



Papier- und Kartonfabrik
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Sustainability Report 2023



Deutscher
NACHHALTIGKEITS
Kodex

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GOVERNANCE refers to the management and control of a company. This includes transparency, ethics, integrity and the structures that ensure that a company is managed effectively and responsibly, for the benefit of all stakeholders.



ENVIRONMENTAL

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ENVIRONMENTAL refers to the ecological aspects of sustainability. It includes measures to reduce environmental impacts such as energy efficiency, waste minimization and the protection of natural resources.

SOCIAL

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SOCIAL concerns the social impact of a company on society. This includes topics such as working conditions, diversity in the workplace, social responsibility towards communities and respect for human rights.



PKV WORKS AND TRADES ACCORDING TO ESG CRITERIA

Initiated by the United Nations, the international abbreviation ESG has stood for the terms Environmental, Social and Governance since 2006. As ESG criteria, they represent the three sustainability-related areas of responsibility for companies and act as a corporate tool to record, analyze, measure and evaluate sustainability efforts. Stakeholders are informed about these efforts in regular sustainability reports.



EDITORIAL

The sails are set. And we know the rough course for the first part of our journey! The path to decarbonization is a huge step for our company, as it is for our entire industry. But: for us, it is no longer a departure into the unknown. We have put a great deal of energy and resources into planning this journey, which we consider to be ecologically necessary and which is also required by law in ever-increasing detail.

Our starting conditions were good – recycling of waste paper since 1950 and a decades-long tradition of investing in energy efficiency have put us and our business model in a stable position. We are firmly convinced that fiber-based, recyclable packaging has decisive advantages in terms of sustainability.

Now it's a matter of staying the course. For us, this means groundbreaking investment decisions in fuel switching as well as permanent smart navigation.

Not everything is in our hands. We, and with us the entire industry, need a clever system that reliably provides us

with competitive green energy. More than ever before, electricity from renewable sources will be a central component. From efficient grid expansion, to modern grid fee structures, to economic energy procurement strategies – a lot has to be rethought and adapted as part of the transformation. We want to be part of this transformation and we also have to question our processes and thought patterns. That is why we are actively engaging in discussions with politicians and administrators to ensure that the opportunities and needs of our industry are taken into account. An industrial electricity price would also give us a tailwind because it could help with the transformation and secure thousands of tariff-bound jobs in Germany. Excessive bureaucracy, on the other hand, could cause us problems.

Our navigation team already has its hands full with decarbonization, preparing for the CSRD, implementing sustainable supplier management and many other topics related to the environment, people and society.

But we have a goal that makes all the effort worthwhile. By successfully navigating the path to climate neutrality and sustainable business practices in all areas, we as a company contribute to a perfect cycle: When biogenic packaging material is repeatedly turned into new material in climate-neutral recycling cycles, we maximize the benefits for people and products – while also conserving resources to the greatest extent possible. This vision is what drives us!

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

THE HEART OF YOUR PACKAGING

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. With an annual production capacity of 930,000 tonnes, we are one of the largest production sites in the German paper industry. In 2023, we generated a turnover of 415 million euros and employed around 600 people.

We produce Fluting and linerboard (white/brown) from waste paper, as well as gray and brown board in pigmented, white coated and laminated grades.

Our company holds the following certificates:

- **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)**

In the reporting year, 64% of our products were sold in Germany and 36% 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.



DNK criterion 01

STRATEGY

“We have been using 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.”

DNK requirement: The company declares whether or not it pursues a sustainability strategy. It explains what concrete measures it is undertaking to operate in compliance with key recognised sector-specific, national and international standards.

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 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.

This strategy defines how our company contributes to sustainable development in several strategic fields of action. We will briefly outline these contributions at this point and go into more detail in the rest of the report.

We have been fulfilling our responsibility to contribute to sustainable development for many decades as a manufacturer of high-quality packa-

ging paper and cardboard made 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 in doing so make a strong contribution to environmentally perfect packaging.

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.

We can and intend to continue increasing our energy efficiency by means of process optimisation and technical innovation and in doing so will reduce energy input per tonne of finished product.

In view of the ambitious European climate targets, we are working hard to design potential transformation pathways and prioritised technological options to switch to alternative fuels on our road to climate neutrality. Supported by an external team of consultants with expertise in the energy market and technology, we launched a project to develop this pathway and an overarching decarbonisation strategy in December 2022. The project was successfully completed in October 2023 and presented to the company's shareholders, whereupon the preliminary plan was approved for further internal action by the decarbonisation team set up for this purpose. Since then, the internal decarbonisation team has been tasked with defining a concrete decarbonisation path to achieve short- and medium-term reduction targets by 2031, and further targets by 2045.

The decarbonisation pathway is specifically designed to achieve an absolute reduction in greenhouse gas emissions of -42% by 2031 compared to the base year 2021.

Based on our location, our highly efficient water management system achieved a top position in the industry ranking. Nonetheless, we intend to harness technical innovation to continue reducing our consumption of fresh water and retain our excellent standing.

We always consider environmental impact and increased energy efficiency when making investments and procurements. Wherever possible, we give precedence to greener options that make a positive contribution to sustainable development. These principles apply equally to cooperation with suppliers and contractual partners. In 2023, we began to focus intensively on the analysis and fulfilment of human rights and environmental due diligence obligations within our supply chains and hence in procurement processes as well. Even if we are not currently directly subject to the requirements of the German Supply Chain Act, we are gradually implementing the requirements according to our own chosen approach, as we expect positive developments within the supply chains and have identified relevant interfaces with other initiatives. We have always paid particular attention to environmental and other relevant criteria in our standardised management systems in our procurement processes. However, at the beginning of 2023, we set ourselves the goal of carrying out regular risk analyses and full due diligence checks on our direct business partners.

Healthy and motivated employees are the cornerstone of a successful company. This potential must be preserved. Among our top priorities is to avoid placing our employees, suppliers or visitors at risk.

We are committed to the continuous improvement of all processes, both to safeguard our company and out of responsibility for sustainable development. Employees from all levels are involved in our decision-making processes. The following management systems are implemented and maintained in order to ensure this practice:

- Occupational health and safety according to DIN EN ISO 45001
- Environmental management according to DIN EN ISO 14001
- Quality management according to DIN EN ISO 9001
- Energy management according to DIN EN ISO 50001
- Food and product safety according to DIN EN ISO 22000

In the pursuit of all these objectives, we remain aware that as a company within an energy-intensive industry we can control many – but not all – of the factors to fulfil our vision.

Our industry's path to climate neutrality will hinge to a large extent on policy frameworks and technical decisions, especially in regard to the purchase of renewable energies. In our view, the challenges are found less on the technical side and refer instead to the availability of 'green' energy, regulatory and infrastructural issues, as well as the general business environment.

These framework conditions must enable us to produce economically and market our products both nationally and internationally – also outside the EU – in order to secure the viability and continued development of our company. We cannot create these conditions on our own. It is therefore our firm belief that the opportunities and requirements for climate-neutral paper production must be communicated transparently at all societal and political levels.

DNK criterion 02

MATERIALITY

“However, the most important factor on the road to ecologically perfect packaging will be how [...] greenhouse gas emissions in paper production can be substantially reduced even further.”

DNK requirement: The company discloses the aspects of its business operations that have a significant impact on sustainability issues and what material impact sustainability issues have on its operations. It analyses the positive and negative effects and provides information as to how these insights are integrated into the company's processes.

Packaging made from recycled waste paper is a functionally persuasive and ecologically purposeful solution for a variety of industrial requirements or consumer wishes. Drawing on this conviction, Papier- und Kartonfabrik Varel has been producing paper and cardboard from waste paper since 1950. In doing so, PKV also attaches importance to fair partnership with its employees, which it achieves by paying salaries in line with or even above collective agreements, among other things.

In Germany, packaging paper and cardboard are now made almost exclusively from recycled waste paper. By using this valuable raw material, PKV also conserves significant quantities of natural resources. Recent studies indicate that recovered paper fibres can be reused in packaging materials 25 times or more without any significant loss in quality (Eckhart, Rene (2021): Über die Rezyklierbarkeit von Faltschachtelkarton. Wochenblatt für Papierfabrikation 11/2021).

In this environment, the PKV is influenced by key sustainability issues, and at the same time, key sustainability issues have an influence on its business activities. A company classifies an

issue as material based on its strategic alignment as defined by management and with particular consideration of the opportunities and risks.

