



# SUSTAINABILITY REPORT

SCHOELLERSHAMMER

2024

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# FOREWORD

## from the Management Board

Dear reader,

Schoellershammer perceives itself as a driving force of a paper industry uniting ecological, social and economic sustainability. In a challenging market environment burdened by fluctuating regulations, we adhere to our values-driven corporate strategy. Climate neutrality, secure jobs subject to co-determination and a supply chain free of human rights violations – these are our goals. Pursuing them consistently also constitutes a business opportunity.

With recovered paper and wheat starch, 99 per cent of our raw materials are renewable. We source all raw materials and consumables from within Europe. Our goal is to become climate-neutral by 2045. The owners of our company work with us to define this journey. At the beginning of 2025, we adopted our transformation plan which we present in this report. Our commitment has sparked great interest among customers and other stakeholders.

Schoellershammer is a reliable employer. Once again, the number of employees rises lightly in 2024. Almost every tenth person employed by us was working part-time – with equal numbers of men and women. Our trainee ratio remained stable at 6 percent. We offer progression plans to young people who prove themselves with us.

In order to meet our human rights due diligence obligations, we have established a multi-level CSR risk management system in recent years. 2024 saw the addition of supplier self-assessments and industry-specific audits. One focus is always on the prevention of labour law violations in logistics.

We updated our materiality assessment at the beginning of 2025. It meets the requirements of the GRI standards and the European CSRD Directive which was originally intended to apply to us from 2025 onwards. As the date of application has been postponed and it is unclear whether we will be required to report at all, we will continue to report in accordance with GRI for the time being. The results of the materiality assessment will be incorporated in the next sustainability report.

We have been a member of the United Nations Global Compact (UNGC) since 2020. We are explicitly committed to implementing and promoting the spread of the ten principles of the UNGC on human rights, labour conditions, the environment and anti-corruption.

We would like to thank all our employees, partners and customers for their support.

Kind regards,



Armin Vetter



Bernd Scholbrock



Dr. Tobias Boland



# SCHOELLERSHAMMER'S CLIMATE PATHWAY

## Our transformation plan for climate-neutral production from 2045

Schoellershammer is an energy-intensive company. Every year, we produce around 540,000 tonnes of containerboard from recovered paper. We aim to make the business climate-neutral by 2045. The most important lever for achieving this target is the electrification of our production processes.

Our transformation concept which we developed with the aid of external expertise in 2024 as part of a comprehensive concept study and adopted in 2025, is based on several premises. Firstly, the transmission and distribution grid operators must expand the electricity grids as planned and required. Secondly, there must be sufficient renewable energy available to facilitate the climate-neutral electrification of our processes.

As the technology required for this development is already available and is still being refined, we will make the necessary investments in line with these challenges. At the same time, we are dependent on future technologies such as carbon capture and storage (CCS). If the infrastructure, commercial viability and cost effectiveness are subject to further delays, this will also have a knock-on effect on our transformation plan from 2030 onwards.

### Environmental policy

Our company has been working for many years to reduce its energy requirements through efficiency measures and to replace fossil fuels with more sustainable alternatives. As early as 2017, Schoellershammer committed to irreversibly reducing its energy consumption and CO<sub>2</sub> emissions. In 2023, we defined an active contribution to sustainable development as a corporate goal. The transformation concept now presented translates this vision into concrete measures.

## Measures to date

In 2017, we defined specific targets to reduce Scope 1 and 2 emissions by 2030 and have worked systematically to hit these targets. A first major step in 2021 was the decommissioning of the lignite-fired power station, which we replaced with a highly efficient combined heat and power (CHP) plant. It is fuelled by natural gas and biogas and can be converted to hydrogen if required. We combined the CHP plant with a recycling facility which was commissioned in 2024. In the recycling facility, we utilise residual materials from recovered paper processing and sewage sludge from wastewater treatment to generate steam, thereby significantly reducing our need for externally purchased energy.

In recent years, many modernisation steps implemented such as the installation of a vapour condenser and the construction of significantly more efficient heat recovery systems – have also contributed to reducing our energy consumption.

**The recycling facility is an important building block of our chosen climate path**



## Planning until 2032

From 2027, we will stop using pulverised lignite and opt for heat from natural gas instead. There are plans to expand the wastewater treatment plant in 2028 in order to increase the proportion of biogas in our energy supply. For the process heat supply of our site, the measures described above will enable us to achieve a 67 percent reduction in emissions compared to 2020 by as early as 2029, both in terms of total emissions and specific emissions (Scope 1 and Scope 2).

A further major step will be the electrification of steam generation which is scheduled for the early 2030s. As soon as the grid operator makes a binding commitment to expand the electricity connection promised for 2031, we can start the detailed planning for a high-temperature heat pump that utilises waste heat from paper production.

The package of measures described will reduce our CO<sub>2</sub> footprint by around 40 per cent compared to 2020, based on Germany's electricity mix. Provided that the electricity mix is green, CO<sub>2</sub> emissions will be cut by 83 percent.

## Final steps from 2040

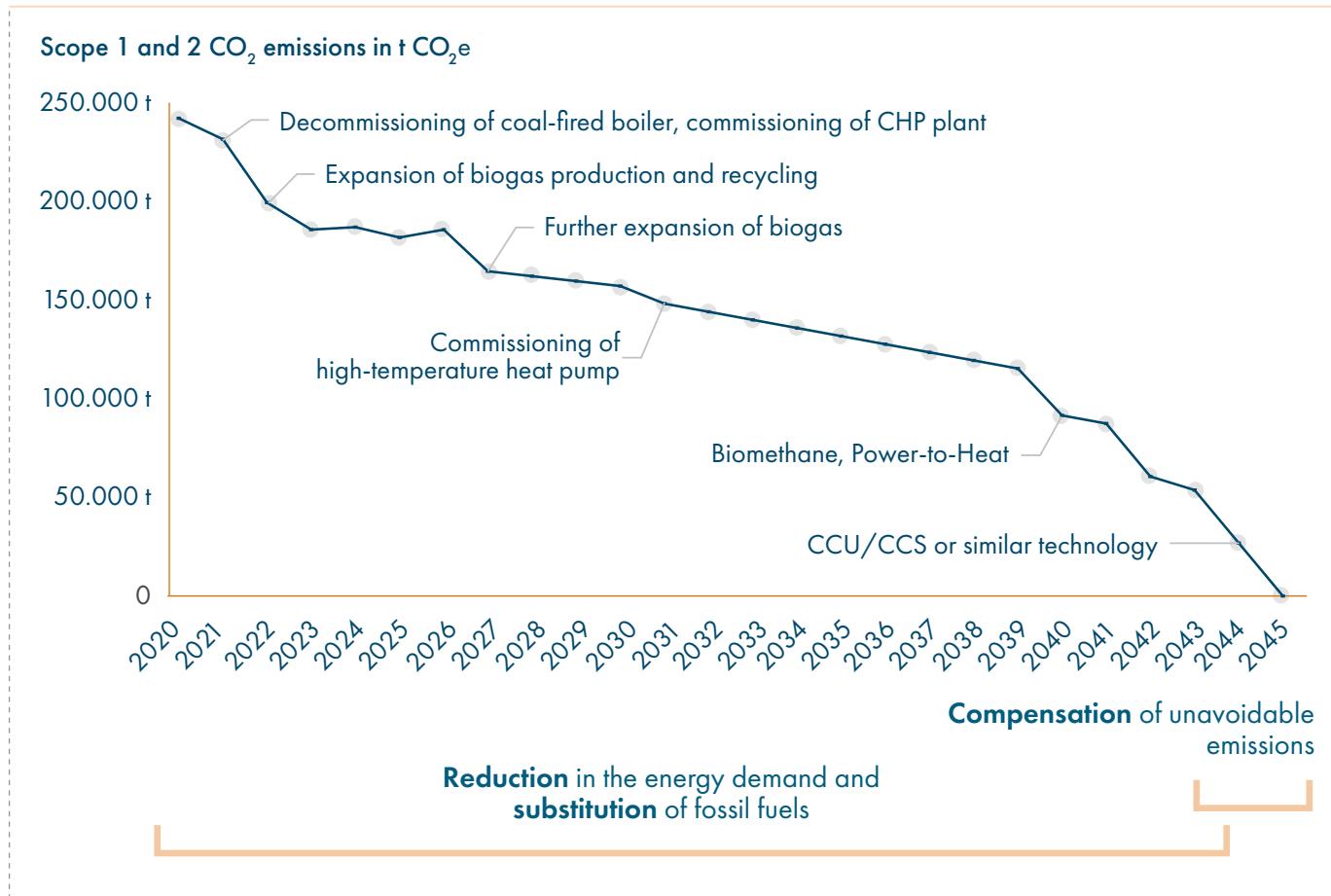
We do not expect technically mature and financially viable technologies to reduce the remaining emissions until the beginning of the 2040s. Based on current knowledge, it would be possible to convert our gas boiler to biomethane subject to sufficient availability and economic viability. Theoretically, it would also be possible to split unavoidable CO<sub>2</sub> emissions – such as those incurred in the recycling facility – into biogenic and fossil emissions and to utilise or sequester the fossil portion. However, these techniques are very energy-intensive and therefore only of limited use.

We are currently assuming that between 10 and 20 percent of our current emissions are unavoidable and may have to be offset from 2045.

## Conclusion

Schoellershammer is ready for transformation. In particular, the electrical generation of process steam, a key feature of our production, is already possible today. What we still lack is the infrastructure: Reliable access to electricity from renewable sources and effective grid expansion are critical components. If these conditions are met, we will be able to produce paper even more sustainably and economically.

## CLIMATE PATHWAY FOR 2020 TO 2045, SCOPE 1 AND 2



## EMISSION REDUCTION TARGETS AND MEASURES 2020 – 2045 IN ABSOLUTE FIGURES\*

Year	Scope 1 and 2 CO <sub>2</sub> emissions in tons	Measure
2020, base year	242,136	
2021	199,378	Decommissioning of coal-fired boiler, commissioning of natural gas-fired CHP plant
2027	164,597	Decommissioning of the pulverised coal-fired and transition to natural gas-fired boiler
2028	162,090	Increasing the proportion of biogas by expanding the wastewater treatment plant
2031	144,046	Electrification of steam generation (high-temperature heat pump)
2040	91,510	Further technical conversion: renewable energy sources, carbon capture, etc.
2045	26,850	Compensation for unavoidable residual emissions

\* The reference figure is the annual production of 540,000 tonnes of paper in the base year.

