



2022

Sustainability Report

# Selected figures

## Selection of sustainability-relevant figures, inter alia under GRI Standards and CSR-RUG<sup>1</sup>

Key figures	2022	2021	2020	Change 2022/2021
<b>Company profile</b>				
Revenue <sup>2</sup>	€11,135.6 million	€10,294.3 million	€8,341.6 million	+8.2 %
Net income <sup>2</sup>	€105.8 million	€568.0 million	€210.9 million	-81.4 %
<b>Products and solutions</b>				
Research and development expenditure <sup>2</sup>	€321.3 million	€273.0 million	€235.3 million	+17.7 %
Patent applications and patents granted	2,843	2,804	2,836	+1.4 %
of which new applications in the reporting year	94	81	111	+16.0 %
Share of electric-powered vehicles sold (ITS segment)	88.1 %	87.0 %	87.3 %	
Share of used industrial trucks sold (ITS segment)	17.1 %	17.0 %	23.7 %	
<b>Environment</b>				
ISO 14001 certification rate <sup>3</sup>	81 %	72 %	59 %	
Energy use	2,212,046 GJ	2,289,737 GJ	2,142,564 GJ	-3.4 %
Greenhouse gas emissions (Scope 1+2) <sup>4</sup>	141 kt CO <sub>2</sub> e	149 kt CO <sub>2</sub> e	143 kt CO <sub>2</sub> e	-5.7 %
Greenhouse gas emissions (Scope 3) <sup>4</sup>	18,352 kt CO <sub>2</sub> e	19,633 kt CO <sub>2</sub> e	-	-6.5 %
Water consumption	553 million liters	584 million liters	472 million liters	-5.2 %
Waste produced	101,934 t	76,399 t	65,638 t	+33.4 %
<b>Employees</b>				
Number of employees <sup>5</sup>	41,149	39,602	36,207	+3.9 %
Personnel expenses	€2,848.7 million	€2,612.0 million	€2,300.8 million	+9.1 %
Percentage of female employees	17.8 %	17.1 %	17.2 %	
Number of apprentices <sup>5</sup>	799	713	687	+12.1 %
ISO 45001 certification rate <sup>3</sup>	80 %	70 %	47 %	
Illness rate <sup>6</sup>	3.4 %	2.9 %	2.9 %	
Lost time injury frequency rate <sup>7</sup>	5.8	7.7	7.9	

<sup>1</sup> GRI Standards of the Global Reporting Initiative (GRI) and the preparation of a non-financial Group report in accordance with sections 315b and 315c in conjunction with 289c to 289e of the German Commercial Code (German implementation of the EU Directive on non-financial reporting, CSR-RUG)

<sup>2</sup> For further information, please refer to the Annual Report 2022, including the consolidated financial statements (consolidated income statement) and management report (research and development).

<sup>3</sup> Or equivalent standard, based on all sites

<sup>4</sup> Greenhouse gas emissions in thousand tons CO<sub>2</sub>-equivalents, scope 2 market-based, scope 1 and 3 location based

<sup>5</sup> Full-time equivalents (FTE) as at balance sheet date 31/12/

<sup>6</sup> Absence days due to illness or occupational accidents related to planned working days of active employees

<sup>7</sup> Occupational accidents of active employees with one or more working days lost per million hours worked