Opportunities and risks are regularly analysed at various levels. A spreadsheet tool is used to collect corporate opportunities and risks in the management review prepared by the Executive Board. The information is then visualised in an opportunity and risk matrix and reviewed regularly. The findings are then used to infer suitable actions. The process descriptions reflect their inherent opportunities and risks, while responsibility for their monitoring and control rests with the process owners.

Furthermore, stakeholder management – the consideration of what interested parties expect – is another key factor to enable appropriate responses to the business environment. A spreadsheet tool is used to analyse stakeholder groups as part of the annual management review and to infer (communication) measures.

The identification of environmental aspects belongs in the category of environmental planning and is a basic requirement for preparing relevant targets and programmes. Environmental aspects that can be influenced and the associated environmental impacts are regularly identified for the principal activities within paper and cardboard production and along the product life cycle. Unintended circumstances and unforeseeable emergencies are also considered in this context.

Papier- und Kartonfabrik Varel has adopted a systematic procedure to identify all relevant legal, regulatory and customer requirements pertaining to occupational health and safety, quality and product safety, environmental protection and energy (mandatory obligations) that apply to its activities and services. The currency of these obligations is regularly reviewed and any changes are assessed.

These analyses and the business model itself indicate how PKV's business operations positively impact material sustainability issues. Of particular note in this regard is the substantial contribution that PKV makes to a functioning circular economy and hence to resource efficiency in the production of packaging materials. Nevertheless, even the production of packaging material from recycled waste paper is not without its challenges and risks in regard to material sustainability issues. The use of energy and water resources warrant particular mention in this regard. Despite a 43% reduction in energy consumption per tonne of paper across the sector since 1980 (bifa Umweltinstitut (2020): Nachhaltiger Papierkreislauf – eine Faktenbasis), the paper industry remains energy-intensive, which is due in particular to the drying process during production. Natural gas is currently the main source of energy at PKV and is used in the company's own power plant, which generates greenhouse gas emissions (refer to → criterion 12). At the same time, water is a necessary part of the production process, where it is used as a solvent and transport medium. PKV's geographic location

means that the extraction of fresh water from deep wells is the only way to accommodate these requirements in a process that is strictly monitored by the authorities. Technical tests on the use of additional alternatives such as purified wastewater have been completed successfully. This option will continue to be pursued going forward (refer to → criterion 12).

Material sustainability issues emanating from outside the company affect business operations at PKV as well. The analyses outlined above indicate that the huge rise in demand for PKV products over recent decades should be viewed as the most significant opportunity in this regard. This trend has been driven of late by the increasing consumer awareness for the ecological benefits of recyclable packaging compared to plastic solutions.

Representative surveys (e.g. Simon-Kucher & Partners, March 2021) show that more than two thirds of German consumers attach importance to sustainable packaging. 70% of respondents state that they view paper and cardboard as the most sustainable materials. As described in the last paragraph, this perception is naturally associated with risks as well. We are convinced that our business model presents the opportunity to create products for environmentally perfect packaging. It is our belief that we are ideally prepared for this role thanks to our sustainable raw materials and the steadily evolving resource efficiency of our business cycles. However, the most important factor on the road to

ecologically perfect packaging will be how greenhouse gas emissions in paper production can be substantially reduced even further based on the threefold factors of in-house efficiency, technical innovation and government policy (especially in regard to energy sources). Since our last report, new findings have emerged from the ongoing negotiations on the EU Packaging and Packaging Waste Regulation (PPWR), which, among other things, provided for reuse quotas for certain types of packaging. In our view, this poses the risk that established recycling loops may be placed at a disadvantage in favour of reuse loops, although in our opinion, these prescribed reuse loops would be associated with a clearly negative environmental impact due to plastic usage, transport, storage and cleaning. According to current estimates, the revision of the PPWR, which is currently undergoing final negotiations, still poses a risk in the long term, especially as implementation into national law is still pending, but has been amended in some relevant areas in a positive and practical way for the recycling process of fibre-based packaging. For example, exemptions were created in regard to the introduction of reuse quotas for paper, card and cardboard packaging, and the fully functioning recycling process of our products was recognised.

The topics previously defined as material also remained in place for the 2023 financial year and continued to be monitored as part of our sustainability strategy and the definition of corresponding targets and measures. As part of a strategic

objectives workshop in November 2023, some sustainability topics were further strengthened and anchored in concrete operational objectives and measures for achieving the objectives in 2024 (see Chapters 3, 12, 14-16). In particular, as part of the preparations for the upcoming Corporate Sustainability Reporting Directive (CSRD), an update of the materiality analysis in accordance with the CSRD was carried out for the entire HZI Group in the first and second quarters of 2024. These will only be included in the next sustainability report. Full reporting in accordance with the CSRD will then take place starting from 2026 in the non-financial statement in the management report of the HZI Group's annual financial statements.

The conclusions we draw from these analyses for our sustainability management are described primarily in → criteria 01, 03 and 12.

Refer in this regard also to
 → **Criterion 01**
 → **Criterion 03**
 → **Criterion 12**

DNK criterion 03

OBJECTIVES

“[...] the objective 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 remains the top priority.”

DNK requirement: The company discloses what qualitative and/or quantitative as well as temporally defined sustainability goals have been set and operationalised and how their level of achievement is monitored.

Our vision is to maximise climate neutrality in the production of our recycled papers and cardboards – and in doing so make a strong contribution to environmentally perfect packaging. We believe that this vision, as reported in → criterion 01, is consistent with the goals of the Paris Climate Agreement of 2015 and the 17 Sustainable Development Goals (SDGs) of the United Nations. Building on this long-term and most vital objective, we have derived a variety of medium-term goals as part of our strategic objectives. The Executive Board analyses their impact and level of fulfilment in the annual management review and evaluates the findings with senior managers. In addition, implementing and auditing our management systems are essential factors in the fulfilment of our sustainability goals. The Executive Board is responsible for the achievement of our strategic goals. As part of a strategic goals workshop in November 2023, our strategic goals for 2024 were also formulated in regard to sustainability.

The three highest-priority goals were:

- **GHG emissions: Definition of a concrete decarbonisation pathway**
- **Sustainable procurement: Analysis and fulfilment of human rights and environmental due diligence obligations in the supply chain (in accordance with the requirements of the German Supply Chain Due Diligence Act)**
- **Environmental pollution: Reduction of odour emissions**

Given the energy intensity within our industry, the objective 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 – remains the top priority. This high priority is also derived from the regular evaluation of opportunities and risks, which we describe in → criterion 02. The most notable approaches that warrant mention in this regard include

- Efficient power plant technology
- Increasing the availability of our production facilities
- Minimising rejects
- Optimised utilisation of raw materials
- Procurement and sales strategy that draws to the greatest possible extent on regional sources to keep energy input in the transport sector at the lowest level of economic viability, as well as
- Various energy saving and efficiency projects in all production facilities.

Our company has defined detailed short- and medium-term goals for all of these and other approaches. As described in → criterion 1, in 2023 we worked on a decarbonisation pathway for our company that goes beyond mere energy efficiency measures and previously set specific reduction targets. 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. In order to meet this target, we are focusing on electrifying our production processes by increasingly using green electricity to operate our systems and machines and converting external electricity into heat/steam for our drying processes with the help of Pth modules.

In connection with this scenario, the necessary expansion of the previously limited electricity grid connection and the possibility of using a large heat pump to achieve greater efficiency in the generation of steam are being examined.

As expected, our highly efficient water management system was able to maintain a top position in the industry ranking based on our location, using just 4.4 m³ of fresh water per tonne of finished product in 2023. We intend to harness technical innovation to continue reducing our consumption of fresh water where possible.

Moreover, we have defined targets for our purchasing department which will guide our actions in the attainment of our sustainability vision. We have always engaged in detailed dialogue with our strategic suppliers to guarantee sustainable procurement. We have launched collaborative projects for process optimisation, resource efficiency and innovation to trigger positive developments along the entire supply chain. As described in our last report, we began to introduce an even more comprehensive supplier assessment system in 2023 with the aim of ensuring sustainable and proper environmental and social procurement in the long term.

In 2023, we built on the steps taken in 2022:

- With the introduction of a web-based platform solution, we have subjected 100% of our suppliers (1,290) to an abstract industry and country risk analysis
- Suppliers with an abstract high and medium risk who are also strategically important suppliers for us (136) were invited to complete various questionnaires as part of a

specific risk analysis, in which they commented on key sustainability and compliance issues.

- In Q2/Q3 2024, the analysis will be continued by carrying out an impact analysis to examine individual prioritised suppliers and risk areas in detail in order to derive appropriate measures.
- In Q3 2024, all purchasers will be trained in sustainable procurement and the practical implementation of supplier risk analysis and communication.