# SCHOELLERSHAMMER AT A GLANCE

**S**CHOELLERSHAMMER GmbH, based in Düren, was founded in 1784. We are a traditional family business in the paper industry. We generate around 50% of our revenue in German-speaking countries. Other relevant markets include Benelux, Poland, France, Italy, Spain, the United Kingdom and Scandinavia. Our customers range from medium-sized companies to international corporations. We serve both pure packaging manufacturers and fully integrated companies with their own paper production that use our products as a supplement. As a non-integrated manufacturer, we are not in competition with our customers or our suppliers – an aspect they highly appreciate.

We identified the potential of the circular economy as early as 1950, when we commissioned our first production machine for recycled paper. Schoellershammer has produced containerboard products ever since.

## SCHOELLERSHAMMER IN THE DÜREN VIDEO

In the new [video](#) of the town of Düren, Schoellershammer represents the crucially important Düren paper industry as the largest employer. It was a pleasure to be part of the project.



Our aim is to be one of the most sustainable paper manufacturers in the European packaging market. We shut down our coal-fired power plant in 2021 and have since been operating a combined heat and power (CHP) plant with natural gas and biogas to generate energy, which has reduced our emissions by 30 percent. In March 2024, we commissioned a recycling facility for the thermal treatment of rejects on site, thereby replacing a significant amount of the natural gas. Thermal treatment significantly reduces our waste disposal costs, thus eliminating a few thousand lorry journeys per year.

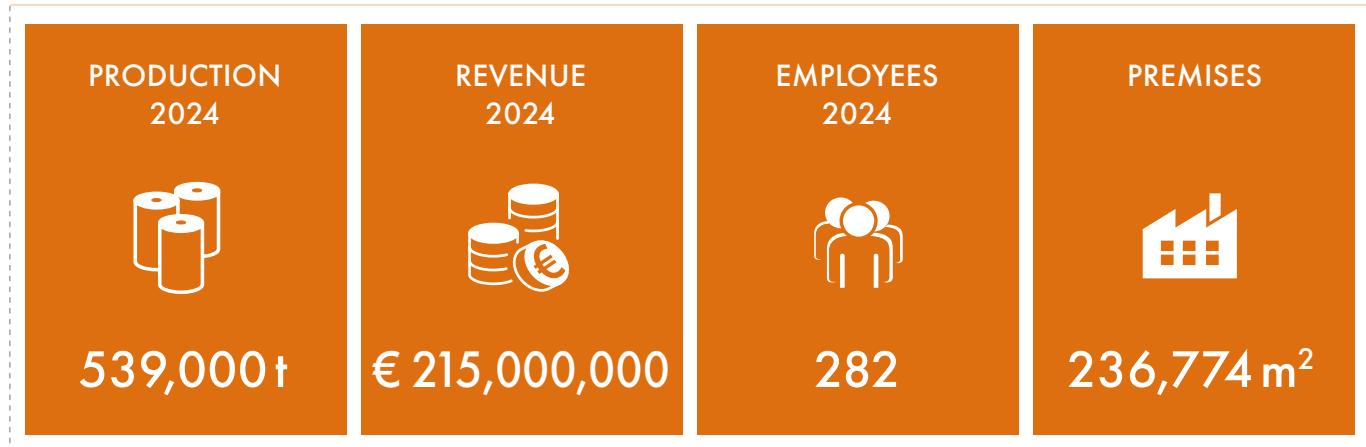
## Exclusive use of secondary fibres

We manufacture our containerboard exclusively from secondary fibres. In addition to standard paper products which account for around three quarters of our manufacturing activities, we also produce high-performance grades. These include our own Hammerliner, Hammerflute and Twinhammer brands. Hammerliner and Hammerflute are containerboard papers with particularly high strength properties; Twinhammer is suitable as a testliner and corrugating medium, which reduces our customers' procurement and warehousing costs and enables lighter packaging.

All our products are FSC®-certified (FSC® C109985) and have also been PEFC-certified since 2025.

Our two paper machines, PM 5 and PM 6, produce over 540,000 tonnes of fluting and liners per year from recovered paper collected in the region. Our PM 6 paper machine was commissioned in 2016 and is one of the most energy-efficient paper machines in Europe. In recent years, we have been able to bring the energy consumption per tonne of PM 5 closer to that of PM 6 through modernisation and efficiency enhancement.

## FACTS AND FIGURES



## Strategy and business development

Schoellershammer perceives itself as a driving force and designer of a paper industry uniting ecological, social and economic sustainability. We strive to play an active role in shaping the energy transition in the packaging sector, growing organically while reducing our carbon footprint at the same time. Our goal is to become climate-neutral by 2045.

We firmly believe that our forward-looking engagement will secure the future viability of our company. In doing so, we offer our employees and their families a sound economic foundation.

In 2024, we generated revenue of around € 215 million with a record production volume of 539,000 tonnes of paper. Although revenue was slightly down on the previous year, it still exceeded our expectations. Unit sales remained stable compared to the previous year's levels.

In the reporting year, we employed 282 people at our site in Düren (2023: 277). Almost all of them live locally. The loyalty of our workforce to Schoellershammer is high, and in 2024 we celebrated the 25<sup>th</sup> anniversary of five of our colleagues and the 40<sup>th</sup> anniversary of two employees. At the same time, we have an above-average commitment to young talent: In the 2024 financial year, 6% (2023: 6.13%) of our employees were trainees.

# MANAGEMENT STRUCTURE AND GOVERNANCE

Schoellershammer has three internal bodies: the General Assembly, the Advisory Board and the Management Board. The company's sustainable development is part of the strategic process defined by the Advisory Board and the Management Board, with second-tier management also involved in this process.

The Advisory Board is the highest supervisory body. Its members are elected every three years at the Annual General Meeting which is composed of members of the families that hold shares in Schoellershammer. The Advisory Board examines Schoellershammer's business activities on the instructions of the company's shareholders. Its responsibilities include issuing the company's rules of procedure and approving the annual financial statements.

Schoellershammer's articles of association state that, to avoid conflicts of interest, company shareholders may not serve as either Chair or Deputy Chair of the Advisory Board. Both individuals must possess the requisite expertise and business experience for the scope and significance of their position. No remuneration policy exists for members of the Advisory Board. Any conflicts of interest that may arise must be disclosed to the General Assembly. The Chair of the Advisory Board may not simultaneously serve on the Management Board.

The Advisory Board meets at least twice per year. In 2024, the Advisory Board met on three occasions, which included a dialogue between shareholders and the Management Board. The Works Council also convenes with the Advisory Board on an annual basis.

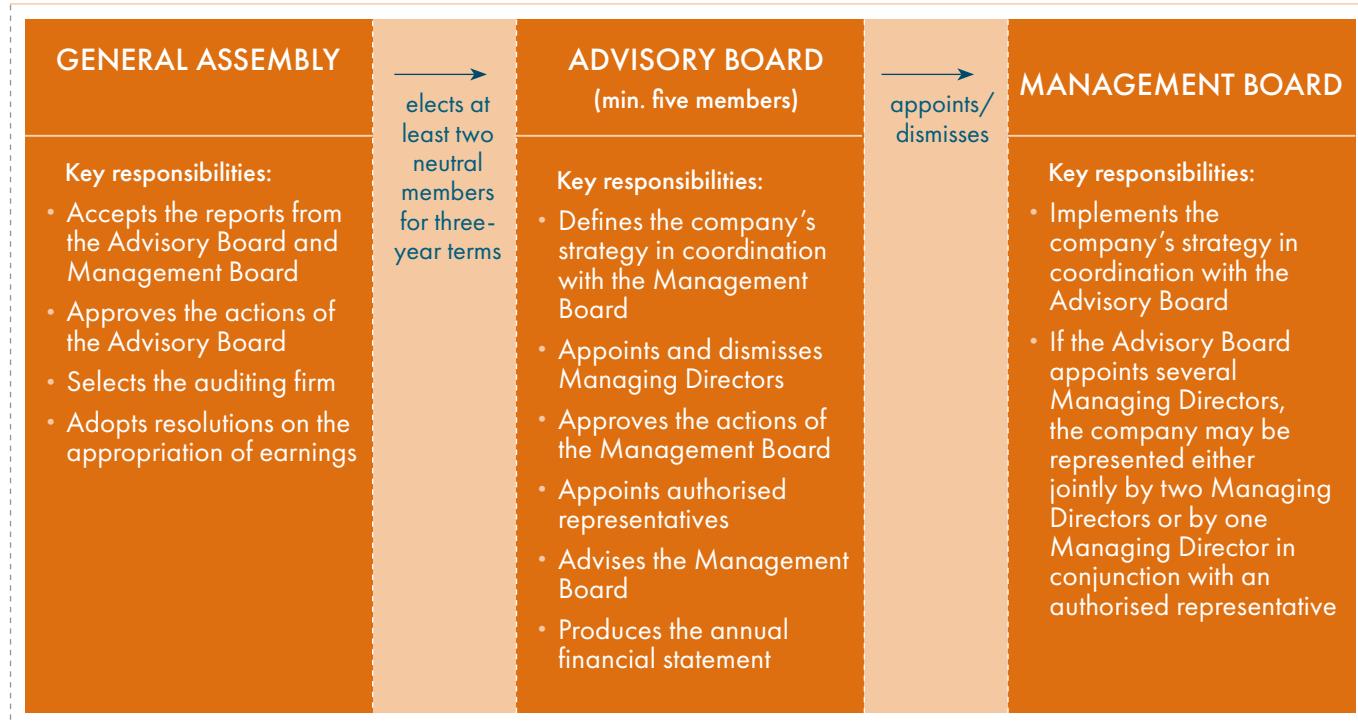
## THE ADVISORY BOARD

Members of the Advisory Board in the 2024 financial year

- **WOLFGANG K. MEUSBURGER**  
Teufen/Switzerland, management consultant;  
Chairman of the Advisory Board since 2000
- **DR. STEFAN KARRER**  
Baden-Baden, Germany. CTO of  
Koehler Holding SE & Co. KG. Deputy Chair  
of the Advisory Board since 2023
- **MARTIN ERFURT**  
Wuppertal, Germany. General Partner in Erfurt &  
Sohn KG. Member of the Advisory Board since 1998

- **CHRISTIAN STAMBACH**  
St. Gallen, Switzerland. Lawyer and partner in  
Bratschi AG. Member of the Advisory Board  
since 2016
- **DR. WIEBKE RHODIUS**  
Munich, Germany. Lawyer. Member of the Advisory  
Board since 2022

## GOVERNANCE STRUCTURE



In accordance with the company's articles of association, the Advisory Board delegates management of Schoellershammer to the Management Board. The Advisory Board appoints, monitors, advises and discharges the Management Board. It is informed of business developments by the management on a monthly basis.

