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# DÖRKEN



## ENVIRONMENTAL STATEMENT 2025

CONSOLIDATED VERSION

## DÖRKEN IMPRESSUM

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# DO IT.

In der globalen Krise machen WIR den Unterschied.

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## 1. The Company

### 1.1 About the EMAS Environmental Statement

With this EMAS environmental statement, we aim to provide our customers, employees, owners, authorities, and our neighborhood with transparent information about the development and improvement of Ewald Dörken AG's environmental performance.

Protecting the environment and human health is a high priority at Dörken. Our company complies with all legal requirements related development, production, application, use, storage, and disposal – and where possible, we strive to exceed them.

Since 2004, Ewald Dörken AG has voluntarily participated in the European Union's Community Eco-Management and Audit Scheme (EMAS).

This environmental statement covers the 2024 financial year and covers the period from January 1, 2024, to December 31, 2024. The figures, facts, and information presented apply to our locations in Herdecke and Hagen.

**Note:** Changes in calculation methods, improved data quality, or updated information may lead to deviations compared to previous years. These are explained transparently in this environmental statement

### Foreword by the Executive Board

*„It is not only for what we do that we are held responsible, but also for what we do not do.“ (Molière)*

As a family-owned company with more than 125 years of history in the chemical industry, we act in accordance with this guiding principle. Our employees are our greatest asset, and we therefore cultivate a respectful and open working environment. A family-friendly workplace, a company pension scheme, as well as opportunities for company sports and health promotion are a matter of course for us.



Fig. 1: CEO Thorsten Koch

We also feel a special commitment to conserving resources and protecting our environment. This is why we decided several years ago to implement certified quality and environmental management systems.

Our company headquarters has been located in Herdecke since its founding, and as both a company and an employer, we feel deeply rooted in and connected to the local community and the region. Our Hagen-Vorhalle site, established in 2022, reinforces this commitment and reflects our responsibility as an employer. The Dr. Carl Dörken Foundation, founded in 1987, supports cultural institutions, schools, and sports clubs. Moreover, the entire Dörken organization and its employees are regularly involved in regional projects—financially and through substantial personal engagement.

The launch of a sustainability initiative for the entire corporate group was therefore a natural next step. This overarching project will in future provide the framework for all our activities in this important area. With this environmental statement, we make our sustainability efforts and activities transparent—not only for our employees and neighbors but also for our customers and suppliers.

Having laid the foundation for new ideas this year, we look forward to many exciting projects that will help ensure that the world of tomorrow remains a livable place.

## 1.2 Company Portrait

Ewald Dörken AG is a family-owned company with around 1,400 employees based in Herdecke and Hagen. The holding company consists of two business units, Dörken GmbH & Co. KG and Dörken Coatings GmbH & Co. KG, which manufacture high-quality products in the fields of films, paints, and corrosion protection.

Dörken GmbH & Co. KG (hereinafter referred to as **Dörken Membranes**) offers reliable system solutions for wind and moisture protection, building waterproofing and protection, and flat roof drainage. The highly innovative functional layers are used for protection around the home or as customized industrial solutions. Together with our partners, we are shaping the future of individual buildings and even urban architecture

Dörken Coatings GmbH & Co. KG (hereinafter referred to as **Dörken Coatings**) specializes in high-quality surface protection and offers solutions for a wide range of applications, such as high-performance corrosion protection and high-quality coatings with dispersions and paints for components, façades, and interior walls. In addition, we are a reliable and qualified partner for all aspects of pigment pastes and tinting systems.

Dörken Service GmbH (hereinafter referred to as **Dörken Services**) supports the two business units as a strong third entity. The services include the central departments HR, purchasing management, finance and controlling, investor relations, IT, general management, and HSE (health, safety, and environment).

In 1892, brothers Dr. Carl Dörken and Ewald Dörken founded Ewald Dörken oHG to produce varnishes, lacquers, and anti-corrosive paints at Wetterstraße 58 in Herdecke. Towards the end of the 19th century, the production of consumer and industrial goods increased significantly. This was accompanied by a rise in demand for coatings to protect a wide variety of surfaces. The expanding construction industry also had a growing need for building paints to meet a broad range of requirements.

With their experience as a trained chemist and a trained businessman, brothers Dr. Carl Dörken and Ewald Dörken decided to enter the manufacturing industry.

Since then, responsibility for the family business has been passed down from generation to generation, always guided by the principle of sustainable and continuous development. Dörken has thus grown from a small paint factory into a global company.

Today, the two wholly owned subsidiaries Dörken Coatings and Dörken Membranes are successfully positioned in their markets and are recognized as innovation leaders in their industries.



Fig. 2: Dörken - An innovative family business

## 1.3 Corporate Policy

### **DÖRKEN protects values**

This principle is at the heart of our work and is reflected not only in the quality of our products. As a family-owned company with over 1,000 employees, we take responsibility for people, society, and the environment. We put this principle into practice every day through targeted safety measures and high quality standards.

### **Customer Satisfaction and Legal Compliance**

We align ourselves with on the wishes and goals of our customers and are committed to complying with all relevant regulations, especially in the areas of environmental protection and occupational safety. Our success is based on the trust our customers place in the quality and safety of our products. Our goal is to offer reliable products and services and to ensure safe working conditions under all circumstances.

### **Economic Efficiency and Sustainable Value Creation**

Our corporate goals include securing our long-term independence, maintaining and developing our locations, and achieving sustainable economic performance. We act responsibly by designing our processes and products in compliance with the law and, wherever possible, optimizing them to be environmentally friendly and resource-efficient beyond the legal requirements. In the areas of transport, packaging, and product design, we rely on solutions that combine the highest safety standards with ecological responsibility. Our aim is to offer premium quality while simultaneously contributing to the protection of the environment.

### **Employee Commitment and Secure Workplaces**

Our Dörken quality and safety standards are an expression of our shared values—they are the result of the responsible actions and commitment of each and every employee. That is why we create a safe, trusting, and motivating work environment in which employees can perform their duties conscientiously and where continuous learning is encouraged. Promoting quality, environmental, and safety awareness is an integral part of our management concept.

### **Integrated Management System**

In order to achieve our corporate goals in terms of quality, environmental protection, and safety, we rely on an integrated management system based on ISO 9001, ISO 14001, and EMAS. This enables us to consistently implement the principles and requirements in our daily practice. The board of directors and management are committed to the continuous development of the system, taking into account technology, regulatory requirements, corporate principles, and customer needs.

### **Continuous Improvement**

The Dörken companies (Ewald Dörken AG, Dörken Service GmbH, Dörken GmbH & Co. KG, Dörken Coatings GmbH & Co. KG) strive for continuous improvement in all areas. We are committed to regularly reviewing and optimizing processes and procedures to minimize environmental impact, use resources efficiently, and continuously improve workplace safety.

This continuous improvement is a central component of our integrated management system and forms the basis for sustainable growth, quality enhancement, and risk minimization. All





employees are called upon to actively participate in this process and to advance the company's development with constructive ideas and feedback.

## Responsibility and Support

The Executive Board and management are responsible for maintaining and continuously developing the management system, supported by the management representatives, who receive the full support of senior management. Through training, the integration of environmental and sustainability aspects, and regular audits, we ensure consistent implementation of the system requirements and continuous improvement in quality, environmental protection, product responsibility, and safety.

## Sustainability and Environmental Protection

Our goal is to continuously reduce emissions and waste and to use resources efficiently, including through the use of environmentally friendly technologies. We are committed to using state-of-the-art technology to ensure the highest standards of environmental and safety compliance. Before introducing new activities, products, or process changes, we systematically assess their impact on the environment and safety. We take proactive measures to prevent accidents and minimize accident-related emissions. In addition, we expect our suppliers and service providers to comply with and promote comparable standards in the areas of environment, health, and safety.

## Proactive Hazard Prevention and Willingness to Engage in Dialogue

Through efficient hazard prevention organization, we minimize environmental and health risks and are well prepared for potential incidents. We maintain an open dialogue with authorities, the public, and our employees, and provide comprehensive information about the environmental impact of our activities.

## Learning Culture and Prevention

We learn from events by thoroughly analyzing accidents and near misses in order to prevent similar incidents in the future. In doing so, we promote a positive error culture that enables open communication about mistakes and serves as a basis for continuous improvement. *Safety is of equal importance to us as economic success.*

The management and all employees of the above-mentioned Dörken companies are committed to complying with company policy and annual targets in terms of quality, environment, safety, and sustainability, and to providing the necessary resources for their implementation.





## 2. Scope of EMAS

The following Ewald Dörken AG companies define the scope of EMAS:

- Dörken GmbH & Co. KG (hereinafter referred to as **Dörken Membranes**),
- Dörken Coatings GmbH & Co. KG (hereinafter referred to as **Dörken Coatings**).

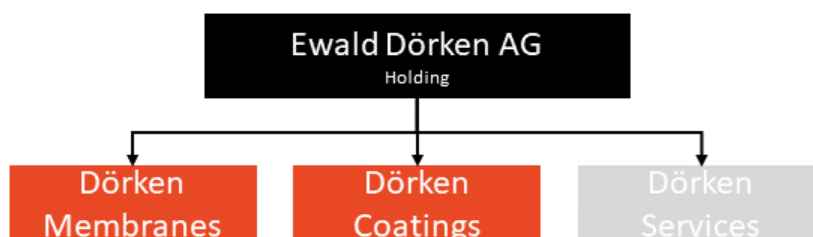


Fig. 3: Organization of Ewald Dörken AG and scope of EMAS (orange)

Der Standort in **58313 Herdecke an der Wetterstraße 58** ist der **Hauptsitz** der Dörken-Geschäftseinheiten. Der **Nebensitz** der Dörken Membranes ist der Standort in **59098 Hagen an der Brünninghausstraße 8**.

The location at **Wetterstraße 58, 58313 Herdecke**, is the **headquarters** of the Dörken business units. The **secondary location** of Dörken Membranes is at **Brünninghausstraße 8, 59098 Hagen**.

The CEO of Ewald Dörken AG is Mr. Thorsten Koch. The managing directors of Dörken Membranes are Mr. Thorsten Koch, Mr. Christian Harste, and Mr. Ingo Quent. The managing directors of Dörken Coatings are Mr. Thorsten Koch and Mr. Christos Tselebidis.

### 2.1 Main Location Herdecke

The Dörken Membranes division processes polymers such as polyethylene and polypropylene. Operating materials, packaging, and auxiliary materials are also used. These materials are processed using extrusion lines, calenders, and winding stands. For storage, various silo and racking systems are available across the site.

The Dörken Coatings division processes binders, resins, solvents, and pigments. Operating materials, packaging, and auxiliary materials are also used. These are processed with the aid of agitators, containers, and mills. As with Dörken Membranes, various silo and racking systems are available on the premises for safe and compliant storage.

Dörken Services handles central and cross-functional tasks for the manufacturing divisions in the areas of HR, purchasing management, finance/controlling, investor relations, IT/O (IT & organization), GM (facility management), and HSE (health/safety/environment).

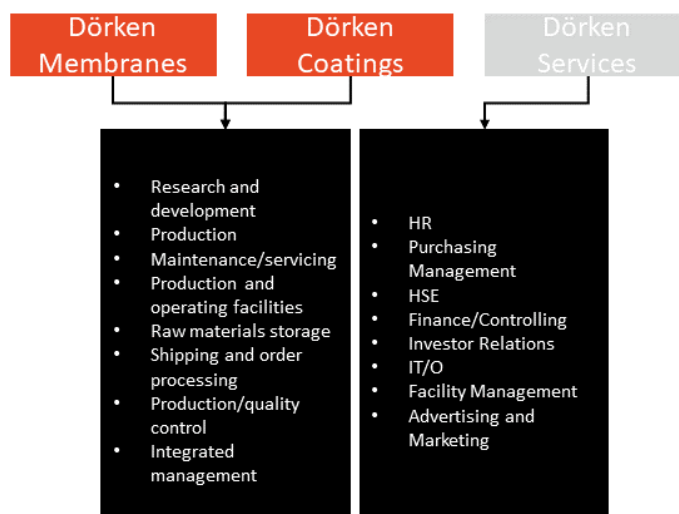
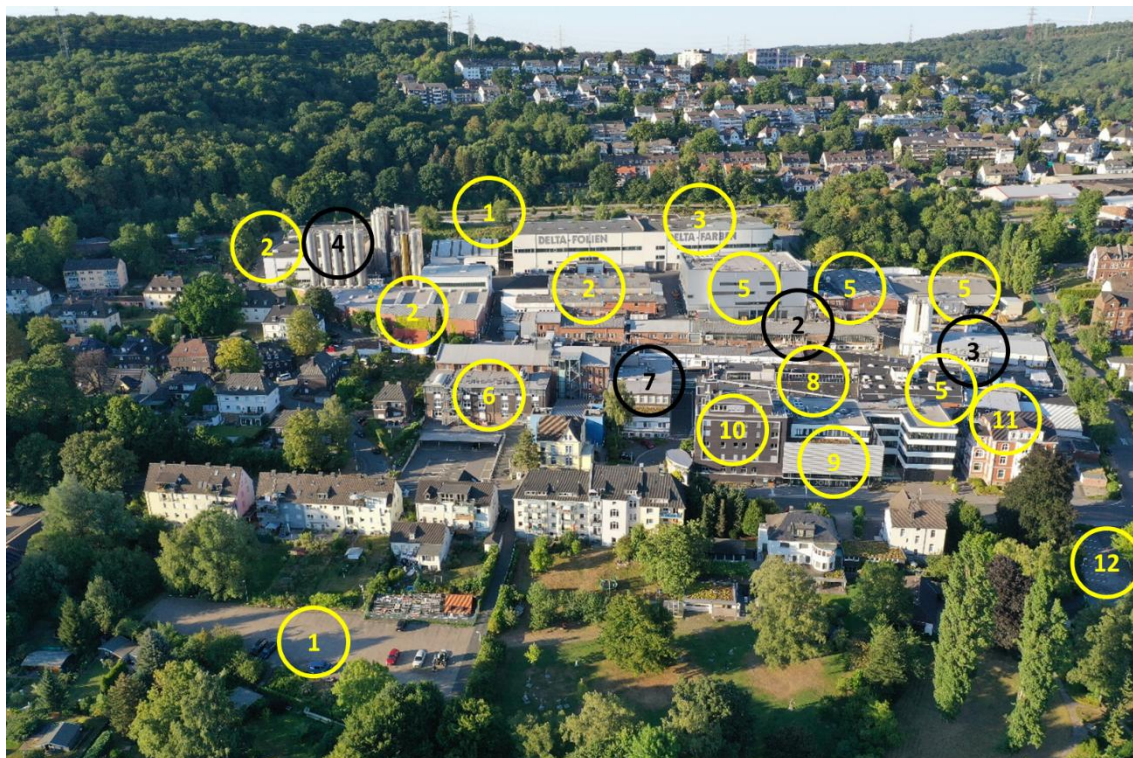


Fig. 4 Distribution of tasks among the Dörken business units

The Herdecke site employs 600 people.