In the second half of 2024, a policy statement and a supplier code of conduct will be formulated to provide our suppliers with clear basic guidelines on what we expect from them in terms of compliance with human rights and environmental due diligence obligations. Furthermore, our strategy includes documentation of our standards in all areas of occupational safety, which we uphold through implementation of our occupational health and safety management system in accordance with DIN EN ISO 45001 and seek to improve continuously going forward. One specific goal in this context was to cut the number of work accidents to the level enshrined in the BG RCI paper (Employer's Liability Insurance Association for the Raw Materials and Chemical Industries) by the end of 2022, a goal we achieved.

In 2023, we also achieved our self-imposed goal of remaining below 20 reportable accidents per 1,000 employees.

For 2024, we have set ourselves the goal of further reducing the number of accidents and remaining below 15 reportable accidents per 1,000 employees and are continuously implementing appropriate measures.

DNK criterion 04

DEPTH OF THE VALUE CHAIN

“We almost exclusively use recycled waste paper as raw material for the production of paper and cardboard at our plant.”

DNK requirement: The company states what significance aspects of sustainability have for added value and how deep in the value chain the sustainability criteria are verified.

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 15 different quality levels and which we source from 14 different countries worldwide (in 2023, 99.3% of our purchase volume came from Europe, including Great Britain, Norway and Switzerland, 72% from Germany). Naturally, we also receive numerous other deliveries with auxiliary materials, laminated paper, technical components and much more.

Even today, we are engaging 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. At the time of this report,

- 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 law standards in logistics procurement is viewed as an inalienable requirement.
- A large proportion of purchasers are receiving training in sustainable procurement.
- We are having our procurement policy reviewed as part of the EcoVadis rating.
- As described in the last chapter, we began introducing an even more comprehensive supplier assessment system in 2023 with the aim of ensuring sustainable and proper environmental and social procurement in the long term.

In 2023, we built on the steps taken back in 2022:

- **With the introduction of a platform solution, we have subjected 100% of our active suppliers (1,290) to an abstract industry and country risk analysis**
- **Suppliers with a high and medium risk who are also strategically important suppliers for us (136) were invited to complete various self-assessments/questionnaires as part of a specific risk analysis, in which they were required to comment on key sustainability and compliance issues.**
- **In Q2/Q3 2024, the analysis will be continued by carrying out an impact analysis to examine individual prioritised suppliers and risk areas in detail in order to derive appropriate measures.**
- **In Q3 2024, all purchasers will be trained in sustainable procurement and the practical implementation of supplier risk analysis and communication.**
- **In the second half of 2024, a policy statement and a supplier code of conduct will be formulated to provide our suppliers with clear basic guidelines on what we expect from them in terms of compliance with human rights and environmental due diligence obligations.**

Our own production is the next key point in our value chain. We process our raw material into paper webs on rolls and cardboard on pallets or rolls at our plant. The sustainability aspects of this production are described in detail in → criterion 12 Resource Management.

Since 2010, PKV has been able to offer its customers Forest Stewardship Council (FSC®) chain of custody certification for all its products. Established 1993, FSC® has created an internationally recognised certification system to ensure sustainable forest management. PKV is able to sell its entire product portfolio with an FSC® mark thanks to the predominant use of recycled waste paper as a raw material and the purchase of FSC®-certified pulp, mechanical pulp and laminated paper for individual grades. We can offer our customers FSC® Recycled Credit, FSC® Recycled 85%, FSC® Mix Credit and FSC® Mix 70%, depending on the composition of the individual products. 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. Subsequently, after being used, our PKV products are 100% recyclable. This means they can be collected in waste paper containers and reprocessed into

Refer in this regard also to
→ **Criterion 12**



DNK criterion 05

RESPONSIBILITY

“[...] It goes without saying that sustainability is not just a matter for the boss. All of our employees are kept up to date with sustainability issues at the company [...] and encouraged to do their part.”

DNK requirement: Accountability within the company's management with regard to sustainability is disclosed.

In 2023, further steps were taken to optimise the holistic sustainability strategy. In view of the large number of regulatory requirements identified, some topics and projects were prioritised by the sustainability manager together with the Executive Board. In November 2023, the multi-faceted topic of sustainability was included as a separate area in the strategic goals (5-year vision). The achievement of the prioritised strategic sustainability goals for 2024 is ensured by the respective project managers with their working groups and monitored by the sustainability manager in regular status meetings. The sustainability manager reports on the progress of the company's targets at the internal 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. 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).

It goes without saying that sustainability is not just a matter for the boss. 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 parti-

cipation 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 is also planned for 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.

DNK criterion 06

RULES AND PROCESSES

“[...] there are management systems/standards in place at PKV to define or establish processes that are geared at implementing the sustainability strategy.”

DNK requirement: The company discloses how the sustainability strategy is implemented in the operational business by way of rules and processes.

PKV's sustainability goals (as an integral component of the strategic objectives) are a firm part of the internal rules, processes and standards – across all hierarchical levels, from the partners and Executive Board to the regular dialogue at the operational level and vice versa.

Aside from the sustainability strategy itself, the company has introduced a variety of policies to provide basic guidance in this process. They include a Code of Conduct, internal management principles, a policy statement on working conditions and human rights and a policy for sustainable and responsible procurement.

PKV draws on its established system of short, medium and long-term work and safety instructions, various regular reports, information on the "PULS" social intranet and other management and reporting formats to fulfil its goals.

At the same time, PKV controls its activities using management systems and

standards in the following areas

- Quality (since 1994, certified according to ISO 9001)
- Environment (since 2009, certified according to ISO 14001)
- Forest Stewardship Council (FSC®), certified since 2010
- Occupational health and safety (certified according to BS OHSAS 18001 from 2012 to 2019 and according to ISO 45001 since 2019)
- Energy (since 2013, certified according to ISO 50001)
- Food safety (certified according to INREKA since 2008/switch in certification to ISO 22000 since 2021)

and regularly engages certified external auditors to review its procedures. 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.



DNK criterion 07

CONTROL

“Much of this data is integral to reporting and auditing of our management systems and, for this reason alone, must fulfil the strictest requirements in regard to reliability, consistency and comparability.”

DNK requirement: The company states how and what performance indicators related to sustainability are integrated into its periodical internal planning and control processes. It discloses how suitable processes ensure reliability, comparability and consistency of the data used for internal management and external communication.

Like with all its strategic goals, PKV also logs and reports a large number of metrics and performance indicators concerning its sustainability goals. This data is used by managers, the Executive Board and shareholders for steering and control purposes. Much of this data is integral to reporting and auditing our management systems and, for this reason alone, must fulfil the strictest requirements in regard to reliability, consistency and comparability.

This applies equally to the metrics and performance indicators that relate to our energy input. We will now examine this issue in more detail, in line with the principle of materiality.

Among others, we use energy in-

put per tonne of finished product as a performance indicator to measure our target achievement. This enables us to state, expressed in kilowatt hours, how much energy was needed to produce one tonne of marketable paper or cardboard. The indicator is based on measured energy input (according to our energy management system) and weight data for our finished products. It allows us to see the progress we have made towards our reduction target.

However, we still require significant amounts of additional data and various indicators to measure this progress. This is due to the large number of factors that impact our energy input. These influences include, among others, raw material utilisation, the power efficiency of our power plant and production facilities, the availability of these facilities (energy input increases if availability is higher) and the volume of waste (lower waste quantities result in less energy input per tonne of finished product).

Within this framework, we consider not only the pure energy input from our current energy sources of natural gas, biogas and electricity, but also their associated emissions. Accordingly, we calculate our corporate carbon footprint based on the principles enshrined in the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. For more information, refer to → criterion 13.

Refer in this regard also to
→ **Criterion 13**

Performance indicator EFFAS S06-01: Percentage of total suppliers and supply chain partners screened for compliance in accordance with ESG criteria

All of our 1,290 currently active suppliers were screened using an abstract risk analysis with regard to country and industry risks. Of these, 136 suppliers (corresponds to 10.5%) with a high risk and strategically important suppliers with a medium risk were subjected to a specific risk analysis using an online survey on relevant sustainability topics, including social and ecological aspects. Further suppliers will be invited to participate in surveys as part of ongoing campaigns.