# Strategy status overview

## Leading targets and status of the KION Group sustainability strategy<sup>1</sup>

Dimension	Action field	Targets and indicators, [target year]	Status 2022	Status 2021
People	Occupational health and safety	<b>Reduction of accident frequency rate by 5 % per annum</b> (based on the annual upper limit; long-term: no occupational accidents), [per annum]	5.8	7.7
		<b>100 % ISO 45001 certification rate<sup>2</sup></b> (all sites), [2024]	80 %	70 %
	Talent	Increase in employee satisfaction to an <b>engagement score</b> of at least <b>75</b> and a <b>participation rate</b> of at least <b>68 %</b> , as measured by an annual, global employee survey, [2023]	Engagement score: 74 Participation rate: 77 %	Engagement score: 74 Participation rate: 64 %
		<b>No cases of non-compliance</b> with KION Group minimum employment standards, [ongoing]	0 cases, target achieved	0 cases, target achieved
Products	Product and solution safety	<u>ITS segment:</u> Average number of selected <b>safety features per industrial truck</b> increased to <b>4</b> , [2027] and an <b>equipment rate with active safety features of 10 %</b> , [2027]	3.3 5.5 %	3.8 5.8 %
		<u>SCS segment:</u> Mitigating risks of noise pollution by offering quieter and safer solutions: <b>20 %</b> of Dematic's <b>solution portfolio</b> targeted to <b>operate under 85 dB(A)</b> , [2027]	♦	♦
	Product and solution sustainability	<u>ITS segment:</u> Strive for an electric-focused portfolio incl. battery and fuel cell-driven products by increasing the <b>share of electric-powered vehicles sold annually to 90%</b> , [2027]	88.1 %	87.0 %
		<u>SCS segment:</u> Development towards a sustainability focused portfolio: <b>100%</b> of Dematic's <b>new product / solution portfolio</b> will be <b>measured by sustainability related targets<sup>3</sup></b> , [2027]	♦	♦
		<u>ITS segment:</u> <b>Increase</b> in average <b>charging efficiency</b> of vehicles with <b>electric drives</b> , [2027]	♦	♦
	Processes	Climate and energy	<b>Absolute reduction in GHG emissions (Scope 1,2,3)</b> in metric tons of <b>CO<sub>2</sub>e</b> compared with 2021	
* Near-term [2030]: <b>Scope 1+2</b> by <b>4.2 %</b>			-5.7 %	149,306 tons
<b>Scope 3</b> by <b>2.5 %</b> per year (linear)			-6.5 %	19.6 million tons
* Long-term [before 2050]: <b>net-zero, Scope 1, 2, 3</b> by <b>100 %</b>			18.5 million tons	19.8 million tons
		<b>CO<sub>2</sub> neutrality</b> of products and solutions during use phase (in metric tons of <b>CO<sub>2</sub>e Scope 3</b> GHG emissions caused by the <b>use of annually shipped KION Group products and solutions</b> ), [before 2050]	14.4 million tons	15.3 million tons
		<b>30 % absolute reduction</b> of energy related GHG emissions of <b>own operations</b> in metric tons of <b>CO<sub>2</sub>e (Scope 1, 2, 3.3)</b> compared to 2017, [2027]	29.8 %	26.4 %
		<b>100 % ISO 14001 certification rate<sup>2</sup></b> (all sites), [2024]	81 %	72 %
	Circularity	♦	♦	♦

Processes	Supply chain	<b>EcoVadis or equivalent rating<sup>4</sup></b> (Corporate Social Responsibility performance) available for:  <b>25 % of top spend on strategic suppliers</b> for all OUs, [2022]	KION Group 49 % ITS EMEA 51 % ITS APAC 56 % ITS Americas ♦ SCS - Global 46 %	One OU has reached the target, the other OUs are working on implementation.
		<b>100 % of strategic and high-risk suppliers</b> , [2023]	65 % of high-risk suppliers <sup>5</sup> are covered	♦
		<b>100 % of direct suppliers</b> , [2025]	♦	♦
		<b>Definition and communication of minimum EcoVadis or equivalent score<sup>4</sup></b> for all suppliers, [2023] <b>Minimum EcoVadis score mandatory</b> for all suppliers, [2027]	♦	♦
	Sustainable governance	<b>EcoVadis “gold” rating</b> for all OUs and the KION Group, [2027]	KION Group: Gold Operating Units <sup>6</sup> : 1 Platinum; 1 Gold; 2 Silver; 1 no medal; 1 unrated	KION Group: Silver Operating Units <sup>6</sup> : 2 Gold; 1 Silver; 2 Bronze; 1 unrated
	<b>S&amp;P Global Corporate Sustainability Assessment (CSA) score ≥ 70</b> points for the KION Group, [2027]	62	57 (2020: 53)	

<sup>1</sup> Status and details in the corresponding subchapters

<sup>2</sup> Or equivalent standards

<sup>3</sup> Defined by internal or international standards, scorecards or certification schemes

<sup>4</sup> Group or site rating

<sup>5</sup> High risk suppliers refers to industry and country risk based on sustainability criteria

<sup>6</sup> The OU KION ITS EMEA is covered by the assessments of LMH EMEA and STILL EMEA.