Due to the hillside location with an average gradient of around 9% and the the historically evolved site layout, close coordination between the individual parts of the plant is necessary. This is particularly true as numerous infrastructure facilities, such as the power supply, fresh water and sewage networks, and cooling systems, are shared across the entire site and between the different companies. The Wetterstraße site is almost completely built up and approximately 92% sealed. The area covers approximately 75,000 m<sup>2</sup>, of which approximately 69,300 m<sup>2</sup> are sealed.

The Robert Bonnermann School and the Hagen–Dortmund railway line are located in the immediate vicinity of the factory premises. The Ruhr River runs about 100 meters away in a straight line.



*Fig. 5: Herdecke location: 1: Employee parking; 2: Membrane production; 3: Dörken Coatings raw materials warehouse; 4: Dörken Membranes silo warehouse; 5: Dörken Coatings production; 6: Dörken Coatings/Membranes application technology/Dörken Coatings laboratories and works council; 7: R&D Dörken Membranes; 8: R&D Dörken Coatings; 9: Administration; 10: Purchasing management; 11: HSE and IT; 12: Guest parking. (The colors were deliberately chosen to ensure good visibility against the background.)*

Access to the Ewald Dörken AG factory premises is via the former B234 federal highway through the center of Herdecke. Gate 1 is located directly on Wetterstraße. It is manned around the clock by our own staff or a security service. Gate 1 also houses the fire alarm control panel (BMZ), the fire department control panel, and the emergency plans. External company employees check in and out there, receive instructions, and are given access passes that allow them to enter the premises via the electronic access control system. Visitors, on the other hand, register in the foyer of the new administration building.

In addition to Gate 1, there are other access points to the factory premises: Gate 6 (North Gate) in the upper part of Schillerstraße, Gate 2 on Wetterstraße next to Villa Frieda, Gate 3 in the lower part of Schillerstraße, and Gates 4 and 5 on the street "Auf der Helle." Dörken Membranes operates continuously in three shifts from Monday to Sunday. Dörken Coatings and Dörken Services have regular operating hours from Monday to Friday between 6:00 a.m. and 6:00 p.m.



Several parking spaces are available for employees in the immediate vicinity of the plant. Separate parking spaces are designated for visitors directly opposite the main entrance on the so-called Ruhr parking lot.

There are some areas on the company premises that pose particular hazards. These include transformer stations, fully enclosed radioactive thickness measuring systems, explosion hazard zones, areas where firefighting with water is prohibited, CO<sub>2</sub> extinguishing systems, gas cylinder storage facilities, tank farms, and compressors.

The Herdecke location is classified as an upper-class operating area according to 12. BImSchV, with two relevant production areas being decisive. This entails special obligations, which include the following points: enhancing facility safety, reporting malfunctions, complying with the provisions of the law and the ordinance, and reporting deficiencies related to fire protection and plant safety.

## 2.1.1 Structural Changes

Since 2021, no construction measures have been carried out at the Herdecke site that would be considered significant with respect to environmental impact or building structure in accordance with Annex IV of the EMAS Regulation.

## 2.2 Secondary Location Hagen

Several Dörken Membranes production facilities are located at Brüninghausstraße 8, 58098 Hagen, employing 260 people.

At this site, membranes with structured surfaces and spunbonded nonwovens are produced. The production units, associated goods-receiving areas, and storage facilities for finished products are all located on the premises. The total area of the site is approximately 78,000 m<sup>2</sup>, of which about 22,900 m<sup>2</sup> are built over and about 28,000 m<sup>2</sup> is paved, resulting in a sealed area of 50,900 m<sup>2</sup> (65%).

The site is located within the immediate urban area and directly adjoins residential development. Hagen-Vorhalle railway station and the Hagen–Dortmund rail line are located in the immediate vicinity, directly adjoining the site. The Ruhr River flows approximately 200 meters away, and a Ruhr water-treatment catch basin is located around 50 meters from the premises.

The main access to the site is via Brüninghausstraße 8. Gate access is managed via a fire department key safe and an external security service. The site operates a continuous three-shift system from Monday to Sunday. Outside regular operating hours, the site continues to be monitored by the contracted security service, ensuring continuous on-site presence. Parking facilities are available directly in front of the site.

Particular hazards on the site include a transformer station, a fully enclosed radioactive thickness-measurement system, a legacy contaminated site, a gas cylinder storage facility, and several compressor units. Polymers such as polyethylene are used in the production process. Operating materials, packaging, and auxiliary substances are also used. Manufacturing is carried out using extrusion lines, calenders, and winding equipment. Silo and racking systems are available for storage purposes.



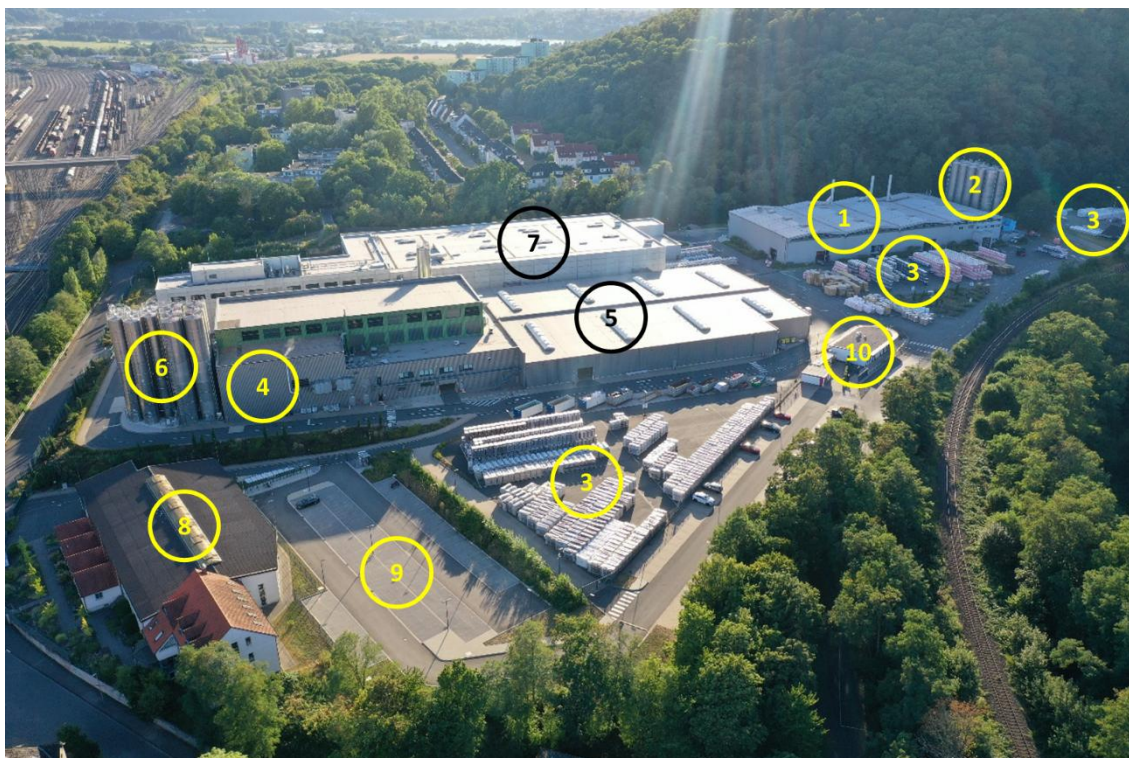


Fig. 6: Hagen location. 1: Production of dimpled membrane; 2: Storage silo for raw materials for dimpled membrane; 3: Finished goods warehouse; 4: Spunbond production; 5: Finished goods warehouse for spunbond; 6: Raw materials warehouse for spunbond; 7: Dörken membrane production; 8: Dörken Zubehör GmbH; 9: Employee parking lot; 10: Gatekeeper. (The colors were deliberately chosen to ensure good visibility against the background.)

## 2.2.1 Structural Changes

During the reporting period, a structural change with environmental significance within the meaning of Annex IV of the EMAS Regulation was carried out:

- Replacement of two drum melters in the DSE A area:

The modernization significantly reduced the amount of adhesive that must be disposed of during barrel changes – from around 12 kg to around 1 kg per barrel. This constitutes a sustainable optimization in the use of raw materials and a corresponding reduction in waste generation.

## 2.3 Organizational Changes

### 2022

In 2022, the Group-wide sustainability team P3 was established under the leadership of Mr. Kröffges (Dörken Membranes).

Team P3 focuses on environmental and sustainability matters as well as the further development of the integrated management system of Ewald Dörken AG. Its responsibilities include preparing this environmental statement. For this reason, the involved developers and managers are listed by name in this report as contact persons.

On March 1, 2022, Mr. Robin Neuser assumed the position of Head of Health, Safety, and Environment (HSE).



In the same year, Mr. Eusemann joined the HSE team as a safety engineer and occupational safety specialist.

In 2022, Mr. Tebbe also joined the Building Management department as a project manager for construction projects.

## 2023

In 2023, Mr. Rüter began his role as Vice President Strategic Projects Operations at Dörken Coatings.

## 2024

In 2024, Mr. Alex was appointed as the second Managing Director of Dörken Services.

Since summer 2024, Mr. Vossius has held the position of site manager.

In the same year, Mr. Kröffges additionally assumed group-wide responsibility for sustainability and integrated management systems within Ewald Dörken AG.

Effective June 1, 2024, the production organization of Dörken Coatings was restructured. The solvent-based products division (formerly SBC), the water-based products division (formerly WBC), and the pastes division (formerly Tinting) were merged into a single unit, "Production Architectural Coatings," jointly managed by Christian Hackstein and Christian Rachni.

Since July 1, 2024, Dr. Ingo Klüppel has been responsible for the Industrial Coatings production division (formerly CPC). Both divisions fall under Mr. Rüter's area of responsibility.

Since 2024, Mr. Genzke has been supporting the HSE team as a safety technician with a focus on maintaining the Quentic system.

Ms. Runggas has joined the HSE team as an environmental engineer and safety engineer.

In 2024, the HR department's structure was realigned to better meet the increasing and diverse requirements of the various business units. As part of this realignment, responsibility for cross-functional HR topics was transferred into a matrix organization.

Ms. Kufahl continues to serve as HR Manager for Dörken Membranes.

Ms. Schröder remains HR Manager for Dörken Coatings.

Ms. Ullosat continues in her role as HR Manager for Dörken Services, with responsibility for recruiting and vocational training.

## 2025

On January 1, 2025, Mr. Tselebidis joined Dörken Coatings as Managing Director.

Effective June 15, 2025, Mr. Czech (Dörken Services), a developer in the P3 sustainability team, was appointed Environmental Management Officer of Ewald Dörken AG.



### 3. Dörken Coatings

High-performance micro-layer corrosion protection systems, architectural coatings, emulsion paints, pigment preparations, and pastes—whether solvent-based, solvent-free, or water-based—are the final result of a largely automated production process.

In the first step, the raw materials (pigments, binders, solvents) are retrieved from storage and prepared according to the formulation using scales or dosing systems (mass or volume metering). The raw materials are then processed in a dissolver and subsequently transferred to an additional mixing unit for final blending.

Depending on the requirements of the formulation, the mixture may need to be milled in a bead mill to achieve proper pigment dispersion. After passing through the final mixer, the product undergoes laboratory quality control. If the coating systems, paints, emulsions, and pigment pastes meet the stringent quality specifications, they are then filled, packaged, and palletized for shipment. Afterwards, the finished pallets are stored in the finished goods warehouse until they are collected. The products are supplied to qualified applicators and wholesalers and are processed by professional users.

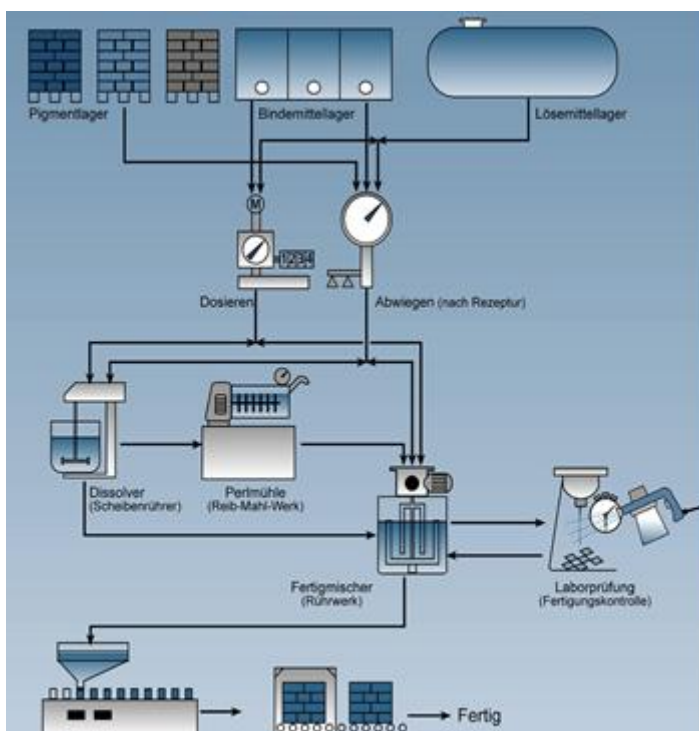


Fig. 7: Dörken Coatings production diagram

Dörken Coatings produces an environmentally friendly alternative for each product category. The use of these products is limited solely by the capabilities and willingness of professional applicators to employ environmentally compatible alternatives (low-solvent, aromatics-free, water-dilutable). If optimal solutions cannot be achieved due to quality constraints, Dörken Coatings nevertheless strives to develop at least partial solutions through internal R&D efforts.

Environmental and occupational health protection are of paramount importance at Dörken Coatings. The company consistently aims not only to comply with legal requirements, but to exceed them wherever possible – across all phases of the product life cycle, from development and production to application, use, storage, and disposal.

As the market leader in chromium(VI)-free corrosion protection systems, Dörken Coatings has been setting industry benchmarks for many years. A central objective of its development activities is to anticipate regulatory requirements at an early stage and proactively develop sustainable solutions. This includes, in particular, the development of biocide-free architectural coatings and PFAS-free coating systems – despite the considerable technical complexity and the diversity of the product portfolio.

High corrosion protection performance ensuring long component service life is a fundamental standard. In addition, the energy consumption of customers is actively taken into account: Innovative systems with reduced curing temperatures enable significant savings potential – representing a further contribution to increased sustainability and efficiency in industrial coating processes.

## 3.1 Business Context

### 3.1.1 Internal Topics

#### **Strengthened corporate management through centralized responsibility and continuous improvement**

Since 2024, quality, environmental, and CSR responsibilities have been consolidated within the central “Quality & CSR” department. This restructuring significantly enhances the integration of sustainability, process management, and compliance into corporate governance.

To increase efficiency and optimize processes, additional measures have been implemented. These include the ongoing optimization of production facilities, supply chain and logistics processes, as well as the introduction of standardized setup and production specifications. These initiatives contribute to error prevention and resource conservation.

