

Sustainability Report 2023

Panther Group



Stark und elastisch

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1. Panther Group



1.1 Company profile

Since **Panther** was founded in 1902, about 120 years ago, the company is established in the market and is positioned throughout Europe in the meantime. With an extensive portfolio from corrugated board, packaging, displays to print through to tailor-made services, the family run Group had a total turnover of 429 million euros in 2023. The **Panther Group** is strategically located close to borders of Germany, enabling optimised, freight-conscious and smooth delivery to customers.

In addition to the parent company, **Panther Packaging GmbH & Co. KG**, which is headquartered in Tornesch (near Hamburg), the **Panther Group** comprises nine stand-alone companies. All the companies (**Panther Plants**) make full use of the advantages of a decentralised organisation. A wide variety of products are manufactured: corrugated board folding boxes, rotary or flatbed die-cut packaging, specially coated packaging as well as secondary placements, be they counter displays or pedestal display units. The products are printed in flexo direct print/preprint, offset printing process or digital print in multiple colours.

Our growth-oriented nature and innovative spirit have ensured our success to this day. The independence of the **Panther Plants**, each with their own specialisations and services, contributes to the fact that the entire Group always flexibly adjusts to changing market conditions and new customer requirements.

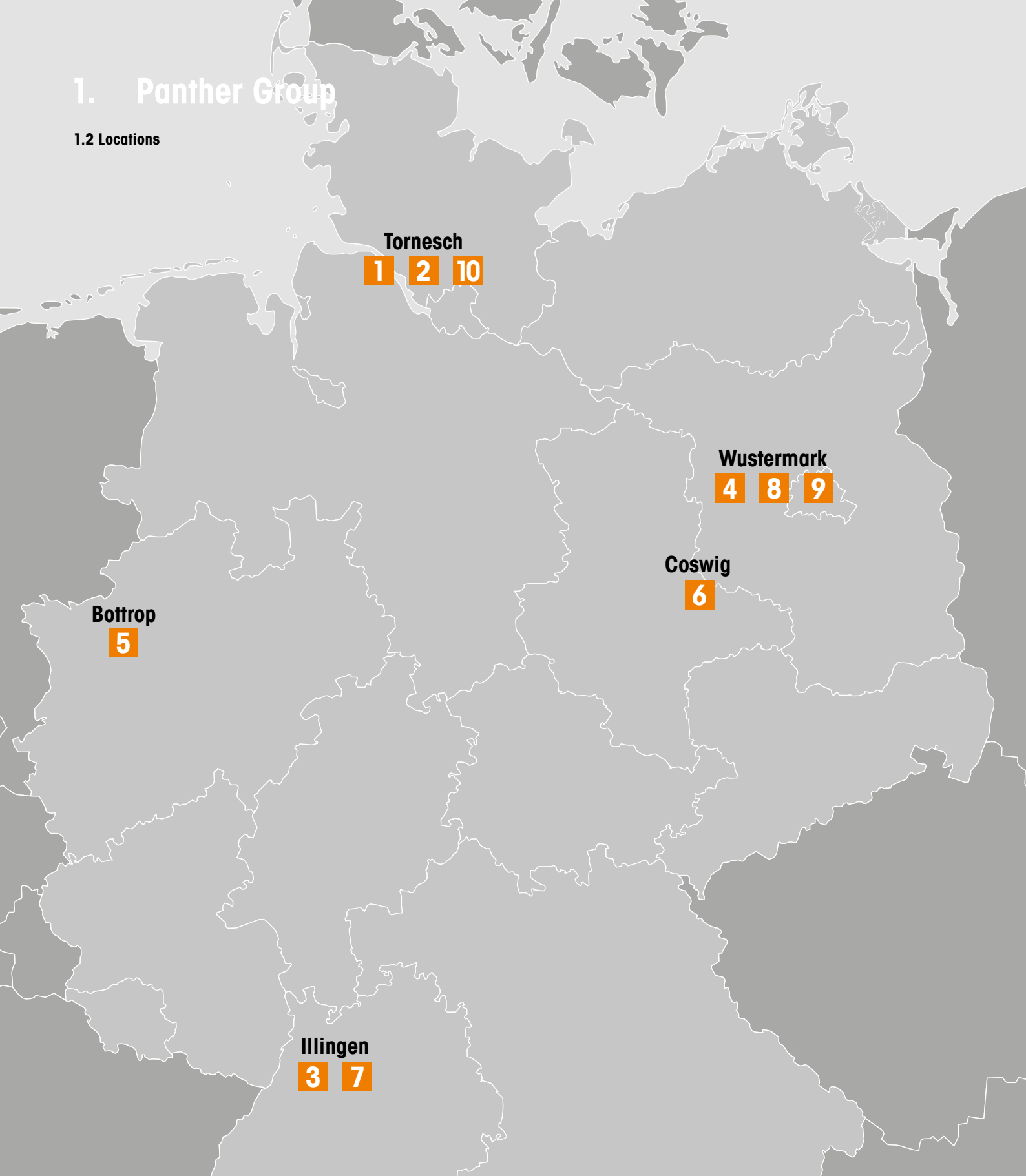
Panther Group in figures:

121	10	5	429 Mio. €
Years of experiences	Companies	Locations	Turnover
405.000 † p. a.	200 Mio. m² p. a.		
Total corrugated capacity	Preprint capacity		
16 Mio. € p. a.	Investment in machinery and plants		
1.171	104	17	
Employees	Apprentice	Apprenticeship professions	



1. Panther Group

1.2 Locations



Panther Packaging  1

2
Altonaer Wellpappenfabrik 

3
Südwestkarton 

4
Wepoba Wellpappenfabrik 

5
RRK Wellpappenfabrik 

6
WS Coswiger Wellpappe- und Papierverarbeitung 

7
Print-Pack 

8
Panther Display 

9
Panther Print 

10
Panther Cargo 



1. Panther Group

1.3 Corporate policy

The **Panther Group** supplies the European market with corrugated board, packaging, displays, printed products and various services, such as assembly, for example. A decentralised organisation, flat hierarchies, short communication channels and fast decision-making procedures ensure efficient processes. Thanks to the organisational structure, we are dynamically positioned with all subsidiaries and the wide range of services.

We pursue a strategy of developing innovations, bringing them onto the market and utilising synergy effects. The **Panther Group** focuses on holistic solutions back as early as the packaging and display development stage. We are the link between manufacturers and consumers and we make the packaged goods transportable with our packaging so that they reach the customer undamaged. Packaging materials are developed and optimised taking into consideration ecology, economy and the entire value chain. This includes an economical use of the material through power-efficient packaging in the plant right through to the reduction of transport and waste disposal volumes.