Performance indicator EFFAS S06-02: Percentage of total suppliers and supply chain partners audited for compliance in accordance with ESG criteria

So far, no corresponding audits have been carried out by PKV. However, many of our suppliers and partners are already certified according to externally audited management systems. This was determined as part of the sustainability survey. However, since this survey does not yet cover 100% of suppliers, the percentage of audited suppliers is not yet indicative. No further audits were carried out in 2023 because the more detailed evaluation of suppliers as part of the supplier risk analyses did not begin until the end of 2023 and the evaluation of the results was still pending.

DNK criterion 08

INCENTIVE SCHEMES

“In addition, management has decided to provide financial support for voluntary work by employees.”

DNK requirement: The company discloses how target agreements and remuneration schemes for executives and employees are also geared towards the achievement of sustainability goals and how they are aligned with long-term value creation. It discloses the extent to which the achievement of these goals forms part of the evaluation of the top managerial level (board/managing directors) conducted by the monitoring body (supervisory board/advisory board).

PKV’s sustainability goals (as described in → criterion 03) are firmly integrated into the strategic goals of the company and as such are also part of the regular management evaluations conducted by the shareholders. We report on the corresponding management review as a control instrument at management level in → criterion 02, and on more detailed control mechanisms at the level of individual performance indicators in → criterion 07.



In addition, management has decided to provide financial support for voluntary work by employees.

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.

PKV has established two monetary incentive schemes that relate to sustainability issues:

Refer in this regard also to
→ **Criterion 02**
→ **Criterion 03**
→ **Criterion 07**

The management and works council established the company suggestion scheme as far back as 2001, and it remains in place today. Among others, the sustainability goals of occupational safety, health protection and environmental protection were part of this scheme from its inception. The energy efficiency goal was then added later on.

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.

DNK criterion 09

STAKEHOLDER ENGAGEMENT

“PKV has appointed primary contacts and introduced communication channels for all these stakeholder groups [...]”

DNK requirement: The company discloses how the socially and economically relevant stakeholders are identified and integrated into the sustainability process. It states whether and how an ongoing dialogue takes place with them and how the results are integrated into the sustainability process.

A structured record detailing the most important stakeholder groups with whom PKV has always engaged was prepared during implementation of the PKV management systems in 2017. It was drafted during a management workshop under external leadership and also set out the interests these stakeholders have in the company and what demands they place in PKV.

The currency of this system is regularly reviewed during the annual management evaluation as well as internal and external audits, and any necessary changes are then made.

These main stakeholders are (in no particular order)

- shareholders
- employees/works council
- customers
- neighbours/residents
- applicants
- onractors (service providers, suppliers, utilities, certifiers)
- trade associations
- local media
- schools
- the interested public
- emergency services
- authorities
- legislative institutions
- chambers and associations
- insurance companies
- banks
- associations
- NGOs

PKV has appointed primary contacts and introduced communication channels for all these stakeholder groups. These communication channels can be extremely varied (face-to-face meetings, events, digital formats, press and public relations, other formats for internal and external corporate communication, company suggestion schemes, audits, inspections, reports...). PKV's system of occupational health and safety management also includes numerous opportunities to consult and involve employees.

Feedback from the various forms of dialogue with these stakeholders is also used in different ways for the ongoing development of sustainability management.

As part of the update of the materiality analysis described in → criterion

02, the main stakeholder groups at PKV were once again transparently involved in the process of identifying material sustainability issues on which PKV has an impact in the present and future and issues that have an equal impact on PKV by means of a stakeholder survey.

The complaints process in regard to aspects of the management systems and/or FSC®-certified products is an apt example. Each complaint that PKV receives is logged and forwarded to the competent office without delay. In addition, complaint management liaises with complainants during and after the processing of their concern. Complaints regarding FSC®-certified products are handled according to a process defined in the FSC® manual; this also applies to interim status reports and final feedback to the complainants.

In addition, a complaints system was set up at the beginning of 2023 allowing all external and internal stakeholder groups to submit anonymised reports on violations of public law and human rights and/or environmental obligations. We have added corresponding rules of procedure and a link to the reporting platform on our website.

The company suggestion scheme is another example of a process to manage feedback from our stakeholders. It is described in more detail in → criterion 08.

Refer in this regard also to → **Criterion 8**



DNK criterion 10

INNOVATION AND PRODUCT MANAGEMENT

“Harnessing the best available technology has always been integral to our corporate strategy. This has positive knock-on effects in regard to resource preservation. [...]”

DNK requirement: The company discloses how innovations in products and services are enhanced through suitable processes which improve sustainability with respect to the company's utilisation of resources and with regard to users. Likewise, a further statement is made with regard to if and how the current and future impact of the key products and services in the value chain and in the product life cycle are assessed.

Papier- und Kartonfabrik Varel makes an important contribution to sustainable development by means of its business model alone. Compared to other materials, packaging paper and cardboard made from recycled paper yield significant benefits in regard to ecological aspects of sustainability that extend from production and use to recycling. Processing waste paper as the raw material conserves natural resources, and the collection systems established in Germany and many other countries ensure that used products can be easily returned to the circular economy. Among other things, a carbon footprint is calculated for each of our products in order to assess their specific environmental impact. Moreover, our management systems regularly identify environmental aspects that can be influenced and the associated environmental impacts for the principal activities within paper and cardboard production and along the product life cycle. Unintended circumstances and unforeseeable emergencies are also considered in this context. We report on how other opportunities and risks are considered in → criterion 02.

Naturally, innovation processes along the value chain affecting established goods such as paper and cardboard play an important role, also with

regard to sustainable development. Broken down individually, these processes include, firstly, external technical innovations exploited by our company, and, secondly, proprietary product and process innovations as well as, thirdly, investments in industry-wide innovation processes.

Technical innovation has always played a central role at our company. Harnessing the best available technology has always been integral to our corporate strategy. This yields a steady stream of positive knock-on effects in the area of resource conservation –

for instance when innovative technology is used for machine conversions that increase dewatering of paper in the machine's press unit to save energy during steam drying. In addition, PKV is, broadly speaking, open to revolutionary methods of steam production and in 2019 commissioned a power-to-heat module that draws on wind energy (purchased from the market) to generate steam. In 2022, PKV also planned to install a new photovoltaic system with an output of around 2.2 megawatts (MWp). Implementation began in 2023.

We are also strongly involved in the continuous improvement of our own products and processes, along with innovation and optimisation. Our integrated management systems (quality, environment, occupational health and safety, food and product safety, energy) provide a suitable framework for this purpose that is regularly assessed by external auditors. The company suggestion scheme is another example of an innovative process. It is described in more detail in → criterion 08.

Furthermore, our internal product development department, for example, contributes to industry-wide research projects that aim to exploit previously unusable fibre material for recycling and integration in packaging materials.

PKV co-founded Modellfabrik Papier in Düren in 2019 to work on industry-wide solutions to reduce greenhouse gas emissions, improve resource conservation and increase energy efficiency going forward. Comprising a large number of partners from industry, universities and associations, this research network will use the coming years to conduct intensive basic research in the interests of sustainable, climate-neutral paper and cardboard production.

Refer in this regard also to
→ Criterion 02
→ Criterion 08

Performance indicator EFFAS E13-01: Improvement rate of product energy efficiency compared to previous year

Since our products themselves do not consume energy, we cannot report on this indicator. We report on the energy consumption and efficiency of our production under the corresponding criteria.

Performance indicator EFFAS V04-12: Total investment (CapEx) in research for ESG-relevant areas of the business model, e.g. ecological design, eco-efficient production processes, reducing the impact on biodiversity, improving health and safety conditions for employees and partners in the supply chain, developing ESG opportunities for products – also expressed in monetary units, e.g. as a percentage of sales

We are unable to report on this indicator because our data does not currently allow these investments to be clearly distinguished from each other. However, in 2024 we are preparing intensively to firmly anchor the KPIs required under the EU Taxonomy and CSRD in our organisation and thus to be able to report on this in 2026 based on the 2025 balance sheet.

DNK criterion 11

USAGE OF NATURAL RESOURCES

“[...], PKV has been contributing for decades to a successful circular economy consisting of paper and cardboard production, the use of its products in industry and private holds and recycling and by doing so is conserving natural resources.”

DNK requirement: The company discloses the extent to which natural resources are used for the company's business activities. Possible options here are materials, the input and output of water, soil, waste, energy, land and biodiversity as well as emissions for the life cycles of products and services.

PKV has almost exclusively used waste paper as the raw material in the production of paper and cardboard since 1950. The only exceptions are small quantities of pulp from sustainable forestry, which are added to special grades for technical reasons, and virgin fibre-based laminating papers made of pulp from sustainable forestry, which we purchase from external sources. PKV was one of the first paper factories in Germany to rely exclusively on waste paper as a raw material.