#### **Qualification and participation as success factors**

Approximately 600 employees work at the Herdecke site. Training, knowledge transfer, and active staff involvement are essential prerequisites for successfully achieving environmental and quality objectives.

A systematic training program strengthens both technical competencies and awareness of sustainability, quality, and occupational safety. In addition to traditional training formats, digital learning tools and hands-on instruction are becoming increasingly important to provide knowledge in a flexible and targeted manner.

#### **Technology leadership through environmentally friendly solutions**

With regard to its product portfolio and innovative capabilities, Dörken Coatings holds a leading technological position in chromium(VI)-free corrosion protection systems. In addition, PFAS-free and biocide-free solutions are being developed. Furthermore, products designed for lower curing temperatures contribute to improved energy efficiency for customers.

### 3.1.2 External Topics

#### **Regulators and customer expectations as key drivers**

The company is strongly shaped by legal and regulatory requirements. These include REACH/CLP, CBAM, CSRD, the EU Taxonomy, the EUDR (deforestation-free supply chains), the Energy Efficiency Act (EnEfG), as well as increasingly stringent VOC and emission limits. Compliance is ensured through the Quentic system, supported by a regularly updated legal register.

Customer and market expectations are also becoming more prominent. The automotive industry in particular requires evidence of CO<sub>2</sub> footprints, recyclability, and PFAS-free products. Sustainable products with extended life cycles and transparent ESG data are emerging as essential prerequisites for contract awards.

#### **Raw material risks and dependencies as key influencing factors**

Supply chain and raw material risks represent another significant challenge. Dependencies on critical suppliers and the availability of petrochemical raw materials lead to risks such as material shortages, price volatility, and rising transparency requirements, for example through the Digital Product Passport.





These factors increase procurement complexity and have a direct impact on cost structures, production security, and planning reliability. Geopolitical developments, international trade conflicts, and climate-related extreme events can further destabilize global supply chains.

In addition, societal and environmental megatrends are shaping products, markets, and corporate processes. These include climate change and its associated effects—heat, heavy rainfall, and drought—as well as demographic shifts, digitalization, and increasing urbanization.

## Climate change as a cross-cutting topic

The requirements of the ISO 14001 amendment on climate change have been incorporated into a double materiality analysis:

- Outside-in (financial risks):
  - Extreme weather events threaten infrastructure and supply chains.
  - Rising temperatures lead to higher cooling and energy costs.
  - Water scarcity poses risks for production processes.
  - Stricter emissions and ESG regulations increase pressure to adapt.
- Inside-out (impact of the company):
  - Direct and indirect CO<sub>2</sub> emissions (Scopes 1–3).
  - Use of petrochemical raw materials and high water consumption in production.
  - VOC emissions and waste volumes require systematic reduction.
- Opportunities:
  - Development of bio-based and water-based coatings.
  - Circular economy approaches.
  - Energy efficiency measures (PV systems, green electricity, biological exhaust air scrubbers).

## 4. Dörken Membranes

Dörken Membranes develops, manufactures, and distributes membranes for building construction, civil engineering, gardening, and landscaping. The product portfolio includes solutions for foundation wall protection, drainage, underlay membranes, and vapor barriers. Foundation wall protection products safeguard structures against moisture ingress from the ground, while underlay membranes and vapor barriers protect roof constructions from high humidity.

During membrane production at Dörken Membranes, plastic granulates are transported from silos, octabins, or bags through pipelines to an extruder. Additives such as color masterbatches or stabilizers are metered into the plastics. Inside the extruder, the material is melted under controlled temperature and pressure. The molten polymer melt is then pressed through a die and applied onto a rotating roller. Depending on the product type, flat substrates such as fabrics or nonwovens are integrated into the process. The solidifying material is conveyed through several rollers, wound into rolls, and subsequently cut into saleable lengths.

In addition to membrane production, Dörken Membranes also manufactures nonwoven layers for underlay membranes. Raw materials are automatically conveyed from silos to extruders via pipeline systems. Additives such as colorants are dosed according to defined formulations using automated weighing systems. In extruders A and B, the mixture is melted and transported to the die by a screw. Under pressure, the molten mass is extruded through a die and a perforated plate, forming continuous fibers.

These fibers are cooled and stretched by air, reducing the fiber cross-section. The stretched fibers are deposited onto a moving screen belt, which transports the fiber web to two rollers, the so-called





calender. In the calender roll, the loose fibers are thermally bonded under pressure and temperature. Alternatively, consolidation can be achieved by needle punching. A downstream winding unit then forms large rolls of the finished nonwoven for further processing. A schematic process diagram is shown below.

Finished products are predominantly distributed to wholesalers and installed by professional construction contractors.

### Strategic realignment: Focus on durability, efficiency, and resource conservation

In recent years, the product portfolio for underlay and underlayment membranes has been fundamentally realigned—with a clear focus on maximizing product service life.

The entire range has undergone a comprehensive revision, resulting in product lines that guarantee a minimum service life of 30 years – a commitment our customers can rely on. This durability is achieved through the use of high-quality polymers and represents an important contribution to environmental protection.

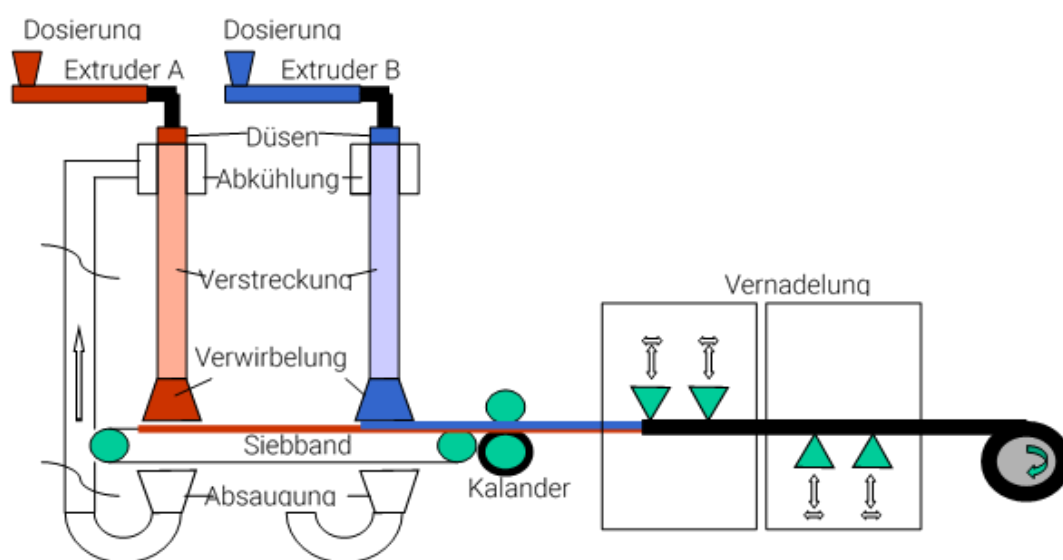


Fig. 8: Dörken Membranes production diagram

In addition, all underlay membranes have been equipped with an innovative adhesive application. For tradespeople, this eliminates the need for cumbersome manual bonding. Installation becomes significantly easier and faster while ensuring a secure and consistent bond between the membranes – regardless of weather conditions. As a result, membrane tightness is ensured for at least 30 years.

In the premium segment, a double adhesive strip is now used, enabling material savings of up to 30%. Simply rotating the membrane during installation greatly reduces off-cut waste, thereby lowering costs and minimizing environmental impact. At the same time, the integrated self-adhesive edge reliably protects against the ingress of cold and moisture – contributing to an energy-efficient roof that reduces heating costs and provides long-term protection.

With this combination of durability, quality, and ease of installation, new benchmarks are being set in the field of underlay and underlayment membranes – delivering sustainable solutions that benefit both customers and the environment.

## 4.1 Business Context

### 4.1.1 Internal Topics

#### Developments in the context of sustainable corporate management

As part of the company's ongoing efforts to enhance environmental and economic performance, several significant internal developments have been advanced in recent years. These initiatives not only strengthen operational efficiency and the company's capacity for innovation, but also provide the foundation for a more sustainable design of business processes, products, and customer relationships.

#### Efficiency enhancement and operational excellence

Since 2023, a central area of focus has been the optimization of the machinery fleet to improve energy consumption, material efficiency, and production throughput. In addition, targeted measures have been implemented to streamline supply chain and logistics processes. Key priorities included increasing the utilization of transport capacities, reducing empty runs, and more strongly integrating regional suppliers to minimize transport-related emissions.

Parallel to this, the development of standardized setup and production specifications has been accelerated. These contribute to error prevention, reduced paper consumption, and faster onboarding of new employees, while simultaneously increasing overall productivity and conserving resources.

As part of the redesign of the plant layout in 2023, production areas were reorganized, material flows optimized, and spatial synergies leveraged. These measures resulted in improved energy efficiency, shorter internal transport routes, and enhanced working conditions for employees.

#### Innovation and new markets

Innovative products and forward-looking market strategies form the basis for sustainable growth. In recent years, the focus has increasingly been on developing future-oriented products that take climatic and economic market dynamics into account.

Building on these developments, several innovation projects have been initiated that will generate both economic and ecological benefits for the company.

#### Customer focus and product responsibility

A core element of the environmental strategy is a consistent focus on customer needs and the assurance of sustainability throughout the entire product life cycle. This includes, in particular:

Ensuring the marketability of products in the face of ever-increasing regulatory requirements.

- Ensuring product compliance and marketability in the face of continuously increasing regulatory requirements.
- Reducing transport-related damage as part of the "Transport Damage" project in order to minimize material losses, customer complaints, and associated emissions.
- Focusing on product longevity, as communicated in the XX marketing story, to ensure the longest possible service life.



## 4.1.2 External Topics

### Market environment and regulatory framework

The environmental strategy is closely linked to developments in the market environment, evolving customer expectations, and applicable legal and regulatory requirements. A deep understanding of these external factors enables the proactive development of sustainable solutions that meet ecological, economic, and social demands.

### Megatrends and global developments

The framework conditions for business activities are increasingly shaped by global megatrends. These profound and long-term developments present not only challenges but also opportunities for innovation and strategic differentiation. Particularly relevant trends include:

- Globalization and the resulting interconnected markets
- Climate change as a central ecological challenge
- Increasing resource scarcity
- Ongoing digitalization and connectivity
- New forms of mobility and urbanization
- Demographic change
- Growing requirements in the areas of health and safety

In 2023, these developments were systematically assessed in a strategic analysis under the heading "Megatrends." The insights gained are directly incorporated into product development, service strategies, and internal processes to ensure early and effective responses to societal and environmental changes.

### Applicable legal provisions

Legal requirements in the fields of occupational safety and environmental protection are continuously increasing at both national and international levels. To address these developments, the digital platform Quentic has been used since 2023, enabling more efficient, secure, and transparent compliance processes. This ensures precise documentation, active risk management, and the sustainable safeguarding of legal compliance.

### Applicable norms and technical standards

Significant changes are also emerging in the area of technical standards. Two trends, in particular, are having a lasting impact on product policy:

- The increasing demand for guaranteed product service life
- Growing requirements regarding application safety

Both trends contribute to higher complexity in product development and simultaneously make the use of recycled materials more difficult. This is because enhanced safety requirements are often linked to stricter material specifications. Since 2022, these developments have been systematically documented and analyzed in an internal standards database, ensuring rapid and targeted responses to normative changes.



## 5. Relevant Environmental Regulations

The companies of the Dörken Group use the Quentic software solution to continuously monitor legal and regulatory changes. The “Legal Compliance” module is operated under an existing contract with eco COMPLIANCE GmbH, whose legal experts and technical specialists provide quarterly updates on relevant regulatory developments.

If a legal amendment results in a concrete need for action within the company, a corresponding task is automatically generated in Quentic. This task is assigned to the responsible functional manager and must be processed accordingly. The use of the software ensures structured documentation and provides a reliable audit trail demonstrating compliance with legal obligations.

The environmental regulations listed in Table 1 are of particular relevance for the Dörken Group. Additional legal requirements can be accessed in the digital legal register within Quentic.



Tab. 1 Excerpt of environmentally relevant, binding commitments by location or business unit

Legal framework	Scope
Bundesimmissionsschutzgesetz (BImSchG)	Both locations
4. Bundesimmissionsschutzverordnung (BImSchV) – Verordnung über genehmigungsbedürftige Anlagen	Herdecke
12. BImSchV – Störfallverordnung	Herdecke
31. BImSchV – Lösemittelverordnung	Both locations
42. BImSchV – Verordnung über Verdunstungskühlanlagen	Both locations
Wasserhaushaltsgesetz (WHG)	Both locations
Chemikaliengesetz (ChemG)	Both locations
Kreislaufwirtschaftsgesetz (KrWG)	Both locations
Strahlenschutzverordnung	Both locations
Erneuerbare-Energien-Gesetz (EEG)	Both locations
Bundesbodenschutzgesetz (BBodSchG)	Both locations
Gesetz über die Beförderung von gefährlichen Gütern (GGBefG)	Both locations
Gewerbeabfallverordnung (GewAbfV)	Both locations
Energiedienstleistungsgesetz (EDL-G)	Both locations
EG-Verordnung Nr. 1221/2009 (EMAS III) mit den Novellen der EMAS-Verordnung nach den Änderungsverordnungen (EU) 2017/1505 vom 28.08.2017 und (EU) 2018/2026 vom 19.12.2018.	Both locations
Löschwasser-Rückhalte-Richtlinie (LöRüRL)	Both locations
Technische Anleitung z. Schutz gegen Lärm (TA Lärm)	Both locations
Technische Anleitung z. Reinhaltung der Luft (TA Luft)	Both locations
Geruchsimmissions-Richtlinie (GIRL)	Both locations
Lösemittelhaltige Farben- und Lack-Verordnung (ChemVOCFarbV)	Herdecke
Technische Regeln für Gefahrstoffe (TRGS)	Both BUs
Lieferkettensorgfaltspflichtengesetz (LkSG)	Both BUs
Carbon Border Adjustment Mechanism (CBAM)	Both BUs
EU Deforestation Regulation (EUDR)	Both BUs
REACH-Verordnung	Both BUs
CLP-Verordnung	Both BUs
Biozid- und Pflanzenschutzrecht	Both BUs
Gefahrstoffverordnung (GefStoffV)	Both BUs
Arbeitsschutzgesetz (ArbSchG)/Betriebssicherheitsverordnung (BetrSichV)	Both BUs
DGUV-Vorschriften	Both BUs
Chemikalien-Verbotsverordnung (ChemVerbotsV)	Both BUs
General Product Safety Regulation (GPSR)	Both BUs
Transportrecht (ADR, RID, IMDG, IATA)	Both BUs
ISO 9001, ISO 14001, EMAS	Both BUs
Verband der Automobilindustrie (VDA)	DöCo
Anwendungsnormen (z. B. DIN EN 13252)	Both BUs
Construktion Product Regulations (CPR)	DöMe
Anforderungen von Versicherungen und Kreditinstituten	Both BUs
Verbandsspezifische Anforderungen:	
AVIS Technique, ZVDH, ICC, IAPMO	DöMe
Kundenspezifische Anforderungen:	
QNG, EU-Taxonomie, BNB	DöMe
IMDS	DöCo
DGNB	Both BUs

The safety of employees and residents, as well as environmental protection, are top priorities within the Dörken Group – even ahead of product quality and economic success. The company works toward this goal every day with a high level of professional expertise. If deviations are identified during the systematic review of legal obligations, appropriate countermeasures are initiated immediately. If necessary, the relevant authorities are also involved. This ensures that all facilities operate in compliance with legal requirements at all times.

