

Papier- und Kartonfabrik  
**varel** 

# Sustainability Report



Deutscher  
NACHHALTIGKEITS  
Kodex  
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CONTENT

Editorial ..... 3

General information ..... 4

**Strategy**

Strategy ..... 6

Materiality ..... 8

Objectives ..... 10

Depth of the Value Chain ..... 11

**Process Management**

Responsibility ..... 14

Rules and Processes ..... 15

Control ..... 16

Incentive Schemes ..... 17

Stakeholder Engagement ..... 18

Innovation and Product Management ..... 19

**Environment**

Usage of Natural Resources ..... 22

Ressource Management ..... 23

Climate-Relevant Emissions ..... 29

**Society**

Employee Rights ..... 32

Equal Opportunities ..... 33

Qualifications ..... 35

Human Rights ..... 36

Corporate Citizenship ..... 37

Political Influence ..... 38

Conduct that Complies with the Law and Policy ..... 39

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No polar bears ... ? Unlike many other sustainability reports, we do not want to show photos of polar bears on melting floes – or hands with soil and a seedling. Reporting on sustainability means concentrating transparently on the essentials. On the contribution we can make ourselves. Without distracting with pictures. That's why the pictures in this report show what it's really about: about us in PKV, about our contribution to sustainable development.

EDITORIAL



For many decades we have been producing high-quality packaging paper and board from recycled waste paper. We firmly believe that fibre-based, recyclable packaging offers decisive advantages in various aspects of sustainability. Our business model therefore needs no adjustment from a sustainability point of view. Global industrial supply chains, fruit, vegetables and many other food products require safe, protective and efficient packaging. Corrugated and solid board packaging based on our products have established themselves in many value chains and everyday situations as sustainable solutions that can be returned almost anywhere in the world in a functioning recycling loop.

Our industry's path to climate neutrality will depend to a large extent on political framework conditions and technical decisions, especially regarding the procurement and use of renewable energies. In addition to a consistent focus on energy savings in our production process, we currently see the challenges in the availability of "green" energy and in the regulatory and economic framework conditions.

These framework conditions must allow us to produce economically in order to secure the existence and further development of our company. Since we cannot create these framework conditions ourselves, we also see an important contribution in transparent communication about the opportunities and conditions of climate-neutral paper production at all social and political levels.

This sustainability report is a contribution to this. In it, we (like more than 700 companies in Germany by now) disclose our goals and successes, but also challenges in essential aspects of sustainable development according to the 20 criteria of the nationally and internationally recognised Deutscher Nachhaltigkeitskodex (DNK). As transparent information, as a current spotlight on the state of affairs – and above all as a contribution to a broad discussion that will move us forward technically and politically on the path to climate neutrality.

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



## GENERAL INFORMATION

Papier- und Kartonfabrik Varel (PKV) is a German manufacturer of paper and cardboard made from waste paper for use in the packaging industry. The company is based in Varel, Lower Saxony. Our annual production capacity is 925,000 tonnes, making us one of the largest production sites in the German paper industry. In 2020, we achieved a turnover of 293 million euros and employ more than 600 people.

We produce Fluting and linerboard (white / brown) made from recovered paper, gray and brown board, 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 protection 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 § 56 of the Closed Substance Cycle Waste Management Act)**

In the year under review, 65 % of our products were sold in Germany and 35 % 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 be recycled again.



# STRATEGY





DNK criterion 01

## STRATEGY

“We have been using recovered 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.**

Producing high-quality packaging papers and board grades sustainably and at the same time competitively through continuous improvement is the most important goal of our company. We have been using recovered 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-conserving development. Our sustainability strategy has therefore always been part of our DNA and is also an integral part of our corporate strategy.

There we have identified our contributions to sustainable development in several strategic fields of action of our company. We will briefly outline these contributions here and go into more detail in the rest of the report.

As a manufacturer of high-quality packaging paper and cardboard, both made from recycled waste paper, we have been fulfilling our responsibility to contribute to sustainable development for many decades. We are firmly convinced that fibre-based, recyclable packaging offers decisive advantages in various aspects of sustainability.

**Based on this self-image, we have always intensively considered sustainability aspects in our investments, products and processes. The certification of all our products according to the valid FSC® standards and our voluntary classification according to the EcoVadis standard also underlines this attitude. As a regionally rooted family business, we live our responsibility for people and the environment every day.**

**Our vision is to produce our paper and board as climate-neutrally as possible – and thus make our best possible contribution to ecologically perfect packaging.**

We see this vision as being in line with the goals of the Paris Climate Agreement of 2015 and the 17 Sustainable Development Goals (SDGs) of the United Nations.

In addition to recycling recovered paper – as the basis of our activities – we as a company can make important additional contributions to sustainable development through our own efforts.

We can and want to further increase our energy efficiency through process optimisation and technical innovation and thus reduce the energy input per tonne of finished product.

With our economical water management, we have achieved a top position in an industry comparison measured by our location. Through technical innovation, we want to reduce the use of fresh water even further and defend our top position.

When making investments and procurements, we always take into account the impact on the environment and an increase in energy efficiency and, wherever possible, give preference to environmentally friendly options that make a positive contribution to sustainable development. The same applies to our cooperation with suppliers and contractual partners.

Healthy and motivated employees are the cornerstone of a successful company. This potential must be preserved. The avoidance of hazards for our employees as well as for suppliers and visitors is a top priority.

Both to safeguard our company and out of our responsibility for sustainable development, we are committed to the continuous improvement of all processes. We involve our employees at all levels in decision-making processes. We ensure this by implementing and maintaining management systems:

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

**With all these goals, we are at the same time aware that as an energy-intensive industry we have many, but by no means all, of the levers for realising our vision in our own hands.**

**Our industry's path to climate neutrality will depend to a large extent on the political framework conditions and technical decisions, especially with regard to the purchase of renewable energies. We currently see the challenges less on the technical side, but rather in the availability of "green" energy and in the regulatory and business framework conditions.**

These framework conditions must allow us to produce economically in order to secure the existence and further development of our company. Since we cannot create these framework conditions ourselves, we also see an important contribution in transparent communication about the opportunities and conditions of climate-neutral paper production at all social and political levels.

DNK criterion 02

## MATERIALITY

“However, the decisive factor on the way to ecologically perfect packaging will be how we succeed in further substantially reducing greenhouse gas emissions in paper production [...]”

**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 convincing and ecologically sensible solution for a variety of industrial requirements or consumer wishes. Based on this conviction, Papier- und Kartonfabrik Varel has been producing paper and cardboard from recovered paper since 1950. In doing so, PKV also attaches great importance to a fair partnership with the employees, among other things by means of collectively agreed and above-tariff remuneration.

Today, packaging paper and cardboard in Germany are made almost exclusively from recycled waste paper. By using this valuable raw material, PKV also conserves natural resources on a large scale. New research suggests that recovered paper fibres can be reused 25 times or more in packaging materials without any significant loss of quality (Eckhart, Rene (2021): *Über die Rezyklierbarkeit von Faltschachtelkarton*. Wochenblatt für Papierfabrikation 11/2021).

In this environment, PKV influences material sustainability issues, and at the same time material sustainability issues affect its business. The classification of the materiality of an issue is part of the strategic orientation of the company by the management and in particular part of the consideration of opportunities and risks.

Opportunities and risks are regularly analysed at different levels. Corporate opportunities and risks are collected via a table tool in the management review of the executive board, graphically prepared in an opportunity and risk matrix and regularly reviewed. Appropriate measures are derived on the basis of the results. Process opportunities and risks are reflected in the individual process descriptions; the responsibility for monitoring and controlling these lies with the process owners.

In addition, stakeholder management or the consideration of the expectations of interested parties also plays a decisive role in order to be able to react actively to the business environment. A table tool is used to analyse the interested parties as part of the annual management review and to derive (communication) measures.

The determination of environmental aspects is part of environmental planning and a prerequisite for the definition of environmental goals and the development of environmental programmes. The environmental aspects that can be influenced and the associated environmental impacts are regularly determined for the main activities in paper and board production and along the product life cycle. In this process, conditions that are not as intended and foreseeable emergency situations are also taken into account.

PKV has systematically identified all relevant legal, regulatory and customer requirements for occupational health and safety, quality and product safety, environmental protection and energy (binding commitments) for its activities and services. The timeliness of the commitments is regularly reviewed and changes are assessed.