Throughout the entire Group, greatest importance is attached to the safety of the products as well as that of our employees. Our products and services are continuously improved through constantly optimised processes to minimise the risks of product contamination from a hygiene perspective. Safety and the preservation of health and resources are the guiding principles for our daily thoughts and actions. The requirement for continuous improvement of the effectiveness of the integrated management system and risk minimisation are the impetus for new corporate goals and programmes in all areas, combined with the requirements of a HACCP system (Hazard Analysis and Critical Control Points) and GMP (Good Manufacturing Practice). As an integral part of the supply chain of the pharmaceutical and food industries, we are aware of the great responsibility for food and pharmaceutical product safety. Therefore, in the event of a pandemic, we have also defined measures to ensure the supply to our customers in the event of a crisis.

The **Panther Group** strives for the highest level of quality, which is reflected in its corporate actions. All measures for organising, establishing, maintaining and expanding the management system serve to consolidate existing and develop new long-term customer relationships and are an existential part of our corporate strategy alongside environmental, energy, safety and market aspects. Our common objective is to fulfil customer expectations in order to secure the performance of our **Panther Plants** in the long term. This is, for example, one of the reasons running the **Panther Innovations-Programm** as an active suggestion scheme.

**Panther
Innovations-
Programm** 



The concept of the integrated management system has been developed with a focus on error prevention. To achieve these objectives, specific processes and ways of working have been defined which are successfully implemented in the common work of all employees of the company and our customers. Management is committed to consulting and involving the employees. If, despite this, deviations occur, for example from specifications, each and every employee is obliged to ensure that the defect is rectified. Every employee is expected to take personal responsibility for the accuracy and safety of our products, services, processes and working methods.

The organisational guidelines laid down in the management handbook oblige the management and all employees to carry out their respective activities accordingly, thus ensuring the quality and safety of our products, the safety of each employee and the protection of the environment.



1. Panther Group

Our integrated management system leads to significant improvements in processes and helps to minimise the environmental impact with the highest possible energy efficiency of our machinery and equipment. Protection of the environment starts with the efficiency of raw materials we use. Management representatives for the areas of quality, energy, environment and waste, GMP/hygiene, water protection, hazardous goods, FSC® and occupational safety are responsible on behalf of the management for all measures within the scope of the management system and also for the checking of their compliance as well as continuous optimisation. For us, sustainable management includes regular checks on the use of regenerative energies and the expansion of corporate considerations through life cycle costing analyses.

Compliance with laws and regulations, alignment with the Ethical Trading Initiative Base Code (ETI Base Code), which is based on the conventions of the International Labour Organisation (ILO) and is an internationally recognised code of labour practices), as well as requirements from other areas of the individual sites are both ensured and further developed through the **Panther Philosophy**, the integrated management system and the linking of processes. Environmental impacts related to our business activities are transparently disclosed in public dialogue, reflecting, among other things, our corporate culture.



Investments in and the procurement of technical goods always include an assessment of energy efficiency, which is one of the decision-making criteria we use when awarding contracts. Our suppliers are considered and assessed as partners in the value chain. At the same time, we have committed ourselves to actively contributing to achieving the climate targets by reducing specific CO₂ emissions.

The **Panther Group** strives to draw the attention of its employees to quality and environment-related problem areas, compliance with hygiene guidelines, as well as guidelines on occupational safety and health protection through continuous training and information in order to increase awareness and promote active cooperation. If, despite all documented procedures, quality, environment, hygiene or occupational safety-relevant failures or even accidents occur, effective countermeasures are put into place and immediate steps are taken to prevent them in the future. We support our employees through education and training and ensure a working atmosphere with working conditions that are conducive to this.



We also ensure compliance with the General Data Protection Regulation (GDPR), a European Union regulation that governs the processing of personal data. This applies to our customers' data as well as that of our employees and business partners and is the guarantee of data security regarding technologies, patents, new developments, strategies and goals, both internally and externally.

We respect, protect and promote universal human rights and consider it our responsibility to comply with them by being cooperative and fair with each other. We treat each other with tolerance, acceptance and respect and leave no room for discrimination. In addition, we ensure that everyone avoids dangers and risks. We are committed to this and also expect compliance with international human rights standards from all our partners throughout the entire supply chain.



1. Panther Group

1.4 Panther Philosophy

The **Panther Philosophy** has been the basis of our daily thoughts and actions for decades. Over the decades, this has grown to incorporate the three pillars of sustainability, ecology, economy and social affairs (Chapter 2.2). These form the basis for the sustained success of our Group and are an integral part of our corporate strategy.

Panther Philosophy: For the shared success

Mission

Our products enable human beings to receive all types of goods all over the world.

Values

We always give of our best. In our company we work honestly, loyally and reliably with each other. Our cooperation within the **Panther Group** is characterised by a sense of responsibility, fairness and discipline.

In the **Panther Group**, nobody is disadvantaged on account of the age, sex, origin, nationality or world view. We respect general human rights.

Guiding principles

Customer requirements determine our thoughts and actions. We put the very highest premium on skill, performance and cooperation.

We respect initiative and continued personal education.

Employees who live the **Panther Philosophy** are our strength, because not only are they our capital, they shape our reputation and our performance.

Our constant striving for improvement determines our mutual success.

Vision

In the eyes of our customers we wish with our sustainable products to be the best company in the packaging industry.

Objectives

We want to grow regardless of general economic developments.

We want to make profits, because only a successful company remains sustainable and is a competent partner for our customers.

Even in the face of strong competition, we will prevail – no matter what difficulties stand in our way.

We want to be a source of innovations in order to remain fit for the future.

In order to achieve the right price level for the market, we are continuously optimising our costs.

Quality and safety of our employees are our first priority. The skills of our staff are reflected in the quality of our products and services. That quality creates the highest satisfaction among our customers and binds them in the long term.

The environment is an asset worthy of our protection. Our products can be recycled and are an important part of the material cycle.