In addition to legal regulations, Dörken Coatings and Dörken Membranes are also subject to other binding obligations. The companies of the Dörken Group also review compliance with such obligations, some of which are based on their own decisions.

The Dörken Group currently complies with all environmental regulations and requirements.

## 5.1 Continuous Verification of Legal Compliance

Continuous monitoring of legal compliance is a high priority within the Dörken Group. The following methodological approaches are used to review the respective framework conditions:

- Internal audits by the Integrated Management System officers in cooperation with specialists from the HSE department; optional involvement of additional internal auditors
- Regular safety and environmental inspections by specialists from the HSE department
- Document audits to check environmental and safety-related documentation by the HSE department.
- Regular processing of legal obligations in the Quentic system by the respective managers with the support of HSE specialists.
- Audits at waste disposal companies by the waste management officer.
- Information for managers about relevant legal changes via the Quentic platform.

Responsibility for compliance with the respective legal requirements lies with the operators of the respective organizational units in accordance with the delegation of duties.

## 5.2 Integrated Management System

The concept of quality has a long tradition at Dörken and was established early on within the company. Over the past four decades, the topics of environmental protection and occupational safety have continuously gained importance – driven by internal company goals, customer requirements, and legal regulations.

Since the year 2000, numerous organizational developments have been implemented, which have particularly strengthened the areas of environmental protection, energy efficiency, quality assurance, and occupational safety in a sustainable way. Today, the following management areas are considered equally important within the company:

- Quality Management (QM)
- Environmental Protection / Energy Efficiency (EP)
- Occupational Safety (OS)

This equality is reflected in the implemented Integrated Management System (IMS).

The organization, responsibilities, and procedures, such as those for handling customer inquiries, complaints, hazards, accidents, requirements, or suggestions for improvement, are regulated in clearly defined process descriptions, procedures, and work instructions.



A continuously developed control loop, which includes Environmental audits, improvement measures, reviews, public relations and reporting illustrate the structured interaction of all activities within our management system.

A large part of the documents and data is now structured and stored centrally in the Dörken IT network. The Dörken processes are regularly evaluated and continuously developed. Corrective measures play a central role in ensuring and improving process quality. An important component of the continuous improvement process is the initiative „Responsible Care“ (responsible action) of the chemical industry, which was launched over 25 years ago. It includes, among others, the following areas of action:

- Product responsibility
- Occupational and health protection
- Plant and transport safety

These principles are firmly anchored in Dörken's integrated management system.

## 5.3 Organisation and Responsibilities

For the companies in the Dörken Group, the safety of employees and residents as well as the protection of the environment are the highest priorities. A clear and transparent organizational structure of company representatives, including the responsibilities defined for this purpose, ensures both compliance with legal requirements and efficient and effective processes. The operational representatives for the integrated management system (IMS) report directly to the management/board of directors. They work closely with the other operational agents as shown in the figure.

There are comprehensive internal emergency and alarm plans in place in case of an incident. In close cooperation with the relevant fire and civil protection authorities, operational alarm and hazard prevention plans (BAGAP) are also drawn up and regularly updated. In the event of major events, a specially established corporate staff can be activated to manage coordinated actions.

Operational policies ensure that managers and employees are informed about key behaviors and special procedures and can act appropriately in the event of an incident.

The representative functions are not entirely subordinate to the respective manufacturing divisions or the managing directors according to §52b BImSchG. The functions (Fig. 9: marked in orange, excluding UMB and IMS) are subject to the Health, Safety & Environment department within Dörken Service GmbH in terms of expertise and discipline.

The specialist in occupational medicine is permanently employed.

The decentralized HSE functions of the safety officer and fire and evacuation assistants are available in sufficient numbers in all areas of the company and are appointed in writing.

Legal liability over the order is ensured for the respective operating companies.



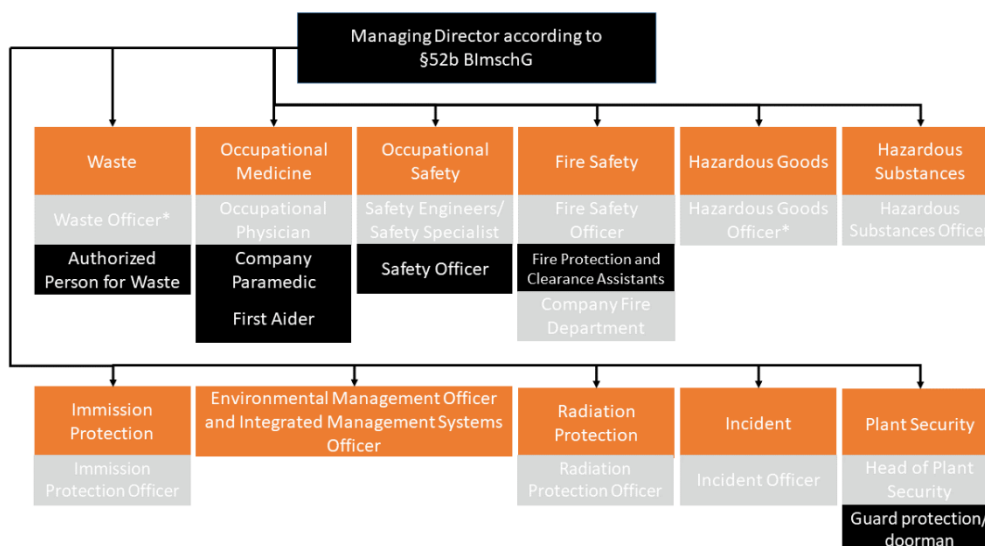


Fig. 9: Representative organizational chart. \*: external service provider.

## 5.4 Employee Participation

The continuous improvement of the company's preventive and additive environmental protection is achieved through the direct involvement of employees. To this end, employees have the opportunity to propose optimization options for the company's suggestion system. In recent months, these have included, for example, proposals to examine government subsidies on energy costs. Upon receipt of a proposal for improvement, it will be evaluated by the specialist departments.

In 2024, the P3 team organized a Sustainability Day to raise awareness and inform employees about various environmental issues. Six specific priority themes were presented:

- Climate change
- Nutrition
- Renewable energy
- Microplastics
- Sustainable consumption
- Mobility

The events were announced and accompanied internally via the intranet. Around 80 employees showed interest and took part in the event – significantly more than originally planned.

In addition to organizing the Sustainability Days, the P3 team also regularly informs employees about other sustainability topics via the intranet, e.g. B. on the current development of the Corporate Sustainability Reporting Directive (CSRD).

Sustainability reporting specifically involved previously identified stakeholders. For this purpose, qualitative interviews were conducted with selected internal and external stakeholders. The aim was to capture relevant sustainability issues from a stakeholder perspective and to gain a better understanding of their expectations and requirements.



In addition, all business units (BUs) of Ewald Dörken AG have independently conducted workshops with employees from all departments. In these workshops, possible impact, risk, opportunities (IROs) were systematically collected and discussed.

The results from the interviews and workshops were compiled, analyzed and evaluated. On this basis, a double materiality analysis was carried out to determine the company's core IROs. This analysis takes into account both the impact of the business activity on the environment and society (Impact Materiality) and possible financial impacts on the company (Financial Materiality).

In 2024, Dörken also successfully participated in the Energy Scout program of the South Westphalian Chamber of Industry and Commerce (SIHK) – a program for the qualification of trainees in the field of energy efficiency and corporate climate protection. The aim is to enable young employees to independently identify and implement savings potential in the company.

This year's energy scout team was dedicated to reducing the speeds of our agitators. The project impresses with a minimal implementation effort and at the same time a large effect: it achieves an annual saving of 30,000 kWh of energy and thus avoids around 12 tons of CO<sub>2</sub>.

With this project idea, the team was not only able to convince internally: In the final event of the competition, the Dörken team prevailed against projects from other regional industrial companies and took first place.

In addition, Dörken took on the role of host for one of the official workshops of the Energy Scout program in 2024 – a sign of active participation and support for sustainable initiatives in-house.

## 5.5 Environmental Audit

One of the most important tools for ensuring environmental performance is regular environmental audit (internal audits). It verifies that all operations and processes comply with the specified specifications. If action is required, it is included in a plan of action and dealt with by the responsible persons within a defined period of time.

Monitoring compliance with all relevant environmental regulations and other binding obligations is also a key aspect. This creates the necessary legal certainty for the company.

In the course of adapting to the EMAS Regulation amended in 2017, both external and internal influencing factors were identified that can have a positive or negative impact on the environmental management system. It also defined the interested parties of relevance to the environmental management system. These include:

- Customers
- Suppliers
- Authorities
- Applicants
- Cooperation partners\*
- Associations
- Certifier
- Residents
- Competitors
- Universities
- Locations/Subsidiaries
- Insurance
- State
- Banks



- Press
- NGOs
- Service provider
- Employees
- Works council
- Shareholder
- Management

The requirements and expectations of these parties were assessed taking into account environmental risks and opportunities. On this basis, concrete measures and environmental objectives are derived.

Furthermore, the phases of the life path of the produced products from raw material extraction through development, product production, delivery, use to the end of use were examined for influenceability.

The present environmental statement informs interested parties of all relevant activities, data and facts, as well as the objectives and measures sought. Building on the Dörken policy and the company's strategic objectives, measures are defined to further improve environmental performance. The aim is to minimize environmental impacts, use resources more efficiently and achieve continuous improvements.

The final step is the independent audit of the environmental management system, legal compliance and this environmental declaration by an approved and accredited environmental verifier.

## 5.6 Communication

### 5.6.1 Internal Communication

The Dörken divisions rely on a variety of communication channels to convey information about the integrated management system transparently and effectively:

- At annual meetings, senior managers and representatives of the works council are informed about current developments. Topics such as objectives, program progress, new procedures, company suggestion systems and responsibilities are developed in small working groups and discussed in plenary.
- All employees receive regular training on both general and specific topics of environmental, occupational and health protection as well as quality management.
- Environmental statements will be published and made available to all interested parties.
- Proposals from the company's suggestion system are regularly discussed and actively incorporated into the further development of the management system.
- The internal audits of the integrated management system (environmental protection, occupational health and safety, safety, quality) are not only used for evaluation, they also promote open dialogue and professional exchange.
- Postings, short discussions and training, as well as cooperation in quality and environmental circles, further strengthen internal communication.
- Relevant information and documents are available to all employees via the intranet.



## 5.6.2 External Communication

The environmental statement and the associated updates can be viewed on the DÖRKENGROUP homepage.

Furthermore, activities on the environment are communicated through

- Neighborhood brochure on Dörken.de
- Press releases.
- Participation in working groups of associations.
- Assistance with environmental problems for customers.
- Opening of the company premises to authorities and residents through the management of interested groups.
- As a member of the VCI (Association of the Chemical Industry), the Dörken companies participate in the global initiative „Responsible Action“ (Responsible Care).



## 6. Environmental Aspects

### 6.1 Evaluation of Environmental Aspects

Within the framework of the environmental management system, the environmental aspects of Ewald Dörken AG for the Dörken Coatings and Dörken Membranes business units (BUs) were systematically identified and evaluated. All environmental aspects were considered in order to create a sound basis for the continuous improvement of our environmental performance and to fulfil legal and other obligations.

At the beginning of the year, workshops were conducted in all Business Units with staff from different departments, in which possible impact risk opportunities (IROs) were systematically collected and discussed. Together with the results from qualitative stakeholder interviews – a total of 19 events were conducted –, they formed the basis for a double materiality analysis according to the bottom-up principle. This analysis complied with the requirements of the Corporate Sustainability Reporting Directive (CSRD) and was carried out before the publication of the EU Regulation „Omnibus“ (Regulation (EU) 2023/2775), which postponed the timeframe of the CSRD. The lessons learned were directly incorporated into the assessment of environmental aspects within the framework of the environmental management system. It was found that the 28 core IROs identified in the environmental field are in strong agreement in content with the essential environmental aspects already identified in the context of EMAS.

The main direct environmental aspects with the highest environmental relevance are identified below, their risks and opportunities as well as measures for potential emergency situations are presented.

The energy consumption of electricity is particularly important in production. It mainly leads to CO<sub>2</sub> emissions from fossil electricity generation and poses risks due to supply or grid outages as well as increasing regulatory requirements. At the same time, opportunities are opening up to strengthen the corporate image, use support programs and actively contribute to achieving climate goals. In addition, energy consumption is indirectly relevant in emergency situations, particularly in the context of emergency power supply and the operation of critical infrastructure. To ensure functionality, ventilation and safety systems must continue to operate in an emergency. Backup systems for critical processes are provided for this purpose.

Air emissions include CO<sub>2</sub> produced during production, as well as VOCs and odors that can be released during both production and use of the products. They pose risks to air quality, health and climate and are subject to strict legal requirements. However, significant hazards can arise in emergency situations. These include leaks or uncontrolled leaks that can lead to soil and groundwater contamination in liquid VOCs. There is also a risk of air pollution due to evaporation or release and a risk of explosion if VOCs form flammable mixtures with air. VOCs are often highly flammable (e.g. B. Solvents, paint components). This increases the risk of fire or explosion. In enclosed spaces, high concentrations can lead to steam explosions, and flue gases can contain toxic substances. Employees face health risks because inhaling VOC vapors can cause dizziness, headaches, or respiratory irritation; long-term exposure can cause organ damage.

Preventive measures are implemented to minimize risks, such as compliance with storage regulations (substances containing VOCs only in approved, ventilated areas), the use of double-walled containers and drip trays, the use of explosion-proof electrical systems, VOC exhausts and ventilation systems, and regular leak tests of tanks, pipelines and containers. In addition, monomer filter systems are used in extrusion extraction. In case of emergency, immediate evacuations and warnings from employees are provided, as well as the closure and ventilation of the affected area. Personal protective equipment (e.g. B. Respiratory masks, gloves) is mandatory. Binders such as activated carbon to absorb substances and products containing VOCs are available, and fire departments and environmental authorities will be informed immediately in the event of major releases.