Positive effects of PKV's business activities on key sustainability issues result from these analyses and from the business model itself – it is in particular PKV's substantial contribution to a functioning circular economy and thus to the conservation of resources in the production of packaging materials that should be mentioned here. However, the production of packaging material from recycled waste paper is not free of challenges and risks with regard to key sustainability issues. In particular, the use of energy and water resources should be mentioned here. The paper industry is an energy-intensive sector – primarily due to the paper drying required in the production process – even though industry-wide final energy consumption per tonne of paper has been reduced by 43% since 1980 (bifa Umweltinstitut (2020): Nachhaltiger Papierkreislauf – eine Faktenbasis). At PKV, energy-related greenhouse gas emissions are caused by the current main energy source, natural gas, in the company's own power plant (see → criterion 12). At the same time, the production process requires the use of water as a dissolving and transport medium, among other things.

The location of PKV currently only allows for the extraction of fresh water from deep wells, which is strictly monitored by the authorities. Additional alternatives such as the use of treated sewage water are currently being technically tested (see → criterion 12).

At the same time, significant sustainability issues also have an external impact on PKV's business activities. Based on the analyses described above, the main opportunity here is that demand for the products manufactured by PKV has grown massively in recent decades, driven most recently by consumers' increasing awareness of the ecological benefits of recyclable packaging. As representative surveys show (e.g. Simon-Kucher & Partners, March 2021), more than two thirds of consumers in Germany attach importance to sustainable packaging. 70% of respondents name paper and cardboard as the most sustainable materials in their view. As described in the previous paragraph, this perspective naturally also entails risks. We are convinced that our business model offers the opportunity to manufacture products for ecologically perfect packaging.

**Thanks to our sustainable raw material and our ever more developed resource-saving cycles, we see ourselves in an excellent starting position for this. However, the decisive factor on the way to ecologically perfect packaging will be how we succeed in further substantially reducing greenhouse gas emissions in paper production through a triad of our own efficiency, technical innovation and governmental framework conditions (especially with regard to the energy source).**

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

Please also read → **criterion 01**  
→ **criterion 03**  
→ **criterion 12**

## DNK criterion 03

# OBJECTIVES

“[...] The highest priority is given to the goal of further increasing our energy efficiency through process optimisation and technical innovation, thus reducing the use of energy sources per tonne of finished product.”

**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 produce our recycled paper and recycled cardboard as climate-neutrally as possible – and thus to make our best possible contribution to ecologically perfect packaging. As reported in → criterion 01, we see this vision as being in line with the goals of the Paris Climate Change Agreement of 2015 and the 17 Sustainable Development Goals (SDGs) of the United Nations. From this long-term and most important goal, we have derived various medium-term goals as part of our strategic objectives, whose impact and degree of fulfilment is analysed by the Executive Board in the annual management review and also evaluated with the managers in charge of operational implementation. In addition, the implementation and auditing of our management systems contributes significantly to the achievement of our sustainability goals.

In view of the energy intensity of our industry, the highest priority is given to the goal of further increasing our energy efficiency through process optimisation and technical innovation, thus reducing the use of energy sources per tonne of finished product. This high priority is also derived from the regular examination of opportunities and risks, which we describe in → criterion 02.

The main approaches to be mentioned here are

- **efficient power plant technology**
- **increasing the availability of our production plants**
- **the minimisation of rejects**
- **optimal utilisation of raw materials**
- **a procurement and sales strategy that is as regional as possible in order to keep energy consumption in the transport sector as low as economically justifiable**

as well as various energy-saving and efficiency projects at all production facilities.

For all these and other approaches, we have internally set detailed short- and medium-term targets. Through our current investment programme, we aim to achieve a reduction of up to 10% of our CO<sub>2</sub> emissions per tonne of finished product (current energy sources natural gas, biogas and electricity) by 2025 compared to 2018. In parallel, we want to develop a plan on how to achieve further reductions and move as far as we can on our own towards greenhouse gas neutrality.

With our economical water management and the resulting 4.0 m<sup>3</sup> of fresh water used per tonne of finished product in 2020, we have achieved a top position in an industry comparison based on our location, and we want to maintain this level. Moreover, we want to reduce the use of fresh water even further through technical innovations.

In addition, we have also defined goals for our purchasing department that will guide us in realising our sustainability vision. We are already in close contact with our strategic suppliers to ensure sustainable purchasing. Joint projects in process optimisation, resource efficiency and new developments are expected to result in further positive developments for the entire value chain. We will also introduce a comprehensive assessment of suppliers in order to verify sustainable and long-term ecologically and socially fair procurement. Specifically, we have set ourselves the following goals:

- In 2022, our key suppliers will be reviewed as part of our sustainability survey.
- We intend to have our key suppliers sign our Code of Conduct for Sustainable Procurement.
- We ensure that all colleagues from the respective purchasing departments of our company are regularly trained on the topic of sustainability so that responsible procurement decisions are made.

Furthermore, we have documented our high standards in all aspects of occupational safety in our strategy, which we live by implementing our occupational health and safety management system according to DIN EN ISO 45001 and want to improve continuously. One of our concrete goals is to reduce the number of occupational accidents to the level of BG RCI Papier by 31 December 2022, or better, to the level of BG RCI as a whole. By 31 December 2025, we want to be 30 % below the BG RCI level and are preparing corresponding measures.

## DNK criterion 04

# DEPTH OF THE VALUE CHAIN

“For the production of paper and board in our mill, we use almost exclusively recycled waste paper as raw material.”

**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.**

For the production of paper and board in our mill, we use almost exclusively recycled waste paper as raw material – on average, we receive 3,500 tonnes of raw material every day from Monday to Friday, which is available in 21 different qualities and which we source from 19 different countries worldwide. And of course we also receive numerous other deliveries of auxiliary materials, laminating paper, technical parts and much more.

We are already in close contact with our strategic suppliers to ensure sustainable purchasing. We keep an eye on potential risks for sustainable development in social, ecological and ethical dimensions such as

- effects of logistics transports (emissions from transports)
- working conditions at suppliers (compliance with social and ethical standards) and
- quality criteria of raw materials (ecological dimension of resource conservation).

We address these potential risks through various initiatives, rules and processes that our purchasing departments communicate with suppliers and business partners on an ad hoc basis and work out solutions together.

At the time of this report

- many of our suppliers – like ourselves – have certified management systems that legitimise ecologically and socially just business practices,
- we purchase only FSC®-certified pulp for our paper and board production,
- our purchase of logistics services is based on compliance with EU standards in the context of cargo services. Strategic consideration is given to the use and combination of ship, road and rail to achieve efficient transport of goods.
- compliance with human rights and labour standards in logistics procurement is a matter of course,
- a large proportion of our buyers are trained in sustainable procurement,
- we have our procurement policy reviewed as part of the EcoVadis rating.

In addition, we will introduce a comprehensive assessment of suppliers in order to verify sustainable and long-term ecologically and socially fair procurement.

**Specifically, we have set these goals:**

- **We intend that our key suppliers sign our Code of Conduct for Sustainable Procurement.**
- **We make sure that all colleagues from the respective purchasing departments of our company are regularly trained on the topic of sustainability so that responsible procurement decisions are made.**



The next essential point in our value chain is our own production. At our mill, we process our raw material into paper webs on rolls and cardboard on pallets or rolls. We report in detail on sustainability aspects of this production in → criterion 12.

PKV has been able to offer all its customers chain of custody certification in accordance with the Forest Stewardship Council (FSC®) for all its products since 2010. Since 1993, the FSC® has created an internationally recognised certification system to ensure sustainable forestry.

**By predominantly using recycled waste paper as raw material, as well as purchasing FSC®-certified pulp, wood pulp and laminating paper for individual grades, PKV can sell its entire product portfolio with an FSC® statement.**

Depending on the composition of the individual products, we can offer our customers the statements FSC®Recycled Credit, FSC®Recycled 85 %, FSC®Mix Credit and FSC® Mix 70 %. Of course, the processes and regulations of PKV itself are also certified according to the FSC® standards. This certificate is regularly checked and renewed by external auditors.

