees, of whom non-binary <i>(VSME)</i>	0	0	0	Headcount
Total number of employees on fixed-term contracts <i>(VSME)</i>	62	62	73	Headcount
Employees on fixed-term contracts, of whom men <i>(VSME)</i>	55	57	70	Headcount
Employees on fixed-term contracts, of whom women <i>(VSME)</i>	7	5	3	Headcount
Employees on fixed-term contracts, of whom non-binary. <i>(VSME)</i>	0	0	0	Headcount
Percentage of employees covered by collective bargaining agreements <i>(VSME)</i>	100	100	100	%
Number of employees participating in company pension plans <i>(VSME)</i>	597	602	616	Headcount
Full-time employees <i>(EcoVadis)</i>	432	426	423	Headcount
Part-time employees <i>(EcoVadis)</i>	180	198	233	Headcount
Turnover rate <i>(PKV)</i>	5.1	5.4	4.6	%
Employee departures <i>(PKV)</i>	35	46	39	Headcount
New hires <i>(PKV)</i>	56	65	86	Headcount
Gesamtarbeitsstunden / Anzahl der geleisteten Stunden <i>(EcoVadis)</i>	860,418	867,177	910,682	h

EQUALITY, INCLUSION & DIVERSITY

We do not tolerate any form of harassment or intimidation of employees, business partners, suppliers, service providers or other persons. Instead we are firmly committed to providing all employees with a working environment that is free of mental, physical or sexual harassment. We reserve the right to impose sanctions under labour law if we become aware of harassment in any form.

We are explicitly committed to the principle of equal treatment at our company and to equal opportunities. In particular, no person shall experience discrimination or be placed at a disadvantage due to their ethnic origin, gender, religion or ideology, disability, age or sexual identity. We therefore hold that equal opportunities and equal treatment are not tasks but a matter of course. Recruiting, hiring and promotion procedures take place exclusively on the basis of professional qualifications and competences and do not include any other form of assessment. Wage and salary agreements apply equally to all genders in accordance with our collective agreement and do not include any pay gaps in relevant pay scale categories. The high standards in this area are also reflected in the activities of our works council, which represents the interests of the company employees in a variety of ways. Among other things, the works council is

involved in matters that relate to encouraging a work-life balance and the implementation of actual equal rights for women and men in recruitment, employment, training and continuing education. In regard to the establishment of representation for severely disabled employees, the works council actively promotes the employment and integration of severely disabled and sick employees and supports their concerns through integration agreements, preventative measures and company integration management, among other things.

Aside from a number of committees and working groups to discuss issues and reach joint agreements, the establishment of a representative body for severely disabled employees, young persons and trainees to act as a mouthpiece between the works council and management plays a key role in safeguarding co-determination rights and empowering employees to express their interests.



Measures implemented in 2025

We have also set ourselves additional targets for 2025 in the areas of equal opportunities, diversity and inclusion, which extend over and above the measures taken so far:

- **Development of a diversity strategy** including a clearly defined vision, goals, and measures that integrate into the company’s employer branding strategy

The target was achieved. The concept was presented to the Chief Commercial Officer in early 2025 and the majority of the targets and measures for the target years of 2025–2026 have already been adopted.

Goals and measures for 2026/27

Goal

- Implementation of the goals and measures outlined in the concept within the specified timeframe (Q4/2026 and 2027)

Measures

- Implementation of a strategy to promote diversity in recruiting

Areas of focus based on untapped potential:

- 1.1. Support for & retaining women in technical (apprenticeship) occupations
- 1.2. Creating career incentives for employees aged > 55
- 1.3. Support for people with an immigrant background
- 1.4. Retaining employees who have a (severe) disability

- Raising internal awareness of diversity, equality, and inclusion
- Embedding diversity, equality, and inclusion in the corporate culture

This concept establishes the following business positioning:

“Here at the Varel Paper and Cardboard Factory, we value the uniqueness of each individual and are committed to diversity in all its forms – regardless of gender, background, religion, disability, age, or sexual identity.” What matters to us is that you’re a good fit for us as a person and that you want to succeed alongside us. “We are actively committed to fostering an inclusive corporate culture in which diverse perspectives and backgrounds – which we view as an asset to our business processes – can be further promoted and developed to their fullest potential.”

Regarding **creating career incentives for employees aged > 55**, a program is already being implemented that will allow individual employees to continue working with us for a certain period of time after reaching retirement age. This offer is not available to all employees across the board, but is arranged on a case-by-case basis during an individual meeting with the respective supervisor in the relevant department, during which the employee’s potential is assessed in collaboration with the human resources department and the available options are discussed.