The waste –both hazardous and non-hazardous waste– is generated during production. Environmental pollution, resource waste, and the risks of improper disposal are offset by opportunities such as waste



prevention, recycling, and image enhancement. However, significant hazards can arise in emergency situations. In the case of hazardous waste (e.g. B. Paint residues, solvents, oil-containing equipment, batteries) there is a risk of fire and explosion in the case of flammable substances as well as the risk of soil and water contamination in the case of leaking chemicals. There are also health risks from toxic fumes or skin contact. Even non-hazardous waste (paper, plastics, wood, scrap metal) can pose a fire hazard if large quantities of flammable substances are stored uncontrolled. Other risks include the release of microplastics or pollutants during decomposition or combustion. Specific scenarios include fires in waste storage with a risk of toxic flue gas formation, power outages in waste disposal (failure of compaction presses or exhaust air systems) and leaks of liquid waste with soil or sewer pollution. Preventive measures are being implemented to minimize risks: separate storage of hazardous and non-hazardous waste, use of dense, marked and sealable containers, use of liquid waste collection trays to avoid soil contamination, and fire protection measures such as fire extinguishers in waste storage facilities. Regular inspections of waste storage areas for leaks or overcrowding and training of employees on emergency measures are also provided. In the event of an incident, evacuation and closure of the danger area, the use of binding agents in the event of leaks (e.g. B. Oil absorbent, sand) and the immediate alert of the fire brigade or environmental authority in case of danger to the environment or people. After the emergency, the safe disposal of contaminated waste takes place.

Soil contamination is particularly relevant due to the industrial pre-use of the land. Risks arise from soil sealing, biodiversity loss, contaminated sites and erosion. In emergency situations, risks similar to those associated with the emission of air emissions may occur.

Comprehensive measures are being implemented for prevention: the handling of dangerous substances is clearly regulated, EX protection areas have been set up for explosive substances, and suction systems are installed for dust-contaminated operations. Collection trays are used to prevent liquids from entering the soil. The risk in handling hazardous substances is regularly assessed, and in the event of events, measures are taken to minimize risks. In addition, substitutes are used, certain substances are excluded and products are further developed (e.g. B. PFAS reduction). Requirements for quantities that meet demand have been implemented, and the storage of hazardous substances near production is only permitted in hazardous substance cabinets. The risk assessment of raw materials is ensured by the line managers, with support from the HSE department if necessary.

The handling of hazardous substances in production and use requires special care to avoid environmental pollution, health hazards and legal consequences. In emergency situations, various risks can arise, including accidents and leaks during internal transport, explosions, fires or uncontrolled thermal reactions of approaches. Other hazards include increased exposure, for example from dust, leaks or improper disposal.

Comprehensive measures are in place to minimize risk: a fire protection plan, evacuation plan and a defined emergency, reporting and escalation chain are implemented. A digital notification is made when storage conditions increase a risk because certain substances must not be stored together. In addition, detectors such as fire detectors are installed to enable location determination in an emergency.

Furthermore, the handling of hazardous substances is important as an indirect environmental aspect almost throughout the entire life cycle – from raw material production through transport and use to disposal. Here, the risks of leakage and improper disposal as well as compliance with legal due diligence obligations are paramount.



## 6.2 Life Cycle Perspective

The following figures systematically examine the environmental impacts of products and services throughout their life cycle.



Fig. 10: Environmental aspects based on the life path of Dörken Coatings products.

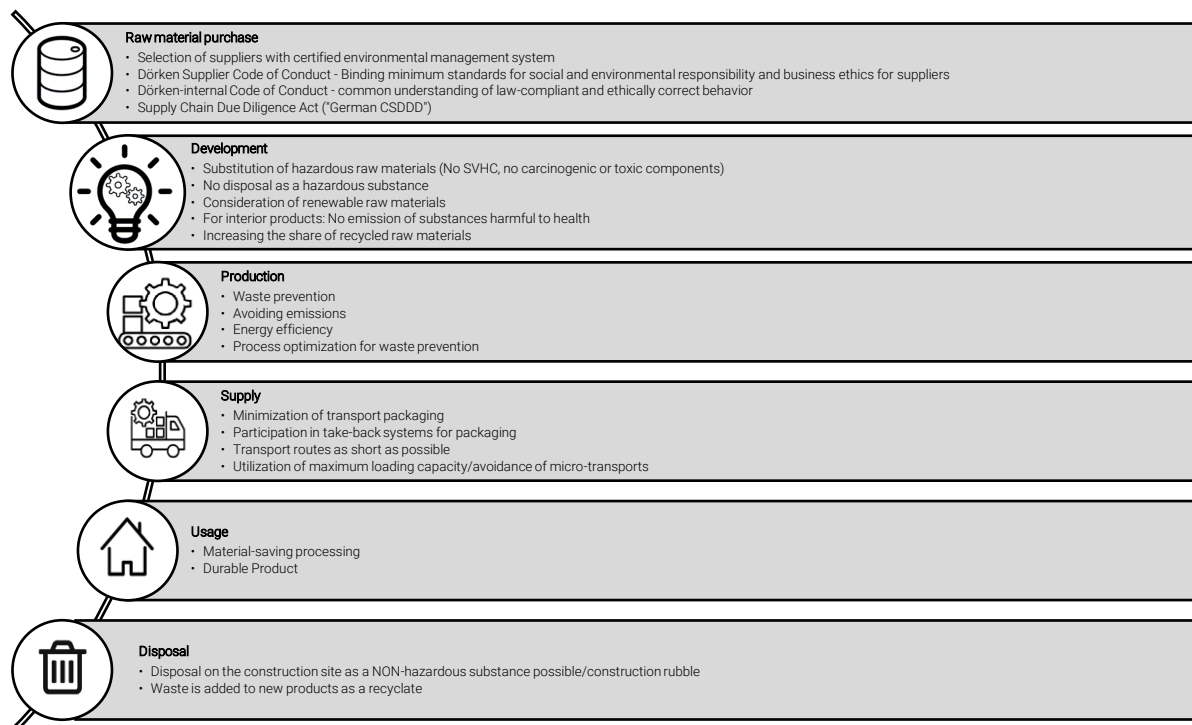


Fig. 11: Environmental aspects based on the life path of Dörken Membranes products.



## 7. Key Indicators

### 7.1 Reference Quantity

For the core indicators of energy efficiency of electricity and vehicle fleet, energy performance, material efficiency, waste, biodiversity and emissions, the quantity of finished goods [t] produced serves as the reference value. For the core indicators of natural gas consumption and diesel fuel consumption for internal transport at the Herdecke site, the quantity manufactured [t] in Herdecke is used as the reference value.

Tab. 2 Reference quantities – quantities manufactured from 2022 to 2024

Reference quantities		Herdecke	Hagen
Manufactured Quantity [t]	2022	20.545	11.361
	2023	12.711	13.415
	2024	12.312	15.703

The reference value of energies for heating purposes is the built-up area [m<sup>2</sup>] of the respective locations. At the Herdecke site, district heating is assessed and at the Hagen site, natural gas energy is assessed using this reference value.

Tab. 3 Reference values – built-up area from 2022 to 2024

Reference quantities		Herdecke	Hagen
Built-up area [m <sup>2</sup> ]	2022	32.600	22.870
	2023	32.600	22.870
	2024	32.600	22.870

### 7.2 Energy Efficiency

#### 7.2.1 Electricity Energy

Different energies are used at the Wetterstraße and Hagen locations. The main energy source for all areas is electricity. Due to the energy-intensive production of the composite films, which is partly required by extruder temperatures of >200 °C during production, the overall energy consumption can be described as high. The electricity is mainly used for production purposes and is therefore directly related to the quantities of Dörken Coatings and Dörken Membranes produced.

Tab. 4 Electricity energy consumption and electricity energy efficiency from 2022 to 2024

Electricity		Herdecke	Hagen
Power Consumption [MWh]	2022	21.819	16.081
	2023	16.305	15.805
	2024	14.698	16.140
Energy Efficiency [MWh/t]	2022	1,06	1,41
	2023	1,28	1,17
	2024	1,19	1,03

## 7.2.2 District Heating

District heating is only used at the Herdecke site. It is used exclusively for heating purposes. District heating is fed into six locations at the site and consumption is determined by meters. The built-up area of the site is used as the reference value.

In order to be able to compare the annually calculated ratios of district heating to built-up area, the weather-adjusted ones are presented.

**Tab. 5 District heating consumption and district heating efficiency from 2022 to 2024**

Fernwärme	Herdecke	
Power Consumption [MWh]	2022	9.662
	2023	9.283
	2024	9.660
Ratio of weather-adjusted district heating consumption to built-up area [MWh/m <sup>2</sup> ] (GTZ 20/15)	2022	0,30
	2023	0,29
	2024	0,30

A direct allocation for the individual Dörken corporate units is not possible. The costs of district heating are distributed via a transfer key. The energy consumption for this energy is determined only for the Herdecke site.

The high energy consumption for district heating is explained by the new administration building, which has been in use since 2020. In 2020, due to the pandemic, the work was carried out from home; the new offices have only been used regularly since 2021.

## 7.2.3 Natural Gas

Natural gas is used at the Herdecke site within production exclusively at Dörken Membranes in the coating plant, therefore the reference value of the quantity produced is taken into account.

Thermal exhaust gas purification (catalytic afterburning) has been in operation in the Dörken Membranes coating plant since 2020; this treatment of the exhaust gases results in increased gas consumption.

**Tab. 6 Natural gas consumption and natural gas efficiency from 2022 to 2024 in Herdecke**

Natural Gas	Herdecke	
Power Consumption [MWh]	2022	3.967
	2023	4.342
	2024	5.030
Energy Efficiency [MWh/t]	2022	0,19
	2023	0,34
	2024	0,41

The Hagen site uses this energy for heating purposes. To evaluate natural gas consumption, the ratio of weather-adjusted natural gas consumption to built-up area is presented.

Tab. 7 Natural gas consumption and natural gas efficiency from 2022 to 2024 in Hagen

Natural Gas		Hagen
Power Consumption [MWh]	2022	2.164
	2023	1.910
	2024	1.995
Ratio of weather-adjusted consumption of natural gas to built-up area [MWh/m <sup>2</sup> ] (GTZ 20/15)	2022	0,11
	2023	0,10
	2024	0,11

The consumption of natural gas has a direct impact on the environment, as emissions are generated directly at the site.

## 7.2.4 Diesel Fuel for In-Plant Transport

The use of diesel fuel takes place at the Herdecke site to refuel the forklifts. The consumption of diesel fuel is not relevant and is not controlled by key figures.

Tab. 8 Diesel fuel consumption and diesel fuel efficiency with regard to factory transport from 2022 to 2024 in Herdecke

Diesel		Herdecke
Power Consumption [MWh]	2022	239
	2023	246
	2024	166
Energy Efficiency [MWh/t]	2022	0,01
	2023	0,02
	2024	0,01

## 7.2.5 Car Pool

Ewald Dörken AG owns a fleet of vehicles. The vehicles are used by employees for the commute to Herdecke and in the position of field representative to the customer. Private use is also possible. The fuels are divided into diesel, gasoline and electricity. Consumptions are documented regardless of location, but are assigned to business units. At the Hagen site, only vehicles from Dörken Membranes are used. The vehicles are calculated proportionally to the total consumption of the Dörken Membranes and are specified for the Hagen location.

Tab. 9 Car fleet consumption and car fleet efficiency from 2022 to 2024

Car fleet consumption		Herdecke				Hagen		
Power Consumption [MWh]		Diesel	Petrol	Electricity	Total	Diesel	Petrol	Total
	2022	256	158	1	272	26	1	27
	2023	239	258	11	267	25	3	28
	2024	227	212	16	265	24	3	27
Energy Efficiency [MWh/t]	2022	0,12	0,01	0,000	0,13	0,002	0,000	0,002
	2023	0,19	0,02	0,001	0,21	0,002	0,000	0,002
	2024	0,18	0,02	0,001	0,20	0,002	0,000	0,002



## 7.2.6 Total Energy Consumption

Total energy consumption is reported on a site-by-site basis for the energy consumed. These indicators are for information purposes only and are not applied to the definition of objectives.

Tab. 10 Total energy consumption and efficiency from 2022 to 2024

Total Energy		Herdecke	Hagen
Power Consumption [MWh]	2022	36.414	18.272
	2023	30.814	17.743
	2024	29.945	18.162
Share of renewable Energy [MWh]	2022	20.438	15.169
	2023	16.305	15.805
	2024	8.857	9.506
Energy Efficiency [MWh/t]	2022	1,77	1,61
	2023	2,42	1,31
	2024	2,43	1,17
Energy Efficiency of renewable Energy [MWh/t]	2022	0,99	1,34
	2023	1,28	1,18
	2024	0,70	0,61
Share of renewable Energy	2022		65 %
	2023		100 %
	2024		59 %

## 7.3 Material Efficiency

In the Dörken companies, raw materials are needed for various productions. Due to the different product range, the raw materials used vary considerably in nature. Material efficiency indicators are determined for Dörken Coatings and Dörken Membranes. Objectives are defined for this environmental indicator.

Tab. 11 Material consumption and material efficiency from 2022 to 2024

Herdecke	2022	2023	2024
Material Consumption [t]	26.658	15.511	14.280
Material Efficiency [t/t]	1,30	1,22	1,16
Hagen	2022	2023	2024
Material Consumption [t]	12.334	18.225	19.764
Material Efficiency [t/t]	1,09	1,36	1,28

## 7.4 Water

The water consumption of the Dörken companies is used for both sanitary and production purposes.

In the Dörken Membranes production, water is required for cooling purposes, air scrubbers and for the dilution of printing inks. In addition to city water, well water is used for cooling purposes.

In the production of Dörken Coatings, only city water is used for cooling and for the production of aqueous products (WBC).

The key figures are determined on a location-based basis. This indicator is not assessed as a significant environmental aspect.

Tab. 12 Water consumption and water efficiency from 2022 to 2024

Water		Herdecke	Hagen
Consumption [m <sup>3</sup> ]	2022	36.060	13.620
	2023	41.477	20.077
	2024	30.311	16.558
Key figure [m <sup>3</sup> /t]	2022	1,76	1,20
	2023	3,26	1,50
	2024	2,46	1,07

## 7.5 Waste

A distinction is made between hazardous and non-hazardous waste.

Non-hazardous waste mainly includes the following types of waste:

- fractions according to the Commercial Waste Ordinance
  - Paper, paperboard, cardboard (AAV 15 01 01, AVV 20 01 01);
  - Glass (AVV 15 01 07, AVV 20 01 02) – not applicable, as no waste is generated,
  - Plastics (AVV 07 02 13, AVV 15 01 02, AVV 17 04 03, AVV 17 02 03, AVV 20 01 39),
  - Metal (AVV 17 04 05, AVV 17 04 07, AVV 20 01 40),
  - Wood (AVV 15 01 03, AVV 20 01 38),
  - Textiles (AVV 20 01 10, AVV 20 01 11) – not applicable, as no waste is generated,
  - Biodegradable waste (AVV 20 02 01, AVV 20 01 08),
  - Other waste added to recovery
    - Construction and demolition waste (AVV 17 01 01, AVV 17 01 02, AVV 17 01 03, AVV 17 01 07, AVV 17 02 02, AVV 17 02 03, AVV 17 05 04, AVV 17 06 04, AVV 17 08 02, AVV 17 09 04),
- Other waste:
  - Mixed municipal waste (AVV 20 03 01),
  - Mixed packaging (AVV 15 01 06);
  - Aqueous sludge (AVV 08 01 16, AVV 02 02 04, AVV 08 01 20),
  - Non-hazardous chemicals (AVV 08 01 12, AVV 08 01 14, AVV 08 03 18, AVV 08 04 10, AVV 11 01 14, AVV 12 01 17, AVV 16 03 04, AVV 16 03 06).