**Our paper reel warehouses –  
the lynchpin of ultra-  
modern paper logistics**



Our company premises:  
A place where nature  
and production are in  
balance

## THE MANAGEMENT BOARD

In the 2024 financial year, the Management Board consisted of Armin Vetter, Bernd Scholbrock and Alexander Stern. In February 2025, Dr Tobias Boland succeeded Alexander Stern who left the Management

Board. The managing directors represent Schoellershammer in pairs or together with an authorised signatory.



### ARMIN VETTER

Engineer (Dipl.-Ing. (FH)).  
Kreuzau, Germany.  
Member of the Management  
Board since 2008;  
responsible for production  
and technology



### BERND SCHOLBROCK

Business economist (BA).  
Kreuzau, Germany.  
Member of the Management  
Board since 2008;  
responsible for markets and  
logistics



### DR. TOBIAS BOLAND

Business Administration  
(Dipl.-Kfm.). Kempen, Germany.  
Member of the Management  
Board since 2025;  
responsible for finance,  
HR and IT

The Management Board controls the company's operational activities and develops them in coordination with the Advisory Board. This also includes managing the company's impact on social issues.

The Management Board is responsible for all processes that are not of paramount financial or strategic importance. This includes sustainability management, compliance management and other due diligence processes as well as analysis of their efficacy. During the

2024 financial year, neither the Advisory Board nor the Management Board received any reports of negative or potentially negative impacts caused by the company. Details of our processes and complaint mechanisms are outlined in the chapter: "Ethical business principles and practices".

Women have been under-represented on the company's senior management bodies to date, although the Advisory Board now has a female member.



## Anchoring sustainability

Schoellershammer's sustainability issues are closely linked to its strategy and corporate development. The Advisory Board contributes its experience of managing sustainability issues in other companies to this process; the Management Board contributes company-specific knowledge and extensive expertise in relation to the business environment, regulatory frameworks and the potential of Schoellershammer. In the reporting year, the Management Board reported to the Advisory Board on the progress of the sustainability projects at every meeting for the first time.

The Management Board engages with the sustainability issues identified in the materiality assessment, monitors their implementation and explores them further through internal training and dialogue with internal bodies. The Management Board is responsible for determining, reviewing and approving the information published in the Sustainability Report.

The Management Systems, Sustainability and Digitalisation Officer is responsible for all sustainability issues, along with the development of corresponding management systems and reporting. She reports directly to the Management Board and coordinates sustainability-related activities in partnership with the relevant departments.

# ETHICAL BUSINESS PRINCIPLES AND PRACTICES

We see ethical and compliant behaviour as the key to trusting relationships and sustainable success. We communicate our values to our employees and stakeholders.

At Schoellershammer, our internal guidelines are based on international frameworks and international conventions. These include, in particular, the Universal Declaration of Human Rights, the core labour standards of the International Labour Organisation (ILO), the UN Guiding Principles on Business and Human Rights (UNGPs) and the principles of the United Nations Global Compact (UNGCG), which we joined in 2020. Our codes of conduct for employees, suppliers and other business partners explicitly refer to these basic international principles.

In its cooperation with suppliers, Schoellershammer is guided in particular by the German Supply Chain Duty of Care Act (LkSG), although this Act is not legally binding for us due to the size of our company.

## Compliance management

The Management Board is responsible for compliance and issues are jointly discussed.

Compliance management is monitored operationally by the Compliance Manager, who reports directly to the Management Board. Among other things, she reviews invitations and donations that may exceed the limits set out in our guidelines. Prevention is a particular focus of Schoellershammer's compliance management. We last updated and trained our compliance guidelines in 2023. The group of participants included the management as well as those responsible for purchasing, sales and technical departments. The next training course will be held in 2025.

Our whistleblower system:  
[www.schoellershammer.de/en/whistleblower/](http://www.schoellershammer.de/en/whistleblower/)



We operate a whistleblower system and have included a link to it on our homepage since 2022. It offers employees and all other interested parties the opportunity to report infringements of laws, regulations and internal guidelines, including anonymously. These reports are kept confidential in accordance with statutory provisions. Whistleblowers can submit reports either via our dedicated whistleblower page or by telephone. It is also possible for the caller to distort their voice in order to submit a report anonymously by telephone.

Employees can also turn to the Works Council, the Compliance Manager or directly to the Management Board. We highlight these options in our code of conduct.

As in the three previous years, no fines or other sanctions due to material infringements of laws or regulations were issued against Schoellershammer in the reporting year.

## Guidelines and work instructions

Our employees undertake to abide by our code of conduct when they join our company. We explain the code's details and importance in an online training session. We also require our suppliers and other business partners to adhere to this code. We always keep both documents up to date. The last update was carried out in November 2024.

All internal guidelines and work instructions are prompted and approved by the management. They are available on the intranet, to which around three quarters of our workforce have access. Relevant updates are communicated by notice and, since 2024, also by push notifications on mobile phones. We offer online training on key topics. New employees receive an individually compiled package with all the important internal guidelines and work instructions.

We set great store by collaborating with partners that share our understanding of sustainable business. Details on guidelines and practices in this context are reported in the chapter "Our supply chain".



Responsible  
when handling  
our paper

## THE FRAMEWORK THAT GUIDES OUR ETHICAL CORPORATE CULTURE

International frameworks	Key internal guidelines	Aspects of implementation
United Nations Universal Declaration of Human Rights	Code of conduct for employees Code of Conduct for suppliers and other business partners	<ul style="list-style-type: none"> <li>Employee obligations and training</li> <li>Supplier obligations</li> <li>Inclusion in forms and contracts</li> <li>Inclusion in the risk assessment</li> <li>Inclusion in annual supplier negotiations</li> </ul>
Core Labour Standards of the International Labour Organisation (ILO)	Sustainable procurement guidelines	<ul style="list-style-type: none"> <li>Risk assessments for suppliers</li> <li>On-site supplier inspections</li> <li>Supplier self-disclosure</li> <li>Supplier audits</li> <li>Compliance training for employees in procurement</li> </ul>
UN Guiding Principles on Business and Human Rights (UNGPs)	Guidelines on non-discriminatory recruitment procedures	<ul style="list-style-type: none"> <li>Job advertisements</li> <li>Reviews of application documents</li> <li>Job interviews</li> <li>Correspondence with applicants</li> </ul>
Principles of the UN Global Compact (UNGCG)	Guideline on corruption prevention	<ul style="list-style-type: none"> <li>Included in regular compliance training</li> </ul>
	Anti-monopoly guidelines	<ul style="list-style-type: none"> <li>Included in regular compliance training</li> </ul>
	Agent guidelines	<ul style="list-style-type: none"> <li>Review of all sales intermediaries by the Compliance Manager</li> <li>Detailed written documentation of services provided by sales intermediaries</li> </ul>

**Sustainability  
starts with  
quality control**



## Association work and lobbying

Schoellershammer managing directors occupy relevant posts in the governing bodies of associations and initiatives. Prominent examples include:

- DIE PAPIERINDUSTRIE e. V., Berlin: Board member, Chair of the Packaging and Corrugated Papers Association
- PAPIER NRW – Verband der papiererzeugenden Industrie in Nordrhein-Westfalen e. V., Düsseldorf Member of the Executive Board, Chair of the Waste Paper Committee NRW
- Arbeitgeberverband der papiererzeugenden Industrie von Düren, Jülich, Euskirchen und Umgebung e. V.: Board member
- Industrie – Wasser – Umweltschutz e. V., Düren: Association chair
- Wasserverband Eifel-Rur, Düren: Member of the Association Council, Chair of the Advisory Board of GKA Düren

In particular, we engage with various committees and working groups at DIE PAPIERINDUSTRIE e. V. addressing the topics of energy, environmental affairs, technology, logistics and sustainability. Together with the association, we champion the interests of paper packaging manufacturers.

Since 2016, Schoellershammer has been cooperating with four industrial enterprises in the Energienetzwerk Düren-Rureifel, which is supported by the Aachen Chambers of Industry and Commerce (IHK Aachen). Its participants discuss energy efficiency and process optimisation measures and formulate reduction targets for three-year periods, with the companies then combining their figures. Between 2019 and 2022, we saved a combined total of roughly 75,000 tonnes of CO<sub>2</sub> in this manner. The three-year target for the period starting from 2023 is 44,429 MWh per year, which would correspond to a CO<sub>2</sub> reduction of 16,326 tonnes of CO<sub>2</sub> per year.

We are a founding shareholder in Modellfabrik Papier gGmbH, which is also based in Düren. Modellfabrik researches new technologies that could reduce carbon emissions in paper production.

## Stakeholder engagement

In 2023, we identified our most important stakeholders as part of a materiality assessment workshop. The Management Board was responsible for the final prioritisation of these stakeholders.

Regular dialogue with the majority of our stakeholders forms an integral part of our day-to-day operations. Personal encounters promote mutual appreciation and are crucial for the joint development of forward-looking strategies. In this spirit, we involve our stakeholders in a variety of ways:

### Employees

Allowing employees to voice their concerns denotes appreciation. Our established engagement formats include annual performance reviews, works assemblies, an exchange of views between employer and employee representatives, and the complaints procedure which is open to all employees. We operate a company suggestion system, which is used in particular by employees in commercial roles to contribute their ideas. Details are outlined in the chapter: "Supporting our employees and their development".

The Head of HR and the Works Council were part of the team for determining material sustainability issues for the company, and are also integrated with further development. In 2023, we established an internal committee comprising employer and employee representatives to implement the Federal Wage Framework Agreement (Bundesentgelttarifvertrag – BETV) within the company which was enacted at Schoellershammer in 2024.

### Owners

The owners, who are represented by the Advisory Board, play a pivotal role in Schoellershammer, primarily through their financial policy and their willingness to tackle future-focused topics. It is particularly important to us that we decide collectively on investments and innovations that allow us to reduce our company's CO<sub>2</sub> emissions. In 2024 one key aspect was the finalisation of the transformation plan to ensure that the company's

business is climate-neutral by 2045. We report on the details in the chapter "Schoellershammer's Climate Pathway".