Our customers then use our finished products in packaging solutions, for example for the food and consumer goods industry, the pharmaceutical industry or mechanical engineering. After this use, our PKV products are 100% recyclable. This means they can be collected in the waste paper and reprocessed into new paper and cardboard products.

Please also read → **criterion 12**

# PROCESS MANAGEMENT



DNK criterion 05

## RESPONSIBILITY

“And of course, sustainability is not just a matter for the boss. All our employees are continuously informed [...] about sustainability issues in the company and encouraged to make their own contributions.”

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

Sustainability as one of our most important topics for the future is a matter for the management. The shareholders and management of PKV draw up and update the company's sustainability strategy. They are in regular contact with the department heads, who are responsible for the operative implementation and reporting on the achieved goals. This steering is supported significantly by the internal officers for our management systems.

**With regard to sustainability, particular mention should be made of occupational health and safety management (ISO 45001), environmental management (ISO 14001), energy management (ISO 50001) and certification by the Forest Stewardship Council (FSC®).**

All officers advise and support the company in complying with these high voluntary standards, and they cooperate in the regular internal and external audits (conducted by accredited certification bodies).

And of course, sustainability is not just a matter for the boss. All our employees are continuously informed – among other things via our social intranet and the employee magazine "leseStoff" – about sustainability issues in the company and encouraged to make their own contributions. Consultation and participation procedures ensure the involvement of employee representatives. At the same time, all employees are intensively involved in the implementation of the sustainability strategy through department-specific goals. Through our suggestion scheme, they also regularly submit ideas that also support this strategy, for example on energy efficiency.

DNK criterion 06

## RULES AND PROCESSES

“[...] Management systems / standards have defined or established processes in PKV that essentially serve the implementation of 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 part of the strategic goals) are a fixed element of the internal rules, processes and standards – through all hierarchical levels, from the shareholders and the management to the regular exchange at the operational level and vice versa.**

In addition to the sustainability strategy as such, various guidelines – such as a code of conduct, internal management principles, a guideline on working conditions and human rights and a guideline on sustainable and responsible procurement – provide fundamental orientation.

To implement its goals, PKV uses its existing system of short-, medium- and long-term work and safety instructions, various regular reports, information on the social intranet "PULS" and other management and reporting formats.

At the same time, PKV controls its actions through management systems and standards in the areas of

- 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 (2012 – 2019 certified to BS OHSAS 18001, since 2019 certified to ISO 45001)
- Energy (since 2013, certified according to ISO 50001)
- Food safety (certified according to INREKA since 2008 / 2021 change of certification to ISO 22000)

and has its processes regularly audited by certified external auditors. These management systems / standards have defined or established processes in PKV that essentially serve the implementation of the sustainability strategy.



DNK criterion 07

## CONTROL

“Much of this data is part of the reporting and auditing of our management systems and for this reason alone is subject to the highest requirements for reliability, consistency and comparability.”

**DNK requirement: The company states how and what performance indicators related to sustainability are integrated into its periodic 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.**

As for all its strategic goals, PKV also records and reports a large number of key figures and performance indicators for its sustainability goals. This data is used by managers, management and shareholders for steering and control purposes. Much of this data is part of the reporting and auditing of our management systems and for this reason alone is subject to the highest requirements for reliability, consistency and comparability.

This also applies to key figures and performance indicators relating to our energy use, which we would like to discuss in more detail here – following the principle of materiality.

Among other things, we use the energy input per tonne of finished product as a performance indicator to monitor the achievement of our goals. This allows us to indicate, measured in kilowatt hours, how much energy we needed to produce one tonne of saleable paper or cardboard.

The indicator is based on measurements of energy use (according to our energy management system) and weighing data of our finished products. It shows us how far we have progressed towards our reduction target

To control this progress, however, a large number of other data and indicators are necessary, because the number of influences on our energy utilisation is also large. Influences include the utilisation of the raw material, the efficiency of the power plant and production facilities, the availability of these facilities (the better available, the better the energy utilisation) and the amount of scrap (the less scrap, the less energy input per tonne of finished product).

In this context, we consider not only the pure energy use of our current energy sources, natural gas and biogas, but also the associated emissions. Accordingly, we calculate the corporate carbon footprint for our company as a CO<sub>2</sub> balance. The calculation is based on the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, details of which can be found in → criterion 13.

Please also read → **criterion 13**

DNK criterion 08

## INCENTIVE SCHEMES

“In addition, the management has decided to financially support the voluntary commitment of 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).**

The sustainability goals of PKV (described in → criterion 03) are firmly integrated into the strategic goals of the company and as such are also part of the regular evaluation of the management 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 PKV, there are two monetary incentive systems linked to sustainability issues:

As early as 2001, the management and works council established the company suggestion scheme, which is still in place today. From the beginning, the sustainability goals of occupational safety, health protection and environmental protection, among others, were integrated into this scheme, and later the goal of energy efficiency was also integrated. All PKV

employees can make suggestions in this regard, which are checked for feasibility and then classified by an evaluation committee (representatives from the management, works council and various specialist departments). If a suggestion is accepted, bonuses are paid out that are based on the value of the improvement suggestion.



In addition, the management has decided to financially support the voluntary commitment of employees. In this way, we want to underline how important cohesion and commitment are to us – both professionally and privately. PKV provides annual funds in the "PKV Extra" programme set up for this purpose in 2020 so that it can act as a donor/sponsor for projects in which employees themselves are active.

Please also read → **criterion 02**  
→ **criterion 03**  
→ **criterion 07**

DNK criterion 09

## STAKEHOLDER ENGAGEMENT

“Feedback from the diverse dialogue with these stakeholders also flows into the further development of sustainability management in various ways.”

**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.**

The most important stakeholder groups with whom PKV has always been in contact were recorded in a structured manner in 2017 in connection with the implementation of the PKV management systems as part of an externally led workshop with the management and internal officers – together with their interests in the company and their demands on PKV.

Within the framework of the annual management system evaluation as well as in internal and external audits, the up-to-dateness is regularly checked and adjustments are made if necessary.

These stakeholder groups are primarily (without ranking)

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

PKV has designated contact persons and communication channels for all of these stakeholder groups, the latter of which can vary greatly from person to person (personal exchanges, events, digital formats, press and public relations work, other formats of internal and external corporate communication, company suggestion schemes, audits, inspections, reports...). PKV's occupational health and safety management also provides for a variety of ways to consult and involve employees.

Feedback from the diverse dialogue with these stakeholders also flows into the further development of sustainability management in various ways.

One example is the process for complaints concerning aspects of the management systems and/or FSC®-certified products. Every complaint that reaches PKV is logged and immediately forwarded to the responsible office. In addition, the complaints management contacts the complainants during and after the processing of the complaint. Complaints regarding FSC®-certified products are handled according to a process defined in the FSC® manual; this also applies to interim statuses and final feedback to the complainants.

Another example of processes related to feedback from our stakeholders is the company suggestion scheme, which is described in more detail in → criterion 08.

Please also read → **criterion 8**

DNK criterion 10

## INNOVATION AND PRODUCT MANAGEMENT

“It has always been part of our corporate strategy to use the best available technology. This constantly leads to positive effects in the conservation of resources.”

**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 through its business model alone. Packaging paper and board made from recovered paper have great advantages over other materials in terms of ecological aspects of sustainability – both in production and in use and recycling.

The processing of the raw material recovered paper conserves natural resources, and the collection systems established in Germany ensure a functioning return of the used product within the circular economy. The ecological impact of our products is assessed, among other things, through the calculation of product carbon footprints specific to each type of paper. In addition, our management systems regularly determine the environmental aspects that can be influenced and the associated environmental impacts for the main activities in paper and board production as well as along the product life cycle. In this context, non-intended conditions and foreseeable emergency situations are also taken into account. We report on further considerations of opportunities and risks in → criterion 02.

Of course, innovation processes along the value chain also play an important role for established goods such as paper and cardboard, also with regard to sustainable development. To be considered separately are, on the one hand, external technical innovations that our company makes use of, on the other hand, our own product and process innovations and, finally, investments in industry-wide innovation processes.

**Technical innovations have always played an important role in our company. It has always been part of our corporate strategy to use the best available technology.**

This constantly leads to positive effects in the conservation of resources – for example, when innovative technology is used in machine rebuilds, which continuously saves energy in the form of steam in the dryer section by increasing the dewatering of the paper in the press section of a paper machine. PKV is also open-minded towards forward-looking ways in steam production per se and in 2019 commissioned a power-to-heat module that can generate steam from wind power (purchased on the market).