The following types of waste are mainly generated by hazardous waste:

- Components (packaging) with hazardous residues (AVV 15 01 10, AVV 15 02 02, AVV 15 01 11),
- Paint and varnish waste (AVV 08 01 11, AVV 08 01 13, AVV 08 04 09, AVV 08 01 16, AVV 20 01 27),
- hazardous chemicals (AVV 07 02 08, AVV 07 03 04, AVV 11 01 11, AVV 12 01 12, AVV 16 05 06, AVV 16 05 08, AVV 16 05 07, AVV 20 01 14, AVV 20 02 15),
- Electronic waste including batteries (AVV 16 02 13, AVV 16 02 11, AVV 20 01 23, AVV 20 01 33, AVV 20 01 35),
- Solvents and solvent mixtures (AVV 14 06 02, AVV 14 06 03, AVV 16 07 09, AVV 16 10 01, AVV 20 01 13)
- Machine oil and transmission oil (AVV 13 02 05)

Tab.13 Waste volumes at the Herdecke site from 2022 to 2024

Herdecke			Coatings			Membranes			Gesamt		
			2022	2023	2024	2022	2023	2024	2022	2023	2024
non-hazardous waste	Fractions according to GewAbfV	Paper, paperboard, cardboard	0,0	3,2	3,2	75,8	51,405	78,525	75,8	54,6	81,8
		Plastics	3,1	4,3	2,7	2953,3	2.416,9	1.483,3	2.956,4	2421,2	1486,0
		Matal	0,0	0	0	32,8	31,5	36,4	32,8	31,5	36,4
		Wood	159,9	41,3	0	93,7	128,9	176,7	253,6	170,2	176,7
		Biodegradable waste	0,0	0	0,1	0,0	0,0	0,0	0,0	0,0	0,1
		Construction and demolition waste	1,3	0	0	1,6	0,2	3,4	2,9	0,2	3,4
	Mixed municipal waste		0	0	0	108,6	81,0	94,4	108,6	81,0	94,4
	Mixed packaging		19,7	8,34	0,96	0,0	48,3	7,7	19,7	56,6	8,6
	Aqueous sludge		452,5	389,4	464,0	247,4	172,0	188,7	699,9	561,3	652,7
	Non-hazardous chemicals		52,5	60,2	75,6	4,37	5,7	0,0	56,9	65,9	75,6
	Total		689,0	506,7	546,5	3517,5	2935,8	2069,1	4.206,5	3442,5	2615,7
						Waste/quantity manufactured [kg/t]			205	271	212
					Separate collection rate [%]			96,3	94,2	90,5	
hazardous waste	Components (packaging) with hazardous residues		170,6	100,4	105,9	95,1	0,0	5,8	265,7	100,4	111,7
	Paint and varnish waste		116,7	121,3	111,8	1,9	0,0	10,5	118,6	121,3	122,2
	Hazardous chemicals		3,1	4,4	77,7	2,64	47,2	10,9	5,7	51,6	88,6
	Electronic waste including batteries		0,0	0,7	0,0	1,934	1,1	2,4	1,9	1,8	2,4
	Solvents and solvent mixtures		1,1	0,0	11,9	0,0	0,1	0,0	1,1	0,1	11,9
	Machine oil and transmission oil		0,0	0,1	0,0	0,0	2,3	3,2	0,0	2,4	3,2
	Total		291,5	227,0	307,2	101,6	50,7	32,8	393,1	277,7	340,0
						Waste/quantity manufactured [kg/t]			19	22	28
Total waste			980,5	733,7	853,7	3619,0	2986,5	2101,9	4599,5	3720,2	2955,7
						Waste/quantity manufactured [kg/t]			224	293	233





Tab. 14 Waste volumes at the Hagen site from 2022 to 2024

Hagen			Membranes		
			2022	2023	2024
Non-hazardous waste	fractions according to GewAbfV	Paper, paperboard, cardboard	54,6	56,4	106,8
		Plastics	1.663,5	1.632,4	2.139,8
		Metal	5,4	29,0	26,4
		Wood	67,8	90,4	119,1
		Biologisch abbaubare Abfälle	8,4	11,8	11,6
		Construction and demolition waste	1,4	9,3	169,1
	Mixed municipal waste		58,9	111,1	105,9
	Mixed packaging		1,4	48,3	38,5
	Aqueous sludge		0,0	33,1	35,0
	Non-hazardous chemicals		0,0	0,0	0,1
	Total		1.861,4	2021,8	2752,2
	Waste/quantity manufactured [kg/t]		164	151	175
Separate collection rate [%]		96,8	92,0	94,0	
Hazardous waste	Components (packing) with hazardous residues		0,1	0,1	0,1
	Paint and varnish waste		6,6	0,1	0,0
	Hazardous chemicals		0,0	0,0	0,0
	Electronics waste including batteries		1,6	2,2	1,5
	Solvents and solvent mixtures		0,0	0,3	0,0
	Machine oil and transmission oil		6,3	4,0	2,7
	Total		14,6	6,7	4,3
	Waste/quantity manufactured [kg/t]		1,3	0,5	0,3
Total waste			1876,0	2028,5	2756,5
Waste/quantity manufactured [kg/t]			165	151	176

## 7.6 Biological Diversity

This section provides an overview of the area structure of the two sites. The total area, the proportion of sealed and built-up areas as well as the near-natural areas – both on and off the factory premises are recorded.

Tab. 15 Area information from 2021 to 2024 of the Herdecke location

Area consumption Herdecke		2021 - 2024
Total Area	m <sup>2</sup>	75.000
Sealed area	m <sup>2</sup>	69.280 (92 %)
of which built	m <sup>2</sup>	32.600
Near-natural area: green facade and green roof	m <sup>2</sup>	6.120
Natural area away from the location	m <sup>2</sup>	3.500

The near-natural area away from the site is located below the Ruhr parking lot. It is an allotment garden and a natural embankment.

Tab. 16 Area information from 2021 to 2024 of the Hagen site

Area consumption Hagen		2021 - 2024
Total Area	m <sup>2</sup>	78.200
Sealed area	m <sup>2</sup>	50.900 (65 %)
of which built	m <sup>2</sup>	22.870
Near-natural area: green facade and green roof	m <sup>2</sup>	22.300
Natural area away from the locations	m <sup>2</sup>	0

Since 2021, the areas have not changed in size or use. No additional sealing has taken place, nor have any near-natural or green areas been reduced. This does not result in any relevant impact on biodiversity at the site. Against this background, there is currently no significant impact of the company on biodiversity.

## 7.7 Emissions

CO<sub>2</sub> emissions and their equivalents represent the central factor in our operational climate impact. While emissions of other greenhouse gases such as N<sub>2</sub>O, CH<sub>4</sub>, HFCs, HFCs or SF<sub>6</sub> are not relevant for either location, CO<sub>2</sub> emissions from direct and indirect sources form the focus of accounting. In subsequent tables, these are therefore listed in detail and according to the international standards in Scope 1 (direct emissions from own sources, e.g. B. from the use of natural gas, fuels or refrigerants) and Scope 2 (indirect emissions from purchased electricity and district heating).

The refrigerants refilled in the refrigeration systems at the Herdecke site with a CO<sub>2</sub> equivalent of around 30 t are of minor importance compared to the other direct CO<sub>2</sub> emissions.

The focus on CO<sub>2</sub> and CO<sub>2</sub> equivalents is essential because these emissions have the greatest impact on climate change and contribute significantly to global warming. Reducing CO<sub>2</sub> emissions is therefore one of the most effective measures to reduce the ecological footprint and achieve climate goals.

In addition to CO<sub>2</sub> emissions, other total emissions such as dust, SO<sub>2</sub>, NO<sub>x</sub> and volatile organic compounds (VOCs) are also reported. The latter arise particularly in the production of varnishes, paints, dispersions and coating systems and are a relevant indicator for the production of Dörken Coatings.

Tab. 15 Greenhouse gas emissions Scope 1 and 2 from 2022 to 2024 at the Herdecke site

Greenhouse gas emissions in CO <sub>2</sub> -equivalent		2022	2023	2024	Emissions conversion factors (as of 2025) and sources
<b>Scope 1 (direct emissions)</b>					
Car fleet - Petrol	t	52,97	86,33	71,02	2.879226 kg CO <sub>2</sub> e/l (GEMIS 5.1)
Car fleet - Diesel	t	810,82	759,28	719,92	3.10237 kg CO <sub>2</sub> e/l (GEMIS 5.1)
Floor handling equipment l - Diesel	t	62,15	64,03	43,24	3.10237 kg CO <sub>2</sub> e/l (GEMIS 5.1)
Natural Gas	t	1150,59	1259,33	1458,98	0.290 kg CO <sub>2</sub> e/kWh (t/MWh) (GEMIS)
Propane	t	1,32	1,32	0,26	1.110 kg CO <sub>2</sub> e/kg (EEW 2024)
Coolant R410A	t	10,40	16,7	20,05	2088 kg CO <sub>2</sub> e/kg (UBA)
Coolant R422D	t	0	382,06	0	2729 kg CO <sub>2</sub> e/kg (UBA)
Coolant R134a	t	0	77	0	1100 kg CO <sub>2</sub> e/kg (UBA)
CO2 use water bubbler	t	0,01	0,06	0,05	
<b>Scope 1 emissions Herdecke total</b>	<b>t</b>	<b>2.088,31</b>	<b>2.646,11</b>	<b>2.313,53</b>	
<b>Scope 2 (Emissions from the provision of energy from external sources)</b>					
District heating	t	2.705	2.599	2.705	0.28 t CO <sub>2</sub> e/MWh
Volume of purchased electricity	t	1.797	0	1.776	0.294 kg CO <sub>2</sub> e/kWh
Volume of purchased electricity car fleet	t	2	29	48	0.294 kg CO <sub>2</sub> e/kWh
<b>Scope 2 emissions Herdecke total</b>	<b>t</b>	<b>4.504</b>	<b>2.628</b>	<b>4.529</b>	
<b>Sum of Scope 1 und 2 Herdecke emissions</b>	<b>t</b>	<b>6.592,7</b>	<b>5.274,2</b>	<b>6.842,9</b>	
<b>Ratio of greenhouse gas emissions to quantity produced</b>	<b>[t/t]</b>	<b>0,3</b>	<b>0,4</b>	<b>0,6</b>	



Tab. 18 Greenhouse gas emissions Scope 1 and 2 from 2022 to 2024 at the Hagen site

Greenhouse gas emissions in CO <sub>2</sub> -equivalent					Emissions conversion factors (as of 2025) and sources
		2022	2023	2024	
Scope 1 (direct emissions)					
Car fleet - Diesel	t	8,36	7,93	7,61	3.10237 kg CO <sub>2</sub> e/l (GEMIS 5.1)
Natural Gas	t	627,56	553,90	578,80	0.290 kg CO <sub>2</sub> e/kWh (t/MWh) (GEMIS)
Scope 1 emissions Herdecke total	t	635,92	561,83	586,41	
Scope 2 (Emissions from the provision of energy from external sources)					
Volume of purchased electricity	t	1324	0	1950	0.294 kg CO <sub>2</sub> e/kWh
Volume of purchased electricity of car fleet	t	6	7	8	0.294 kg CO <sub>2</sub> e/kWh
Scope 2 emissions Herdecke total	t	1331	7	1.958	
Sum of Scope 1 und 2 Hagen emissions	t	1966,54	569,21	2544,52	
Ratio of greenhouse gas emissions to quantity produced	[t/t]	0,17	0,04	0,16	

Tab. 19 Air pollutants from 2022 to 2024 at the Herdecke site

Air pollutants Herdecke		2022	2023	2024
SO <sub>2</sub> without car fleet	kg	180	196	216
SO <sub>2</sub> with car fleet	kg	428	443	448
NO <sub>x</sub> without car fleet	kg	1058	1143	1212
NO <sub>x</sub> with car fleet	kg	1253	1466	1482
Dust (PM) without car fleet	kg	44	48	54
Dust (PM) with car fleet	kg	51	59	62
organic substances (VOC)	t	33,80	24,29	16,08
Sum Air pollutants	t	35,5	26,3	18,1
Ratio of air pollutants to quantity produced	kg/t	1,73	2,07	1,47

Tab. 20 Air pollutants from 2022 to 2024 at the Hagen site

Air pollutants Hagen		2022	2023	2024
SO <sub>2</sub> without car fleet	kg	87	76	80
SO <sub>2</sub> with car fleet	kg	89	79	83
NO <sub>x</sub> without car fleet	kg	454	401	419
NO <sub>x</sub> with car fleet	kg	479	426	443
Dust (PM) without car fleet	kg	22	19	20
Dust (PM) with car fleet	kg	22	20	20
Sum Air pollutants	t	0,6	0,5	0,5
Ratio of air pollutants to quantity produced	kg/t	0,04	0,04	0,04

The quantities of air pollutants were calculated using the conversion factors of the Federal Environment Agency, see table below. ([https://www.umweltbundesamt.de/sites/default/files/medien/11850/publikationen/hintergrunddaten-emissionsbilanz\\_erneuerbarer\\_energetraeger\\_2022.xlsx](https://www.umweltbundesamt.de/sites/default/files/medien/11850/publikationen/hintergrunddaten-emissionsbilanz_erneuerbarer_energetraeger_2022.xlsx), in the context of <https://www.umweltbundesamt.de/publikationen/emissionsbilanz-erneuerbarer-energetraeger-2022>; Stand: 05.09.2025).

Tab. 21 Conversion factors for air pollutants (figures in g/kWh)

Conversion factors used for air pollutants	SO <sub>2</sub>	NO <sub>x</sub>	Dust (PM)
Natural Gas	0,04	0,21	0,01
Diesel	0,09	0,94	0,02
Petrol	0,11	0,29	0,02
Electricity	0,24	0,50	0,02

## 8. Environmental Events

Catalyst poisoning has been detected in the coating plant area, which has temporarily impaired compliance with odor emission limits in particular. Regular cleaning and replacement cycles can currently ensure legally compliant operation.

A project to install a bioscrubber is being planned to implement a more energy-efficient and low-maintenance solution in the future.

## 9. Complaints

No complaints were reported.

## 10. 2025 Goals/Target Assessment of the 2022-2025 Goals

### 10.1 Ewald Dörken AG

Reduction of indirect emissions from electricity by 100%

Output value 2021	4.147 t CO <sub>2</sub> -equivalent
Target value 2025	0 t CO <sub>2</sub> -equivalent

#### Actions:

In order to reduce the total company's emissions to 0 t CO<sub>2</sub> equivalents, the Purchasing Department switched entirely to electricity from renewable energies. From March 2022, this target value was achieved and initially maintained.