1.5 Code of Conduct (CoC) for employees and suppliers

We have drafted a Code of Conduct for employees as well as for our suppliers and published it on our website. Both documents are subject to regular reviews and updates. In addition, these documents are used in purchasing and procurement management to ensure responsible behaviour right from the beginning of the supply chain.

www.panther-packaging.com/en/downloads

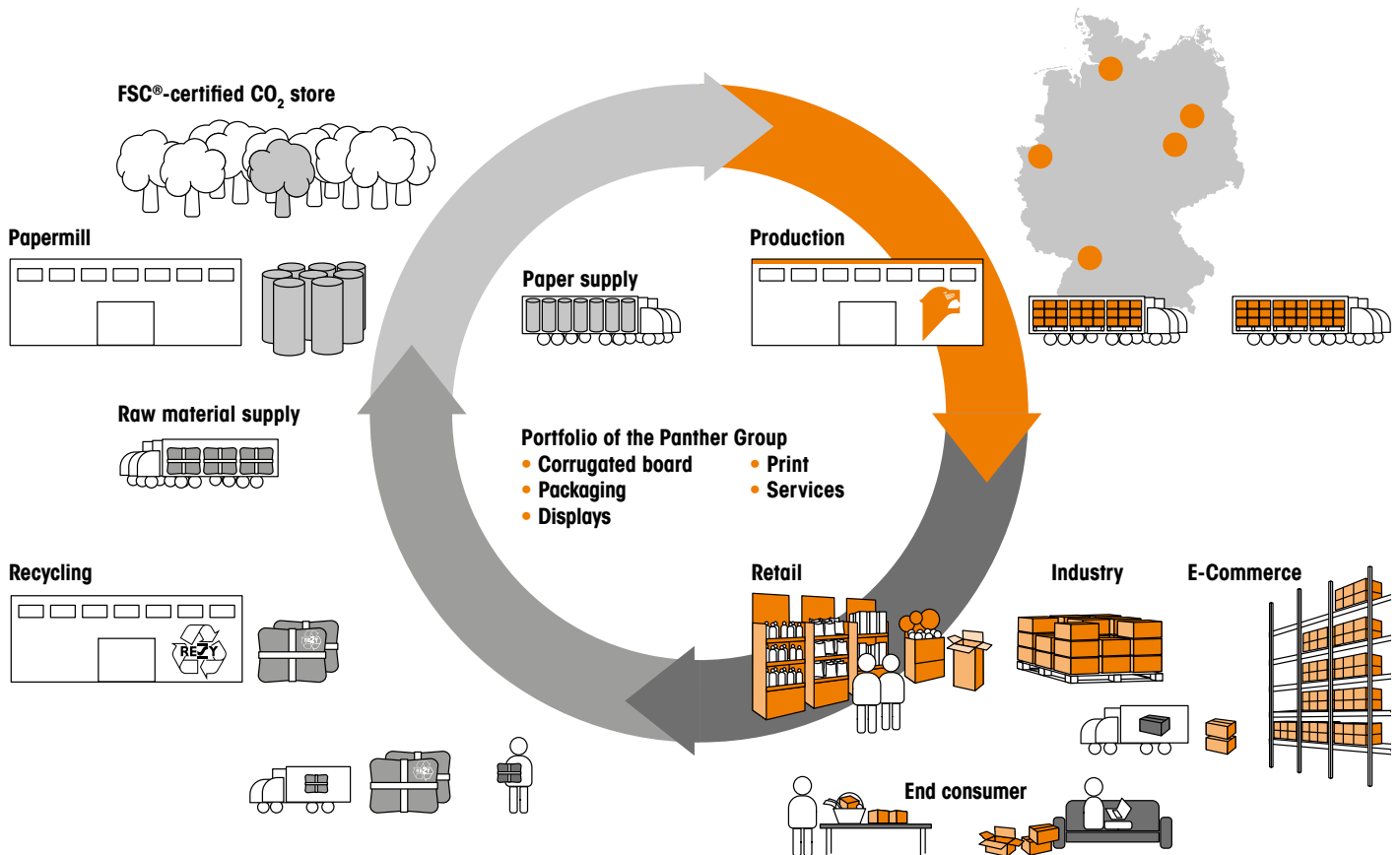


1. Panther Group

1.6 Recycling product corrugated board

The packaging material corrugated board is a natural product, environmentally friendly and manufactured primarily from the raw material paper, which has its origin in renewable raw material wood. We use paper containing waste paper (> 90 %) and virgin fibre paper (< 10 %). This is why corrugated board is considered to be a particularly favour-

able packaging material from an ecological perspective. Forest-based industries in Europe contribute to an annual improvement in carbon footprint of 806 Mt, which corresponds to 20% of all CO₂ emissions (VDW: Report 04/2020; CEPI study: Climate effects of the forest-based sector in the European Union).



Biodegradable substances such as corn, wheat or potato starch are used for gluing the paper webs. Furthermore, primarily water-based printing inks are used, with the aim of conserving resources as a matter of principle. As such, unused inks are stored and reused. The reuse of residual flexo inks is made possible by state-of-the-art ink mixing equipment.

Furthermore, corrugated board is a circular product, since it can be recycled. In countries such as Germany, the recycling rate is extremely high and this is a suitable indicator for comparison with other packaging materials.

The environmental compatibility of corrugated board is demonstrated by the use of approximately 90 % recycled paper as the most important raw material source.

Printed corrugated and solid board can also be disposed in compliance with the official regulations on the recycling of waste paper. Our corrugated board packaging therefore also meets the requirements of EN 13427 to 13432 for packaging avoidance, reusing, material recycling, energy recovery and composting.

Transportable, shelf-ready and sales packaging made from corrugated board contribute to the conservation of resources on the one hand by offering optimum protection for all types of packaged goods and ensuring they reach consumers in perfect condition. On the other hand, products and packaged goods are protected from external damaging factors, as is the environment from undesirable contact with the goods. Food can also be protected from premature spoilage.

www.wellpappen-industrie.de/nachhaltigkeit/recycling.html



2. Sustainability Management

2.1 Sustainability strategy

Sustainability concerns us all – including the **Panther Group**. A holistic view is required, consisting of social and political factors, among others.



Panther for Planet has been an integral part of our corporate strategy for sustainable development for years and specifies the Group's focus. We have set clear targets for the protection and preservation of the environment and align our daily actions with these. As a company that acts responsibly, we define our targets with foresight, taking into account possible conflicts of interest between environmentally conscious actions and the quality of our products and services. In doing so, we always pursue a holistic approach. This ensures sustainability is integrated in our daily business.

Panther for Planet stands not only for thinking about today, but above all about tomorrow. Climate-friendly design, material reduction, resource-saving production and new, recyclable raw materials form the foundation for innovations: packaging and displays for a wide range of customers combine sustainability criteria with the indispensable protection, distribution and marketing functions.