\* Subject to final approval by the Boards of KION GROUP AG, scheduled for 2023

♦ In process

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# Introduction

## Foreword

**Dear Sir/Madam,**

At KION Group, we strongly believe that sustainability and our business success go hand in hand. We are deeply committed to protecting the environment and promoting the health and social well-being of people around the world. We act responsibly, in an environmentally friendly manner and in compliance with human rights. As part of our sustainability strategy, the next long-term climate goal is to drive KION toward net-zero emissions. Our mission is clear: to lead the way in sustainable development in the material handling industry, creating value for our customers, employees, investors, business partners and society as a whole. For the present and for future generations.

Even in challenging macroeconomic and geopolitical times like 2022, we remain concerned about continuing to strengthen and implement sustainability as a field of action and a key element in our KION 2027 strategy. Sound and sustainable process and structures, as well as attractive sustainable products and solutions, are a fundamental prerequisite if our Group is to remain resilient. In close cooperation with our customers and business partners, we will therefore drive forward our sustainability agenda in a focused manner.

In order to lend further weight to this high aspiration and to our goals, the Supervisory Board at KION GROUP AG has now established the issue as a dedicated area of responsibility at the Executive Board level. Valeria Gargiulo will assume the newly created role of Chief People & Sustainability Officer (CPSO) by no later than May 2023. With her many years of experience in human resources and in the Department for Environment, Social Affairs, and Responsible Corporate Leadership, she will further strengthen KION's sustainability profile, create greater transparency, and implement targeted sustainability-related measures.

### **Sustainability targets in eight action fields**

In the meantime, in 2022, we have restructured eight action fields in the area of sustainability in order to define a framework for our conduct and ongoing development in the coming years.

- Occupational health and safety (OHS): With OHS, our objective is to ensure the safety of our employees and own operations.
- Talent: We want to attract and develop talent with a focus on diversity.
- Product and solution safety: The goal is to continue to enhance the safety of our products for our customers. This will help us underpin our position as one of the world's leading intralogistics providers.
- Product and solution sustainability: We work every day to increase sustainability in our portfolio.
- Climate and energy: The goal is to steadily reduce emissions and energy consumption (scope 1, 2, and 3).
- Circularity: We strive to attain circular processes and business models.
- Supply chain: We want full transparency on relevant aspects along our supply chains.
- Sustainable governance: Our aim is to continue to improve mechanisms within our own governance processes and to be open about reporting on results.

This places our focus on a climate-neutral, environmentally conscious and circular economy, the product portfolio and employees.

### People, environment and sustainable profitability

KION Group's approach to sustainable business can be well described by the concept of the triple bottom line of sustainable development: People, environment, and sustainable profitability. With regard to people, we want to be a corporate group that employees enjoy working for. We want to be leaders in our ability to attract a talented workforce, and in our ability to retain and continuously develop this talent. We also aim to value and promote diversity. We attach enormous importance to health and safety in the workplace.

In terms of the environment, we are directing our attention to climate protection and to the circular economy in our value chain. Furthermore, we demand of our suppliers that they remain committed to maintaining current environmental and social standards.

To ensure our sustainable profitability, we are banking on innovations and the provision of high-performance, efficient products, solutions, and services that support our sustainability efforts as well as those of our customers.