However, from 2023 onwards, prices for electricity from renewable sources rose significantly as a result of increased demand. For economic reasons, the share of green electricity was reduced in 2024 and kept at an average of 50%. As a result, indirect emissions could no longer be completely reduced to 0 t CO<sub>2</sub> equivalents.

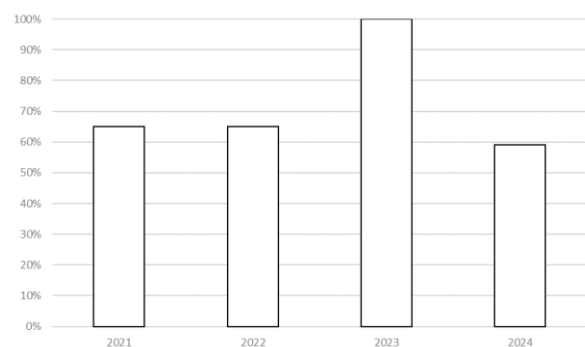


Fig. 12 Shares of renewable energy

### 10.2 Dörken Coatings

#### 10.2.1 Energy Efficiency

Reduce specific energy consumption per production volume by 5%

Output value 2021	456 kWh/t
Target value 2025	433 kWh/t

#### Actions:

As part of the energy efficiency program, the replacement of the P2 bead mill in the CPC production facility was initiated. The aim is to reduce energy consumption by using a more energy-efficient system. The project was budgeted at EUR 200,000 and was scheduled for implementation in June 2023. The commissioning of the measure has already taken place. The responsible Project Engineer is responsible for its implementation.

To further increase energy efficiency, the technical adaptation of water treatment in Paste production is planned. Significant energy savings are to be realized by deliberately shutting down the plant on weekends. The project has a budget of EUR 10,000 and was scheduled for completion by the end of 2023. In 2022, the project was in the planning phase. Here too, the responsibility lies with the Project Engineer.

In the 2024 Environmental Statement, another program item was added to further increase efficiency: review of the compressed air system for the Dörken Coatings area and improvement of the measurement system. Budgeting was set at EUR 10,000. The responsibility lies with maintenance.



Implementation should take place by the end of 2025. To date, an inventory has been carried out, which has led to a postponement of the completion date to the end of 2027.

Tab. 22 History of annual energy efficiency

Energy efficiency	[kWh/t]	
	2021	456
	2022	480
	2023	531
	2024	490

By replacing energy-intensive production units and technically adapting water treatment, noticeable energy savings were achieved in individual production areas. Especially in tinting production, the targeted shutdown of water treatment on weekends led to a significant decline in electricity consumption.

In the CPC sector, the replacement of the pearl mill P2 from the second half of 2023 had a positive impact on energy efficiency. However, this effect was partially compensated by the additional energy requirements of the newly installed bioscrubber (exhaust air scrubber).

The measure to review the compressed air system in the Dörken Coatings area is still under implementation. So far, the inventory has been completed; the actual technical optimization will continue until the end of 2027 as part of a new program.

However, the development of the specific energy consumption measure shows that the positive effects of the measures in the overall result were overshadowed by other influencing factors. After a baseline of 456 kWh/t in 2021, the value initially rose to 480 kWh/t (2022) and 531 kWh/t (2023) before falling to 490 kWh/t in 2024. The increase in 2022 and 2023 is due in particular to the higher energy requirements of the new Dörken Coatings administration and the sharp decline in production volume in Architectural Coatings (WBC and SBC) due to the economic downturn. Here, the unchanged high base loads for maintaining the infrastructure led to an increase in specific energy consumption.

A separate examination of the segments shows that the efficiency measures implemented in the industrial and tinting sectors were successful. In the Architectural Coatings segment, however, the production decline of approximately 30% acted as a key driver for the increase in the key figure.

## 10.2.2 Material Efficiency

Confirmation of material efficiency even when expanding the product portfolio

Output value 2021	1,03 t/t
Target value 2025	1,03 t/t

### Actions:

As part of the energy efficiency program, the replacement of the pearl mill in the CPC production facility was commissioned. In addition to improving energy efficiency, the new plant also contributes to material efficiency by reducing material loss in the production process. The project is estimated to cost EUR 200,000 and is scheduled for implementation in June 2023. The contract has already been awarded and the responsible Project Engineer is responsible.

To further increase efficiency, the installation of a new 20-liter pearl mill in paste production was initiated. This measure serves both energy and material efficiency by enabling more resource-efficient processing at smaller batch sizes. Implementation was underway in 2022 and is expected to be completed by the end of 2023. The project is set at a cost of EUR 100,000. Here too, the responsibility lies with the Project Engineer.

The target of maintaining material efficiency at the 1.03 t/t level despite expanding the product portfolio was met or slightly exceeded between 2021 and 2024. After a slight increase to 1.04 t/t in 2022, due to temporary process adjustments and start-up phases of new products, the value was reduced again to 1.03 t/t in 2023 and further improved to 1.02 t/t in 2024.

**Tab. 23 Material efficiency after expanding the product portfolio**

Material Efficiency	[t/t]
2021	1,03
2022	1,04
2023	1,03
2024	1,02

The essential measures – the replacement of the pearl mill in CPC production and the installation of a 20-liter pearl mill in paste production – contribute to both energy and material efficiency. They reduce material losses and enable more resource-efficient processing, especially for smaller batch sizes.

Since both measures only took effect in the second half of 2023, the positive effect is more clearly visible in the key figure from 2024 onwards. The progress confirms that material efficiency can be maintained at a high level even with an expanded product portfolio.

## 10.2.3 Specific Waste

### 10% reduction in total specific waste

Output value 2021	101 kg/t
Target value 2025	90 kg/t

#### Actions:

To reduce the volume of packaging in manufacturing CPC, a project to integrate raw material suppliers more closely has been launched. The aim of the measure is to take back and reuse packaging materials in order to avoid waste and increase resource efficiency. Implementation is carried out in close coordination with selected suppliers and is planned with a budget of EUR 10,000. The completion of the measure was scheduled for the end of 2023. The project is currently under implementation and is the responsibility of purchasing.

The target of reducing the specific total waste by 10% by 2025 from the baseline of 101 kg/t has not been fully achieved in recent years, but shows a clearly positive trend since 2023. After a significant increase to 115 kg/t in 2022, mainly caused by the increased use of disposable wooden pallets during the tight supply chain phase, the value was reduced to 97 kg/t in 2023 and further to 96 kg/t in 2024.

The 16% reduction from 2022 to 2023 is mainly due to the close cooperation with raw material suppliers within the framework of the launched project for the withdrawal and reuse of packaging materials. The stabilization of supply chains after the Corona pandemic led to better raw material quality and availability, which reduced scrap quantities. In addition, the optimization of the filling process contributed to a reduction in production-related paint and varnish residues.

Tab. 24 Specific waste volumes from 2021 to 2024

Specific waste	kg/t
2021	101
2022	115
2023	97
2024	96

The measures defined in the Environment Programme are taking effect and the current trend confirms that the target of 90 kg/t by 2025 is realistically achievable. In addition, waste prevention has been successfully implemented in the case of hazardous packaging waste. For the coming years, the focus will be on further optimising processes with high waste content, observing possible quantity fluctuations and testing additional circular solutions.

## 10.2.4 Emissions (VOC)

### Reduction of solvent-loaded exhaust air in CPC production by 30%

Output value 2021	4,53 t C/Jahr
Target value 2025	3,17 t C/Jahr

#### Actions:

A biological exhaust air purification system is being implemented to sustainably reduce airborne emissions in CPC production. The core of the measure is the use of a biological scrubber that naturally breaks down organic compounds and other pollutants from the exhaust air. This is intended to significantly reduce emissions and minimize environmental impact in the long term. The project involves investment costs of EUR 800,000 and is currently being implemented. The completion of the measure was planned for the end of 2023. Responsibility for the project lies with the responsible Project Engineer.

The target of reducing solvent-laden exhaust air in IC (formerly CPC) production by 30% by 2025 compared to the initial value of 4.53 t C per year was already significantly exceeded in 2024. After an increase to 4.72 t in 2022 and an initial improvement to 4.11 t in 2023, the value fell to 1.23 t C per year in 2024. This not only achieved the target but fell below it by around 73%.

The decisive measure was the implementation of a biological exhaust air purification plant with an integrated bioscrubber that naturally degrades organic compounds and other pollutants from the exhaust air. Commissioning resulted in a significant and sustained reduction in emissions. The project was implemented with an investment cost of EUR 800,000 and was led by the responsible Project Engineer.

With the successful completion of this measure, the environmental impact of solvent-based emissions has been significantly reduced, and it is expected that the low emission levels achieved can be maintained in the coming years.

A transparent and systematic recording of greenhouse gas emissions is needed to fully understand the climate impacts of our business activities and to set the course for an effective reduction strategy. Therefore, Dörken has set out to create a climate balance framework for the Dörken Group by 2026. This framework provides the basis for the development of concrete measures to reduce emissions and supports the long-term direction of the climate strategy.



## 10.2.5 Employee Involvement

### Training of internal auditors focusing on environmental protection/environmental management

The target is to provide group-wide qualified internal auditors who actively contribute to the continuous improvement of the environmental management system.

#### Actions:

To strengthen environmental management and ensure internal audit competence, internal auditor training is conducted with a focus on environmental protection and management. The project includes a four-day seminar with practice-oriented content on environmental law, environmental aspects, audit methodology, and the evaluation of environmental performance. In 2022, 14 participants from various business sectors were planned. The training has a budget of EUR 25,000 and is scheduled to be completed by the end of 2023, but was completed in 2024.

The goal of training group-wide qualified internal auditors with a focus on environmental protection and management has been successfully implemented. At the end of 2023, a specially designed four-day seminar was launched, providing practical knowledge on environmental legislation, environmental management systems, audit methods, and the identification and implementation of improvement measures. The measure was coordinated by the CSR Department and deposited with a budget of EUR 25,000.

The original plan was for 14 participants from various business areas; in fact, a total of 16 people were successfully trained as internal auditors by 2024. In September 2024, an additional training day was held to deepen the knowledge learned and to take into account current developments in environmental law and audit practice.

The training not only strengthened internal audit competence but also increased the effectiveness of environmental protection audits. The measure thus makes a significant contribution to the continuous improvement of the environmental management system and to the sustainable anchoring of environmental and sustainability standards in all areas of the company.

## 10.3 Dörken Membranes

### 10.3.1 Energy Efficiency

#### To reduce the specific energy consumption per production quantity by 15%

Output value 2021	1,206 MWh/t
Target value 2025	1,037 MWh/t

Result 2024	1,388 MWh/t
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#### Actions:

As part of a comprehensive investment program, two new production lines were procured with the aim of increasing energy efficiency and reducing scrap in manufacturing. The new plants gradually replace the outdated plant fleet and are characterized by significantly lower energy consumption and more stable process management.

The potential savings are estimated at around 3,000 MWh per year, representing a reduction in energy consumption of around 15% compared to 2019. However, this saving will only take effect after the old plants have been fully commissioned and shut down.

The measure was launched in 2019 with a total budget of EUR 15,600. As of 2022, the two production lines were in the qualification phase after being procured. In the reporting year 2022, higher energy consumption was initially expected due to the required start-up phase („learning curve“) and parallel operation with the old systems. The expected efficiency gains will unfold gradually and are expected to reach their full potential by 2025.

In 2024, the first line was fully qualified. The qualification measures here have been fully completed. The time for qualifying Line B is delayed by the schedule. In addition, substitution projects for various existing products were launched at the Herdecke site in 2024, resulting in large quantities of raw materials being processed into experimental products, which has a negative impact on specific energy consumption.

### 10.3.2 Material Efficiency

Confirmation of material efficiency even when expanding the product portfolio

Output value 2021	1,16 t/t
Target value 2025	1,16 t/t
Results 2024	1,212 t/t

#### Actions

In the period 2021–2022, a CIP program was implemented in production, focusing on various optimization topics to increase material efficiency. The aim of the measure was to reduce the use of materials, promote resource conservation and sustainably reduce production costs through targeted process improvements.

The project had a budget of EUR 105,000 and was managed by the Lean Office. The measure has been completed, with the savings and improvements achieved remaining stable at the level achieved, as things stand.

An automated detection system was introduced in production to reduce scrap and increase product quality. The system enables early detection and rejection of defective products during the ongoing process, thus contributing to resource conservation and improving overall plant effectiveness (OEE). The project was launched in 2020 and involves investments of EUR 445,000. The implementation is carried out by the Procedural Planning Department and was under implementation in 2022, with planned completion in 2022. Due to the designated qualification measures, a positive influence on material efficiency could be achieved. Currently, the specific material efficiency is 4.3% above the defined 2025 target.

### 10.3.3 Spezific Waste

Reduction of the specific total waste below the level before the qualification of the new plants

Output value 2021	0,156 t/t
Target value 2025	0,117 t/t
Result 2024	0,234 t/t

With the commissioning of the new production lines and the associated start-up phase, scrap and waste generation increased significantly in 2021 and 2022. To counteract this, a technical optimization of edge strip trimming was initiated on an existing production facility. The aim of the measure is to minimize material losses in the peripheral area of the products and thus significantly reduce the amount of scrap. The measure was set at a cost of EUR 32,000 and was the responsibility of the procedural planning. It was under implementation in 2022 and is expected to be completed by the end of 2022. It makes an important contribution to compensating for the increased waste generation from 2021 and 2022.

In parallel, a comprehensive project to introduce an automated detection system has been implemented since 2020. This system detects errors in the production process at an early stage and enables the targeted ejection of defective products before material losses or unnecessary further processing occur. This not only improves product quality but also significantly reduces the amount of rejects. The investment costs amounted to EUR 445,000, and the implementation was carried out through



procedural planning. The measure should be completed by the end of 2022 and is a key building block for the long-term reduction of waste between 2023 and 2025.

These two measures form an integral part of the 2022 strategy to compensate for increased waste volumes and support the targeted continuous reduction of the Production Committee until 2025.

The first line qualified in 2024. The qualification measures here have been fully completed. The qualification of the second line is delayed compared to the schedule, which meant that it could not be completed in 2024. In addition, substitution projects for various existing products produced at the Herdecke site have been launched in 2024. In this case, large quantities of raw materials are processed into experimental goods in production trials, which has a negative impact on specific energy consumption. The challenges presented here were taken into account for the 2025-2028 target assessment (see Chapter 11.3.1).

## 11. Objectives/Environmental Programmes 2025-2028

### 11.1 Ewald Dörken AG

#### 11.1.1 Environmental Management System

In addition to Dörken Coatings and Dörken Membranes, Dörken Services is also located at the Herdecke site. In contrast to the two business units mentioned above, Dörken Services does not yet have a central integrated management system (IMS). Since 2025, a project has been pursued with the aim of gradually establishing an IMS in Dörken Services. Certification according to ISO 9001, ISO 14001 and the EMAS Regulation is to be achieved by 2028.