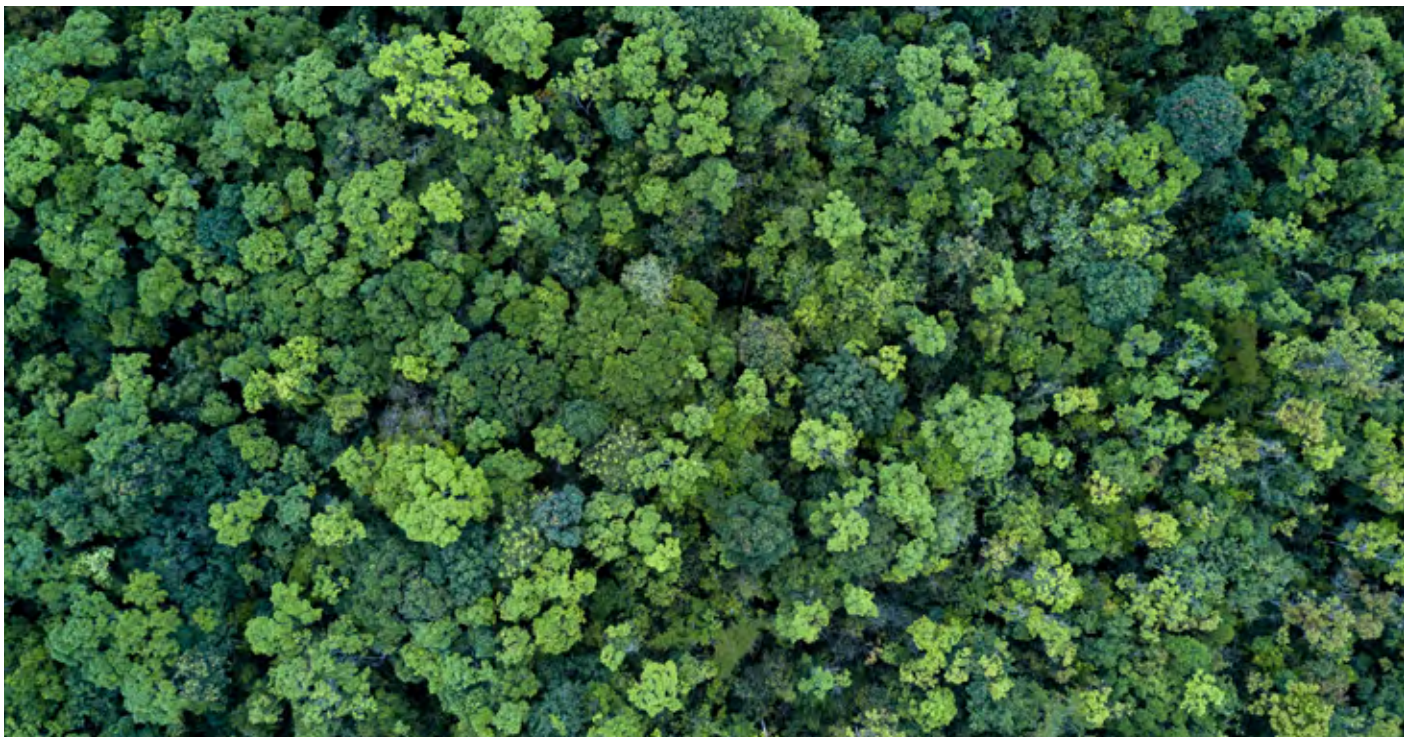
As part of the corporate strategy, **Panther for Planet** is anchored in our integrated management system. This includes our binding commitment to continuous improvement and possible adjustments to our business activities.

With a long-term focus, the **Panther Group** always strives to make a contribution to protecting and preserving the environment (soil, air and water) and to specifically minimise its own CO₂ footprint. Various measures such as the conscious use of energy and materials, as well as the commissioning of the most modern machines, are already supporting us on the way to an emission-free future. By consciously collaborating with sustainably oriented companies like us, we can ensure that every step within the value chain of our products is done with sustainability in mind. The assessments of environmental aspects are updated annually at all locations, from delivery to disposal, with a distinction between normal operation and disruptions.



The Group joined the global SBT initiative back in March 2022, which aims to limit global warming to 1.5 degrees in accordance with the Paris Agreement. In addition, the **Panther Group** is obliged to reduce CO₂ emissions significantly and achieve net zero emissions by 2040.

www.sciencebasedtargets.org



2. Sustainability Management

2.2 Three pillars of sustainability

Sustainability Management is all about factoring in ecological, economic and social objectives equally. It also comprises continuous development, and ensuring long-term improvements where the three pillars are concerned.

Within the **Panther Group** we continually pursue the objective of internalising, living and realising the three pillars of sustainability because we are convinced that everyone can and should contribute to this.

Ecology

Conscious use and protection of resources

- Conservation of natural resources and the conscious use of water, energy and limited raw materials to protect people and the environment
- Improvement in the ecological footprint (CO₂ reduction)

Economy

Sustainable management

- Increasing efficiency and effectiveness
- Achieving profits
- Safeguarding our company in the long term
- Creation of permanent jobs and general prosperity

Social affairs

Fair action

- Promotion of social commitment
- Training and further education for free professional development
- Sense of responsibility towards human beings and the environment



2. Sustainability Management

Environmental sustainability

As a matter of principle, the **Panther Group** ensures the conscious, efficient and effective use of natural resources in order to protect and preserve the environment.

Our environmental strategy, **Panther for Planet**, continuously guides us on the right path, on which basis we invest in all measures for sustainability. With every investment we set new standards, be it in terms of efficiency, effectiveness, environmental protection or safety. Our strategy is geared towards conserving resources and, above all, preserving the environment in the long-term, and, as a result, lowering specific energy consumption, reducing the consumption of raw materials and lowering CO₂ emissions, coupled with better performance.

In the future, we will continue to extend our cost leadership by making targeted investments in efficient production facilities in order to be able to operate successfully and sustainably in the market with our customers.

At **Panther**, we attach great importance to innovation management. To illustrate this, we already use recycled corrugated base papers with a low specific weight per square metre (grammage) in order to achieve maximum performance of corrugated board packaging with minimum material input and by doing so keep our carbon footprint as small as possible.

We want to continue to reduce our CO₂ emissions in the coming years with the products in our circular economy. For instance, we are striving additionally to reduce our energy consumption.

Economic sustainability

The foundation of our company is on a long-term and strategic business model, with which we aim to generate profits within the social market economy to secure our existence and achieve growth.

The fact that our company has a stable financial structure means that we can continuously make sustainable investments. Furthermore, the taxes we pay to the state also provide support. They also help to create jobs, which in turn lead to general prosperity within the system, especially for future generations.

We take a comprehensive approach to all our business and economic decisions and incorporate aspects of all three pillars of sustainability.

Social sustainability

For the **Panther Group**, taking a social approach is a matter of course and indispensable for a mutual coexistence. We augment our **Panther Philosophy** with this decades-long approach by the Group supported by the three pillars of sustainability.

Our employees interact with each other in a helpful and respectful manner which reflects our corporate culture. We involve the entire **Panther Team** in all areas in an active way. This also promotes a feeling of togetherness. In addition, our philosophy is fully internalised and lived.

We make a contribution to environmental protection and as a result to society as well with our environmentally friendly and recyclable products. Corrugated board can not only substitute plastic in many cases, it can also be recycled, which helps us protect our environment. We also cultivate a conscious use of resources.