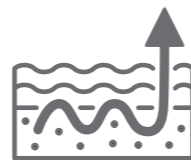
By doing so, PKV has been contributing for decades to a successful circular economy consisting of paper and cardboard production, the use of its products in industry and private households and recycling thereby conserving natural resources. Fibres used in the production of corrugated base paper and cardboard can be recycled to a high standard and reused more than 25 times. In Germany, on average, over 80 per cent of such packaging consists of recycled paper. The return rate for waste paper is similarly high: around 80 per cent of paper, cardboard and carton products are disposed of properly. PKV purchased a total of 820,000 tonnes of waste paper in 2023.

At the same time, the recycling of waste paper also requires natural resources – mainly 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.

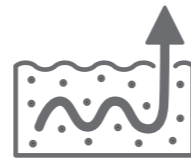
Water is the most important pulping, transport and sorting medium and is hence indispensable for paper and cardboard manufacturers. This applies from the preparation of raw materials to web creation and the finished web to comply with specific strength and appearance requirements. In 2023, PKV used 4.4 m³ of fresh water per tonne of finished product (3.1 million m³ in total) in multiple and cascade scenarios for its production processes. Our water management system is explained in more detail in → criterion 12.

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. As energy sources, PKV currently uses natural gas (2023: 1,349,869,330 kWh) and biogas (2023: 52,453,000 kWh) generated in the process water treatment to create process heat (in the form of steam) and electricity. For reasons relating to process engineering, we also purchase electricity from external sources (2023: 9,854,451 kWh), but also feed electricity that we generate but do not use into the public grid (2023: 23,922,880 kWh). Our energy management system is described in detail in → criterion 12.

ENERGY SOURCES 2023



**1,349,869,330 KWH
NATURAL GAS**



**52,453,000 KWH
BIOGAS**



**= PROCESS HEAT
AND ELECTRICITY**

**9,854,451 KWH
EXTERNAL ELECTRICITY**



**23,922,880 KWH
ELECTRICITY FED INTO
THE PUBLIC GRID**

Refer in this regard also to
→ **Criterion 12**

DNK criterion 12

RESOURCE MANAGEMENT

Building on our current investment programme, we aim to achieve an up to 10% reduction in our carbon emissions per tonne of finished product by 2025 [...].”

DNK requirement: The company discloses what qualitative and quantitative goals it has set itself with regard to its resource efficiency, in particular its use of renewables, the increase in raw material productivity and the reduction in the usage of ecosystem services, which measures and strategies it is pursuing to this end, how these are or will be achieved, and where it sees there to be risks.

ENERGY

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.

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 200 tonnes of steam per hour and more than 50 MW of electricity, depending on the steam off-take. Natural gas is the principal energy source, along with biogas generated in our process water treatment system. It is primarily converted into electricity in two gas engines with a combined electrical output of almost 2 MW. The flue gas heat is used to generate steam and the engine heat to heat water fed into the boiler. Another quantity of biogas is used as a substitute for thermal purposes in a steam generator otherwise powered by natural gas. This enables over 90% utilisation of the energy obtained from natural gas and biogas.

By harnessing natural gas and biogas as energy sources, the power plant makes PKV largely self-sufficient. Only rarely is it necessary to purchase electricity from third parties.

In 2022, PKV also planned to install a new photovoltaic system with an output of around 2.2 megawatts (MWp). Implementation began in 2023.



POWER TO HEAT

Furthermore, the power-to-heat module (electricity to heat/steam) we tested has the technological capability to ease the strain on the public grid – especially in times of increased wind power generation – and can hence save on primary energy and CO₂ at the same time.

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 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 area has experienced considerable progress over recent years and decades – data released

by 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 2,798 kWh in 2021. At PKV, we can report natural gas energy input of 1,545 kWh per tonne of finished product in 2023 (natural gas input Hu, based on ready-for-sale goods, weighed quantity with inherent moisture), and total energy input of 1,570 kWh per tonne. 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 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 (see → criterion 13) to progress from where we are now.

The following will outline some of our projects that aim to improve our energy efficiency.

In 2023, we began implementing a project to improve the recycling of process heat from paper production using new systems. It involves building new water circuits to permit the use

of heated cooling water as preheated process water for the machines – instead of the cold fresh water that has been used until now. This new procedure largely eliminates the need to preheat the fresh water with steam, leading to savings in natural gas equivalent to 16,700 megawatt hours per year – or the annual energy consumption of around 950 average households. This system is scheduled to go into operation in May 2024.

We are also reducing emissions by converting most of our vehicle fleet to electric drive. For the last few large vehicles with combustion engines (e.g. special wheel loaders), we are planning to switch to a synthetic fuel made from recycled vegetable fats in order to reduce CO₂ emissions.

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 4.4 m³ of fresh water per tonne of finished product in 2023. 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).

Although our current water management system operates at the lower level of what would be technically

feasible, we remain tireless in our efforts to achieve continuous improvement. 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).

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 3.23 million m³ of this quota in 2023, 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.

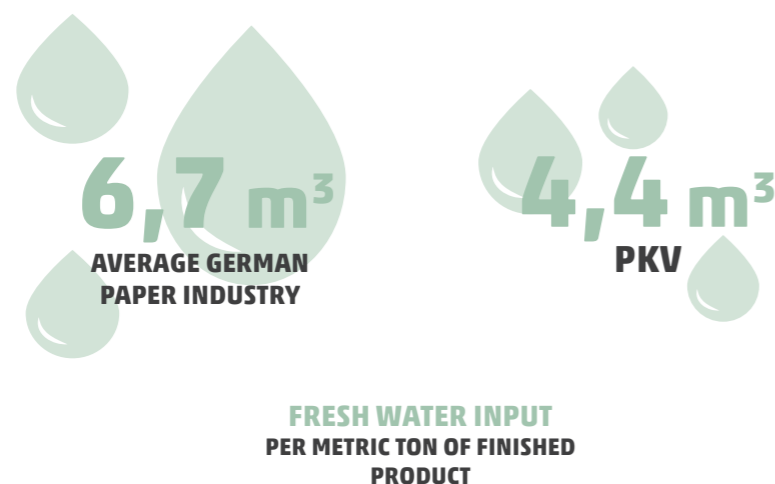
How do we handle water at our plant? The groundwater comes in at a temperature of between seven and ten degrees Celsius and is used initially to cool the turbines in the power plant, the switch rooms, the control rooms and the hydraulic stations in multiple stages. Doing so eliminates the need for a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

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. 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. Completely purified water (2023: 2.8 m³ per tonne of finished product) is discharged into the North Sea via a seven-kilometre-long 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).

MATERIALS

In addition to using our two main resources, energy and water, as efficiently as possible, we also constantly strive to reduce the amount of other materials we use in the production process through various process optimisation measures. For example, two projects were implemented in 2023, whereby we reduced the use of mass glue for hydrophobising the surface on the cartoning machine 2 by 25 % (saving approx. 53 t) and permanently dispensed with dyeing the rear side for a certain



product type in paper production, thus reducing the use of liquid direct dyes by around 10 % (saving 38,000 litres). These additives are essential components of the formulas that play a key role in determining the properties of our products. Nevertheless, we succeeded in significantly reducing their consumption volumes through process optimisation.

WASTE MANAGEMENT

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.

Unfortunately, the non-recyclable fraction of waste paper in our raw material has risen in recent years. Included in this are, for example, plastic bags, films, stickers and much more. This waste now accounts for around three percent of the raw material.

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 incineration plants), which required a significant number of transports and incurred high costs.

We have decided to transform these rejects as far as possible into a useful product. The reject processing system 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 use waste heat from paper and cardboard production for drying. Then we press the rejects into pellets. They have the capacity to replace fossil fuels, as they are used as fuel in the cement industry and elsewhere or in power stations that generate electricity and/or district heating.

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, and our compliance with these requirements is checked 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 machi-



nes 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 substances 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 2023. In this context, after determining the legally required discharge heights and the status of odour reduction technology, a preliminary project will be launched by the fourth quarter of 2024, which will provide for the technical and economic feasibility of the developed action plan. A cross-facility team of experts led by technology and plant development continuously monitors the status of targets and measures.

BIODIVERSITY

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 also participated in the 'Blossoming Trade' project in 2023. 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.