Thus, as of today, almost 90 percent of all new forklift and warehouse trucks manufactured by the KION Group are already electrically powered. In supply chain solutions, 100 percent of our products are already electrically powered. Sustainable future technologies are the main focus of our research and development activities: In April 2022, we expanded our production capacity of lithium-ion batteries for industrial trucks through KION Battery Systems GmbH (KBS), a joint venture between KION GROUP AG and BMZ Holding GmbH in Karlstein am Main (Germany). Up to 30,000 batteries can now be manufactured at KBS each year.

However, anyone purchasing a battery-operated fleet of forklifts also requires efficient energy management and the associated consultancy services. This is something we can also deliver. To support our customers in overcoming these challenges, the KION Group has teamed up with ifesca GmbH to utilize artificial intelligence to forecast and manage energy consumption in industrial applications. In turn, the Energy Manager of our brand Linde Material Handling GmbH is helping our customers to manage their internal energy networks more efficiently. Using the accurate forecast results from this platform, they are able to optimize the planning of charging times for their industrial truck fleets, avoid charging peaks, and therefore significantly reduce their energy consumption and costs.

However, the KION Group has taken another decisive step further. This year, the Group is advancing into the development and manufacture of alternative hydrogen drives and will in the future be producing its own fuel cell systems. This means that the KION brands will soon be able to offer their customers everything they need from a single source: the truck, the fuel cells, and the associated servicing. Our own 24-volt fuel cell system for warehouse trucks is being launched to the market this year. A 48-volt system will follow in the future.

Moreover, we have just signed a strategic partnership deal with Li-Cycle Cooperation, which will enable us to use a highly environmentally friendly process to break down batteries into their original components. Thanks to this process, up to 95 percent of the materials used, such as nickel, cobalt, or lithium, can be reused in new lithium-ion batteries – a real milestone on the path to a functioning circular economy and, indeed, for the KION Group.

## Climate neutrality firmly in our sights

Over the past year, we have also further reduced the greenhouse gas emissions generated in our own business operations, and we have already attained our original goal of a 30 percent reduction versus 2017 by 2027 in 2022. Across all of our fields of activity, we have taken further concrete steps toward setting the Group on course for a climate-neutral value chain by 2050 at the latest. This is evidenced, among other things, by the “leadership level” that the KION Group was able to attain in the globally recognized climate change scoring system of the not-for-profit organization CDP. Our efforts and successes are also reflected in the results from the S&P Global Corporate Sustainability Assessment, which provides detailed ESG benchmarking for sustainability practices in more than 10,000 companies. In 2022, we improved our result for the fourth time in a row and achieving a total score of 62. We thus rank among the top five percent of the companies evaluated in our industry. This is another major step on the path toward the target of at least 70 points by 2027 defined in our sustainability strategy.

We currently also have our suppliers undergo a risk analysis and meticulously check that they are complying with human rights and environmental standards. In doing so, we are also paying close attention to environmental risk prevention. We will work actively alongside our suppliers to ensure that human rights and environmental obligations are met currently and in the future.

It is against this background that we look ahead to 2023 with confidence, for successful and, above all, sustainable intralogistics.



Best wishes,

A handwritten signature in black ink, appearing to read 'R. Smith', with a horizontal line extending to the right.