The Management Board and Advisory Board, in particular, coordinate closely, and the Management Board also engages with the owners. Formal engagement takes place through reporting processes and regular meetings. In the reporting year, the Management Board reported to the Advisory Board on the progress of the sustainability projects at every meeting. Details are outlined in the chapter: "Management structure and governance".

### Customers

We maintain close contact with our customers. Our relationships with most of our customers extend back over many years. The Managing Directors and Sales department are particularly responsible for these activities. Structured annual meetings held at least once per year and documented in summary minutes, are the formal core of our engagement with our customers. Our customers are deeply interested in our expertise in terms of sustainability and climate neutrality, and provide us with positive feedback in this regard. Our engagement has proven itself to be a valuable instrument in promoting customer loyalty. It is often regarded as a unique selling point that sets Schoellershammer apart from the competition.



## Agents

Our Sales team discusses market developments and sales activities online with all our agents on a monthly fixed date. We also hold an in-person agents meeting at least once per year. We maintain close links with our agents to exclude the risk of compliance breaches. All agents must sign up to our code of conduct.

## Suppliers

We maintain long-term partnerships with our direct suppliers and know many of them personally. Engaging with raw materials suppliers is the responsibility, in particular, of our Procurement team, while our Logistics team stays in touch with our transport service providers. When it comes to the sustainability requirements imposed on us by our customers, we endeavour not only to pass these on to our suppliers through formal arrangements but also to raise and enhance their awareness of these issues. Details can be found in another chapter: "Our supply chain".

## Regulatory authorities, public institutions and associations

We engage with the Cologne District Administration, which conducts environmental inspections of our company at regular intervals as the regulatory authority. In addition, we maintain contact in particular with the town of Düren, the fire brigade, paper industry associations and the Eifel-Rur Water Association (Wasserverband Eifel-Rur – WVER). We engage with these partners on topics including the environmental issues facing our company as well as economic and political conditions.

## Financing company

The company's management convenes with representatives of the company's banks in an annual banking meeting. Sustainability also plays a growing role in these talks. In the context of climate legislation, banks and state funding agencies require the disclosure of sustainability aspects in order to make investment decisions.

## Local residents

Schoellershammer engages with local residents when necessitated by specific events. Responsibility for nurturing these contacts lies with the management. In June 2024, residents reported annoying noises that were, however, below the threshold. Schoellershammer first installed temporary screening and then retrofitted a silencer. A final conversation confirmed that the noise had been eliminated.



**Genuine craftsmanship – considerate in dealing with resources**

## Sustainability strategy

Schoellershammer's foremost aim is to reconcile economic activity with environmental, social and ethical goals, and thus contribute to consistently sustainable development.

In order to focus our sustainability efforts, we conducted a materiality assessment in 2023. This involved the company management, managers, the works council and the sustainability officer. In a multi-stage process

comprising workshops, discussion forums and technical discussions, we analysed our company's political and social context. We examined our supply chains, identified relevant stakeholders, recorded their concerns and derived key sustainability issues from this process.

In working groups, we initially nominated 15 sustainability topics as relevant, of which we prioritised five after detailed consultation.

### MATERIAL TOPICS

Topic	Parameters
Resource use and the circular economy	<ul style="list-style-type: none"> <li>Materials (GRI 301-1)</li> <li>Recycled input materials used (GRI 301-2)</li> <li>Products (own KPI)</li> <li>Waste (GRI 306-3)</li> </ul>
Energy consumption and emissions	<ul style="list-style-type: none"> <li>Total energy consumption (GRI 302-1)</li> <li>Energy intensity – Scope 1+2 (GRI 302-3)</li> <li>GHG emissions – Scope 1+2 (GRI 305-1, 305-2)</li> <li>GHG intensity – Scope 1+2 (GRI 305-4)</li> <li>GHG emissions – Scope 3 (GRI 305-3)</li> </ul>
Water	<ul style="list-style-type: none"> <li>Water withdrawal (GRI 303-3)</li> <li>Water discharge (GRI 303-4)</li> <li>Water consumption (GRI 303-5)</li> </ul>
Training and education	<ul style="list-style-type: none"> <li>Employee turnover (GRI 401-1)</li> <li>Percentage of trainees in the workforce (own KPI)</li> <li>Hours of training and education (GRI 404-1)</li> </ul>
Working conditions in the supply chain	<ul style="list-style-type: none"> <li>Number of suppliers screened (GRI 414-1, GRI 308-1)</li> </ul>



**Strong together –  
we rely on  
teamwork**

The key topics and the associated strategic approaches were presented to the Advisory Board by the Management Board. The Advisory Board approved the specific sustainability projects and budgets and agreed to the development of a transformation plan to achieve climate-neutral production by 2045. In the reporting year, the Management Board reported to the Advisory Board on the progress of the sustainability projects at every meeting for the first time. The transformation plan, which we present in this report, was finalised at the end of 2024.

At the beginning of 2025, we updated and extended our materiality assessment. It meets the requirements of GRI and European legislation (CSRD), which was originally intended to apply to Schoellershammer from the 2025

financial year. As the date of first-time application of the CSRD has been pushed back by two years; and it remains to be seen whether companies of our size will be subject to the reporting obligation at all in the future, we will continue to report in accordance with GRI for the time being. The materiality assessment for 2025 will form the basis of the upcoming report.

We drew upon external specialists to consolidate our understanding of company sustainability requirements, reporting under GRI and CRSD and then prioritised the issues raised. In order to manage sustainability issues effectively, we are also continuing to build up knowledge within the company at the same time.

# RESOURCE USE AND THE CIRCULAR ECONOMY

Schoellershammer's business model is based on recycling. This means that we are already part of the economic transformation.



The circular economy is a central element of the 2019 European Green Deal and will be further strengthened by the “Green Industrial Deal” adopted in February 2025. This aims to support industry in the transition to a climate-neutral economy – among other things – by promoting climate-friendly technologies, sustainable production processes and refining the circular economy. This last objective is intended to help significantly reduce the use of primary raw materials and to recycle products as completely and energy-efficiently as possible at the end of their life cycle. Schoellershammer's resource-conserving strategy is in line with this approach.

This transition from a linear system to a circular economic model is forcing many companies to redesign their products from scratch. However, this is not the case for Schoellershammer. Our resource is a secondary raw material, recovered paper, which accounts for over 94 per cent of our raw material inflow. We produce containerboard for use in packaging which is also broadly recycled.

Our core business activities, therefore, correspond, to a high degree, with the EU's requirements for sustainable business, set out in its Green Deal. Two European frameworks in particular determine the way forward for Schoellershammer: the EU Circular Economy Action Plan and the EU Packaging Regulation. The Action Plan adopted in 2020 provides the strategic framework, while the PPWR passed in 2023 sets out specific requirements for the packaging sector.

## The merits of paper-based packaging

Packaging made from recycled paper represents a sensible alternative to oil-based packaging. Paper is based on organic materials, making it a more sustainable material. It can be manufactured and recycled in just a handful of process steps and is also easily biodegradable.

In addition, the paper industry in Europe already has a functional system for the collection and recycling of fibres, along with an established market for secondary raw materials. For most plastics, such infrastructure is still a long way away.

We disclose the specific contributions that our core business activities make to the circular economy in this report with the aim of raising awareness in the political sphere and in wider society of the merits of paper-based packaging. We report on the raw materials we use, the products we manufacture and the waste we generate. The type and scope of these resource flows are key indicators in illustrating our contribution to the circular economy.

Water and energy are also resource flows of material importance. We address these aspects in other chapters: “Energy consumption and emissions” and “Water management”.

## Raw materials

As a secondary raw material, paper for recycling accounts for 94.3% of our raw material input. We source paper for recycling primarily from the waste management industry and specialist suppliers of paper for recycling. We give preference to regional sources within a radius of 200 km. In addition, our customers send process fibre waste from corrugated packaging production back to us, which we then recycle.

In 2024, we processed 586,887 tonnes (2023: 570,589) of recovered paper. Added to this were 30,483 tonnes of wheat starch (2023: 28,336) and 6,314 tonnes of consumables (2023: 6,369). Paper for recycling and wheat starch are regenerative materials and account for 98.99% of our input raw materials (2023: 99.95%). Other consumables include dye, other additives and process chemicals. We source all raw materials and consumables from within Europe.

## Quality management

The consumables we use are registered in accordance with the REACH Regulation. The brown dye and other process chemicals are classified as hazardous to water, while two process chemicals we use are markedly hazardous to health. We use these substances responsibly and in accordance with statutory requirements.

Schoellershammer has an ISO 9001-certified quality management system in place. Our standards and rules for production, safety and the environment are the responsibility of management and are conveyed to all employees through regular training.



Our products are regularly tested according to the 36<sup>th</sup> Recommendation of the Federal Institute for Risk Assessment. We make exclusive use of consumables and paper for recycling that match this recommendation.

To date, we have conducted an analysis of human rights-related and environmental risks in our supply chain every two years, most recently in the 2024 financial year. Further details can be found in another chapter: "Our supply chain".

## TYPES OF PAPER FOR RECYCLING WE USE

- 1.02 Mixed papers and boards (sorted)
- 1.04 Old corrugated containers
- 1.05 Supermarket corrugated containers
- 4.01 New shavings of corrugated board
- 4.03 Used corrugated kraft 2

## OUR MATERIAL CYCLE

Raw materials	Input (in t)		
	2022	2023	2024
Paper for recycling	561,875	570,589	586,887
Wheat starch	28,289	28,336	30,483
Consumables	5,186	6,369	6,314
	595,350	605,294	623,684



Products	Output (in t)		
	2022	2023	2024
High performance papers	77,130	92,390	109,800
Standard papers	457,870	437,610	429,200
	535,000	530,000	539,000

Waste (in tonnes)	2022		
	2022	2023	2024
Non-hazardous waste	63,411	66,972	*28,749
Hazardous waste	17	69	**1,450
	63,428	67,041	30,199

\* Excluding production residues that have been fed to the recycling facility since March 2024.

\*\* Essentially filter ash from the flue gas cleaning of the recycling facility.

## Products

All our papers have been tested by ISEGA Forschungs- und Untersuchungsgesellschaft mbH, certified in accordance with the 36th recommendation of the Federal Institute for Risk Assessment (non-wet and non-greasy foods) and approved for food contact. This approval is reviewed every two years.

Schoellershammer holds FSC® Chain of Custody (CoC) certification and undergoes regular audits. This CoC certification confirms that we contribute to the sustainable use of forest resources through our products. Our containerboard products satisfy the requirements of the FSC® Recycled label. Our products have also been PEFC-certified since 2025.