We are also intensively engaged in continuous improvement, innovation and optimisation with regard to our own products and processes. Our integrated management systems (quality, environment, occupational health and safety, food and product safety, energy) provide a framework for this that is regularly externally audited. Another example of innovation processes is the company suggestion scheme, which is described in more detail in → criterion 08.

In addition, our internal product development department, for example, participates in industry-wide research projects with the aim of opening up previously unusable fibre material for recycling and use in packaging materials.

In 2019, PKV co-founded the Modellfabrik Papier in Düren in order to work on industry-wide solutions to reduce greenhouse gas emissions, conserve even more resources and further increase energy efficiency. In the coming years, this research network consisting of numerous partners in industry, universities and associations will conduct intensive basic research in the interest of sustainable, climate-neutral production of paper and cardboard.

Please also read → **criterion 02**  
→ **criterion 08**





DNK criterion 11

## USAGE OF NATURAL RESOURCES

“[...] PKV has been contributing for decades to a successful circular economy consisting of paper and board production, the use of its products in industry and private households, and recycling, thus conserving natural resources, especially wood.”

**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.**

Since 1950, PKV has used almost 100 % recovered paper as raw material for the production of paper and board – the only exceptions are small amounts of pulp from sustainable forestry, which are added to special grades for technical reasons, and fresh-fibre-based laminating papers that we buy in, made from pulp from sustainable forestry. PKV was one of the first paper mills in Germany to rely exclusively on recovered paper as a raw material.

In this way, PKV has been contributing for decades to a successful circular economy consisting of paper and board production, the use of its products in industry and private households, and recycling, thus conserving natural resources, especially wood. In 2020, PKV purchased a total of 797,933 tonnes of recovered paper.

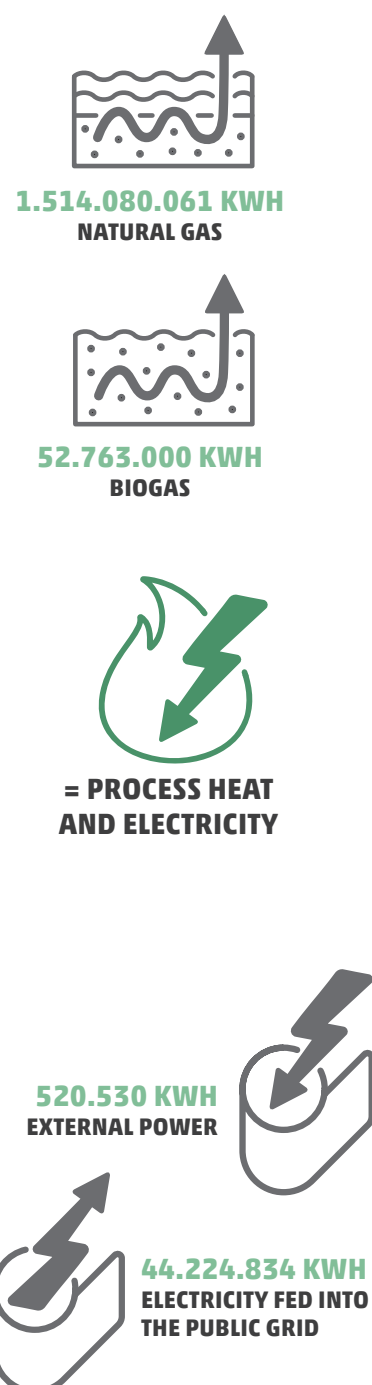
At the same time, the recycling of recovered paper also requires natural resources, first and foremost water and energy – however, these resources can be used more sparingly in the processing of recovered paper than in the production of virgin fibre products.

Water as the most important dissolving, transport and sorting medium is indispensable for paper and board makers – this is evident from the raw material preparation and sheet formation to the finished sheet with application-related strength and appearance. In 2020, PKV used 4.0 m<sup>3</sup> of fresh water per tonne of finished product (2.95 million m<sup>3</sup> in total) in multiple and cascade use in its production processes – we explain our water management in detail in → criterion 12.

The production of paper and board from recovered paper also requires energy, particularly in the form of steam to dry the paper and board webs, but also in the form of electricity to operate the plants. PKV currently uses natural gas (2020: 1,514,080,061 kWh) and the biogas generated in process water treatment (2020: 52,763,000 kWh) as energy sources and generates process heat (in the form of steam) and electricity from them. For process-related reasons, we also purchase electricity externally (2020: 520,530 kWh), but also feed self-generated, unused electricity back into the public grid (2020: 44,224,834 kWh). We explain our energy management in detail in → criterion 12.

Please also read → **criterion 12**

### ENERGY SOURCES 2020



DNK criterion 12

## RESSOURCE MANAGEMENT

“Through our current investment programme, we want to achieve a reduction of up to 10% of our CO<sub>2</sub> emissions per tonne of finished product [...]”

**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 covers its energy requirements almost exclusively from its own power plant, the facilities of which have always been consistently geared towards combined heat and power generation and thus the fullest possible utilisation of the energy source. Our ISO 50001-certified energy management system ensures, among other things, that resources are used as sparingly as possible.

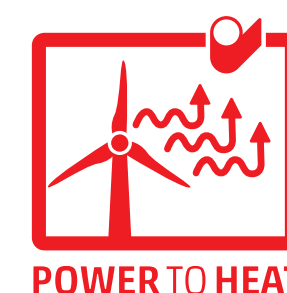
**Our four gas turbines, five high-pressure steam boilers and four steam turbines generate up to 200 tonnes of steam per hour and more than 50 MW of electricity in the highly efficient combined heat and power (CHP) process, depending on the steam demand.**

The main energy source is natural gas, plus biogas generated in the process water treatment plant, which is primarily converted into electricity in two gas engines with a combined electrical output of almost 2 MW. The

flue gas heat is used for steam generation and the engine heat for boiler feed water heating. A further amount of biogas is used thermally in a natural gas steam generator to substitute natural gas. The utilisation of natural gas and biogas energy is over 90 %.

By processing the energy sources natural gas and biogas, PKV's power plant basically also covers its entire own electricity demand. Only in the case of rare unscheduled and longer shutdowns of the power plant due to maintenance is it necessary to purchase electricity externally.

In addition, with our new power-to-heat module (electricity to heat/steam), we can relieve the public grid, especially in the case of increased wind power, and thus save primary energy and CO<sub>2</sub> at the same time.



In accordance with our energy management system, the energy performance indicators are recorded and evaluated monthly. The annual comparison with the corresponding energy baseline from 2012 serves to review the continuous improvement process.

**As part of the paper industry, we belong to an energy-intensive sector, with the corresponding risk of climate-damaging emissions that have a detrimental effect on sustainable development.**

According to the industry association Die Papierindustrie e.V., the specific energy input per tonne of finished product in the paper industry has fallen from 3413 kWh in 1990 to 2743 kWh in 2020 – a reduction of 19.6 %. We as PKV can even report an energy input of 1459 kWh per tonne of finished product in 2020 (value measured at the plants, based on ready-for-sale, weighed goods with their own moisture) and are thus far below this average. It should be noted, however, that this average also includes companies that are technically forced to use more energy simply because of their products, for example when processing virgin fibres. The recycling of waste paper (as at PKV) is less energy-intensive in comparison. Nevertheless, we have set ourselves ambitious goals to move forward from this position as well.

**Through our current investment programme, we want to achieve a reduction of up to 10% of our CO<sub>2</sub> emissions per tonne of finished product (current energy sources natural gas and biogas) by 2025 compared to 2018.**

In parallel, we want to develop a plan on how further reductions can be achieved and how we can move as far as possible on our own towards greenhouse gas neutrality. We also report on this reduction target in → criterion 13.

Today and in the foreseeable future, we have above all efficiency measures at our disposal to approach this goal under our own steam. In addition, a change of energy source to, for example, green hydrogen would – under economic conditions – greatly promote our efforts, but the implementation depends on many factors outside our company.

Here, therefore, we would like to briefly report on examples of our own projects that support our reduction target by improving our energy efficiency.