Additional (general) characteristics of the workforce

Key figure	2023	2024	2025	Unit
Gender pay gap <i>(VSME)</i> / Average unadjusted gender pay gap <i>(EcoVadis)*</i>	0	0	0	%
Gender diversity on the board of directors/Governing body <i>(VSME)</i>	0	0	0	Women / Men
Leadership positions	56	58	69	Headcount
of whom women	6	7	7	Headcount
of whom men	50	51	62	Headcount
of whom non-binary	0	0	0	Headcount
Gender ratio at the executive level <i>(VSME)</i>	12	14	11	%
Percentage of women in the workforce across the entire company <i>(EcoVadis)</i>	10.75	10.51	9.93	%
Percentage of women in top management <i>(EcoVadis)</i>	10.2	10.5	10.3	%
Percentage of employees who are members of minority and/or vulnerable groups, relative to the organization as a whole <i>(EcoVadis)***</i>	4	4	4	%
Percentage of employees covered by collective bargaining agreements <i>(VSME)</i>	100	100	100	%
Employees on parental leave <i>(PKV)</i>	2	2	2	Headcount
Trainees <i>(PKV)</i>	34	33	40	Headcount
Average length of service <i>(PKV)</i>	13	13	13	Years / employee
Longest length of service <i>(PKV)</i>	42	43	44	Years / employee
Employees in the age group < 30 years old	112	115	128	Headcount
Employees aged 30–50	305	304	310	Headcount
Employees in the age group > 50 years	195	205	218	Headcount

* No gender-based wage gap for the same position, qualifications, and level of experience is guaranteed due to binding collective bargaining agreements. Various factors, such as part-time and full-time employment, as well as night shift, holiday, and overtime pay, can make a difference, but gender never does.

** Here we are referring to department heads, plant managers, team leaders, trainers, foremen, and plant supervisors, as well as the works council chairperson

*** Here we report the percentage of employees with a (severe) disability

COMPLIANCE WITH LABOUR AND HUMAN RIGHTS

Our sole company location is in Germany. However, our purchasing and sales departments operate internationally. We comply with all laws, standards and other legal provisions and also adhere to the relevant social rules that apply in the countries in which we are present. These principles are enshrined in our Code of Conduct and elsewhere. We are absolutely and irrevocably committed to respecting and guaranteeing human rights as the greatest asset of our legal system in everything that we do.

We strictly reject any form of forced labour. We define forced labour as any type of work that is performed involuntarily or under threat of punishment. The work of any employee at our company is based on a contract of employment that is concluded voluntarily by the contracting parties. The employee's remit and their principal tasks are set out in the contract of employment and supplementary documents or explanations.

We strictly reject child labour in any form. We fully comply with the provisions of the Protection of Young People At Work Act (JArbSchG) and all associated regulations. Young persons only work the hours that are permitted by law.

In addition to this general commitment, we have also set ourselves the goal of establishing suitable ways of defining measurable targets. Implementation of this policy statement for labour and human rights in 2022

also involved the definition of quantifiable targets for the various issues. Taken together, their purpose is to contribute towards compliance with labour and human rights at PKV.

Additional goals in the area of human rights, in particular with regard to sustainable and responsible purchasing (including the best possible coverage of any risks in the supply chain), are described under "Responsible supplier management". As set out there, we will continue to build on these goals as part of our compliance with due diligence obligations relating to human rights and the environment.

To date, our risk analysis described under "Key sustainability issues" did not identify any such material risks associated with our business operations, business relationships, products and services that are likely to negatively impact human rights.



Key figures on labour and human rights

Key figure	
Indication of whether the company has a code of conduct or a human rights policy for its own workforce <i>(VSME)</i>	Yes
The code of conduct covers the following topics	
Child labour	Yes
Forced labour	Yes
Human trafficking	Yes
Discrimination	Yes
Accident prevention	Yes
Other:	Yes
Indication of whether the company has a mechanism in place for handling complaints from its own workforce	Yes
Confirmed incidents involving the company's own workforce related to child labour, forced labour, human trafficking, and discrimination	No (= 0 cases)

EMPLOYEE DEVELOPMENT AND TEAMWORK

Qualified employees and lifelong learning are vital to success due to our complex processes and systems. This is why we offer a variety of in-service training courses, for example master courses for industrial supervisors specialising in paper production, further qualification as paper technicians or as industrial and business specialists (IHK).

Apprenticeships are also very important at our company, and we provide training in six professions in total. Apprentices and persons completing retraining receive particular support from expert trainers and are given special protection. In doing so, we ensure full compliance with the provisions enshrined in the Vocational Training Act (BBiG). We believe that providing a wide variety of internal courses in many (particularly labour-intensive) areas of the company is a crucial response to demographic change.