PKV has defined a variety of measures that are currently underway within the project:

- Flowering meadows, approx. 7,000 m²
- Flowering/natural meadow with two insect hotels, approx. 3,000 m²
- Natural meadows, approx. 16,800 m²
- Orchard meadow with eleven apple trees (old varieties)
- Fruit trees and natural tree population with natural meadow, approx. 4500 m²
- Beehives on the company premises in cooperation with a local beekeeper since 2018
- Kestrel box in collaboration with NABU since 2013
- Stork nest in collaboration with NABU since 2021

In addition to its participation in the 'Blossoming Trade' campaign, PKV also launched a customer campaign in 2023 that again raised the bar for sustainability and biodiversity: PKV is covering the annual costs of maintaining over 4,780 square metres of flowering meadow on behalf of its customers, and has also sent out seeds from a certified regional source to encourage others to follow suit. The campaign is supported by partners at Immerbunt, a start-up from Oldenburg, and the additional flowering meadow sponsored by PKV is situated on the outskirts of Oldenburg.

Performance indicator EFFAS E04-01: Total weight of waste: / Performance indicator EFFAS E05-01: Percentage of total waste recycled:

Waste type	Recyclable?	Weight in t	As % of total waste
Production waste	Recycling	34.021	59,52%
Reject waste	Recycling	15.226	26,64%
Other waste	Recycling	4.900	8,57%
Total waste	Recycling	54.148	94,73%
Special waste	Disposal	3.015	5,27%
Total		57.163	100%

Performance indicator EFFAS E01-01: Total energy consumption:

1.402.322.330 kWh

Further information: Total amount of renewable energy (biogas) consumed

For electricity generation and feeding into the public grid: 5,119,846 m³

For thermal utilisation and as a substitute for natural gas: 2,949,846 m³



DNK criterion 13

CLIMATE-RELEVANT EMISSIONS

“[...], the objective to continue increasing energy efficiency at PKV by means of process optimisation and technical innovation and in doing so [...] to reduce the use of fossil energy sources per tonne of finished product remains the top priority.”

DNK requirement: The company discloses the GHG emissions in accordance with the Greenhouse Gas (GHG) Protocol or standards based on it and states the goals it has set itself to reduce emissions.

Our company mainly produces climate-relevant 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. As outlined in → criterion 03, PKV's top priority is therefore to further increase our energy efficiency through process optimisation and technical innovation, thereby reducing the use of fossil fuels per tonne of finished product on its path toward achieving an absolute reduction in greenhouse gas emissions and climate neutrality.

The most notable approaches that warrant mention in this regard include

- **Efficient power plant technology**
- **Increasing the availability of our production facilities**
- **Minimising rejects**
- **Optimised utilisation of raw materials**
- **Various energy saving and efficiency projects in all production facilities.**

As described in → criterion 1, in 2023 we worked on a decarbonisation pathway for our company that goes beyond mere energy efficiency measures and previously set specific reduction targets. 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. In order to meet this target, we are focusing on electrifying our production processes by increasingly using green electricity to operate our systems and machines and converting external electricity into heat/steam for our drying processes with the help of PtH modules. In connection with this scenario, the necessary expansion of the previously limited electricity grid connection and the possibility of using a large heat pump to achieve greater efficiency in the generation of steam are being examined.

In order to capture an increasingly transparent picture of our greenhouse gas emissions, we once again calculated our corporate carbon footprint (CCF) in 2023 for Scopes 1-3 based on the guidelines set out in the Greenhouse Gas Protocol (GHG). Our calculated total greenhouse gas emissions for 2023 were 534,531 tonnes of CO₂ equivalents. Total emissions in 2023 will be significantly higher than in the previous years 2021 and 2022. This increase is not fundamentally due to an increase in GHG emissions.

The reason for the increase is instead due to the full inclusion of all Scope 3 activities which are significant for Papier- und Kartonfabrik Varel. In previous years, only three of the categories from this year were included in Scope 3. Four more were included and two were excluded due to immateriality. In addition, the level of detail in the calculation of GHG emissions has increased. For the calculation of emissions in Scope 3, a spend-based approach was chosen in many cases, particularly in Scope 3.1 and Scope 3.2.

All relevant greenhouse gases according to the Kyoto Protocol were included in the calculated CCF. The emissions were obtained using consumption data and emission factors. Primary data was used as far as possible. Where no such primary data was available, we used secondary data from recognised sources. The emission factors were sourced from internationally recognised databases such as DEFRA, Gemis or the German Environment Agency (UBA).

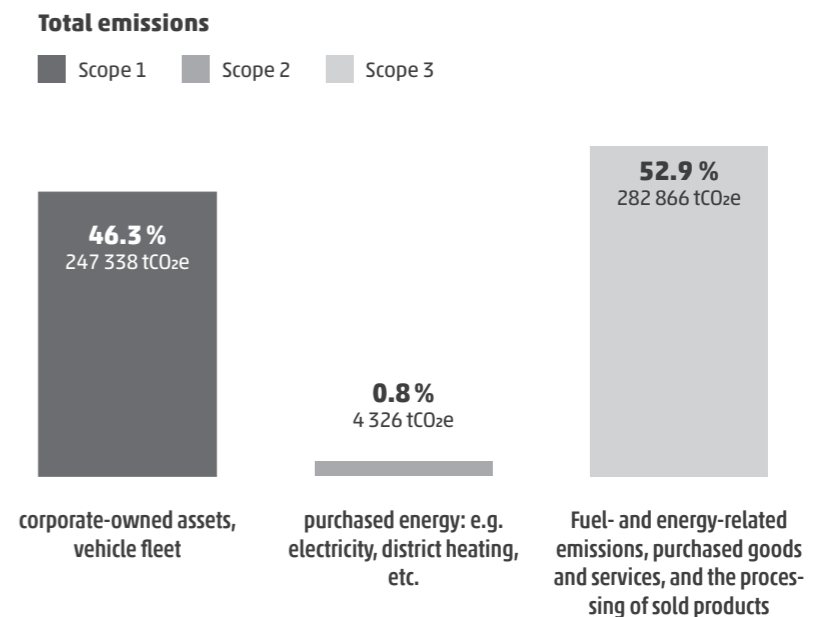
Refer in this regard also to → **Criterion 03**

Performance indicator EFFAS E02-01, total GHG emissions: (Scope 1, 2, 3): 534,531 metric tonnes of CO₂e



Total emissions were divided into three categories (Scopes):

- **Scope 1 contains all emissions directly generated by Papier u. Kartonfabrik Varel GmbH & Co. KG through, for example, company facilities or vehicle fleets (= 247,338 tCO₂e, = 46.3% of emissions).**
- **Scope 2 lists emissions generated by purchased energy, for example electricity and district heating etc. (= 4,326 tCO₂e = 0.8% of emissions).**
- **Scope 3 includes indirect emissions, such as fuel and energy-related emissions, purchased goods and services and the processing of products sold (= 282,866 tCO₂e, = 52.9% of emissions)**



DNK criterion 14

EMPLOYEE RIGHTS

“We are committed to social responsibility and accountable corporate governance.”

DNK requirement: The company reports on how it complies with nationally and internationally recognised standards relating to employee rights as well as on how it fosters staff involvement in the company and in sustainability management, what goals it has set itself in this regard, what results it has achieved thus far and where it sees risks.

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.

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 (https://www.pkvarel.com/wp-content/uploads/2023/09/Code-of-Conduct_0523.pdf) 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.

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. Included in this is a collectively agreed holiday entitlement of 30 days per year, special leave for particular, collectively agreed occasions, a full monthly salary as a Christmas bonus, a separate holiday bonus, performance bonuses, premiums for work at night or on Sundays and public holidays and overtime pay. 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 have acknowledged 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.

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

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 fewer days per year and therefore reconcile their professional lives with personal needs.

OCCUPATIONAL 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, 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. Water dispensers are installed throughout the company and are available to our staff at any time. 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 'Cycle to Work'.

One specific goal in occupational health and safety was to cut the number of work accidents to the level enshrined in the BG RCI paper (employer's liability association for the raw materials and chemical industries) by the end of 2022, a goal we achieved. In 2023, we also achieved our self-imposed goal of remaining below 20 reportable accidents per 1,000 employees. For 2024, we have set ourselves the goal of further reducing the number of accidents and remaining below 15 accidents per 1,000 employees and are continuously implementing appropriate measures.

We fully respect the fundamental right to freedom of association. Every employee is at liberty to join a trade union and will not 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.

Several sections of this report outline the various ways in which our employees are involved in the company's processes, for example → criterion 05, and → criterion 08 in relation to sustainability management in particular. We

report on our targets and processes in regard to occupational health and safety in → criterion 15.