We produced 539,000 tonnes of containerboard in the reporting year (2023: 530,000) with the materials we used. Around 20% (2023: 19%) of our production was accounted for by high-performance paper, which meets particularly stringent strength and rigidity requirements. These products, which have a higher grammage and contain elevated quantities of starch and higher-grade paper for recycling, have properties that can otherwise only be achieved with virgin paper. Consequently, they replace virgin fibres, which reduces wood consumption overall.

Our two machines produce paper with a weight of 80 to 180 g/m<sup>2</sup>. The strongest demand is for the medium weight class, which we therefore produce on both machines. We produce high-performance paper on our PM 5 and use PM 6 to produce lightweight paper from 80 to 135 g/m<sup>2</sup> in brand quality.

Schoellershammer's raw materials and products are already very sustainable. The scope for further reducing the amount of material used per square metre of paper is extremely limited. This is because corrugated packaging is typically engineered to be just as sturdy as necessary while being as lightweight as possible to keep costs to a minimum. In order to improve our products' carbon footprint, we have concentrated our efforts in recent years on process engineering aspects to reduce our



energy consumption as well as on optimising our energy procurement practices. Details can be found in another chapter: "Energy consumption and emissions".

## Waste

In the 2024 financial year, our paper manufacturing activities generated 30,199 tonnes of waste (2023: 67,041). Paper for recycling is delivered to us in bales that, in addition to paper, also contain plastic, metal, glass, textiles and wood. These contaminants, which we refer to as "rejects", have, to date, accounted for the majority of the waste we produce. Boiler ash and sludge from biological wastewater treatment are also produced.

Since the beginning of 2024, we have been operating a recycling facility (RVA) in which we thermally recycle rejects and production residues. The recycling facility enables us to substitute a significant proportion of our natural gas requirements and reduce the volume of waste by more than half.

The proportion of hazardous waste totalled 4.8% (2023: 0.1%) of the waste generated. The increase can be explained by the commissioning of the recycling facility, as filter ash from flue gas cleaning is classified as hazardous waste. Filter ash can also be utilised as an aggregate in cement production, for example. We dispose of all hazardous waste in accordance with applicable regulations. Details about the recycling facility can be found in another chapter: "Energy consumption and emissions".

We pre-treat the wastewater from paper processing in our own wastewater treatment plant, which removes up to 90% of organic impurities from the water before it is sent to the wastewater facility operated by the water association. We send the organic substances removed during wastewater treatment for thermal treatment. Further details of our water and wastewater management activities can be found in another chapter: "Water management".

# ENERGY CONSUMPTION AND EMISSIONS

Schoellershammer has reduced its emissions despite increased production and adopted a transformation plan for climate-neutral operations.

Renewable energy on site:  
Our PV system reduces CO<sub>2</sub> emissions  
for a greener energy future

Schoellershammer pursues the defined climate pathway for the Federal Republic of Germany which targets a 65% reduction in CO<sub>2</sub> emissions compared to 1990 levels by 2030. We are relying on efficiency measures, new technologies and gradually phasing out fossil fuels.

Our energy management system is ISO 50001-certified. In 2017, we defined specific targets to reduce Scope 1 and 2 emissions by 2030 and have worked systematically to reach these targets ever since. We have calculated our Corporate Carbon Footprint (CCF) since 2022 – in-house since 2024 – and had our figures verified by an independent, accredited body. Since 2023, we have also been disclosing our Scope 3 emissions. The emission factors we use take into account all climate-impacting gases in accordance with the GHG Protocol. The emissions reported for Schoellershammer are therefore recorded in CO<sub>2</sub>-equivalents (CO<sub>2</sub>e).

At the beginning of 2025, we adopted our transformation concept which we drew up with external expertise. Our goal is to become climate-neutral by 2045. One important lever that could become effective in the medium term is the electrification of our steam generation. The technology is available, but the public sector must expand the regional electricity grid as announced and provide sufficient green electricity. We report on the details of our plans in the chapter “Schoellershammer’s Climate Pathway”.

Our total emissions amounted to 316,915 tonnes of CO<sub>2</sub>e. This corresponds to a year-on-year reduction of around 14.3 percent. The Scope 1–3 greenhouse gas intensity stood at 588 kg CO<sub>2</sub>e per tonne of paper, a reduction of 15.9 percent. The significant reduction is primarily due to the recycling of residual materials in our own waste recycling plant (RVA) and heat recovery on PM 5, as a result of which we are able to save considerable amounts of natural gas. In addition, transport kilometres previously incurred for the external disposal of residual materials no longer applied.

The differentiated recording of transport emissions also had a significant effect on the reduction of our emission figures. Instead of a flat-rate average value, the freight kilometres were broken down by type of transport (truck, rail, ship) for the first time, resulting in a more reliable - and overall lower – CO<sub>2</sub>e footprint. In addition, in preparing the footprint, we discovered that the emission factors reported by our suppliers were in some cases significantly lower than the standard values in large environmental databases.

#### GREENHOUSE GAS EMISSIONS IN TONNES OF CO<sub>2</sub>e

GHG emissions	2023	2024	Δ	CO <sub>2</sub> e	
Scope 1	82,860.3	87,724.8	5.9%	CO <sub>2</sub> e	
Scope 2	90,972.6	86,572.5	-4.8 %	CO <sub>2</sub> e	market-based
	114,108.0	91,665.2	-19.7 %	CO <sub>2</sub> e	location-based
Scope 3	195,907.9	142,618.0	-27.2 %	CO <sub>2</sub> e	
Total emissions	369,740.8	316,915.3	-14.3 %	CO <sub>2</sub> e	market-based
	392,876.2	322,008.1	-18.0 %	CO <sub>2</sub> e	location-based
biogenic CO <sub>2</sub> e	6,729.1	36,628.4	444.30%	CO <sub>2</sub> e	

## Technical measures on site

In 2024, we commissioned a waste recycling plant (RVA) and have been able to recycle waste from the production process ourselves since April 2024. The recycling facility offers several advantages. It enables a significant reduction in costs by saving natural gas and, at the same time, contributes to reducing our dependence on fossil fuels. This strengthens our security of supply. This facility also opens up the prospect of separating biogenic CO<sub>2</sub> components in the recycling process and processing them separately - a potential step towards negative emissions or future CO<sub>2</sub> recycling.

In the year under review, we integrated heat exchangers into the exhaust air flows of the vacuum systems and into the drying hood exhaust air on our PM 5. This allows us to recover a considerable amount of heat, further reducing our natural gas requirements. We have also installed a photovoltaic system with a capacity of

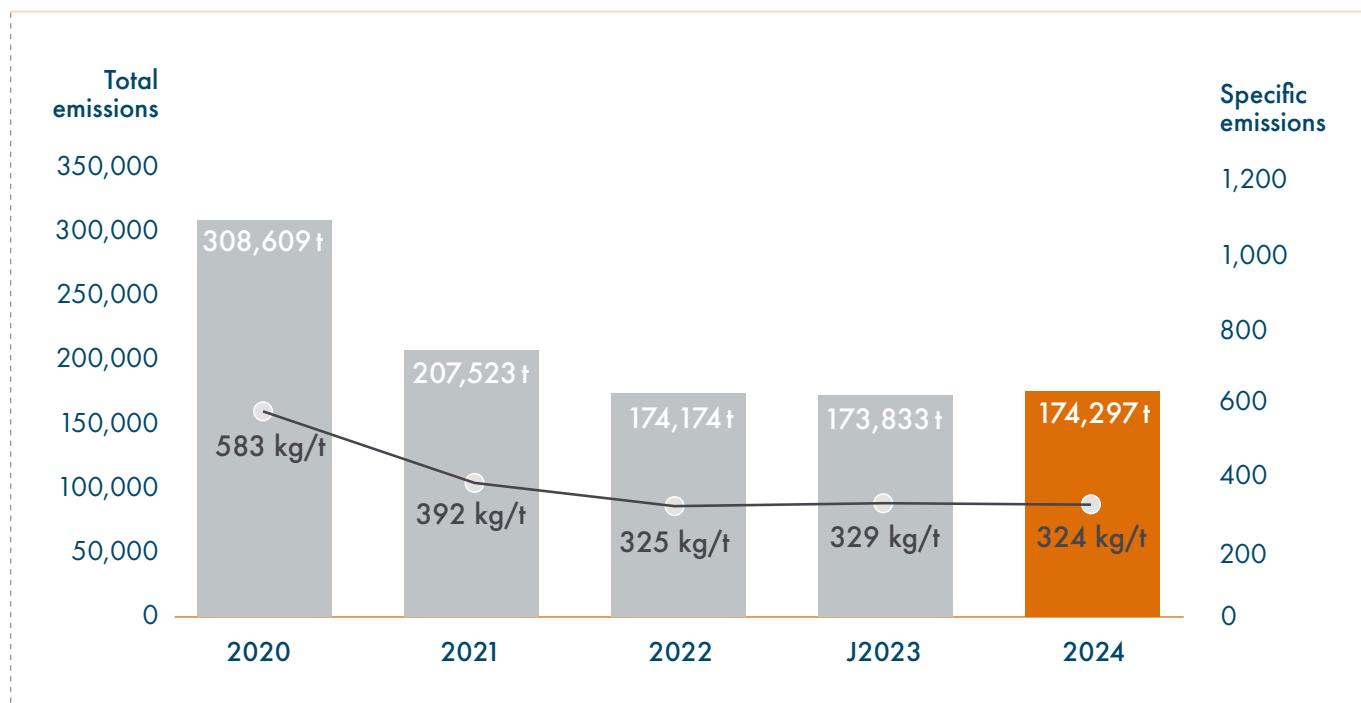
885,000 kWh of electricity per year on the roof of PM 6, which, contrary to expectations, is not yet in operation due to complex regulatory requirements.

No major measures are planned for 2025. We are focusing on optimising the new systems.

## Scope 1 and 2 emissions

Thanks to the commissioning of the recycling facility, we required considerably less natural gas and less lignite dust for steam generation in 2024, and the availability of biogas has risen. However, as a result of our use of the recycling facility, emissions previously reported under Scope 3 (waste generation) have been moved to Scope 1 (substitute fuels). Our use of the facility is also reflected in electricity consumption. The energy intensity for Scope 1 and 2 was 1,400 kilowatt hours (2023: 1,382) and the greenhouse gas intensity 324 kg of CO<sub>2</sub>e per tonne of paper (2023: 329).