Work experience for school students and other company internships represent a special form of training offered at PKV. Its main purpose is to offer career guidance and to foster the personal development of our interns. All requirements defined by the individual educational institutions are complied with in full during our internships.

In addition to apprenticeships, our company attaches immense significance to in-company and part-time further training. We believe it is self-evident that all employees must regularly receive the compulsory training they require for their work.

Moreover, a wide variety of other courses are organised to enable employees to acquire additional qualifications. Aside from regular, needs-based master courses – for which our employees are granted special leave with full pay – we also offer further training courses for technicians, business economists and business specialists, among others. Dual curriculum degree courses are frequently offered, depending on our needs. We offer employees without specific training in the paper industry, especially those working in production, the opportunity to complete a distance learning course to gain theoretical expertise and qualification as paper technicians. On average, this opportunity is given to two eligible employees from the various subunits within production each year. After

earning this qualification, they can then progress to their next career stage in our production departments.

Achievement of goals & measures implemented in 2025

- We had set a goal to develop a leadership development program for all managers in collaboration with two external service providers and to launch it in 2025. We have achieved this goal. Our leadership development program consists of four required modules that all managers must complete. To this end, a number of elective modules, as well as individual training sessions and coaching sessions, are offered, which managers can take as supplemental courses in consultation with their respective supervisors. This program is on track. The required modules are expected to be completed as planned between mid-2025 and the end of 2026.



As part of the annual goals workshop and the strategic goal area **“Goal-oriented team – Employee development,”** we have set **further goals for 2026:**

Strategic goals for 2026

Establishing a sustainable leadership development program

Operational goal/measure

Development of a talent management concept for PKV (Q4/2026), including rollout (2027). This includes:

- Intended goal, definition & approach
- Skills needed in the future
- Identification of talented individuals
- Program duration
- Demarcation, integration, and succession planning

Number of apprentices >: 5% of FTEs / Improve the quality of training

Improving the return rate of trainee evaluation forms (including revising the evaluation standards)(Q3/2026)

- Performance reviews as standard practice whenever there is a change of department or job
- Quarterly meetings with the respective instructor (academic and on-the-job performance)
- Documentation (collection) of all conversations during PRA
- Annual development meeting with the training manager