2. Sustainability Management



2.3 HSEQ Management (Certifications)

The four areas of HSEQ Management (Health, Safety, Environment, Quality) are crucial focuses within the framework of the **Panther Group's** corporate governance. **Panther Packaging GmbH & Co. KG** as a parent company manages and controls the management system for all subsidiaries. **Panther** operates according to an integrated management system that includes the following standards:

- DIN EN ISO 22000:2018 (Hygiene to 79.91 %)
- ISO 45001:2018 (Occupational safety to 79.91 %)
- DIN EN ISO 14001:2015 (Environment to 100 %)
- ISO 50001:2018 (Energy to 100 %)
- DIN EN ISO 9001:2015 (Quality to 100 %)

www.panther-packaging.com/en/sustainability/certification-hseq

FSC®-certified (Forest Stewardship Council)

Furthermore, the **Panther Group** has been FSC®-certified (Forest Stewardship Council) since 2010 and enables ecologically responsible action to be documented with the use of FSC® certified material.

fsc.org/en

SEDEX Audit (under SMETA-Sedex)

We also take our social responsibility seriously and have this verified and documented through the Sedex Audit (according to SMETA Sedex Members Ethical Trade Audit). In this way, we also show that ethical aspects are given equal consideration.

www.sedex.com

EcoVadis

In order to complete the overall picture of our strong concept of sustainability, we work with EcoVadis for a classified assessment in the areas of environment, labour and human rights, ethics and sustainable procurement.

www.ecovadis.com

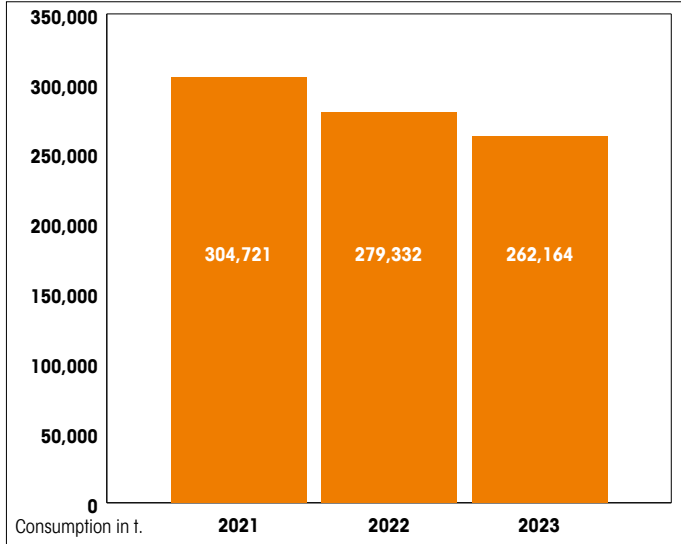


3. Actual status: Figures, data, facts

3.1 Raw materials and auxiliary materials

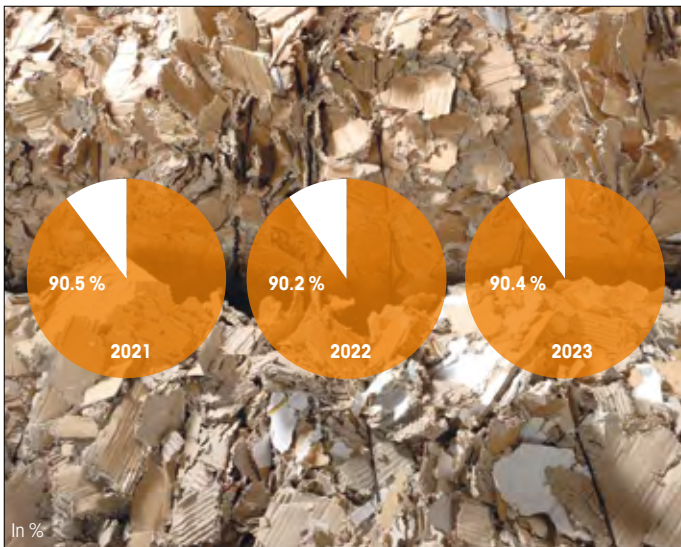
At 95%, paper is the most important raw material for the manufacture of our products. We use recycled and virgin fibre paper.

Corrugated base paper in tonnes:



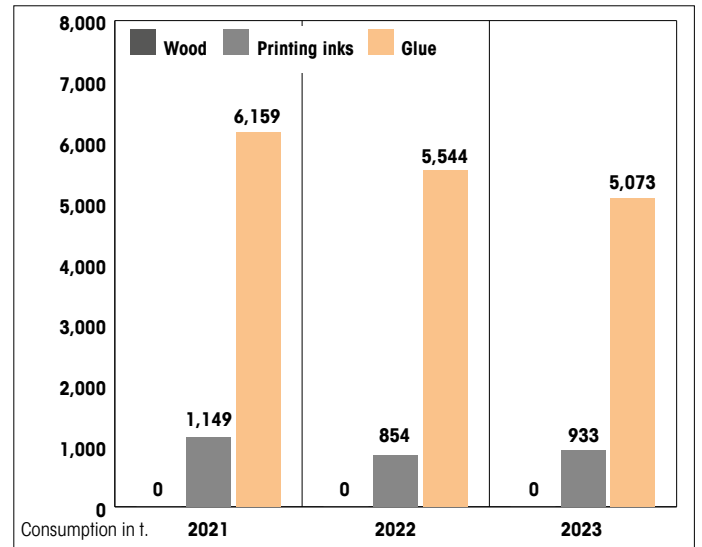
The paper used at our corrugators which is then further processed into corrugated board is procured entirely from suppliers who are certified according to the FSC® standard or comparable standards. As an FSC®-certified company, we ensure that the associated requirements are met, each relating to the entire product chain. We use around 90% recycled paper.

Amount of recycled paper in percent:



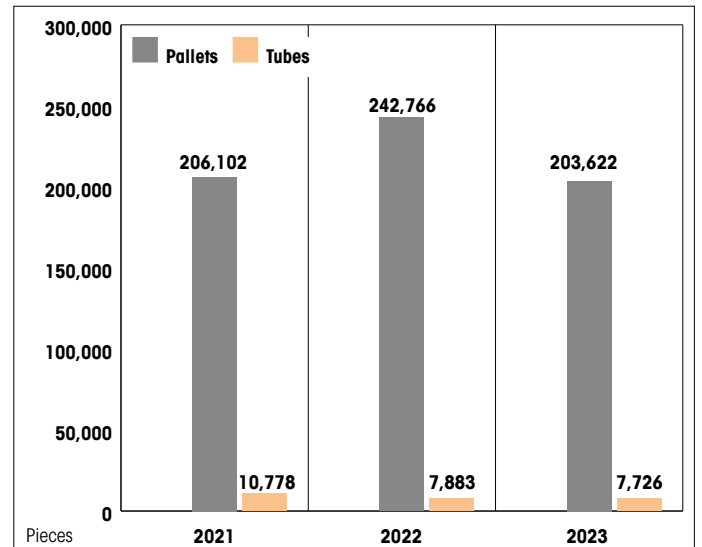
Additives, modified starch adhesives and paints and varnishes are also used. In all **Panther Plants**, mainly water-based flexographic printing inks are used. This means VOC emissions can be avoided and contributes to occupational safety.