### SCOPE 1 AND 2 CO<sub>2</sub>e EMISSIONS AND GREENHOUSE GAS INTENSITY (2020 – 2024)



## ENERGY CONSUMPTION IN KILOWATT-HOURS\*

Energy consumption	2022	2023	2024
Natural gas <sub>LHV</sub>	418,828,210	406,138,084	332,661,924
Biogas <sub>LHV</sub>	19,893,731	31,036,222	36,130,362
Substitute fuels (recycling facility commissioned in 2024)	0	0	104,744,093
Purchased electricity	150,599,649	148,477,055	144,100,037
Green electricity	17,520,000	17,520,000	26,539,150
Steam from pulverised lignite	130,334,143	124,395,261	115,949,913
Diesel for materials handling	2,692,263	2,661,020	2,736,379
<b>Total</b>	<b>739,867,996</b>	<b>730,227,642</b>	<b>762,861,858</b>

\* Real values for the entire plant for production purposes.

GREENHOUSE GAS EMISSIONS IN TONNES OF CO<sub>2</sub> EQUIVALENTS (CO<sub>2</sub>e)\*

Scope 1	2022	2023	2024
Fuels	85,112	82,101	86,905
Motor fuels	751	728	786
Gas leaks (refrigerant)	40	31	33
<b>Total for Scope 1</b>	<b>85,903</b>	<b>82,860</b>	<b>87,725</b>
Scope 2	2022	2023	2024
Power consumption**	29,765	36,488	40,521
Green electricity	193	193	507
District heating/cooling	58,506	54,485	45,544
<b>Total for Scope 2</b>	<b>88,271</b>	<b>90,973</b>	<b>86,572</b>
<b>Total for Scope 1 and 2</b>	<b>174,174</b>	<b>173,833</b>	<b>174,297</b>

\* Calculation based on real values. Emissions factors in accordance with DEFRA, GEMIS, Ecoinvent, UBA and others. The totals may differ slightly due to rounding differences.

\*\* Market-based figure. Deterioration in 2024 due to change in electricity mix from provider, while our electricity consumption decreased. Location-based figure: 45,614 t CO<sub>2</sub>e (2023: 59,623).

## Scope 3 emissions

We apply a cradle-to-shelf perspective, meaning that we examine all emissions from the raw material through to product distribution. This corresponds to Categories 3.1 to 3.8 of the GHG Protocol.

More than half of our Scope 3 emissions are generated in Category 3.1, purchased goods and services. Since 2024, we have also recognised emissions from deliveries in this category, which we previously included under 3.4, Transport and distribution. To further reduce emissions in 3.1, we prefer to use recovered paper suppliers within a maximum radius of 200 kilometres. A supplier's distance from our site is a factor we take note of in our supplier assessments.

This means that we can only take small steps to reduce emissions in Category 3.1, which we implement if they are financially worth it, for example by digitalising order processes.

Category 3.4, Transport and distribution, also remains a relevant category. In terms of the logistics companies we use, we collect vehicle, route and transport information in order to calculate CO<sub>2</sub> emissions incurred in transportation. The insights gained are discussed in meetings with our suppliers. We have been pursuing ways to reduce downstream transport emissions for years. On our initiative, one of our most important freight forwarders has entered into an alliance with us and has been supplying one of our customers with an electric truck (eActros 600) since 2025. We want to gain experience with e-mobility in freight transport and assess its economic viability. The electric truck is used exclusively for transit traffic between Schoellershammer and the customer.

In Category 3.5 Waste generated in the company, waste from paper recycling constituted a major item until 2023, which has been significantly reduced since the waste recycling plant came on stream (with the corresponding emissions shifting to Scope 1). As explained in the chapter "Resource utilisation and circular economy", the recovered paper delivered to us contains plastics and other non-paper components that we now use in our recycling facility as a substitute for natural gas.



**Process monitoring  
of our recycling facility for  
an efficient heat supply**

SCOPE 3 EMISSIONS IN TONNES OF CO<sub>2</sub> EQUIVALENTS (CO<sub>2</sub>e)\*

Scope 3 (cradle-to-shelf perspective)	2022	2023	2024
3.1 Purchased Goods and Services	54,945	54,771	* 87,895
3.2 Capital Goods	2,589	7,293	2,211
3.3 Fuel and Energy-Related Activities	30,601	29,291	18,072
3.4 Upstream Transportation and Distribution	*** 96,741	71,980	**** 22,368
3.5 Waste Generated in the company	*** 31,098	32,354	11,808
3.6 Business Travel	13	10	10
3.7 Employee Commuting	212	209	255
3.8 Upstream Leased Assets	0	0	0
<b>Total for Scope 3</b>	<b>216,199</b>	<b>195,908</b>	<b>142,619</b>

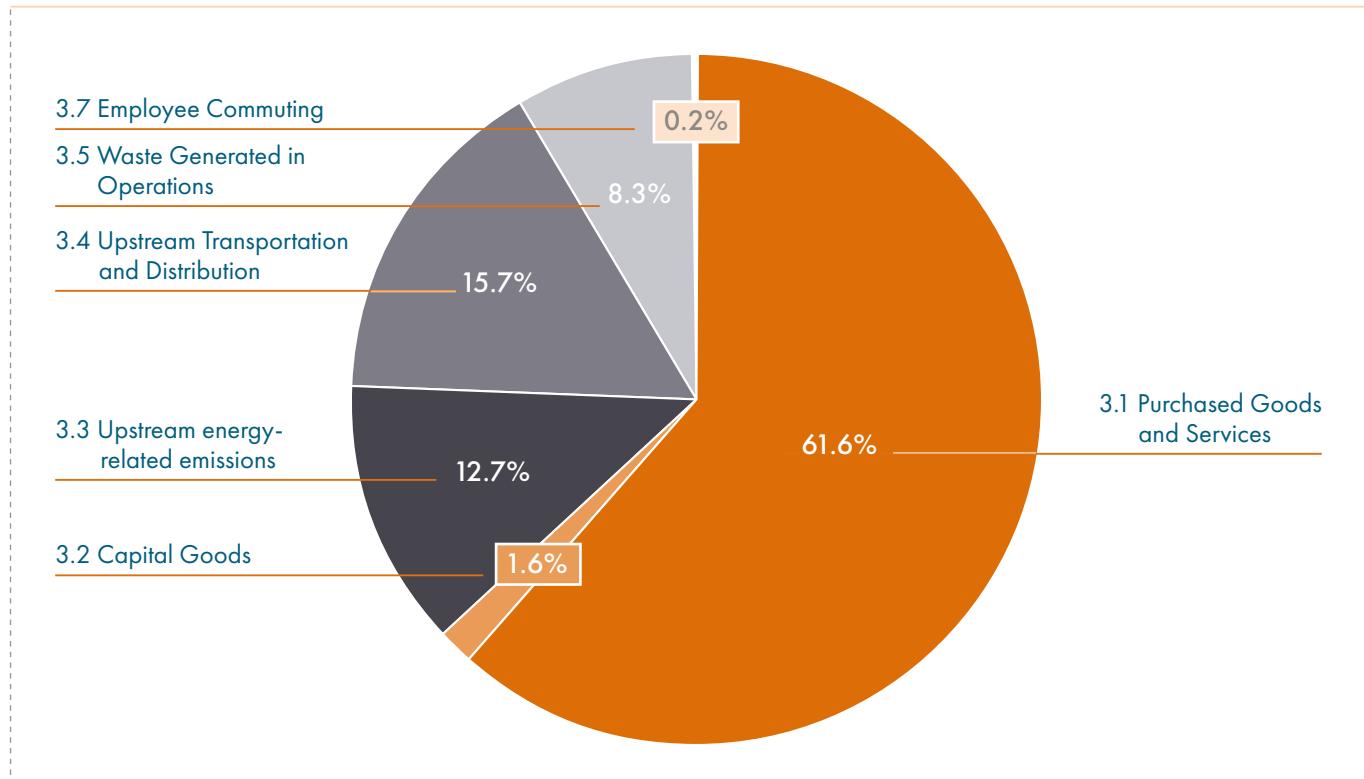
\* Calculation based on real values. Emissions factors in accordance with DEFRA, GEMIS, Ecoinvent, UBA and others; figures for previous years have been adjusted.

\*\* Including upstream transport.

\*\*\* 2022 values partially estimated.

\*\*\*\* Shipping only and use of primary indicators since 2024.

## SCOPE 3 EMISSIONS AS PERCENTAGES



# WATER MANAGEMENT

Thanks to the installation of efficient technology,  
our water consumption  
has been constantly decreasing since 2017.

In harmony with nature:  
The nearby Rur has supplied  
us with water for paper production since 1784

Like the entire paper industry, Schoellershammer is a water-intensive company and depends on a reliable water supply for paper production. We take most of the water we need from the neighbouring River Rur. After purification and clarification, we return almost 84 percent of it to the Rur. We obtain drinking and process water from our municipal provider.

## Availability of water

We are fortunate to operate in a region in which there will be sufficient water over the medium term. Water levels in the Rur are regulated by a number of reservoirs in the river's upper reaches, which ensure a minimum flow rate of 5 m<sup>3</sup>/s. Consequently, the water levels are always sufficiently high for us to withdraw water without negatively impacting the river's ecology. The Eifel-Rur Water Association, of which we are a member, does not consider there to be a risk of low-water levels compromising our production activities. Conversely, our water consumption does not pose any risk to the region.

Although we return by far the greatest volume of the water we use to the Rur, our water consumption remains high at 501,692 m<sup>3</sup> (2023: 518,269). Water is becoming an increasingly scarce resource in Germany, which has led the public and investors to take greater interest in the topic. We have, therefore, identified our company's water consumption as a material topic and disclose our consumption figures and relevant KPIs.

## Water consumption

We reduce water consumption, in particular, by modernising our technical systems. Since 2021, we have been successively equipping pumps and agitators with new mechanical seals. Compared to 2021, this meant that in the reporting year we realised savings of 38 million litres of water (2023: 26.6). This corresponds to a 3.2 percent reduction in total water consumption and a 5 percent reduction in specific water consump-



**Clean water and  
renewable energy:  
The wastewater treatment  
plant combines water  
treatment with biogas production**

tion. Once this work is complete, the total savings will be up to 66.5 million litres per year.

Schoellershammer works with a water cycle that is almost completely closed. We subject process water to repeated treatment and recirculate it numerous times. Water losses are caused in particular by the drying process. We use the resulting water vapour to generate energy and return condensation to the cycle.