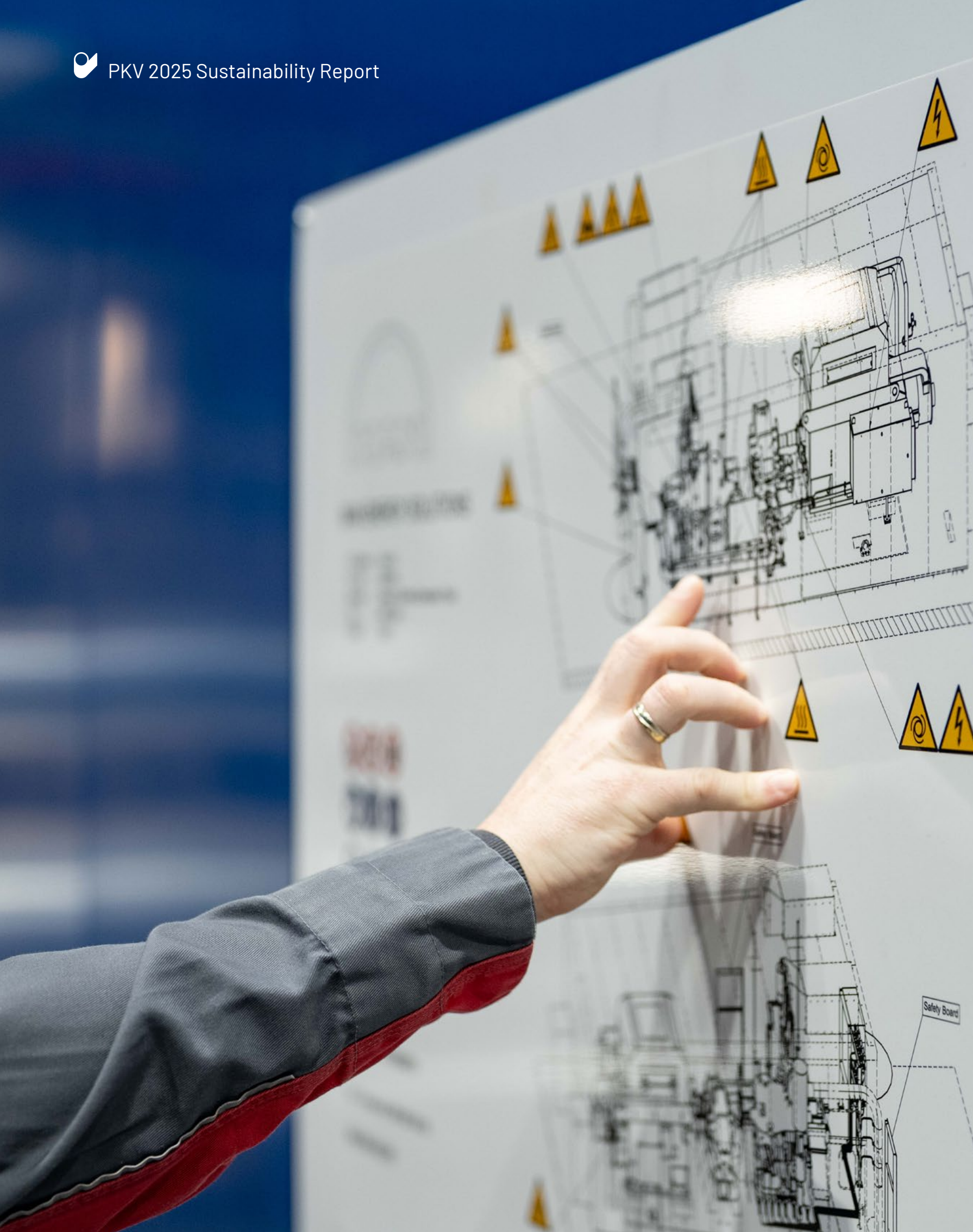
Training metrics

Key figure	2023	2024	2025	Unit
Average number of training hours (per person) – Total / Average training hours per employee <i>(EcoVadis)</i>	2.0	1.7	15.62*	h
Average number of training hours, of whom women <i>(VSME)</i>	2.0	1.7	14.04	h
Average number of training hours, of whom men <i>(VSME)</i>	2.0	1.7	15.82	h
Average number of training hours, of whom non-binary <i>(VSME)</i>	0	0	0	h

Based on the calculated figure, it can be said that each employee spent approximately 1% of their working hours in 2025 on training.

With the rollout of the modules for the leadership development program, which are scheduled for 2025 and 2026, we invested approximately 2,000 additional training hours in 2025 alone for employees in leadership roles.

* In 2025, for the first time, complete tracking of all PKV training sessions, including training on the Studio e-platform, in-person training, the leadership development program (FKEP), and the cybersecurity awareness platform (SoSafe); based in part on estimates of the average duration of a training session; male/female breakdown based on a formula



OCCUPATIONAL HEALTH AND SAFETY

We believe that occupational health and safety are extremely valuable assets that take precedence over production targets. We strictly adhere to the provisions of occupational health and safety legislation and all other regulations that are intended to protect the health of our employees. Our compliance is monitored regularly by the authorities, internal audits and external inspectors. Our occupational health and safety management system is certified according to DIN EN ISO 45001.

In order to adhere to our high standards and go beyond mandatory requirements, we use our own occupational safety officers, regular consultation hours as well as mandatory and optional examinations by our company medical service, a large number of safety officers and first aiders, fire protection assistants, regular meetings of the occupational safety committee and other committees on occupational safety and an extensive system of authorised representatives (e.g. for fire protection, emission control and water protection).

In addition, all persons employed in our production or related areas are given full, high quality professional apparel and personal protective equipment, some of which is custom-fitted, subject to a very small co-pay.

Our company sport is another aspect that makes an important contribution to protecting health. We currently stay fit with six different sports/disciplines (football, volleyball, running, bowling, table tennis and sports badges) and have a good time together.

In addition, PKV has offered its employees membership in the Hansefit company fitness network since May 2023 and covers the monthly costs except for a co-pay. The programme continues to be very well received, with around 309 employees, or around 47% of the workforce, taking part.

Water dispensers are installed throughout the company and are available to our staff at any time.

"One of our strategic goals is to continue moving toward a zero-accident culture in the area of workplace safety."

What is more, employees are also entitled to lease up to two bicycles or e-bikes from our partner Jobrad. We also endorse accompanying campaigns such as “Stadtradeln” and “Cycle to Work”.



Measures and projects implemented in 2025

- Our specific occupational safety goals for 2025 were:
- Reduction in the number of reportable accidents to **fewer than 13 accidents** per 1,000 employees (1,000-man rate (TMQ)), as well as
 - Reduction in the proportion of **behaviour-related accidents** in the total number of reportable accidents to **< 70%**

We slightly exceeded the TMQ in 2025, reaching 14.24. However, this still puts us well below the BG RCI paper value of 26.48 in 2024 (BG RCI, 2024). When we look at the number of days of absence per employee, we can see that we are continuously improving.

We also fell short of our target by 11% when it comes to the proportion of behaviour-related accidents. Nevertheless, we are not shying away from lowering our targets; rather, we are using these results as an opportunity to further strengthen our occupational safety goal for 2026 – to reduce the rate to fewer than 11 accidents per 1,000 employees. In this context, we are further refining our occupational safety concepts and are vigorously implementing additional measures to raise awareness among every employee (see Goals and measures for 2026).