Consumption of wood and glue and use of printing inks:



Glue types (%)	2021	2022	2023
Starch glue	92.34	92.40	93.80
Dispersion glue	7.14	7.08	5.80
Hot glue	0.52	0.52	0.40

Number of pallets/tubes purchased:



3. Actual status: Figures, data, facts

3.2 Energy

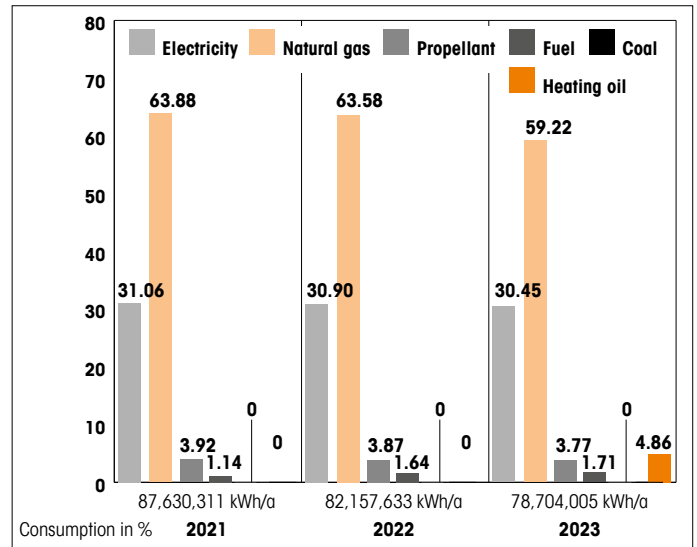
In terms of the energy consumption of the entire **Panther Group**, particularly, we look at the energy sources of electricity, natural gas/propellant and fuel (diesel/petrol). The values vary depending on the plant and its specialisations, as well as services and the conditions associated with them, since, for example, a corrugated board plant with a corrugator requires more power than a pure converting operation. However, the waste heat from a corrugator and the processing board produced can be used specifically in these plants in order to save energy costs for building heating.

Within our certified energy management system, we continuously measure and monitor our energy consumption. Using these results, we assess our energy efficiency and consistently transform our findings into measures. We plan strategically and operationally, set ourselves targets and monitor their achievement. We act in case of deviations and identify potential for improvement.

The entire energy consumption is optimised by continuous and consistent analysis and evaluation.

Since 2021, only CO₂-neutral electricity based on 100% renewable energies has been used for the entire **Panther Group**.

Energy consumption (kWh/a) and the respective amounts of energy sources in percent:

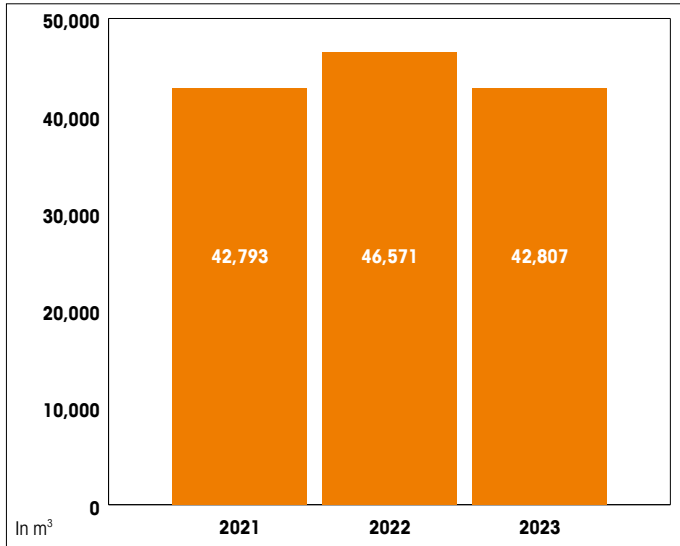


3. Actual status: Figures, data, facts

3.3 Water

As a matter of principle, we differentiate between fresh water, process water and waste water. Process and fresh water is used for the preparation of glue. Approximately 35% of the total water consumption is used for glue production, another 35% for cleaning inking units and printing plates and the rest is fresh water for sanitary facilities.

Water consumption in cubic metres per year:



3.4 Waste

A breakdown into hazardous and non-hazardous waste is carried out, with hazardous waste accounting for less than 1% of total waste generation.

Hazardous waste is disposed of exclusively by specialist waste disposal companies and includes, for example:

- Waste from oil and water separators
- Machine, gear and lubricating oils
- Illuminants
- Empty spray cans
- Glue waste

Technology-induced paper residues from the production of corrugated board are pressed into bales and are completely reused in paper mills for the production of new containerboard. As a result, our corrugated board product returns to circulation after use and is once again an essential raw material for paper production. Our machines are state-of-the-art and ensure that as little paper residue as possible is produced and that it finds its way straight back into recycling. From an economic point of view, trimming must also be kept to a minimum.

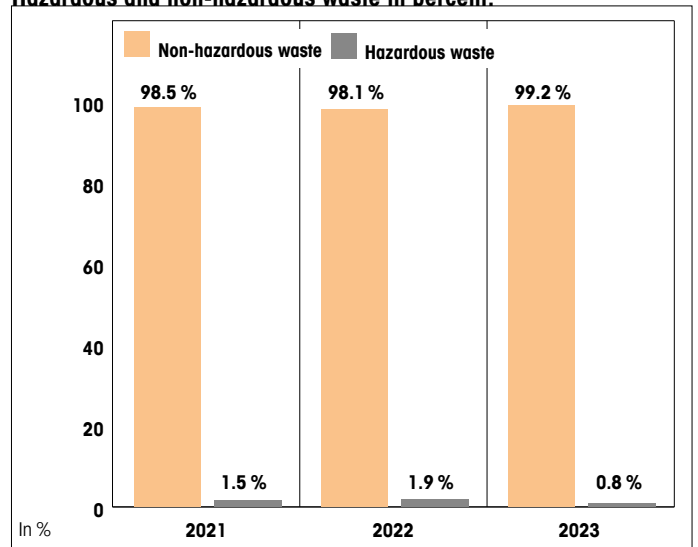
Other wastes, such as wood or metal (paint cans, etc.), are separated and disposed of in accordance with legal requirements.

In 2023, the proportion of non-hazardous waste to the total amount will be 99.2%. Of this, 98.3% is recycled. On the other hand, the proportion of hazardous waste totals 0.8%, which are disposed of 100% legally.