**A major step in this direction was the replacement of the wire and press section of our paper machine 4 at the beginning of 2020.**

The wire and press section is the part of the paper machine in which a mixture of paper fibres and water is combined into a solid web and dewatered by high pressure. The better this dewatering works, the less energy (in the form of steam) the machine needs in the subsequent dryer section to further dry the paper. So one of the main goals of the rebuild was more efficient drying in the press section. After completion of the rebuild, our data shows that less steam per tonne of paper is now needed in the dryer section than before, as desired.

We completed another very significant project for the most part in 2021:

**The expansion of our power generation with the renewal of steam turbines 1 and 3 and with**

**the new steam turbines 11 and 13 and the new boiler 10 opens up some opportunities for us to increase energy efficiency, reduce the use of natural gas, reduce CO<sub>2</sub> emissions and increase the flexibility of the energy supply.**

The new boiler 10 means that we no longer have to operate the previous boiler 4 from 1974 on a permanent basis. The new boiler has a higher efficiency compared to the existing boilers (96 % at full load) and can thus reduce natural gas consumption per tonne of steam produced.

The new steam turbines 11 and 13 will have a specific electricity generation per tonne of steam throughput that is approx. 20 % higher than the shutdown steam turbines 1 and 3. The operation of steam turbine 7 by boiler 10 will result in a specific electricity generation per tonne of steam throughput that is approx. 25 % higher. This increase allows us to shut down one of the four gas turbines when the steam consumption of the production plants is normal. This reduces our CO<sub>2</sub> emissions by about 10,000 tonnes per year.

But it is not only the big projects that we are working on in this context. Another important step – on a completely different scale, but setting an example – was the replacement of an air-conditioning system in the central control room of our cardboard production in 2021. Here we replaced a system with refrigerant with a system that uses the well water that is pumped anyway for cooling. The

more energy-efficient system and the elimination of refrigerants result in a saving of more than 90 per cent of the electricity requirement and also more than 90 per cent of the emissions – arithmetically, we thus avoid the emission of about 68 tonnes of CO<sub>2</sub> annually.

We are also substantially reducing emissions by converting our entire fleet of floor conveyor vehicles to electric drive.

**Today, 110 out of 140 vehicles in our plant use this type of drive. Our goal is to replace all floor conveyor vehicles with electric vehicles by 2025.**

## WATER

In the production of paper and board from almost 100 % recovered paper, we use water for various purposes: as cooling water, preparation and dilution water, cleaning water, pulping, sorting and transport medium in raw material preparation and as a production medium for high-quality, homogeneous sheet formation.

At PKV's site in Varel, only groundwater has been available for these tasks since the plant was founded. This always involves the potential risk of conflicts of use. This fact alone, within the framework of the necessary water management, educates us from the very beginning to use this natural resource sparingly. Today, we manage to reuse one litre of water up to thirty times in various stages and cascades before returning it purified to the ecosystem.

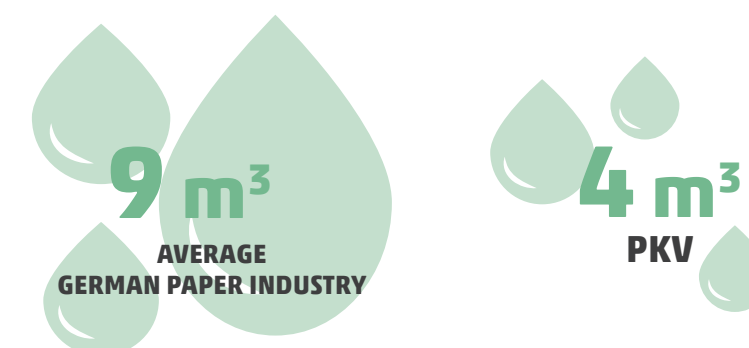
With this economical management and consequently 4.0 m<sup>3</sup> of fresh water use per tonne of finished product in 2020, we have achieved a top position in an industry comparison measured by our location. According to the latest available data, the German paper industry uses an average of around 9 m<sup>3</sup> of fresh water per tonne of finished product. In this comparison, however, it must also be taken into account that our recycling processes already technically require less water than other production processes in the paper industry (e.g. the processing of virgin fibres).

With our current water management, we are working at the lower edge of what is technically feasible, but we are still constantly striving for optimisation. Our goal is to continue to keep fresh water use permanently below or at 4 m<sup>3</sup> per tonne of finished product through technical and process solutions. In addition, we are testing how, in order to conserve resources, treated

municipal and industrial wastewater could be used proportionately in addition to groundwater in the future. To this end, a technical pilot test is underway with local partners such as the Oldenburgisch-Ostfriesischer Wasserverband (OOVV).

We extract groundwater from 15 wells from a radius of up to 5 kilometres. In 2013, after extensive testing, we received a permit for this from the district of Friesland, which is valid for 30 years. We are allowed to produce 4.5 million m<sup>3</sup> per year. In 2020, we used 2.95 million m<sup>3</sup> of this, as we are still more than 20 % away from our volume targets in the investment strategy.

Part of our permit is extensive, regular monitoring with regard to a wide variety of issues that may be related to the extraction of groundwater (impacts on agriculture and forestry, impacts on soil settlements, impacts on the saline/freshwater boundary, etc.).



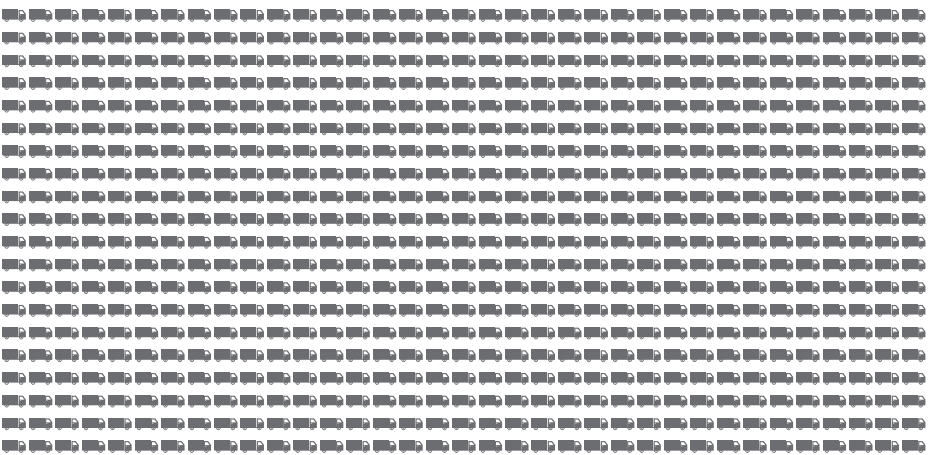
FRESH WATER USE  
PER TON OF FINISHED PRODUCT

So we are subject to very strict monitoring here. Our more than 200 ground-water monitoring sites are visited monthly. So far, no monitoring has shown readings outside the expected.

How do we handle the water in our plant? We first use the seven to ten degree cool groundwater in several stages to cool the turbines in the power plant, the switch rooms, the control rooms and the hydraulic stations. This replaces a large number of refrigeration machines or cooling circuits with associated evaporative coolers and saves electricity, coolant and water.

Our aim is to bring the water as close as possible to the ideal temperature for use in the wet end of the paper and board machines – also by means of additional heat from the recirculation condensate of the dryer section and waste heat from the exhaust air. This water temperature enables us to save primary energy in the form of steam (through saved heating energy and through a higher dewatering speed and higher dry contents after the wire and press sections).

During the production of our board and paper in the dryer section, part of the process water is discharged as steam via the exhaust vents in the hall roof. The remaining process water accumulates in the production process, especially with carbon loads (COD), from which it must be purified after about 30 times use before being discharged into the North Sea or used again in parts of the production process. This task is performed by our process water treatment plant, which currently has a capacity of 90 tonnes of COD per day. This plant has an anaerobic and an aerobic part – so the water is cleaned of the carbon loads with the help of bacteria and settling processes. We then reuse around 20% of this water in production. Finally, we discharge purified water (2020: 2.54 m³ per tonne of finished product) into the North Sea via a seven-kilometre-long pressure pipeline.