To pursue our goals for 2026, we have launched various projects. Here is a selection of our diverse occupational safety projects and measures implemented in 2025:

- Internal training: Personal protective equipment (PPE) for fall protection, safety officers (SiPo), and entering tanks and containers
- Work involving a risk of falling or in tubs: Rescue plan, including guidelines
- Updating the basic rules (S0 instructions)
- Construction of a training pool at the barracks, including planning of the first training sessions in February/March 2026
- Creating a new S0 instruction for work involving a risk of falling
- Review of the skin care plan (for the treatment of skin problems)
- Conducting an evacuation drill at the administrative office



Goal for 2026:

Accident rate per 1,000 workers (TMQ) < 11

Measures:	Deadline:
→ Personal training provided by managers: maintain, conduct, and document.	→ On an on-going basis
→ Development of OSH awareness: Form an “Awareness-raising” working group. Further measures result from this committee.	→ On an on-going basis
→ Introduce SOS inspections (concept).	→ Q4/2026
→ Involve safety officers more closely in workplace OSH practices (develop a plan).	→ Q4/2026

Occupational safety metrics

Key figure	2023	2024	2025	Unit
Number of reportable workplace accidents <i>(VSME)</i> / Number of workplace accidents <i>(EcoVadis)</i>	12	14	9	Number
Rate of reportable workplace accidents <i>(VSME)</i>	2.79	3.23	1.98	Number of accidents per 200,000 working hours
Accident rate: 1,000-man <i>(PKV)</i>	20.27	23.21	14.24	Number / 1,000 employees
Accident rate: 1 million work hours / frequency of lost-time injuries (LTI) for direct employees <i>(EcoVadis)</i>	13.83	16.18	9.88	Number / 1,000,000 hours
Number of days lost due to work-related injuries, fatalities, and illnesses <i>(EcoVadis)</i>	196	282	257	Days
Accident severity / Severity of injuries resulting in lost time (LTI) for direct employees <i>(EcoVadis)</i>	0.23	0.33	0.28	Days absent / Work-related accident
Hours lost due to work-related accidents <i>(PKV)</i>	1,569	2,252	2,058	Hours
Number of days lost due to accidents at work (LTI) <i>(PKV)</i>	25	42	27	Number
Sickness rate (absence; with and without continued payment of salary) <i>(PKV)</i>	7.9	8.1	7.0	Percent (%)
Number of deaths resulting from work-related injuries and illnesses <i>(VSME)</i>	0	0	0	Number
Proportion of trained first aiders in relation to total number of employees <i>(PKV)</i>	17	23	22	Percent (%)
Trained active first aiders <i>(PKV)</i>	102	145	145	Number
Employees participating in company sports <i>(PKV)</i>	128	131	153	Headcount
Number of employees participating in Hansefit <i>(PKV)</i>	280	288	309	Headcount
Percentage of completed occupational safety training courses(SO instructions) <i>(PKV)</i>	100	100	100	Percent (%)





LOCAL COMMUNITY – HERE FOR OUR REGION

CHARITABLE PROJECTS

The desire to pursue charitable goals and to share the company's success with society was a driving force behind PKV founder Hellmut Barthel's decision to establish his foundation in 1991; upon his death in 1999, the foundation became the majority shareholder of the corporate group.

For decades, the Gertrud and Hellmut Barthel Foundation has been a reliable supporter of many projects with a broad impact. Its focus is primarily on Varel and Friesland, but often extends beyond those areas as well. It focuses on education, culture, and environmental issues, as well as on promoting democracy.

**Barthel
Stiftung**

In 2025, the foundation distributed more than two million euros, supporting 100 projects and 35 scholarship recipients.

Furthermore, PKV itself supports charitable projects geared at safe, healthy and equitable cohesion at its location, primarily by making a donation each year. We are also delighted that so many of our staff are involved in charitable causes in their own time. This is why we established the PKV Extra programme in 2020 to provide annual funding for donating to/ sponsoring projects in which our employees are actively involved.

We have outlined all of these activities in our donation and sponsorship policy, which was implemented in 2021. In 2025, we were able to provide a total of 21,200 euros in donations. Of particular note is a donation of 5,000 euros from PKV for the “900 trees for Varel” project, which enabled us to plant numerous trees on land used for this purpose for the first time, in the interest of climate protection and regional biodiversity. By November 2025, more than 100 trees had been planted. The donation from PKV will be used in March 2026 for a tree-planting campaign at the Varel harbour.