0.6% of the total amount of waste is passed through the sorting system as a mixed fraction and 99.4% is sent as a single fraction for better recycling or disposal.

About 45 tons of dust are filtered out of the air for air purification to achieve better working conditions and reduced environmental impact. Around 359 tons of colour pigments are also filtered out of the production water for reuse and minimise the environmental impact and disposed of properly.

Hazardous and non-hazardous waste in percent:



Waste flows in tonnes:

Mixed municipal waste	249.29
Colour sludge from water clarification	358.97
Scrap metals	53.19
Old wood	268.30
Waste paper	39,428.23
Plastics	19.98
Construction rubble	1.94
Kitchen and food waste	4.24
Paper dust from air purification	44.24
Total non-hazardous waste	40,428.38
Oil-containing operating fluids	3.31
Fluorescent lamps	0.75
Waste oil	1.94
Paint and varnish waste	15.98
Total hazardous waste	21.98
Total amount of waste	40,450.36



3. Actual status: Figures, data, facts

3.5 Carbon footprint

Carbon footprint or CO₂ balance is the result of an emissions calculation. CO₂ emissions are greenhouse gas emissions, mainly carbon dioxide (CO₂), methane (CH₄) and water vapour (H₂O). These emissions make an additional contribution to the natural greenhouse gas effect and contribute to global warming. For the **Panther Group**, this means that the impact of corrugated board packaging on the entire production chain, i.e. from raw material production, corrugated board production and processing, right through to delivery to our customers takes into account emissions of fossil fuels (oil, gas, wood or coal) and biogenic greenhouse gases (for example the incineration of biomass) and their degradation, must be considered. What is ecologically positive is that corrugated board is based on the renewable raw material wood, from which paper is made. This means that our industry is taking advantage of the forests' ability to store CO₂ in large quantities. The recycling of used packaging and displays to produce new paper and board further delays the return of CO₂ to the atmosphere.

At the Panther Group the following main relevant drivers have been identified:

Raw materials and auxiliary materials: paper (production from fibrous materials, mainly recovered paper and pulp)

- Energy: gas and electricity
- Waste: production waste/other waste
- Transport & Logistics: road and freight

The term "carbon footprint" can theoretically be calculated using a certain methodology based on a number of factors. For this purpose, the operational system limits of the emission sources, which are differentiated into three scopes, are to be used:

Scope 1 (direct allocation: controllable)

- Heat (gas, vapour, propellants)
- Vehicle fleet (company cars)
- Refrigerants/cooling agents (air conditioning)

Scope 2 (indirect allocation, controllable: energy supply)

- Electricity
- District heating/cooling

Scope 3 (indirect allocation: non-controllable)

- Production material and consumables
- Upstream chain (direct and indirect emissions from upstream process chains) heating/cooling
- Employees journeys
- Upstream chain (direct and indirect emissions from upstream process chains) electricity
- Upstream chain (direct and indirect emissions from upstream process chains) motor fuels
- Flights
- Rental and private cars
- Train journeys
- Stationery

With regard to these scopes, the requirements of the GHG (Greenhouse Gas) Protocol developed and recognised by the World Resource Institute in Geneva must be observed. Accordingly, the reporting of CO₂ emissions is mandatory in Scope 1 and 2, but voluntary in Scope 3. This scope primarily contains the factor paper. This also partly explains why carbon footprint values vary so much in our sector.

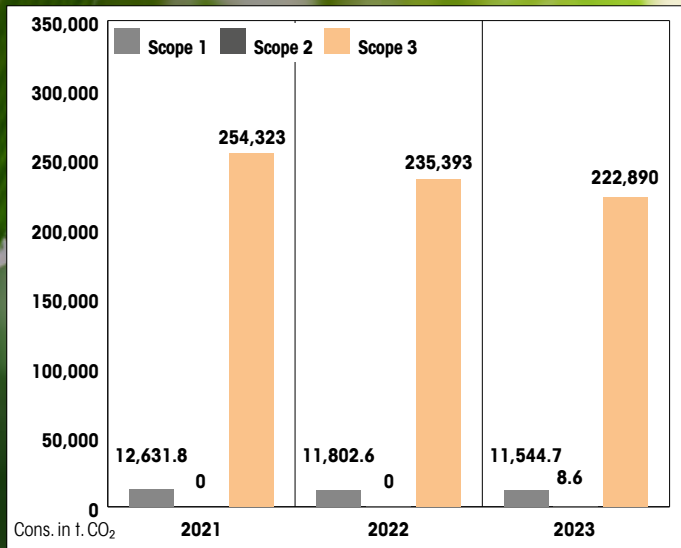
Panther analyses the emission sources and makes a targeted effort to look for CO₂ reduction potential along the value chain. For Scope 1 and 2, the entire Group was able to reduce CO₂ emissions by 30.8% between 2020 and 2023. This is primarily due to the fact that the **Panther Group** has been purchasing CO₂-neutral electricity from 100% renewable energies since the beginning of 2021, which is why Scope 2 has been almost zero since then. Compared to the previous year, a total reduction in CO₂ emissions in terms of Scope 1 to 3 was 12,773.46 t.

The carbon footprint calculation for the entire **Panther Group** and the various business divisions shows that Scope 3 has had the highest percentage (roughly 95 %) over the last three years.