PLASTIC WASTE AND METAL SCRAP IN WASTE PAPER  
18.000 TONS / 700 TRUCKLOADS

WASTE MANAGEMENT

PKV operates facilities in accordance with the Federal Immission Control Act with appropriate waste management and thus guarantees disposal in compliance with the law at all times in cooperation with certified specialist disposal companies. PKV itself also holds this certificate as a specialist waste management company. The internal waste management officer advises the management as well as those responsible and documents in his annual report the paths of the waste from its generation to its recycling or disposal, the review of certificates, the development of waste-specific key figures as well as compliance with the legal requirements, in particular by inspecting the company's own accumulation points at regular intervals, notifying the company of any deficiencies found and suggesting ways to eliminate them. In addition, approaches

for continuous improvement are an integral part of waste management.

Unfortunately, the amount of waste in our raw material, waste paper, that we cannot recycle has increased in recent years – for example, plastic in the form of bags, foils, stickers and much more. This waste now accounts for about three per cent of the raw material. That's almost 18,000 tonnes per year (based on the waste paper purchased in 2020) – or more than 700 truckloads.

We use various systems to sort this waste out of the recovered paper that has been dissolved with water. These rejects are wet, shredded plastic waste mixed with paper fibres or even scrap metal. In the past, this waste was disposed of directly (the plastic usually in waste incineration plants), which involved a lot of transport and high costs.

We have decided to also process these rejects into a usable product as far as possible.

In our reject processing plant, built in 2018, the mixture that can be further processed is broken up, crushed, sorted, dried and compacted. During drying, we use waste heat from paper and cardboard production. We then press this rejects into so-called pellets. These are used as fuel in the cement industry, for example, and thus replace fossil fuels.

NOISE

Despite all efforts, noise emanates from our plant as an industrial operation. The legal framework for this is our operating permit, which was issued by the Trade Supervisory Office on the basis of the Federal Immission Control Act to counter this potential risk. This permit specifies various noise perception limits at different points outside the factory premises, all of which we comply with. Compliance with these limits must be verified every three years by a measuring body notified in accordance with § 29 b of the Federal Immission Control Act (BImSchG).

In addition, a noise expert has created a noise forecast model of our entire factory premises with more than 300 individual measurements. The necessary noise protection measures for modernisations and new investments are derived by the expert from the forecast model. This forecast model is regularly updated according to changes. We consistently follow up on our neighbours' indications of disturbing noises and eliminate these noises. At the same time, we are constantly reducing the noise emitted by our plant, for example by using electric stackers in the waste paper yards and new power plant technology.

ODOUR

PKV produces paper and cardboard almost exclusively from waste paper. Unfortunately, odours cannot be completely avoided in the process. However, we regularly invest in new technologies to reduce odours as much as possible. We are also subject to strict guideline values, compliance with which is regularly checked by independent experts at legally regulated intervals.

Starchy waste paper as raw material, water and warm temperatures are optimal conditions for acidifying bacteria that produce naturally occurring organic acids. This cannot be completely resisted in papermaking. Paper and board machines produce a uniform web from a liquid mixture (paper fibres and water) with the help of screens, felts, rollers and drying cylinders. A large part of the water is mechanically dewatered. The rest must be evaporated during drying. Some of this water vapour rises through exhaust vents above our factory. People can smell even the smallest concentrations of the natural substances dissolved in it. Therefore, we cannot completely avoid the smell of "wet paper" coming from our production. However, this is not a health hazard. Our company is subject to the Federal Immission Control Act (BImSchG), every change to the facilities requires a change permit/notification where the effects on the environment are always considered



by the responsible authorities – in particular noise, odour, soil protection, immissions/emission of substances, waste water discharge and ground water extraction. These permits and notices result in regular monitoring for compliance with emission/immission guide values, which are measured by officially approved measuring stations and independent experts. It can be deduced from this that we do not release emissions in concentrations that are hazardous to health.

We have various ways of countering the development of odours – partly by technical means, partly by adding milk of lime and caustic soda to stabilise the pH value, which worsens the conditions for the acidifying bacteria. Basically, however, we also come up against another dependency at this point: we want to reduce the use of fresh water in our factory as much as possible – but the more fresh water we use, the less odours are produced (dilution effect).

In addition, an appropriate additive is added at key points in the production process to reduce microbiological activities. We always follow the approach of "as much as necessary, and as little as possible" in order to optimally operate the downstream microbiological process water treatment system in our plant. The auxiliary materials used degrade completely in the water cycles, thus preventing any impact on the environment.

Finally, in the process water treatment plant, the previously undesirable process (acidification) is deliberately brought about in order to break down the dissolved starch content there in a controlled manner. With the ongoing modernisation of the process water treatment plant, older plant components are being replaced with the latest technologies, among other things, which contribute to minimising odours and make it possible to return more biologically purified process water to the production process for the dilution effect.

## DNK criterion 13

# CLIMATE-RELEVANT EMISSIONS

“The highest priority at PKV is therefore to further increase our energy efficiency through process optimisation and technical innovation, [...] and thus reduce the use of fossil fuels per tonne of finished product.”

**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.**

Climate-relevant emissions in our company are mainly caused by the use of natural gas, whose energy is converted into electricity and process heat in the form of steam in our power plant. In particular, the process heat for drying the paper and board webs makes the paper industry an energy-intensive sector. The challenge here lies primarily in the fact that water must be used for paper production, which must then be removed from the product again after a paper web has been formed. Both mechanical and thermal processes are used for this purpose, and both require substantial amounts of energy. The highest priority at PKV is therefore to further increase our energy efficiency through process optimisation and technical innovation, as described in → criterion 03, and thus reduce the use of fossil fuels per tonne of finished product.

Key approaches to be mentioned here are in particular

- **efficient power plant technology**
- **increasing the availability of our production facilities**
- **the minimisation of rejects**
- **the optimal utilisation of raw materials**
- **as well as various energy-saving and efficiency projects at all production facilities.**

As a result, we want to reduce our CO<sub>2</sub> emissions per tonne of finished product by 10% by 2025 compared to 2018. Our ISO 50001-certified energy management system also supports us in this.

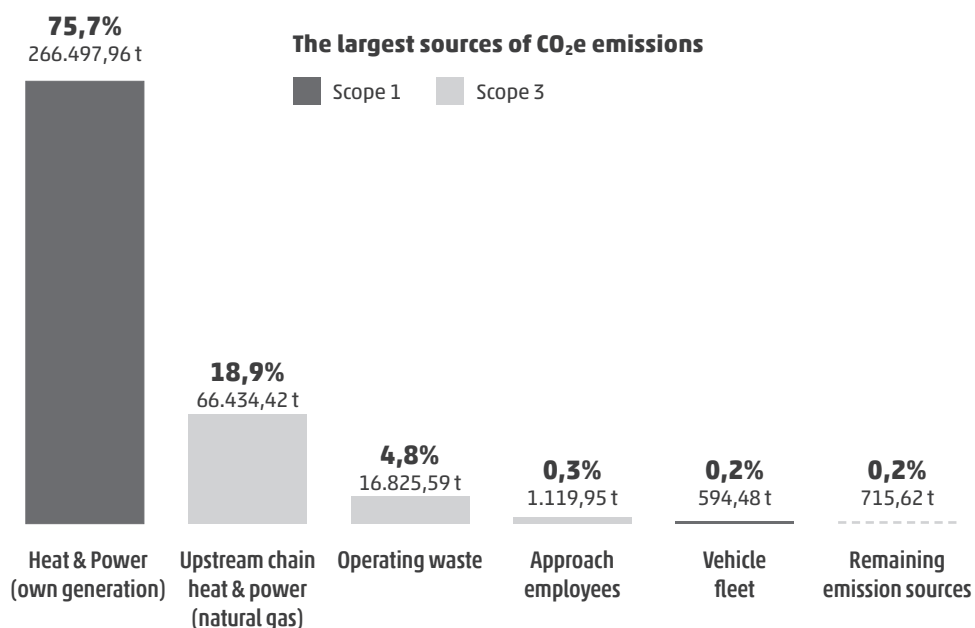
We chose the base year 2018 because it had the best (lowest) primary energy use per tonne of finished product (ready-to-sell, weighed quantity with own moisture) in a five-year period 2014 – 2018 before the implementation of the PKV strategy programme currently underway. We want to be measured against this best value from 2014-2018.