PROACTIVE DIALOGUE

We actively promote open dialogue with the general public by regularly offering free factory tours and providing interested citizens with transparent insights into our production processes. These events are open to anyone 14 years of age or older and are scheduled on an ongoing basis, ensuring low-threshold and continuous interaction.

Through direct interaction on site, the company lays the groundwork for understanding, trust, and questions regarding all relevant topics related to production, sustainability, and corporate practices. At the same time, accompanying communication channels such as newsletters facilitate ongoing information sharing and interaction. This demonstrates our systematic approach to fostering a proactive, structured, and ongoing dialogue with the public.

In our business processes, we are constantly working to assess the potential and actual impacts of everything we do on the environment, people, and society.

Taking this into account and implementing appropriate measures to prevent or minimize negative

impacts are therefore an integral part of all our processes and projects. We provide all of our interested and relevant stakeholders with various ways to contact us directly regarding any concerns, feedback, or complaints they may have.

Furthermore, we have also:

- Implemented an internal complaint mechanism that has always allowed individuals to contact us through any means of communication. As a rule, they are forwarded to the management system coordinators for further coordination, who then forward the matter to the appropriate supervisors for handling.
- In 2023, we implemented a whistleblower protection procedure, whereby the submission of reports through a portal is now organized in a more systematic, anonymous, and centralized manner by the compliance management team.



GOVERNANCE





RISK MANAGEMENT AND COMPLIANCE

We define compliance as adherence to all relevant laws, regulations, internal policies, contractual obligations and voluntary commitments which we or authorised third parties have entered into. This means far more than just lawful conduct. Instead, we also draw guidance from the ethical principles underpinning our corporate culture. This corporate culture thrives on the principle of personal responsibility based on shared values.

In accordance with the guidelines and principles adopted by management in the Code of Conduct, we are also

- Committed to comply with all laws, standards and other legal provisions, and also adhere to the relevant social rules that apply in all countries in which we are present,
- Fully committed to engaging exclusively in fair competition with other market players and our competitors. We comply with all applicable antitrust and competition laws in this area. Under no circumstances do we accept agreements on prices and conditions or arrangements aimed at inhibiting competition or dividing up markets and customer groups.
- Deliberate acts or omissions that cause fraud in relationships with partners are strictly prohibited.
- Under no circumstances are corrupt practices or bribery tolerated.

PKV employees must not offer, grant or accept any unauthorised benefits to or from business partners in the course of their work. The acceptance of gifts is prohibited. The only exceptions are customary hospitality or occasional low-value gratuities.

Our whistleblower system that was introduced in early 2023 enables persons to submit complaints and report anomalies via the group-wide complaints system as part of an anonymous process. Internal and external whistleblowers can use this reporting system to make an anonymous report that is forwarded to an external ombudsman's office, treated confidentially and passed on to the internal compliance manager for further action. The proper use of this whistleblower portal is governed by a group-wide set of procedures that is publicly available.

Data protection is a high priority for our company. Training and audits are regularly performed to sensitize our employees in regard to the handling of personal data. Naturally, all of our actions are rooted in compliance with the relevant laws, in particular the General Data Protection Regulation (GDPR) and the Federal Data Protection Act (BDSG).

We operate an **information security management system** based on the applicable ISO 27000 standard. Our aim is to safeguard the three pillars of information security – availability, confidentiality and integrity – throughout our value chain.

A central office for compliance management was established at Halbzellstoff-Industrie GmbH in 2024. It is in charge of organisation and implementation in the subsidiaries in order to ensure the ongoing development and support of the compliance management system. This includes the following tasks and functions:

- Monitoring legal compliance
- Risk assessment and management
- Development and implementation of compliance programmes
- Tracking of legal changes
- Training and awareness
- Consulting and reporting

Measures implemented in 2025

In 2025, the following measures were implemented to expand our compliance management:

- Preparation of a quarterly compliance report for management,
- Continuation of the risk analysis and assessment of corporate risks,
- Development of a compliance manual as part of the creation of a documented compliance management system,
- Conducting recurring antitrust training for 100% of employees in the purchasing and sales departments,
- Review of the Code of Conduct,
- Development of a procedural guideline with rules for hospitality and invitations and an anti-corruption policy (in preparation for the upcoming training).

Other compliance management targets for 2026:

- Training 100% of relevant employees on anti-corruption and business ethics (Q4/2026)
- Training 100% of new employees on anti-corruption and business ethics within three months
- Ongoing processing of reports submitted through the whistleblower protection portal within three months (if the case permits)
- Annual risk analysis on compliance and integrity

The annual EcoVadis Rating ensures regular external review in the area of ethics and compliance. Compliance is further addressed through the conduct of risk analyses within our own business unit and due diligence reviews of business partners as part of our voluntary fulfilment of supply chain due diligence obligations. Some compliance issues are investigated in other audits (e.g. product safety, data protection, information security).