As things stand, it is not possible to achieve further significant reductions in water consumption at our site. The only alternative would be a completely closed water cycle, which would require considerable use of chemicals and cause unpleasant odours that would negatively impact nearby residents. We have decided against a completely closed cycle for these reasons, among others.

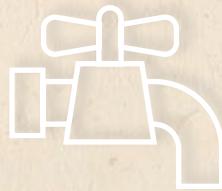
In the reporting year, we connected areas of the premises where rainwater was previously channelled into the wastewater system to our process water system, thereby increasing the use of rainwater.

## Wastewater treatment

Schoellershammer has a two-stage biological waste water treatment system, which we last expanded in 2022, thereby more than doubling the biogas yield. We test the treated process water in accordance with German environmental regulations before we feed it into the municipal collective sewage treatment plant.

There is currently no need for any additional action. In terms of the circular economy, however, our thermal treatment of residual materials from water treatment is significant, and we report on it in the chapter “Resource utilisation and circular economy”.

## WATER CONSUMPTION DEFINITIONS



### WATER WITHDRAWAL

All water extracted from surface water, groundwater, sea water or via third parties during the reporting period



### WATER DISCHARGE

The total amount of wastewater, including both used and unused water, discharged into surface water, groundwater, seawater or to third parties



### WATER CONSUMPTION

All water that is integrated into products, vaporised, evaporated or so heavily contaminated that it cannot be discharged back into surface water, groundwater, sea water or to third parties

FIGURES ON WATER USE (IN m<sup>3</sup>)

	2022	2023	2024
<b>Water withdrawal</b>			
Surface water	2,334,338	2,223,405	2,317,164
Groundwater	0	0	0
Produced water	0	0	0
Water from municipal utility company	29,546	25,860	26,441
<b>Total</b>	<b>2,363,884</b>	<b>2,249,265</b>	<b>2,343,605</b>
<b>Water discharge*</b>			
Surface water	1,808,139	1,705,136	1,815,472
Groundwater	0	0	0
Produced water	0	0	0
Water from municipal utility company	29,546	25,860	26,441
<b>Total</b>	<b>1,837,685</b>	<b>1,730,996</b>	<b>1,841,913</b>
<b>Water consumption</b>			
<b>Total</b>	<b>526,199</b>	<b>518,269</b>	<b>501,692</b>
<b>Water intensity per tonne of paper</b>			
in terms of water withdrawal	4.42	4.26	4.35
in terms of water consumption	0.98	0.98	0.93

\* No hazardous substances are discharged.

# SUPPORTING OUR EMPLOYEES AND THEIR DEVELOPMENT

We give our employees the keys to their professional future: further training and professional development.



Together we shape sustainability –  
because real change  
is created when we work together

The world of work is undergoing fundamental changes. It is becoming increasingly difficult for companies to find and retain suitable staff. Trainees need more personal support, employees change jobs more frequently - all of this ties up resources in companies.

Expectations in everyday working life are also changing. Employees want to achieve a better work-life balance, they appreciate flexible shift models, part-time options or the chance to work on the go. At the same time, professionals are constantly challenged to keep pace with career changes. Most of them need – and many want – continuous training that allows them to grow both professionally and personally.

All of these topics are relevant to Schoellershammer. However, as part of the 2023 materiality assessment, we have defined training and further education as the most relevant employee topic, which we will focus on in this section.

## Our workforce

As of 31 December 2024, 282 (2023: 277) people were employed at Schoellershammer, including 17 trainees. Twelve male and the same number of female colleagues were working part-time.

Salaried employees account for approximately one third of our workforce, while two thirds are employees paid by the hour. The proportion of women is 11.3% (2023: 17.6%). The low proportion of women is typical for our industry with its high proportion of employees in production. Women account for 47% of our employees in administrative roles, as was the case in 2023. We welcome applications from women and take care to ensure that women and men are treated equally when recruiting new employees and furthering the careers of our junior employees.

The recruitment rate fell from 10.8% in 2023 to 7.1% in 2024. The turnover rate rose from 4.7% to 7.8%. We analyse the fluctuation rate with respect to age, gender and area of work. If we notice any abnormalities, we seek to engage in dialogue. Looking to the medium-term, we have set ourselves the target of reducing this rate to below 4% – which, given the increasing mobility of young professionals, will be decidedly challenging.

In the reporting year, older employees in particular left the company, but we were able to fill all positions satisfactorily. The average age in 2024 was 42.

Schoellershammer only employs a handful of people on fixed-term contracts. During the 2024 financial year, this included one temporary worker who we engaged to cover staffing shortages in our logistics operations due to holidays and sickness.

## Supporting our trainees

Schoellershammer is exceptionally active and successful when it comes to traineeships. Our aim is for trainees to make up at least 5% of our workforce on a permanent basis. We met this target again in 2024. The trainee ratio stood at 6% (2023: 6.3%). Five new trainees joined us on 01/08/2024. In 2023 year, there were as many as eleven, but this was an exception.

The training process is more laborious today than was once the case because many trainees require support in graduating from vocational college. This pertains in particular to paper technicians, whose training and education is particularly demanding and includes a considerable amount of mathematics, chemistry and physics. As of 01.01.2025, we have freed up one employee who will provide intensive support and encouragement for our paper technicians, as a trainer. We are convinced that this will significantly improve the skills of young professionals and at the same time promote their loyalty to Schoellershammer.

In the reporting year, we completed training for two apprentices from an insolvent company and then took them on as employees.

We finance the master technician training of young paper technicians and give them time off for the training blocks with full pay. Our master technicians act as mentors to them, supporting their growth within the company. Two of our young master technicians became shift foremen with their own shift in 2024 as part of the succession plan.

In order to find suitable trainees, we participate in school career fairs and regularly exhibit at vocational training fairs and traineeship speed-dating events. In 2024, we provided 18 young people with one- to three-week internships at Schoellershammer to give them an insight into our traineeships. Four of our interns from the previous year joined us as trainees in 2024.

## APPRENTICES WIN IHK PRIZE FOR CIRCULAR ECONOMY

Schoellershammer's apprentices have been participating extremely successfully in the "Circularity Scouts" programme launched by the Aachen Chambers of Industry and Commerce (IHK). The trainees were tasked with independently developing a circular economy project in their company – from brainstorming to planning and implementation.

Our commercial trainees in their second year impressed the jury with their project "Water optimisation in paper production using non-flow seals" and were awarded second prize. The team was supported by our technical coordinator acting as a mentor.

The programme was supported by five workshops, that conveyed the theoretical basics of the circular economy.

Our trainees show how the future works – and are honoured for it by the Aachen Chambers of Industry and Commerce (IHK)



## TRAINEES AS TRAINING AMBASSADORS

As part of the "Training Ambassadors" initiative, we champion dual vocational training and the next generation of skilled workers. Our trainees visit schools in the region and share their experiences with the pupils. Through their work as ambassadors, they hone their professional skills and grow on a personal level.

## OUR TRAINING PROFESSIONS (M/F/X)

- Paper technician
- Industrial mechanic
- Electronic technician for industrial engineering
- Industrial management assistant

## In-service training

The world of work is changing in ever shorter cycles. At the same time, the transformation to climate neutrality poses major challenges for companies and employees. Lifelong learning has become non-negotiable in professional life.

In 2021, we introduced guidelines on employee training. These guidelines describe professional development as a management tool and urge managers to actively encourage their employees to engage in training and education. We know that this approach has the potential not only to increase overall qualification levels in our workforce, but also to boost employee satisfaction and cement their ties to Schoellershammer.

Our HR department organises further training activities in coordination with the specialist departments. In the 2024 financial year, employees spent an average of 17 hours in training, not including trainees. We are postponing the breakdown of training hours by employee group originally planned for this sustainability report by one year, as the categorisation used to date is undergoing revision.

We conduct annual appraisals with all managers, trainees and administrative staff, in which their performance and professional growth are also discussed. In production, where the majority of our workforce are employed, the shift supervisors engage in dialogue with their employees. These discussions have no formal structure and that is not our intention either.

## EMPLOYEE TRAINING AND EDUCATION

The purpose of training and education, in accordance with ILO Convention 140, is to contribute to:

a) the acquisition, improvement and adaptation of occupational and functional skills, and the promotion of employment and job security in conditions of scientific and technological development and economic and structural change;

- b) the competent and active participation of workers and their representatives in the life of the undertaking and of the community;
- c) the human, social and cultural advancement of workers, and
- d) the promotion of appropriate continuing education and training, helping workers to adjust to contemporary requirements.

## Retaining our employees

We are convinced that appreciation and involvement in decision-making and development processes are decisive factors in boosting employee loyalty at Schoellershammer.

Since 2011, employees covered by collective bargaining agreements with at least two years' service at Schoellershammer have also benefited from a performance-related bonus, based on the company's profits.

Our company suggestion scheme is one instrument that our employees make intensive use of and value highly. In particular, our teams working on machinery submit pragmatic ideas based on practice and their experience in order to optimise processes. In 2024, we implemented

16 of these suggestions and provided bonuses based on the resulting savings.

Cooperation has an important role to play in our growing company. This also includes giving our employees space for their private lives, especially in challenging phases of life, such as when raising small children or caring for relatives. In 2024, five male employees and three female employees took advantage of parental leave, three of whom were working shifts. They all returned to Schoellershammer after their parental leave and continue to work for us. Part-time options are also actively utilised by our employees. In the reporting year, 24 employees, half of them women and half men, worked part-time. This corresponds to around 9 per cent of the workforce.

### EMPLOYEES ON PARENTAL LEAVE (AS OF 31 DECEMBER)

Number of employees	2022		2023		2024	
	m	f	m	f	m	f
Parental leave taken	4	2	8	2	5	3
Return after parental leave	4	2	8	*2	5	3
Still at the company	4	2	8	2	5	3
Return and retention rate				100%		

\*2024

## Fair working conditions

All employees are represented by a Works Council whose members are exempted from other duties. The company management and the Works Council work closely together. We regulate relevant employer-employee issues through works agreements. The Works Council

is involved in refining the Code of Conduct as well as in dealing with sustainability issues. In May 2023, it formed part of the team developing the sustainability strategy, and in May 2025, it was consulted on the future prioritisation of employee issues.

Our employees receive salaries at least in accordance with the wage agreement (IG BCE), and 96% of our workforce are covered by the collective agreement. At the beginning of 2024, we were one of the first companies in the Düren paper industry to introduce the Bundesentgeltrahmentarifvertrag (BETV) [Federal Wage Framework Collective Agreement] which creates a standardised pay structure across Germany. Employees are categorised into 13 pay groups which no longer differentiate between wages and salaries. This opens up financial development prospects, particularly for previous wage earners, regardless of their original field of activity.