**Rob Smith**

Chief Executive Officer  
KION GROUP AG

## Company and brands

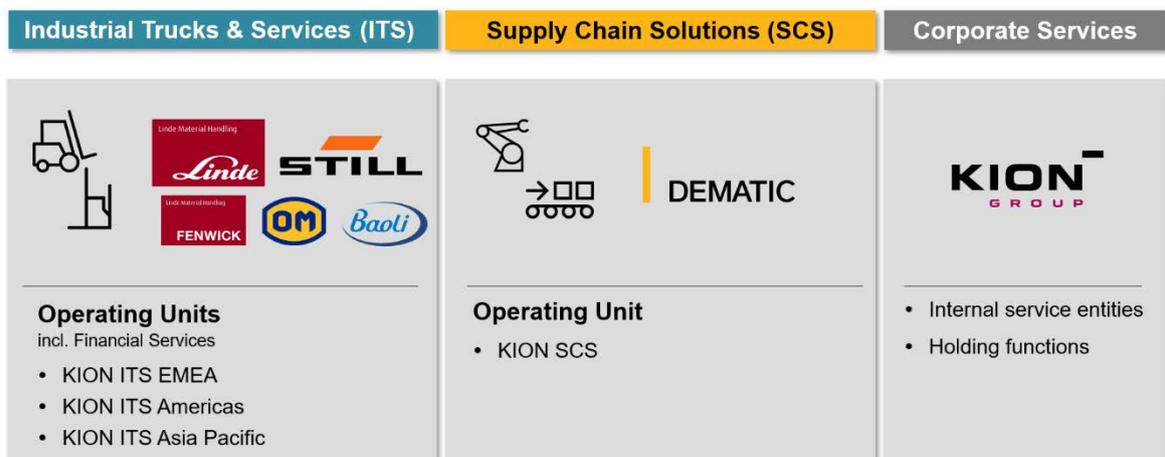
### NfR: Description of the business model

The KION Group is one of the world's leading suppliers of industrial trucks and supply chain solutions. With sales revenues of more than 11 billion euros in 2022, the KION Group is the largest manufacturer of industrial trucks in Europe and the leading foreign producer in China. Its range of products and services includes both industrial trucks, such as forklift trucks and warehouse technology equipment, as well as automation technologies and software solutions for optimizing supply chains, including related services. With more than 1.7 million industrial trucks worldwide as at December 31, 2022, the KION Group counts companies of various sizes in numerous industries on six continents among its customers. The KION Group employs around 41,000 people in more than 100 countries.

The Industrial Trucks & Services (ITS) segment comprises forklift trucks, industrial trucks, warehouse trucks and related services. In this segment, the KION Group operates internationally with the brands Linde Material Handling, STILL and Baoli as well as in regional markets with Fenwick and OM. The Supply Chain Solutions (SCS) segment develops and executes integrated technology and software solutions for optimizing supply chains. Manual and automated solutions are provided along customers' material flows for operational functions, ranging from goods receiving to multi-shuttle warehouse systems and order picking. The KION Group operates internationally in this segment under the Dematic brand. The Corporate Services segment comprises holding and other service companies that provide cross-segment services internally, such as information technology (IT) and general administration.

The KION Group operates in several markets via its four Operating Units (OUs) KION ITS EMEA, KION ITS Americas, KION ITS APAC and KION SCS. While the Operating Units bear full operational and economic responsibility in their markets, KION GROUP AG is responsible for the Group-wide strategy and central business standards. For a detailed illustration of the KION Group's organizational structure, its business model and its key markets, see the section Profile of the KION Group of the [combined Management Report](#), which is part of the Annual Report 2022 and provides a detailed description of the Group's economic position. It is complemented by the quarterly reporting and relevant information in the Investor Relations section of the [corporate website](#).

**Figure 1: KION Group segments – integrated supply chain and material handling solutions**



## Linde Material Handling

Linde Material Handling as part of the ITS segment is one of the world's largest manufacturers of forklift trucks and warehouse equipment. As one of the industry's technology leaders, the brand offers a wide range of solutions for industrial trucks, fleet management and comprehensive services ([Linde Material Handling website](#)). The company looks back on almost 120 years of company history, including over 50 years in the field of material flow solutions.

Linde Material Handling stands for maximum performance even under the most demanding operating conditions. In addition to performant and sustainable drive systems, safety and user-friendliness are top priorities for Linde Material Handling: these include maneuverability, intuitive handling and ergonomics, driver assistance systems through to rapid integration and intelligent interfaces that communicate with operational systems. Automation and seamless integration into the customer application increase efficiency and success. Holistic solutions pursue the target of networked, safe and energetically sustainable intralogistics.

With the "X"-series Linde Material Handling offers electric forklifts whose high performance and robustness can be used as a genuine alternative to internal combustion trucks. Customers are able to choose a quiet, emission-free alternative for even the most challenging applications, without having to allow for any loss of performance.