Compliance metrics

Key figure	2023	2024	2025	Unit
Convictions for anti-competitive conduct, antitrust and monopoly Formation <i>(VSME)</i>	0	0	0	Number
Amounts of fines for violations of anti-corruption and anti-bribery laws <i>(VSME)</i>	0	0	0	€
Percentage of completed compliance training courses (antitrust law) <i>(EcoVadis)</i>	0	0	100	Percent (%)
Percentage of completed compliance training courses (anti-corruption)* <i>(EcoVadis)</i>	0	0	0	Percent (%)
Percentage of employees who have received training in business ethics** <i>(EcoVadis)</i>	39	36	43	Percent (%)
Number of reports submitted through the whistleblower process <i>(EcoVadis)</i>	0	0	0	Number
Number of confirmed information security incidents <i>(EcoVadis)</i>	0	0	0	Number
Cases of harassment <i>(PKV)</i>	0	0	0	Number
Cases of discrimination <i>(PKV)</i>	0	0	0	Number
Number of confirmed corruption cases <i>(EcoVadis)</i>	0	0	0	Number

* Goal for 2026

** Shows the average score from training courses categorized under business ethics: Data protection, information security, cybersecurity awareness, anti-corruption, and antitrust law; this list should be considered indicative only, as some of these training sessions are not held annually or are offered only to new employees; the antitrust law training will be conducted in 2025 by the new compliance manager



RESPONSIBLE SUPPLIER MANAGEMENT

We use almost exclusively recycled waste paper as raw material for the production of paper and cardboard at our plant. On average, we receive 3,300 tonnes of raw material every day from Monday to Friday, which comes in 13 different quality levels and which we source from 13 different countries worldwide (however, 90% of the waste paper comes from within a radius of 500 kilometres). The majority of our main suppliers of purchased goods – including waste paper and laminating paper, auxiliary materials and chemicals, replacement and wear parts, machinery and equipment, as well as services and freight forwarders – are based in Germany or in neighbouring European countries.

PKV is able to sell its entire product portfolio with an FSC® mark thanks to the predominant use of recycled waste paper and the purchase of FSC®-certified pulp, mechanical pulp and laminated paper for individual grades. Naturally, the processes and policies at PKV themselves are also certified according to the FSC® standards. This certificate is regularly reviewed by external auditors and renewed.

Our customers then use our finished products in packaging solutions for the food and consumer goods sector, the pharmaceutical industry or mechanical engineering, to name just a few. After this application, our PKV products are 100% recyclable in accordance with the EN 13430 standard.

We have always engaged in detailed dialogue with our strategic suppliers to guarantee sustainable procurement.

In this context, we also keep an eye on potential risks to sustainable development in social, ecological and ethical dimensions, including

- ➔ Impact of logistics traffic (traffic emissions)
- ➔ Labour conditions upheld by suppliers (compliance with social and ethical standards), and
- ➔ Raw material quality criteria (ecological dimension of resource conservation).

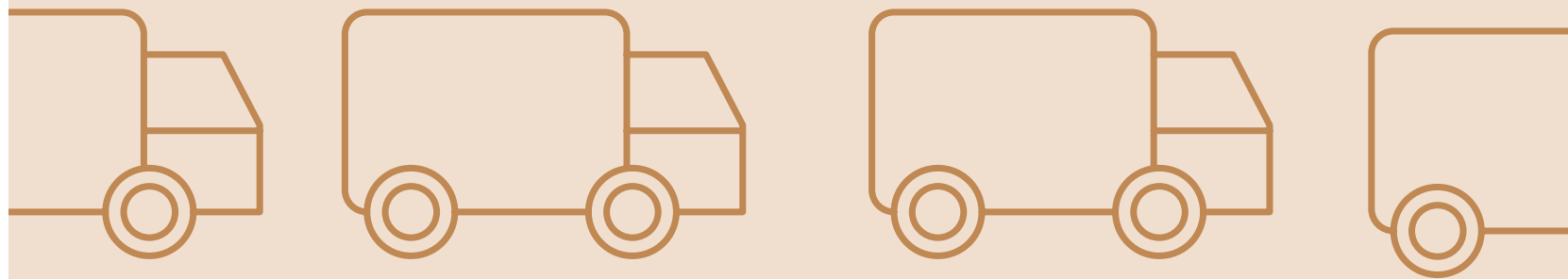
We have introduced a variety of initiatives, rules and processes to address these potential risks. They are communicated to suppliers and business partners by our purchasing departments when the need arises in order to formulate joint solutions. We regularly refine our goals in the area of sustainable procurement and incorporate them into our sustainable procurement policy.