In 2020, which we report on here, we exceeded this best value of 2018 by 5.6%. The reason for this is extensive conversion work on our paper machine 4, among other things to improve energy efficiency. Due to this conversion work and the subsequent gradual ramp-up of production on this machine, we produced less paper in 2020 than in previous years, but – for process-related reasons – were not able to save the same amount of energy. Accordingly, the ratio of energy used to paper produced is mathematically less favourable. We see this as an intermediate step in a strategy programme totalling 280 million euros in investments, with which we are currently working on all the above-mentioned factors that influence production volume and energy consumption per tonne. These investments will have a lasting positive impact on our energy use in the years to come.

In 2021, we calculated our Corporate Carbon Footprint (CCF) for the first time together with the company Climate Partner based on the guidelines of the Greenhouse Gas Protocol. For 2020, this results in calculated emissions of 352,188.03 tonnes of CO<sub>2</sub> equivalents.

All greenhouse gases relevant under the Kyoto Protocol were taken into account in the calculation of the CCF. Emissions were calculated using consumption data and emission factors. Primary data were used as far as possible. If no primary data were available, secondary data from recognised sources were used. Emission factors were taken from internationally recognised databases such as ecoinvent or GEMIS.

Please also read → **criterion 03**



The 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-owned facilities or vehicle fleets (= 75.9 % of the emissions).
- **Scope 2** lists emissions generated by purchased energy, for example electricity, district heating, etc. (= 0 % of emissions).
- **Scope 3** includes indirect emissions, such as employees' commuting to work or services purchased. (= 24.1 % of the emissions)

# SOCIETY





DNK criterion 14

## EMPLOYEE RIGHTS

“We are committed to social responsibility and responsible 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 responsible corporate governance. Compliance with applicable laws forms the basis of our actions, which are characterised by the principles of integrity and fairness as well as sustainability and protection of the environment**

We operate internationally through purchasing and sales and comply with the applicable laws, standards and other legal provisions in all countries in which we operate and also observe the existing social rules in each case. This is laid down, among other things, in our Code of Conduct ([www.pkvarel.com/en/downloads/code-of-conduct/](http://www.pkvarel.com/en/downloads/code-of-conduct/))

We strictly reject any form of forced labour. We define forced labour as any kind of work that is not performed voluntarily or under the threat of punishment. For us, the basis of every employee's work is a written employment contract that is voluntarily concluded between the contracting parties. The employment contract and supplementary documents or explanations specify the area of work in which the employee is deployed and the main tasks assigned.

We reject child labour in any form. We fully comply with the provisions of the Youth Employment Protection Act and all related regulations. Young people are only employed within the legally permissible working time framework.

We fully respect the fundamental right to freedom of association. Every employee is free to organise himself or herself in a trade union and does not suffer any disadvantages as a result. We maintain a cooperative and constructive relationship with our works council and – together with the employer's representatives – with the Mining, Chemical and Energy Industrial Union (IG BCE) as our collective bargaining partner.

We report on the diverse participation of employees in company processes at various points in this report, for example in → criterion 05, and in relation to sustainability management in particular in → criterion 08. We report on our goals and processes in relation to occupational health and safety in → criterion 15.

No quantitative targets are yet available for our efforts in relation to workers' rights. In order to summarise these topics and provide them with measurable targets, the creation of a corresponding internal guideline was in progress at the time of publication of this report. Its implementation is planned for 2022.

In our risk analysis described in → criterion 02, we have not identified any significant risks arising from our business activities, business relationships or products and services that are likely to have a negative impact on workers' rights.

Please also read → **criterion 05**  
→ **criterion 08**  
→ **criterion 15**

DNK criterion 15

## EQUAL OPPORTUNITIES

“Occupational safety and health protection are very high priorities for us, which take precedence over production goals.”

**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, but are firmly committed to ensuring that all employees can work in a working environment free of psychological, physical or sexual harassment. If we become aware of forms of harassment in individual cases, this may result in measures under labour law.

We are expressly committed to the principle of equal treatment within the company and to equal opportunities. In particular, no one may be discriminated against or put at a disadvantage because of their race or nationality, ethnic origin, gender, religion or ideology, disability, age or sexual identity.

In our view, sustainable economic activity and sustainable corporate success are inseparably linked not only to productivity, quality and efficiency, but also to humanitarian standards. In our view, sustainable economic success is not possible without qualified and committed employees. The working conditions described below contribute significantly to this.

### WAGES AND SOCIAL BENEFITS

PKV ensures that the remuneration of all employees fully complies with the applicable laws and collective agreements (in particular the collective agreement for employees in the paper industry and the associated wage and salary agreements). The Minimum Wage Act (Mindestlohngesetz) is the absolute minimum standard, which is considerably exceeded by our various collective agreements. These include a collectively agreed holiday entitlement of 30 days per year as well as special leave days for special collectively defined occasions, a 13th month's salary, a separate holiday allowance, bonus payments as well as supplementary payments for night, Sunday, holiday and overtime work.

We have recognised the company pension scheme as another important building block in this environment and offer our employees two attractive ways of making company pension provision and additionally promote this through employer subsidies and the possibility of deferred compensation.

It is a matter of course for us that every employee receives a monthly pay slip to document and check his or her correct payment.

### WORKING HOURS

We fully comply with the provisions of the Working Hours Act and the associated regulations. According to the collective agreement, we also have a 38-hour week, which is well below the limits of the Working Hours Act.

In individual cases, it will never be possible to completely avoid extra work. However, it is important to us that this does not become the standard at any workplace and always remains the exception. We have implemented a company regulation that requires a separate justification when exceeding a working time of 10 hours in one day, which ensures that this may only be done in the narrow exceptions of the Working Hours Act.



We have concluded a company agreement on part-time work at PKV, which offers every employee the opportunity to reduce their own working hours by up to 50 % within the framework of certain models. This increases the compatibility of family and career and improves the work-life balance.

## OCCUPATIONAL SAFETY

Occupational safety and health protection are very high priorities for us, which take precedence over production goals. We strictly observe the regulations of the occupational health and safety laws and all other regulations that serve to protect the health of our employees, and we are regularly inspected by the authorities as well as by internal audits and external inspectors. Our occupational health and safety management is certified according to ISO 45001.

In order to guarantee our high standards, we rely on, among other things, our own specialists for occupational safety and regular consultation hours as well as compulsory and offered examinations by our company medical service, a large and extra-mandatory number of safety officers and first aiders, regular meetings of the occupational safety committee as well as other committees for occupational safety and an extensive system of commissioners (e.g. for fire protection, immission protection and water protection). Those who work for us in production or related areas are also provided with a complete range of high-quality workwear for a minimal personal contribution.

Company sports also make an important contribution to health protection. We currently have six sports (football, volleyball, running, bowling, table tennis and sports badges) to keep fit and have a good time together. The PKV also pays a monthly subsidy for the gym contract. Drinking water dispensers are set up throughout the company and are available to employees at all times. In addition, employees can lease up to two bicycles or e-bikes through our partner Jobrad. We also support campaigns such as "Cycle to Work".

Our specific goal in the area of occupational safety is to reduce illness/accident-related accidents to the level of the BG RCI paper by 31 December 2022, or better to the level of the BG RCI overall. By 31.12.2025, we want to be 30 % below the BG RCI levels and are preparing corresponding measures.

No quantitative targets are yet available for our efforts in relation to equal opportunities. In order to summarise these topics and provide them with measurable targets, the creation of a corresponding internal guideline was in progress at the time of publication of this report. Its implementation is planned for 2022.

### DNK criterion 16

## QUALIFICATIONS

“With our complex processes and plants, qualified employees and lifelong learning are indispensable for success.”

**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.**

With our complex processes and plants, qualified employees and lifelong learning are indispensable for success. We therefore offer various in-service training courses, for example master craftsman training as an industrial foreman specialising in paper production, further training as a paper technician or as an industrial and business specialist (IHK). In 2020, we spent a total of 305,536 euros on continuing education and training.

Since 2019, we have supported ongoing internal training and development with our digital e-learning platform "Studio". In 2019, we achieved 472 course completions here, then in 2020 already 1,140 and in 2021 (until mid-October) 8,686 course completions per year.

Training also has a very high priority in our company; we train in a total of seven professions. Trainees receive special care from expert trainers and are under special protection. We take full account of the provisions of the Vocational Training Act. We see diverse in-company training in many (especially personnel-intensive) areas of the company as an essential response to demographic change.