With a large rental fleet of almost 43,000 vehicles Linde Material Handling provides a high degree of flexibility. The same applies to the various options - leasing, long-term rental or hire - as well as used Linde trucks which are reconditioned to standardized specifications throughout Europe.

Production sites are located in Germany, France, USA, China, Czech Republic and Poland. Linde Material Handling has been part of KION Group since it was founded in 2006. The head office is located in Aschaffenburg (Germany).

### Linde Material Handling's trucks and services

Trucks	Services
<ul style="list-style-type: none"> <li>• Counterbalance trucks (incl. heavy trucks)               <ul style="list-style-type: none"> <li>- Electric powered forklift trucks</li> <li>- Internal combustion powered trucks</li> </ul> </li> <li>• Warehouse trucks and equipment for transport, stacking and order picking</li> <li>• Tow Tractors and tugger train solutions</li> <li>• Automated vehicles and solutions</li> <li>• Explosion-proof trucks</li> </ul>	<ul style="list-style-type: none"> <li>• Individualization and customized products</li> <li>• Energy solution consulting</li> <li>• Local service, maintenance, spare part supply, full service</li> <li>• Holistic inhouse-logistic concepts</li> <li>• Innovative safety equipment/solutions</li> <li>• Digitization of the fleet &amp; fleet management software</li> <li>• Taylor-made rental solutions</li> <li>• Financial services</li> </ul>

## Linde Material Handling's product portfolio

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### Electric trucks:

- E-series: electric drive
- X-series: high-performance electric drive

### Internal combustion trucks

#### Drive:

- Lithium-ion battery
- Lead-acid battery
- Fuel cell
- Diesel
- Liquefied Petroleum Gas (LPG)
- Hydrogenated Vegetable Oils (HVO)

General maximum load capacity: 18,000 kg

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### Electric warehouse trucks:

- Low lift pallet trucks
- High lift pallet trucks
- Reach trucks
- Order pickers
- Very Narrow Aisle (VNA) trucks

#### Drive:

- Lithium-ion battery
- Lead-acid battery
- Fuel cell

General maximum load capacity: 3,000 kg

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### Electric tractors and tuggy trains:

- Tow tractors
- Tuggy trains

#### Drive:

- Lithium-ion battery
- Lead-acid battery

General maximum load capacity: 6,000 kg

General maximum towing capacity: 35,000 kg



#### Automated vehicles and solutions:

- AMRs (Automated Mobile Robots)
- Automated warehouse trucks with geo-navigation

#### Drive:

- Lithium-ion battery
- Lead-acid battery

## STILL

For over 100 years, STILL has been one of the innovation leaders among the suppliers of forklift trucks, warehouse trucks and intralogistics systems – and is thus a full-range supplier of in-plant logistics ([STILL website](#)). STILL was founded in 1920 in Hamburg by Hans Still as a repair company for electric motors. As early as 1921, electricity-generating units were offered with the “Matador”; the “EK2000” electric truck followed in 1947 and the first electric forklift trucks in 1949. Since then, the brand has developed its portfolio to include numerous products, security, software as well as automation systems and is available in almost 90 countries worldwide.

Focusing on electric powered trucks and warehouse equipment, STILL offers highly efficient products. In 2019, STILL launched the RX60, a truck that has redefined the benchmark for electric trucks. All STILL trucks and equipment are supported by digital control, safety and assistance systems.

STILL provides several system services like intralogistics consulting, racking systems, logistics software systems, or system integration. The brand offers service excellence and a range of services perfectly tailored to the customers’ activities and operations - from repair orders to full service.

In addition to new purchases, used models and rental options are also available to the customer. With a large rental fleet of 35,000 vehicles STILL offers a perfect fit for every customer request.

Production sites are located in Germany, Brazil, Italy, China, France and Czech Republic. STILL has been part of the KION Group since it was founded in 2006. The head office is located in Hamburg (Germany).