The following measures have been implemented so far:

- Many of our suppliers – as we do ourselves – have certified management systems that codify equitable environmental and social business practices.
- We only purchase FSC®-certified pulp for our paper and cardboard production.
- Our procurement of logistics services builds on compliance with EU standards in regard to cargo services. The use and combination of ship, road and rail carriers are considered from a strategic perspective in order to ensure the efficient transport of goods.
- Compliance with human rights and labour standards – including among our suppliers – is both a matter of course and an obligation
- We are having our procurement policy reviewed as part of the EcoVadis rating.
- Since 2023, we have been conducting an annual systematic assessment of our suppliers through an online platform provider to ensure sustainable and long-term environmentally and socially responsible procurement.



In 2025, we built on the steps taken in 2024:

- With our web-based platform solution, we have subjected 100% of our currently active suppliers (1,523) to an abstract industry and country risk analysis (as at: 01 April 2026).
- Measures identified in the impact analysis – aimed at a detailed review of individual prioritized suppliers and risk areas – were further implemented, and suppliers were contacted
- In Q1 2026, all suppliers newly added in 2025 were entered into the platform so that an abstract risk analysis could be conducted
- The platform has therefore yielded 240 supplier profiles with valid assessment findings and defined overall ESG risk as at the reporting date.
- In Q1 2025, we formulated a dedicated supplier code of conduct and sent it to 100% of our business partners. Through this, we communicate our principles and expectations to our suppliers regarding compliance with human rights and environmental due diligence obligations

Our business partners are also expected to comply with all principles and applicable laws and regulations when working with PKV. We advise our business partners to introduce comparable principles at their companies as well. Any identified violation of our principles will attract consequences.

With regard to our business partners, we launched an abstract (= general risk trends in relation to the country in which the company is based and the industry to which the company belongs) and specific risk analysis (= invitation to complete dedicated questionnaires) on an external platform for the first time at the end of 2023. Based on the risk analysis conducted, the risk potential is generally low, as the majority of our direct suppliers from the main purchasing categories of fibre and laminating papers, auxiliaries/chemicals, spare and wear parts, machinery and equipment, services and freight forwarders are based in Germany (approx. 80%) or come from nearby European countries. Even when adding additional suppliers, only a very small proportion are classed as high risk according to the abstract risk analysis (36 of 1,531), whereby the risk is primarily found in the areas of responsibility in the supply chain and environmental protection.

Also in the course of 2025, selected suppliers were asked to complete dedicated questionnaires in which they can correct their risk status and provide information on guidelines, measures and certifications. An impact analysis was then carried out in order to segment and prioritise the suppliers once again in regard to the probabilities of risk occurrence, influencing capacity and risk severity in order to then derive individual measures. The communication and tracking of measures will continue.

 We have set the following additional goals for 2026:

- Perform an annual, abstract risk analysis for 100% of new suppliers
- Annual continuation of the invitation to complete questionnaires for 100% of suppliers with high abstract risk (red) and medium risk (yellow; >, with revenue of €250,000)
- Annual continuation of individual measures and communication regarding sustainability activities in consultation with business partners prioritized according to their sphere of influence
- Conduct on-site audits for the first time at 100% of our strategically important business partners to assess and raise awareness of key sustainability criteria in our collaboration (Q4/2026)

Sustainable procurement metrics

Key figure	2023	2024	2025	Unit
Estimated number of suppliers <i>(VSME)</i>	1,300	1,400	1,530	Number
Number of target suppliers covered by a sustainability assessment* <i>(EcoVadis)</i>	130	180	240	Number
Percentage of target suppliers covered by a sustainability assessment <i>(EcoVadis)</i>	10	13	16	Percent (%)
Number of audited or assessed suppliers that are implementing corrective actions or capacity-building measures <i>(EcoVadis)</i>	136	136	102	Number
Percentage of audited or assessed suppliers that are implementing corrective actions or capacity-building measures <i>(EcoVadis)</i>	10	10	7	Percent (%)
Percentage of targeted suppliers who have signed the Supplier Code of Conduct <i>(EcoVadis)**</i>	/	/	100	Percent (%)
In the production of paper and cardboard percentage of recycled wood or recycled wood products/materials <i>(EcoVadis)</i>	2.9	2.6	3.1	Percent (%)
Pallet wood Percentage of recycled wood or recycled wood products/materials <i>(EcoVadis)</i>	98.5	98.7	98.4	Percent (%)

* We define sustainability assessment as the supplier having a valid sustainability profile on the online platform used, including a completed questionnaire and a signed code of conduct.

** Dedicated Supplier Code of Conduct was not introduced and distributed until 2025

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INFORMATION ON THIS REPORT / LEGAL NOTICE

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