School internships and other in-company internships offered by our company are a special feature. These primarily serve the purpose of career orientation as well as the personal development of the trainee. All specifications of the respective educational institution are adhered to when carrying out internships in our company.

We report on strategies and measures relating to our health management in → criterion 14.

No quantitative targets are yet available for our efforts with regard to qualification. In order to summarise these topics and provide them with measurable targets, the creation of a corresponding internal guideline was in progress at the time of publication of this report. Its implementation is planned for 2022.

In our risk analysis described in → criterion 02, we have not identified any significant risks arising from our business activities, from our business relationships or from our products and services that are likely to have a negative impact on qualification.

Please also read → **criterion 14**

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 responsible corporate governance. In our Code of Conduct, which is open to the public, we describe the principles that we consider to be guiding and essential for responsible corporate governance. In general, all our actions in all areas, especially towards customers, suppliers, business partners and our employees, should be guided by 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 forms the basis of our actions. In our Code of Conduct, we commit ourselves, among other things, unconditionally and irrevocably to always respect and guarantee human rights as the supreme good in all our actions. This Code of Conduct describes our fundamental strategy in this regard. Examples of corresponding measures can be found in → criteria 04, 14, 15 and 16.

Beyond this general commitment, we want to define measurable goals in an appropriate manner in the future. This concerns, for example, the planned internal guideline on working conditions and human rights, which we report on in → criteria 14, 15 and 16. Quantifiable targets are not yet available here, but will emerge in this context. The implementation of the guideline is planned for 2022. We describe further goals in the area of human rights, particularly with regard to sustainable and responsible purchasing (also for the best possible coverage of any risks in the supply chain) in → criterion 03.

In our risk analysis described in → criterion 02, we have not identified any significant risks arising from our business activities, our business relationships or our products and services that are likely to have a negative impact on human rights.

Please also read → **criterion 03**  
→ **criterion 14**  
→ **criterion 15**  
→ **criterion 16**

DNK criterion 18

## CORPORATE CITIZENSHIP

“[...] PKV itself supports charitable projects for safe, healthy and social coexistence at its location, in particular through a major donation at the end of the year.”

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

With the aim of maintaining a concentrated and expert shareholder structure of the group of companies around PKV and at the same time allowing the general public to share in the entrepreneurial success, company founder Hellmut Barthel established the non-profit Gertrud and Hellmut Barthel Foundation in 1991. By his last will and testament, this foundation was endowed with sufficient financial means at the time of his death in 1999. As chairmen of the foundation at the time, Jürgen Evers and Günter Dieball took up the challenge of building up a network of support in which the available funds would be used in the best possible way and in the spirit of the goals set by the founder (monument protection, scholarships, environmental protection, art/culture, education and teaching/research). Today, the chairmanship is held by Kristian Evers and Lutz Dieball.

**In the meantime, the Barthel Foundation has become a reliable supporter of many projects with a broad impact. The regional focus of the funded projects is particularly on Varel and Friesland, but in many cases also goes beyond this. In 2020, the foundation distributed a funding volume of more than 1.6 million euros, supporting 51 projects and 30 scholarship holders.**

In addition, PKV itself supports charitable projects for safe, healthy and social coexistence at its location, in particular through a major donation at the end of the year. This is in line with our self-image as a family-owned, medium-sized company with the highest standards of occupational safety and environmental protection.

Through sponsoring, PKV supports projects around its location – in exceptional cases also nationwide – with a target group that is or could be interested in career prospects in the paper industry. In addition, projects that deal with the protection and economical use of natural resources are also very close to our hearts at our location. This is in line with our self-image as a producer of sustainable raw materials for packaging using resources as sparingly as possible. We also provide sponsorship funds for such projects.

**Barthel**  
Stiftung

And last but not least, we very much welcome the fact that many of our employees are also privately committed to good causes. Volunteering for others is an attitude we are happy to support. Cohesion and commitment are also important values for us professionally.

That is why we currently provide annual funds in our "PKV Extra" programme, which was created in 2020, to act as a donor/sponsor for projects in which our employees are active themselves.

We have described all these activities in a company-wide donation and sponsorship guideline, which we implemented in 2021 and according to which we will report annually to the management from 2022 onwards.

DNK criterion 19

## POLITICAL INFLUENCE

“The basis for political engagement is our consideration of opportunities and risks [...]; the shareholders decide on such engagement.”

**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.**

Relevant for PKV are national and EU legislative procedures, especially on all economic and legal framework conditions in the industrial SME sector, on climate protection and on issues concerning packaging products. We hold discussions on these and other topics at irregular intervals with locally, regionally and nationally active politicians from democratic parties. The basis for political engagement is our consideration of opportunities and risks (cf. → criterion 02); the shareholders decide on such engagement.

In addition, our interests are represented above all by business and industry associations as well as sustainability initiatives. An example of this is DIE PAPIERINDUSTRIE e.V., the main task of this association is to bundle 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 foreign trade, raw materials and law, social and collective bargaining policy, as well as press and public relations work and recruitment of young talent.

Also exemplary is the commitment of the KlimaWirtschaft Foundation, of which we are a member: The foundation supports climate policy projects in politics and administration and, on the other hand, demands reliable political framework conditions for the companies that are committed to climate protection as pioneers. As a "translation aid", the foundation moderates between climate science and business and thus contributes to a better mutual understanding. As a "source of inspiration", the foundation helps companies inside and outside the funding circle to develop innovative approaches to low-carbon business through best-practice examples and the exchange of ideas.

We are members of these organisations, among others:

- Oldenburgische Industrie- und Handelskammer
- Stiftung KlimaWirtschaft
- Bundesdeutscher Arbeitskreis für Umweltbewusstes Management (B.A.U.M.) e.V.
- Branchenverband „DIE PAPIER-INDUSTRIE“ (ehemals Verband Deutscher Papierfabriken (VDP) e.V. und Vereinigung der Arbeitgeberverbände der Deutschen Papierindustrie (VAP) e.V.)
- Verband Nord- und Ostdeutscher Papierfabriken (VNOP) e.V.
- Fachverband Faltschachtel-Industrie (FFI) e.V.
- INGEDE 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)

Please also read → **criterion 02**

DNK criterion 20

## CONDUCT THAT COMPLIES WITH THE LAW AND POLICY

“This corporate culture is based on the principle of self-responsibility on the basis of 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. The company depicts how corruption and other contraventions in the company are prevented and exposed and what sanctions are imposed.**

We use the term compliance to refer to the observance of all relevant laws, regulations, internal guidelines, contractual obligations and voluntary commitments by us or third parties commissioned by us. This does not only refer to mere compliance with applicable law. We are also guided by the ethical principles of our corporate culture. This corporate culture is based on the principle of self-responsibility on the basis of shared values.

In our Code of Conduct, we undertake to comply with the applicable laws, standards and other legal provisions in all countries in which we are active and to observe the social rules that exist in each case. We are fully committed to exclusively fair competition with our market partners and competitors. We comply with all applicable antitrust and competition laws. We reject agreements on prices and conditions as well as agreements that serve to restrict competition or divide up markets and customers.

The same applies to all forms of bribery and corruption; PKV will not tolerate such conduct under any circumstances. We describe how we work towards compliance with sustainability criteria in our supply chain in → criterion 04. PKV employees may not offer or grant any inadmissible advantages to business partners or accept the same in the course of their business activities. The acceptance of gifts is prohibited. The only exceptions are customary hospitality or occasional gifts of small value. The acceptance of monetary gifts is strictly prohibited in any case and in any amount.

PKV is currently testing the bundling of compliance responsibility with a compliance officer from among the shareholders, Lutz Dieball. Reporting and whistleblowing procedures are also being tested in this context.

We are also planning regular training in compliance issues to sensitise employees accordingly. In 2020, we trained relevant persons at management and department head level on the topics of "compliance in general" and "competition/antitrust law". Our goal is to extend such training to all relevant employees in 2022. In the future, we plan to refresh and update the topic in annual training sessions.

A regular external review in the area of compliance takes place through the EcoVadis rating. Some compliance topics are reviewed in other audits (e.g. product safety, data protection, information security).

Please also read → **criterion 04**