Building on the core labour standards of the International Labour Organization (ILO), an internal policy on labour and human rights was introduced at PKV in 2022 to enshrine these principles again in writing. With the implementation of the policy in 2022, we have set ourselves further goals for 2023, including ensuring attractive working conditions over and above the measures taken to date. One of the quantitative goals involved

- the introduction of additional measures to promote employee health.

We were able to achieve this goal by deciding, as described above, to participate in the Hansefit company fitness association in 2023 and thus offer all our employees the opportunity to take advantage of a wide range of health and sports activities (e.g. swimming pools, saunas, gyms, health centres) for a small monthly co-pay. The offer has been very well received

so far, with around 280 employees, or around 45% of the workforce, taking part.

A further target has been set for 2024:

- **Creation of an employer branding concept to increase employer attractiveness and in response to changes in the labour market and the risks of a shortage of skilled workers.**

In a labour market that is increasingly becoming an employee market and is "characterised" by a steadily growing shortage of skilled workers, it is less and less the case that employees are "looking" for potential employers for themselves, but rather that they often have a range of attractive employment opportunities open to them. In response to this change, we are working on strengthening our brand as an employer toward the outside world. Our employer branding is aimed both at the labour market and internally, as part of an attractive employer branding concept also involves convincing our own employees to con-

tinue working for PKV, thus retaining them. To do so, we are continuously working on measures to support our internal and external image, both in terms of content and visually. Regular updating of the concept, including the review and modification of individual measures based on their effectiveness, is also part of the concept development process.

Our risk analysis described in → criterion 02 did not identify any material risks associated with our business operations, business relationships, products and services that are likely to negatively impact employee rights.

Refer in this regard also to
 → **Criterion 05**
 → **Criterion 08**
 → **Criterion 15**

DNK criterion 15

EQUAL OPPORTUNITIES

“We are explicitly committed to the principle of equal treatment at our company and to equal opportunities. In particular, no one [...] may experience discrimination or be placed at a disadvantage.”

DNK requirement: The company discloses in what way it has implemented national and international processes and what goals it has for the promotion of equal opportunities and diversity, occupational health and safety, participation rights, the integration of migrants and people with disabilities, fair pay as well as a work-life balance and how it will achieve these.

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 wage differentials 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.

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%. Furthermore, there is a simple process in place that enables employees to take family or parental leave for a certain period.

Building on the core labour standards of the International Labour Organization (ILO), an internal policy on labour and human rights was introduced at PKV in 2022 to enshrine these principles again in writing. With the implementation of this policy, we also set

additional goals for 2023, for instance to create attractive working conditions that exceed the scope of previous measures. The goal of introducing an official policy for mobile work at the beginning of 2023 to continue promoting the compatibility of family and professional life and to improve the work-life balance was achieved. A company agreement on mobile work has been concluded and has been in force since February 2023. Accordingly, it is possible to work up to 40% of working hours (2 days per week in a 5-day working week) remotely in agreement with the respective department head. This company agreement is actively used by a number of employees whose work generally permits mobile working.

In 2023, an initial brainstorming session was launched between sustainability management and the HR department with the aim of working on a diversity concept in 2024 and beyond. Specifically, this involved formulating a vision, objectives and measures that could be integrated into the company's employer branding concept described in Chapter 16.

DNK criterion 16

QUALIFICATIONS

“Qualified employees and lifelong learning are vital to success due to our complex processes and systems.”

DNK requirement: The company discloses what goals it has set and what measures it has taken to promote the employability of all employees, i.e. the ability of all employees to participate in the working and professional world, and in view of adapting to demographic change, and where risks are seen.

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). In 2023, we invested 708 euros per employee in training and development.

Our Studio e-learning platform has supported our internal training and education programmes since 2019.

We have achieved the following number of completed courses on this platform per year:

2019	464
2020	1096
2021	8786*
2022	2988
2023	4041

**unusually high number due to the launch of many one-time mandatory courses*

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.

These varied training programmes enable us to fill many senior and managerial vacancies and new positions at our company with our own employees. We see this as another suitable response to demographic change.

We report on our strategies and measures in the area of health management in → criterion 15.

Building on the core labour standards of the International Labour Organization (ILO), an internal policy on labour and human rights was introduced at

PKV in 2022 to enshrine these principles again in writing. With the implementation of this policy, we also set additional goals, for instance to create attractive working conditions that exceed the scope of previous measures.

- Compliance with a long-term training quota of at least 5% full-time equivalents (FTE)
- Intensification and increased needs-based organisation for the wide range of further training opportunities

The target of maintaining a training quota of at least 5% of full-time equivalents was achieved in 2023 with a quota of 5.6% (as at the end of 2023).

To achieve the goal set for 2023 of strengthening the needs-based design of the wide range of further training opportunities, a separate position for personnel development was created in the HR department with effect from 01/08/2023. The emphasis is on team development in large departments, master development workshops and a focus on developing leaders at departmental and team management levels. For 2024, we have therefore also set ourselves the specific goal of

- developing and implementing a concept for further development of leadership skills.

To this end, all masters are to receive management training and an external training partner is to be engaged to initiate joint and individual workshops and modules at the department and team level.

Other topics will also be addressed here gradually. In principle, a wide range of further training opportunities already exist, which can gradually be better structured and developed in a more central manner.

Our risk analysis described in → criterion 02 did not identify any material risks associated with our business operations, business relationships, products and services that are likely to negatively impact the qualification.

Refer in this regard also to → **Criterion 14**

Performance indicator EFFAS S03-01, Age structure/distribution (number of FTEs per age group):

Reported here is the data we have collected on the distribution of our employees as a whole (not FTE) by age group – the actual difference would be marginal, but it would require a considerably greater amount of time and effort to calculate.

Age group	No. of employees
20 years or less	26
21-30 years	94
31-40 years	165
41-50 years	142
51-60 years	154
Over 60 years	31

Average age: 42.3 years

Performance indicator EFFAS S10-01, Percentage of female employees in relation to total employees:

PKV: 12.1 %

Performance indicator EFFAS S10-02: Percentage of female FTEs in senior positions in relation to total FTEs in senior positions

Reported here is the proportion of female managers in comparison to the total number of managers: 10.2%

Performance indicator EFFAS S02-02, Average expenses on training per FTE p.a.:

Reported here is the average expenditure on training per employee per year: 708 EUR.

DNK criterion 17

HUMAN RIGHTS

“Sustainability and the protection of our environment are essential principles that guide all our actions.”

DNK requirement: The company discloses what measures it takes, strategies it pursues and targets it sets for itself and for the supply chain for ensuring that human rights are respected globally and that forced and child labour as well as all forms of exploitation are prevented. Information should also be provided on the results of the measures and on any relevant risks.

PKV is committed to social responsibility and good corporate governance. Our Code of Conduct, which is accessible to all interested persons, describes the principles that we believe should guide us and are essential to good corporate governance. As a rule, all of our actions in each area, in particular towards customers, suppliers, business partners and employees, should build on the principles of integrity and fairness. Sustainability and the protection of our environment are essential principles that guide all our actions. Compliance with applicable laws is the basis for our actions. In our Code of Conduct, among other things, 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. This Code of Conduct describes our underlying strategy in this area. Examples of relevant measures are described in → criteria 04, 14, 15 and 16.

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 in 2023. Taken together, their purpose is to contribute towards compliance with labour and human rights at PKV. We report on target achievement in 2023 and further targets for 2024 in → criteria 14, 15 and 16. 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 in → criterion 03. 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 in → criterion 02 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.

Overall, after carrying out the abstract and concrete risk analysis, a low to medium risk can be identified for our own business segment as a result of our business activities, the produc-

tion of paper and cardboard, and the fact that our sole company location is in Germany. Due to strict national legislation in the area of labour and human rights, which we consistently implement, a low risk of human rights violations can be assumed. Nevertheless, because we are an industrial production company, a few risks need to be considered and regularly analysed. In our case, these include the areas of occupational safety and environmental protection, which are relevant pursuant to the German Supply Chain Act (LkSG). However, thanks to existing integrated guidelines, processes and measures, which we implement as part of the certified ISO 45001 and 14001 management systems, we are able to react appropriately to risks in these areas and minimise or prevent negative effects in the best possible way.