Since Dörken Services has numerous interfaces with other business units due to its field of activity, it is expected that the introduction of IMS will not only standardize the process landscape but also sustainably improve environmental performance. This includes the systematic recording and evaluation of environmental aspects along all service processes, the continuous improvement of environmental performance through clearly defined objectives, measures and indicators, and the structured compliance with relevant legal and internal environmental requirements. In addition, the IMS contributes to increasing resource efficiency by reducing energy and material consumption, reducing waste volumes and establishing more environmentally friendly ways of working. At the same time, it strengthens cooperation at interfaces, particularly in the areas of waste management, energy conservation and sustainable procurement.





## 11.2 Dörken Coatings

### 11.2.1 Energy Efficiency

Output value 2024: 490 kWh/t  
Target value 2028: 441 kWh/t

This environmental objective is proving particularly challenging. Some new production areas, such as biocide-free paste technology, call for special electricity-intensive hygiene measures. In addition, there is a shift from water-based cooling technology to more electricity-intensive cooling systems, which, although less maintenance and maintenance intensive, result in higher energy consumption. Nevertheless, our goal remains to reduce overall electricity consumption.

#### Actions:

Specific measures will be implemented to achieve the goal. These include projects to increase the energy efficiency of the plants and the systematic review of the compressed air system. In addition, digital meters are installed to locate leaks more quickly and thus avoid unnecessary energy losses.

Agenda	Project Data	Status	Life cycle stage
Plant optimization agitators & mills	Optimization of driving styles, standby programs. Start: Q2/2025 End: Q4/2027 Responsible: Operations Industrial Coatings.	In planning	Production
LED lighting IC production	Start: Q3/2025 End: Q4/2025 Responsible: Maintenance Coatings	In preparation	Production
Expansion of infrastructure for data transmission	Collection of consumption data to prioritize further energy efficiency measures in a consumption-driven manner Start: Q2/2025 End: Q1/2027 Responsible: Operations Industrial Coatings	In implementation	Production

### 11.2.2 Material Efficiency

Output value 2024: 1,02 t/t  
Target value 2028: 1,02 t/t

The aim is to ensure the high material efficiency values already achieved in the coming three years – despite stricter quality requirements and the planned expansion of the product portfolio.

Agenda	Project data	Status	Life cycle stage
Optimization of paste approaches	Introduction of new approach procedures to minimize incorrect approaches. Start: Q1/2025 End: Q2/2026 Responsible: Operations Industrial Coatings	In planning	Development Production
Additional capacity Binder tank bearing CPC	Expansion of the binder tank system by a further 3 tanks to reduce residual adhesion in containers Start: Q1/2025 End: Q4/2025 Responsible: Operations Industrial Coatings	In implementation	Production
Automation VH production	Replacement of manual approach processes towards automation Start: Q1/2026 End: Q4/2027	In planning	Production

## 11.2.3 Waste

Output value 2024: 96 kg/t  
Target value 2028: 90 kg/t

### Actions:

The expansion of the binder tank bearing CPC is expected to result in fewer transfer losses and lower residual quantities.

In order to future-proof the handling of waste on the factory premises, there is a site-wide project to allocate waste more transparently, to create new locations where necessary and to coordinate processes.

The conversion from disposable wooden pallets to used recycled plastic pallets for internal factory transport has already begun. These have a significantly longer service life and can be easily melted down and reprocessed after use.

Project Exchange of metal hobbocks for deposit containers: The process already begun with zinc flake manufacturers to exchange the disposable metal buckets for deposit containers is to be expanded across the entire zinc flake shopping spectrum. This measure was already started during the last environmental declaration period, but for technical reasons it has not yet been extended across the entire shopping spectrum. A qualification project is currently underway for the last product in the series.

Agenda	Project data	Status	Life cycle stage
Site-wide waste logistics	New collection point concept for separation & transparency. Start: Q1/2025 End: Q1/2027 Responsible: HSE / Facility Management.	In planning	Disposal
Reusable plastic pallets	Replacement of disposable wooden pallets by reusable systems. Start: Q3/2024 End: Q2/2025. Responsible: Logistics / Supply Chain.	In implementation	Production
Paid containers instead of metal hobbocks	Conversion with zinc flake manufacturers. Start: 2022 End: Q2/2026 Responsible: Purchasing / Industrial Coatings.	Ongoing, qualification	Purchase/Disposal

## 11.2.4 Emissions

In order to identify further starting points for the reduction of CO<sub>2</sub> emissions, Dörken Coatings will expand the scope of the Corporate Carbon Footprint to Scope 3 in the coming three years. The Osapiens CCF software required for this has already been procured and is scheduled to be deployed operationally from 2026.

Agenda	Project data	Status	Life cycle stage
Osapiens CCF software	Introduction to Scope 3 Accounting. Start: Q2/2025 End: Q1/2026 Responsible: ESG Team / Sustainability Manager	In planning	Purchase Development
Alternative extinguishing system CPC	Partial conversion of the CO <sub>2</sub> extinguishing system Start: Q1/2025 End: Q4/2025	In planning	Production

## 11.2.5 Employee Participation

Starting in September 2025, Dörken will participate in the Energy Scouts competition for the third time in a row. This positive development is to be continued in particular by raising awareness of environmental and sustainability issues among our trainees. By 2028, our goal is to look back on five successfully completed rounds and thereby attract an ever-growing circle of employees within the company who are actively promoting the topic of sustainability.

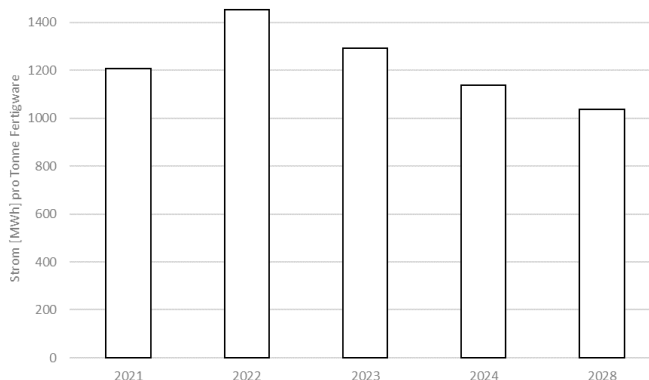


Agenda	Project data	Status	Life cycle stage
Energy Scouts	Participation in a nationwide competition. Target: 5 rounds by 2028. Start: 2023 – ongoing. Responsible: Training Manager / Sustainability Manager	Ongoing	All phases
Surface Academy Workshops	Workshops on sustainability and ESG. Start: 2024 – ongoing. Responsible: Surface Academy / Sustainability Manager.	Ongoing	All phases

## 11.3 Dörken Membranes

### 11.3.1 Energy Efficiency

The two new production lines are significantly more energy efficient than the old plant fleet they are intended to replace. Currently, an annual savings potential of around 3,000 MWh is assumed, which corresponds to about 15% compared to the energy consumption of 2019. However, this saving will only take effect during process-stable operation and after the old plant fleet is shut down (from 2023).



**Fig. 13 Environmental objective Energy efficiency - Membranes - Forecast development**

In addition to 2021, a countervailing trend can be expected for 2022 due to the commissioning of new production lines, the associated learning curve and parallel operation with the existing plant fleet. The full savings potential will continue to develop over the following years and reach its maximum in 2025.

Output value 2024: 1,388 MWh/t

Target value 2028: 1,037 MWh/t

Agenda	Project data	Status	Life cycle stage
Procurement and qualification of two new production lines (Higher energy efficiency; reduced scrap quantity)	Cost: EUR 15 600 000 Start: 2019 End: 2026 Responsible: Production/Procedure Planning	Status 2025: Qualification of a line completed. The second production line is in the qualification phase.	Production
Investment planning PV systems for villages	Cost: No investment budget defined Start: 2022 End: 2027 Responsible: P3 Team	Status 2025: Planning phase	Production

Since the qualification of one of the two plants could not be completed as planned in 2024, the targets from 2025 (savings potential of 15% compared to 2019, see Chapter 10.3.2) will be extended to 2028.

## 11.3.2 Waste Efficiency

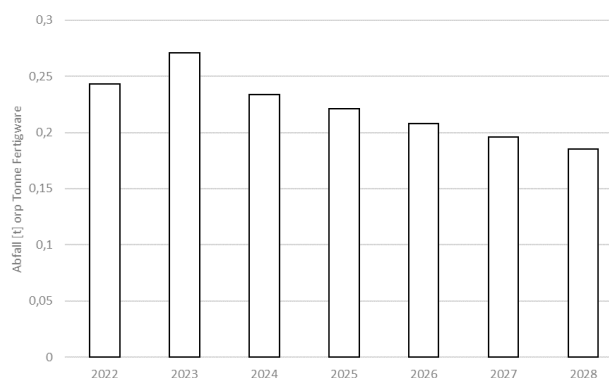
In the context of the commissioning of the two new production lines and the associated learning curve, a significantly increased scrap and thus waste generation can be assumed. Due to the delay in the qualification of one of the two new lines, the reduction in the committee rate will have an impact at a later date than planned.

Due to the additional qualification of a new additional production facility as well as additional various substitution measures on our existing product portfolio, increased scrap volumes will remain in the longer term.

For this reason, the target value for 2028 is defined as 0.185 t/t finished goods. This value will be achieved after completion of all qualification measures (completion of qualification line B + completion of new additional investment + revision of the product portfolio).

In addition to the larger qualification projects, a large number of optimization measures are being carried out in parallel at the plants, which could have an impact on the volume of waste.

Output value 2024: 0,234 MWh/t  
Target value 2028: 0,185 MWh/t



**Fig. 14 Environmental objective Waste efficiency - Membranes -Predict development**

Agenda	Project data	Status	Life cycle stage
Procurement and qualification of 2 new production lines (Higher energy efficiency; reduced scrap quantity)	Cost: EUR 15,600,000 Start: 2019 End: 2026 Responsible: Production/Procedure Planning	Status 2025: Qualification of a line completed. The second production line is in the qualification phase.	Production
Qualification of new installations in the nub area	Cost: EUR 1,000,000 Start: 2023 End: 2025 Responsible: Production/Procedure Planning	Status 2025: Commissioning completed. Currently, the products are being qualified on the facility.	Production
Cutting system spunbonding plant 2 New cutting system to reduce process-related committees	Cost: EUR 150,000 Start: 2024 End: 2025 Responsible: Maintenance / Production	Implemented	Production
New dosing station SVA1 Renewal of the dosing unit to improve the quantity dosing of raw materials.	Costs: EUR 191,000 Start: 2024 End: 2025 Responsible: Maintenance / Production	Implemented	Production
Edge strip return to studded system. Reuse of the edge strip in the plant	Costs: EUR 100,000 Start: 2023 End: 2025 Responsible: Production/Procedure Planning	Implemented	Production
Opticycle project (Optimization of ideal material flows for waste)	Costs: Currently no budget Date: 2025 Responsible: R&D	Material flows and waste volume recorded. Trials regarding the processing of reject streams in the trial. Successes: For two products, rejects that had previously been sold or disposed of could be returned to the production cycle and reused.	Development Production
Digitization of production and setup instructions for all lines	Cost: EUR 5,000 Start: 2023 End: 2026 Responsible: Procedural planning/production/QM	Introduction primarily in implementation	Production



### 11.3.3 Emissions

Objective: Significant undershoot of the emission limit values according to 31. BImSchV by installing a new exhaust gas purification system.

In order to identify further starting points for the reduction of CO<sub>2</sub> emissions, Dörken Membranes will expand the scope of the Corporate Carbon Footprint to Scope 3 in the coming three years. The Osapiens CCF software required for this has already been procured and is scheduled to be deployed operationally from 2026.

The plant is subject to the requirements of § 52 of the Federal Immission Control Act. Against the backdrop of stricter legal requirements and a high standard of sustainable and environmentally friendly operation, the goal was defined not only to comply with the currently applicable and future emission limits, but also to significantly fall below them in the coming years.

To achieve this goal, the procurement and installation of a bioscrubber is planned, which will replace the current power plant post-combustion plant. This exhaust air purification process enables effective reduction of airborne pollutants –especially organic and inorganic compounds– and thus contributes significantly to improving our environmental performance.

The implementation of this project is planned for the end of 2026 and will be regularly evaluated after successful commissioning in order to demonstrate the desired emission reductions and, if necessary, to identify further optimization potential.

Agenda	Project data	Status	Life cycle stage
Procurement and commissioning of an exhaust gas purification system for § 52 BImSchG system	Cost: EUR 2.350,000 Start: 07.2025 END: 31.12.2026 Responsible: Production/Procedure Planning	Status 2025: Budget approval and planning of procurement	Production

## 12. Validation

The environmental verifiers listed below confirm to have assessed that the sites, as indicated in the present environmental statement issued by the organisation Ewald Dörken AG with registration number DE-130-00031, meet all the requirements of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25. fulfil November 2009 as amended on 28/08/2017 and 19/12/2018 on voluntary participation of organisations in a Community eco-management and audit scheme (EMAS).

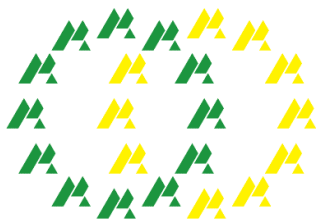
Name of the environmental assessor	registration number	Approved for the areas (NACE)	
Dr. Ulrich Hommelsheim	DE-V-0117	20.3	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
		22.23	Manufacture of builders' ware of plastic
		46.73.6	Wholesale of paint and varnish
		46.74.3	Wholesale of metal and plastic products for construction purposes
		46.75	Wholesale of chemical products
Dr. Georg Sulzer	DE-V-0041	64.2	Activities of holding companies
		70.1	Activities of head offices
Prof. Dr.-Ing. Jan Uwe Lieback	DE-V-0026	20.3	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
		22.23	Manufacture of builders' ware of plastic
		64.2	Activities of holding companies

By signing this declaration, it is confirmed that:

- the assessment and validation were carried out in full compliance with the requirements of Regulation (EC) No 1221/2009 as amended by Commission Regulation (EU) 2017/1505 and (EU) 2018/2026,
- the result of the assessment and validation confirms that there is no evidence of non-compliance with applicable environmental regulations and
- the data and information in the environmental statement provide a reliable, credible and truthful picture of all activities of the organization.

This declaration cannot be equated with an EMAS registration. EMAS registration may only be carried out by a competent body in accordance with Regulation (EC) No 1221/2009. This statement shall not be used as a stand-alone basis for informing the public.

Berlin, September 24, 2025



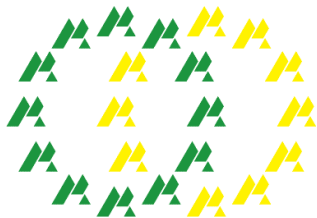
Dr. Ulrich Hommelsheim

Environmental Verifier DE-V-0117



Dr. Georg Sulzer

Environmental Verifier DE-V-0041



Prof. Dr. Jan Uwe Lieback

Environmental Verifier DE-V-0026

GUT Zertifizierungsgesellschaft

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**Signatures in the original German document**



The next updated and validated environmental statements will be presented in 2026 and 2027.

The next consolidated environmental statement will be presented in 2028.