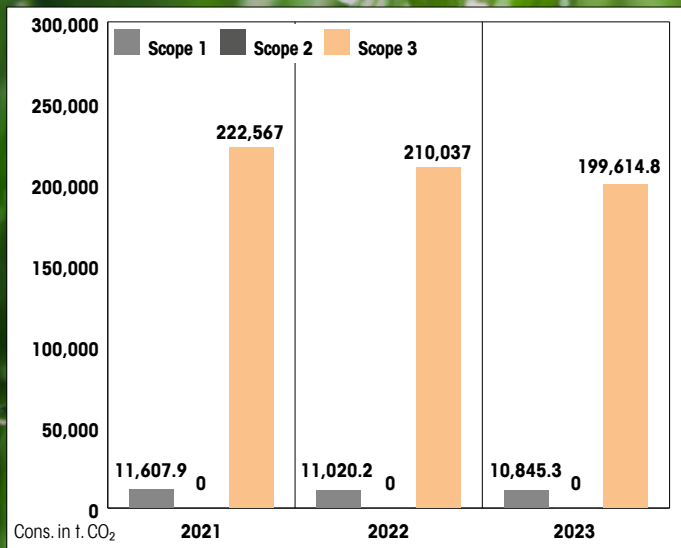


3. Actual status: Figures, data, facts

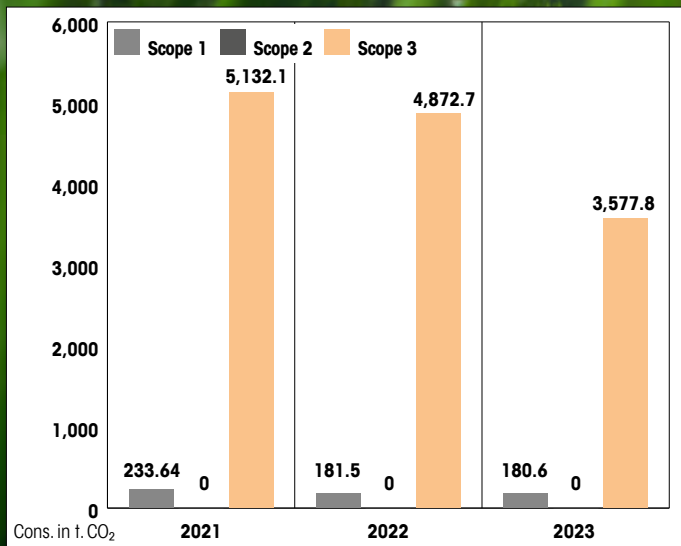
Carbon footprint of the entire Panther Group in tonnes:



Carbon footprint for corrugated board in tonnes:



Carbon footprint for displays in tonnes:



3. Actual status: Figures, data, facts

3.6 Social affairs

In 2023, we will have 1,275 employees in the entire **Panther Group**, including all employment relationships, of which 66% work in commercial areas and 34% in commercial areas. Furthermore, 3.42% of all employees belong to the group of severely disabled people, of which 89% are male and 11% female. The number of apprentices in the entire **Panther Group** is at 104, of which around 30% are commercial and around 70% are commercial apprenticeships.

Health is a priority for us and we always want to provide a safe and health-promoting environment. In 2023, we only had seven commuting related accidents and 45 accidents and thus only a total of 52 reportable accidents. In this context, mention should also be made of the 41 safety officers and 195 first responders.

The son of the company's founder, Fritz Landmann, set up the Fritz Landmann Foundation in Hamburg at the beginning of the 1970s. Since then, the foundation has supported training and professional development in the paper processing and paper production industry. To this day, various institutions throughout Germany are supported with more than 11 million euros.

Numerous annual measures take place throughout the entire Group. All **Panthers**, i.e. 100% of the employees, receive an annual employee assessment with specifications on possible training and further education. All employees are also represented by an occupational safety committee. All **Panther Plants** are also subject to a compliance check on occupational safety, health protection, the environment and energy by external experts.



4. Target status: The way towards a CO₂-neutral future

4.1. Overall and partial targets

Taking the respective circumstances of individual locations into account, measures and targets have been defined until the year 2040. These are in line with German and European climate and environmental policy and contribute to the achievement of the Paris Convention's objective of limiting global warming to 1.5 degrees.



We have defined relevant fields of action for the **Panther Group** based on our business activities, including following the 17 Sustainable Development Goals adopted by global governments in New York in 2015 (SDGs) for sustainable development with regard to ecology, the economy and social issues, as well as at national, regional and local level.

www.undp.org/sustainable-development-goals

Since the objectives and measures for social and economic sustainability are based on the **Panther Philosophy** and **Policy**, such as occupational safety/conditions and safeguarding jobs as well as preventing corruption and criminality, only ecological objectives and measures are listed below. The focus is on the identification, reduction, avoidance and substitution of emissions-intensive drivers, materials, or the like, whereby all upstream and downstream activities and processes along the value chain are considered.

As part of our approach for achieving the status of climate neutrality while at the same time investing in sustainable developments, overall targets and sub-goals have been defined to point us in the right direction for achieving more progress and identifying more potential for reducing CO₂.

Our overall targets include:

- A responsible approach to our business activities
- Preservation of ecology and no lasting damage (biodiversity)
- Active climate protection and a gradual improvement of carbon footprint (calculated based on the total sub-goals and the interactions of these)
- Comprehensive raw materials management – maintaining availability of raw materials
- Targeted substitution of plastic packaging with corrugated board packaging (Innovation Management)

These can be split into the following partial targets:

- Selection of raw, auxiliary and operating materials with regard to environmentally conscious criteria
- Reductions in weight per unit area for minimum material use with maximum performance
- Purchase of CO₂-neutral electricity
- Reduction of specific fresh water and waste water requirements
- Reduction of fuel consumption (vehicle fleet, company cars)
- Sustainable organisation and management of supply chains across all divisions, i.e. supplier management taking into account aspects environmental protection aspects



4. Target status: The way towards a CO₂-neutral future

4.2 Measures

Based on the overall and partial targets, specific quantifiable and verifiable measures will be derived and will ultimately be evaluated with the achieved degree of target attainment. The main focus is on measures in production's core processes. Furthermore, climate protection projects will continue to be supported.

Raw materials

1. Minimal use of material and grammage through the precise design of sustainable packaging solutions
2. Optimisation of the types of corrugated board, like D-flute
3. Use of lightweight papers
4. Use of grass paper
5. Purchase from regional suppliers
6. Purchase from certified suppliers (FSC®)

Energy

7. Reduction of the specific energy requirements through investments in new, cutting-edge machines with energy-efficient features or modernisation of subcomponents
8. Use of CO₂-neutral power from 100% renewable energy
9. Substitution/reduction of fluorinated gases (F-gases) for refrigerants/cooling agents (air conditioning systems), which are differentiated into partially fluorinated hydrocarbons, fully fluorinated and per-fluorinated hydrocarbons as well as sulphur hexafluoride and only decompose slowly in the atmosphere
10. Heat recovery in production
11. Energy savings with mowing breaks for lawn areas with simultaneous improvement of biodiversity
12. Review of use of renewable energies, photovoltaics on roofs and outside areas of **Panther Plants**
13. Monitoring changes – departure from fossil energy sources
14. Optimised compressed air management

15. Ongoing digitalisation (paperless office, etc.) for sparing use of resources
16. Optimised drying management according to the number of colours to be printed
17. Conversion from LPG forklifts to forklifts powered by climate-neutral electricity

Water

18. Optimisation of printing ink sequences
19. Continuous monitoring of water consumption

Transport & logistics

20. Gradual conversion of vehicle fleet (company cars, forklifts) to hybrid/electro mobility
21. Reduced business trips
22. Optimal utilisation of loading capacities and capacity usage through efficient packaging and displays
23. Intelligent distribution/transport networks and route planning

Waste

24. Complete return of production residues into the cycle: adjustment the machine settings for as little paper waste as possible, i.e. optimising the technologically defined trim in corrugated board production and further processing by using different paper standard widths, nesting of the sheets using the maximum possible working widths of the further processing machines

Social affairs

25. In-house training on sustainability
26. Investment/focus on trainings and further education
27. Promotion of apprentices in the fields of mathematics, physics, communication and presentation by trainers



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