The Management Board members negotiate their salaries with the Advisory Board. Other managers negotiate their salaries with the Management Board. The remuneration awarded to the Management Board and other managers consists of a basic salary and various performance-based components, some of which are tied to the company's performance. Severance payments – as well as any potential claims for refunds – are assessed on a case-by-case basis. To date, the Management Board and other managers have not been assessed or remunerated with respect to their sustainability management achievements.

We do not disclose the ratio between the total annual remuneration paid out to the highest-earning person and the average level of employees' total annual remuneration because we consider remuneration to be confidential.

## OUR WORKFORCE ENJOYS EXTENSIVE EMPLOYEE BENEFITS

	<b>Training and education</b>		<b>Additional qualifications</b>
	<b>Above-average remuneration</b>		<b>Smartphone/tablet/laptop</b>
	<b>Remote working</b>		<b>Cycle-to-work scheme</b>
	<b>Flexible working hours</b>		<b>(Company) events</b>
	<b>Company pension plan</b>		<b>Good local public transport connections</b>
	<b>High trainee retention rate</b>		<b>Parking facilities</b>

**WORKFORCE (AS OF 31 DECEMBER)**

		2022		2023		2024	
		f	m	f	m	f	m
By contract type	Permanent	27	213	30	217	30	224
	Fixed-term	1	10	1	12	0	11
By employment type	Full-time	21	218	22	224	18	223
	Part-time	7	5	9	5	12	12
Workforce excl. trainees		28	223	31	229	30	235
Plus trainees		3	12	3	14	2	15
<b>Total workforce</b>		<b>266</b>		<b>277</b>		<b>282</b>	

Including employees on maternity leave, parental leave, long-term sick leave or in partial retirement; not including interns.  
We had two employees on marginal employment (geringfügige Beschäftigung) in the reporting period.

**NEW EMPLOYEES BY AGE (AS OF 31 DECEMBER)**

	2022				2023				2024			
	< 30	30–50	> 50	Total	< 30	30–50	> 50	Total	< 30	30–50	> 50	Total
Male	8	4	2	14	13	13	2	28	7	6	4	17
Female	1	2	0	3	2	0	0	2	1	2	0	3
<b>Total</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>17</b>	<b>15</b>	<b>13</b>	<b>2</b>	<b>30</b>	<b>8</b>	<b>8</b>	<b>4</b>	<b>20</b>

**EMPLOYEE FLUCTUATION BY AGE (AS OF 31 DECEMBER)**

	2022				2023				2024			
	< 30	30–50	> 50	Total	< 30	30–50	> 50	Total	< 30	30–50	> 50	Total
Male	5	2	5	12	3	2	5	10	4	6	8	18
Female	1	0	1	2	1	1	1	3	1	1	2	4
<b>Total</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>14</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>13</b>	<b>5</b>	<b>7</b>	<b>10</b>	<b>22</b>

## Occupational safety

In Germany, there are stringent legal standards in place for occupational health and safety. In accordance with requirements, Schoellershammer has established experts in occupational health and safety, occupational health and safety officers and an Occupational Safety committee that meets regularly to discuss occupational safety risks and measures to prevent accidents. This

committee includes representatives of the technical director, the heads of relevant departments (Production, Technology and Logistics), the Works Council, the company doctor, occupational safety officers, the occupational safety manager and other employees.

There were nine reportable accidents in the reporting period, including five caused by tripping, falling or twisting an ankle.

Strong junior staff  
for a  
"HAMMER" future



# OUR SUPPLY CHAIN

In order to promote good social and environmental standards among our suppliers, we refined our CSR risk management system in 2024 and adapted it to industry-specific requirements.



**A**t Schoellershammer, three departments are primarily responsible for purchasing products and services.

Our Procurement department is responsible, in particular, for sourcing raw materials, such as paper for recycling, wheat starch and dye. We exclusively procure our materials from within Europe. Paper for recycling is primarily sourced from Germany, with some procured from neighbouring European countries. Our key suppliers include the waste management industry and the paper for recycling industry. They also include intermediaries from whom we purchase volumes of products on spot markets. Suppliers of paper for recycling usually engage logistics service providers to deliver the goods to us.

Our Logistics department engages haulage companies that provide transport services, distributing our paper products to our customers by truck or intermodally, in the case of longer distances. The vast majority of haulage companies are based in Germany or the Netherlands, although for customers in other European countries, we also use service providers from the same countries.

Our Technical Procurement department is responsible for sourcing technical components and services, which we exclusively source from within Europe, preferably from Germany. Beyond this, other departments take care of their respective purchasing needs themselves.

## REFERENCE DOCUMENTS FOR OUR DEFINITION OF DUE DILIGENCE

- UN Guiding Principles on Business and Human Rights (UNGPs)
- German Supply Chain Due Diligence Act (LkSG)\*
- EU Corporate Sustainability Reporting Directive (CSRD)
- EU Corporate Sustainability Due Diligence Directive (CSDDD)\*

\* Not mandatory for Schoellershammer.

\*\* Not likely to be mandatory for Schoellershammer.

## Exercising duties of care

Our understanding of due diligence obligations is based on the UN Guiding Principles on Business and Human Rights and the requirements of German supply chain legislation, even if our company does not fall within their scope of application. We welcome policymakers' efforts to create framework conditions that place ethical aspects closer to the heart of business activities.

In order to meet our due diligence obligations and document our efforts in a comprehensible manner, we have established a multi-level CSR risk management system in recent years.

All employees who purchase services for Schoellershammer are subject to our sustainable procurement guidelines. In 2023, we staged training on this topic for our buyers.

We have stable, trusting relationships with our suppliers and maintain a regular dialogue with them. This includes a structured annual review that includes sustainability aspects. We are currently extending the sustainability topics to be covered. As environmental issues are already well covered in these sessions, we focus on labour standards and human rights. We know our raw materials suppliers and haulage providers on a personal level and are in touch with them, sometimes on a weekly basis, but at least several times per year.

Since 2018, we have required all of our suppliers and business partners to comply with our code of conduct and tasked them with passing this obligation on to their own suppliers. We provide our code of conduct, ask them to sign it and incorporate their feedback into our CSR risk assessments.

In 2022, we introduced a tool to record CSR risks in our supply chain, focusing, in particular, on country-specific and industry-specific risks. Our analysis tool now covers our entire supplier pool, regardless of the amount of business we do with them, and we update the tool on a regular basis.

The materiality assessment we conducted in 2023 highlighted the area of logistics as presenting particular risks, which we describe in greater detail later in this report. In 2024, we designed forms for supplier self-disclosure and a questionnaire for auditing high-risk companies based on our risk analysis and used them for the first time. The management, our purchasers and the sustainability officer were involved in their development.

In the 2024 financial year, we sent 20 supplier self-disclosure forms to companies with a heightened risk profile: eleven to freight forwarders, five to service providers and four to other business partners. All supplier self-disclosure forms sent out were completed and returned. We also audited two freight forwarders and one service provider. No abnormalities were detected.

At the end of 2024, we added clauses on social responsibility to our General Terms and Conditions of Purchase. In particular, they contain our expectations of health and safety at work, the payment of appropriate wages and compliance with minimum wage laws and the fulfilment of human rights due diligence obligations. Our terms and conditions of purchase – as well as our supplier code of conduct – are on the homepage. We refer to both documents on our order forms and delivery notes.

### ELEMENTS OF THE CSR RISK MANAGEMENT SYSTEM AT SCHOELLERSHAMMER

- Code of conduct for employees
- Code of Conduct for suppliers and other business partners
- Sustainable procurement guidelines
- Training for buyers to raise awareness of sustainable procurement
- Personal dialogue and structured annual reviews with suppliers
- Supplier screening and subsequent CSR risk analysis

#### Since 2024:

- Supplier self-disclosure, including an extended list of questions for defined industries subject to elevated risks
- Supplier audits, including an extended list of questions for defined industries subject to elevated risks
- Inclusion of due diligence obligations in the General Terms and Conditions of Purchase
- Order forms refer to the Code of Conduct and the General Terms and Conditions of Purchase

#### Since 2025:

- Inclusion of human rights and labour standards in annual reviews with suppliers

**Logistics in action:  
The multitude of vehicle  
movements need  
to be coordinated**



## Specific challenges in relation to logistics

Reports on abuses in the logistics industry have cropped up in the media for years. Truck drivers working for haulage companies are subject to particularly high risks of exploitation. It is not uncommon for haulage companies to subcontract contracts across several levels. Around half of the haulage contracts on German roads are carried out by companies registered abroad. In addition, there are haulage companies that now only purchase tractor units or complete transport units, including drivers, from Eastern Europe. This systematically externalises the risks involved. Regulatory checks in this area are weak and the penalties for breaching labour laws are minor. The drivers also face language barriers, lack knowledge of the law and are dependent on their employers in a one-sided relationship.

In order not to make ourselves complicit, we only use haulage exchanges where orders are placed purely on a price basis, in the event of bottlenecks and by relying on haulage companies known to us. We now only work with selected contract partners. These comprise roughly 50 logistics companies, mostly medium-sized enterprises in our region, many of which have their own pool of drivers and which do their own scheduling. We know the management of these companies and many of their drivers. Only around 10% of our logistics partners are large service providers. These companies tend to cover transports to other countries in Europe.

Schoellershammer has an onboarding process for new haulage companies. This begins with a face-to-face meeting and mandatory registration in FUMO® – a compliance management system for transport logistics that is widely used in Germany. Among other things, it requires companies to commit to pay the statutory minimum wage and upload an EU licence and transport insurance. This EU licence confirms aspects including compliance with social legislation, working hours, safety standards and environmental requirements.

To ensure that the rights of truck drivers are upheld, we have been subjecting our logistics partners to closer scrutiny since 2024. For logistics companies with a heightened risk profile, we have developed a supplier self-disclosure system that is designed for the special risks of the logistics sector. Audits may follow if necessary.

We hold annual meetings with our material suppliers, who often engage haulage companies to deliver their materials to Schoellershammer. In 2025, we will include the topics of human rights and labour standards as fixed elements of our annual reviews.

# GRI INDEX

Schoellershammer GmbH has compiled this report in accordance with the GRI Standards for the period from 01/01/2024 to 31/12/2024.

The company has used GRI 1: Foundation 2021

Applicable GRI Sector Standards: none

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