With regard to our business partners, we started the abstract and concrete risk analysis (= invitation to fill out dedicated questionnaires) at the end of 2023. According to the abstract risk analysis carried out to date, a similar picture emerges, 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 (1,146 of 1,290 suppliers) or come

from nearby European countries. As a result, only a very small proportion of our suppliers are marked with a high level of risk according to the abstract risk analysis (7), whereby the risk is primarily concentrated in the areas of responsibility in the supply chain and environmental protection. At the turn of the year 2023/24, selected suppliers (high-risk suppliers and suppliers with a medium risk that fall into higher sales categories) are tasked with answering dedicated questionnaires in which they can correct their risk status by providing

information on guidelines, measures and certifications. In the following, an impact analysis is targeted in order to segment and prioritise the suppliers once again in terms of risk occurrence probabilities, influence capacity and risk severity, in order to subsequently derive individual measures.

Refer in this regard also to
 → **Criterion 03**
 → **Criterion 14**
 → **Criterion 15**
 → **Criterion 16**

Performance indicator EFFAS S07-02 II, Percentage of total facilities certified according to SA 8000 standard

0 %.

All our facilities are certified according to the following management systems:

- Occupational health and safety according to DIN EN ISO 45001
- Environmental management according to DIN EN ISO 14001
- Quality management according to DIN EN ISO 9001
- Energy management according to DIN EN ISO 50001
- Food and product safety according to DIN EN ISO 22000

DNK criterion 18

CORPORATE CITIZENSHIP

“The Barthel Foundation has become a reliable supporter of many projects with a broad impact.”

DNK requirement: The company discloses how it contributes to corporate citizenship in the regions in which it conducts its core business activities.

Company founder Hellmut Barthel established the non-profit Gertrud and Hellmut Barthel Foundation in 1991. Its aim is to maintain a focused and expert shareholder structure within the PKV Group, while at the same time allowing the general public to share in the company's success. This foundation was endowed with adequate financial resources in the terms of his last will and testament from 1999. As chairs of the foundation at the time, Jürgen Evers and Günter Dieball accepted the challenge of establishing a network of support to ensure ideal use of the available funds in the spirit of the goals set out by the founder (heritage protection, scholarships, environmental protection, art/culture, education and teaching/research). Kristian Evers and Lutz Dieball now chair the foundation.

The Barthel Foundation has become a reliable supporter of many projects with a broad impact. Project funding is mainly focused on the Varel and Friesland regions, although support frequently extends beyond these areas as well. In 2023, the foundation distributed a funding volume of more than €1.6 million to support 78 projects and 30 scholars.

Furthermore, PKV itself supports charitable projects geared at safe, healthy and equitable cohesion at its location, primarily by making a donation each year. This is consistent with our self-perception as a family-owned, medium-sized company that adheres to the highest standards of occupational safety and environmental protection.

PKV sponsors projects in the vicinity of its location – even beyond the region in exceptional cases – that address a target audience that is or might be interested in career prospects in the paper industry. Moreover, we feel deeply committed to projects at our location that investigate the protection and efficient use of natural resources. Doing so reflects our self-image as a producer of sustainable raw materials for packaging that uses resources as sparingly as possible. We provide sponsorship funds for this kind of project as well.

And last but not least, we have adopted a very positive approach to the personal commitment to good causes shown by many of our employees.

Barthel Stiftung

We are happy to support persons who volunteer in the interests of others. Cohesion and commitment are important professional values in our view.

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 outlined all of these activities in a company-wide donation and sponsorship policy, which we implemented in 2021 and which has been the subject of annual reports to the Executive Board since 2022.



DNK criterion 19

POLITICAL INFLUENCE

“Political engagement builds on our appreciation of opportunities and risks [...]. The shareholders decide on this form of commitment.”

DNK requirement: All significant input relating to legislative procedures, all entries in lobby lists, all significant payments of membership fees, all contributions to governments as well as all donations to political parties and politicians should be disclosed by country in a differentiated way.

National and EU legislative procedures are relevant for PKV, especially where they relate to any economic and legal frameworks in the industrial SME sector, climate protection and issues regarding packaging products. We hold talks on these and other topics at irregular intervals with local, regional and national politicians from democratic parties. Political engagement builds on our appreciation of opportunities and risks (cf. → criterion 02). The shareholders decide on this form of commitment.

In addition, our interests are primarily represented by business and industry

associations as well as sustainability initiatives. A prime example is DIE PAPIERINDUSTRIE e.V. The principal task of this association is to pool and represent the interests of member companies in the areas of energy and climate policy, environment and technology, research and research funding at universities and institutes, business and export trade, raw materials and law, social and collective bargaining policy, as well as media liaisons and public relations and recruitment of young talent.

Another apt example is the work of the KlimaWirtschaft Foundation, of which we are a member. The foundation supports projects in the area of climate policy within politics and administration and also calls for reliable political frameworks for companies that assume a pioneering role in the area of climate protection. The foundation acts as an intermediary between climate science and the business community and in doing so cultivates a spirit of mutual understanding. As a 'source of inspiration', the foundation provides best-practice examples and organises dialogue formats that help companies inside and outside the funding circle to develop innovative approaches to low-carbon business.

We are members of the following and other organisations:

- Oldenburg Chamber of Industry and Commerce
- KlimaWirtschaft Foundation
- Grüner Wirtschaftsdialog e.V.
- Bundesdeutscher Arbeitskreis für Umweltbewusstes Management (B.A.U.M.) e.V.
- Industry association DIE PAPIERINDUSTRIE e.V.
- Verband Nord- und Ostdeutscher Papierfabriken (VNOP) e.V.
- Fachverband Faltschachtel-Industrie (FFI) e.V.
- INGEDE e.V.
- Verband der Industriellen Energie- und Kraftwirtschaft e.V.
- Verband der Wellpappen-Industrie (VDW) e.V.
- Verband Vollpappe-Kartonagen (VVK) e.V.
- Verein der Zellstoff- und Papier-Chemiker und -Ingenieure (Verein ZELLCHEMING)
- Arbeitgeber- und Wirtschaftsverband Jade e.V.

Refer in this regard also to
→ **Criterion 02**

Performance indicator EFFAS G01-01:
Payments to political parties as a percentage of total revenue:

0%

DNK criterion 20

CONDUCT THAT COMPLIES WITH THE LAW AND POLICY

“This corporate culture thrives on the principle of personal responsibility based on shared values.”

DNK requirement: The company discloses which measures, standards, systems and processes are in place to prevent unlawful conduct and, in particular, corruption, how they are verified, which results have been achieved to date and where it sees there to be risks. It depicts how corruption and other contraventions in the company are prevented and exposed and what sanctions are imposed.

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.

Our Code of Conduct, as approved by the Executive Board, sets out our commitment to 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. We are 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.

The same applies to all forms of bribery and corruptions. Under no circumstances will PKV tolerate this conduct in any form. 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. Gifts in the form of money are prohibited in every case and in any amount.

→ Criterion 04 describes how we work towards compliance with sustainability principles in our supply chain. 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.

In 2023, PKV continued to trial the introduction of a compliance officer from the shareholder group, namely Lutz Dieball, to oversee all aspects of compliance.

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. No reports were registered in 2023.

In our implementation of whistleblower protection, we are guided by current and future statutory provisions, taking into account both German and European requirements. Moreover, we believe that the continued development of a compliance system must build on strong links between the whistleblower system and related issues such as the German Supply Chain Due Diligence Act (LkSG).

We are also planning regular training on compliance issues to raise awareness among our staff. In 2020, we trained relevant persons at managerial and head of department level on the topics of 'Compliance in general' and 'Competition/antitrust law'. Our goal is still to expand the portfolio of available courses to include all affected employees. We did not quite reach this goal in 2023. This is due to our current considerations to roll out a holistic compliance system to reflect the importance of ethics and compliance in connection with various sustainability regulations. Training courses will be adapted suitably once this system has been prepared. At the end of 2023, we decided to establish a central compliance management unit at the holding company, Halbzellstoff-Industrie GmbH, for the organisation and implementation of compliance processes and guidelines in our subsidiaries in 2024. This was due to the overarching need to establish group-wide compliance processes and guidelines.

The annual EcoVadis Rating ensures regular external review in the area of ethics and compliance. Compliance is further taken into account by carrying out risk analyses in our own business area and due diligence audits of business partners to fulfil our duty of care pursuant to the LkSG. Some compliance issues are investigated in other audits (e.g. product safety, data protection, information security).

Refer in this regard also to **→ Criterion 04**

Performance indicator EFFAS V01-01, Expenses and fines on filings, law suits related to anti-competitive behavior, anti-trust and monopoly practices:

None.

Performance indicator EFFAS V02-01, Percentage of revenue in regions with a Transparency International Corruption Index below 60:

12.6 per cent – in Poland, the Czech Republic, Slovakia, Hungary, Greece, Romania, Italy (in order of sales volume in direct sales in 2023).