### STILL’s trucks and services

Trucks	Services
<ul style="list-style-type: none"> <li>• Counterbalance trucks (incl. heavy trucks)               <ul style="list-style-type: none"> <li>- Electric powered forklift trucks</li> <li>- Internal combustion powered trucks</li> </ul> </li> <li>• Warehouse trucks and equipment for transport, stacking and order picking</li> <li>• Tow tractors and tugger trains</li> <li>• Automated vehicles</li> <li>• Explosion-proof trucks</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance and full service</li> <li>• Short term rental</li> <li>• Safety equipment</li> <li>• Operator and technical training courses</li> <li>• Fleet management</li> <li>• Software for warehouse management</li> </ul>

## STILL's product portfolio

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### Electric and internal combustion trucks

#### Drive:

- Lithium-ion battery
- Lead-acid battery
- Fuel cell
- Diesel
- LPG

General maximum load capacity: 18,000 kg

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### Electric warehouse trucks:

- Low lift pallet trucks
- High lift pallet trucks
- Reach trucks
- Horizontal/vertical order pickers
- VNA trucks

#### Drive:

- Lithium-ion battery
- Lead-acid battery
- Fuel cell

General maximum load capacity: 3,300 kg

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### Electric tractors and trolley trains:

- Tow tractors
- Trolley trains

#### Drive:

- Lithium-ion battery
- Lead-acid battery

General maximum load capacity: 6,000 kg

General maximum towing capacity: 35,000 kg

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#### Automated vehicles and solutions:

Automated vehicles are based on series production vehicles and are standardized.

- High and low lift pallet trucks
- VNA trucks
- Tow tractors

#### Drive:

- Lithium-ion battery
- Lead-acid battery

## Baoli

Baoli is the international brand for the economy and value segments ([Baoli website](#)). Founded in 2003 in Jingjiang (China), Baoli has been part of the KION Group since 2009.

Two modern production facilities in China meet the highest production standards. In addition to the original Baoli plants located in Jingjiang, a new production plant of the KION Group based in Jinan started in 2022.

Baoli offers its customers a range of solid and robust industrial trucks and guarantees a high quality of service. The European development and engineering expertise combined with a cost-efficient production base in China make material handling decisions easy for customers who seek reliable, easy-to-use and easy-to-maintain trucks for their day-to-day operations.

The Baoli brand provides forklift trucks with all required basic functions at a fair price-quality ratio. The product range consists of electric and internal combustion counterbalance trucks as well as a variety of warehouse equipment such as low lift and high lift pallet trucks.

### Baoli's trucks and services

#### Trucks

- Counterbalance trucks
  - Electric powered forklift trucks
  - Internal combustion powered trucks
- Warehouse equipment

#### Services

- Maintenance
- Diagnosis and repair
- Technical training courses

## Baoli's product portfolio

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### Electric and internal combustion trucks

Drive:

- Lithium-ion battery
- Lead-acid battery
- Diesel
- LPG



### Electric warehouse trucks:

- Low lift pallet trucks
- High lift pallet trucks

Drive:

- Lithium-ion battery
- Lead-acid battery

General maximum load capacity: 2,500 kg

## Dematic

Prior to helping the KION Group grow into a leading global provider of integrated automation technology, software and services for optimizing supply chains Dematic was developing technologies which became integral to the advancement of the intralogistics industry ([Dematic website](#)). Founded in 1819 as “Mechanische Werkstätten Harkort & Co.” in the German city of Wetter an der Ruhr it later merged with other companies to create “Deutsche Maschinenbau-Aktiengesellschaft” (Demag) in 1910.

During the early years of its existence, it concentrated on creating and providing entire conveyor systems and by 1939 it came out with the world’s first mobile conveyor belt. Jump to the 1950s and the company counted two major milestones with its development of the world’s first hydraulic excavators and mobile cranes as well as the first shelf-servicing equipment.

In 1973, Mannesmann acquired Demag, and together, they designed the first high-bay warehouse, before the German company sold the intralogistics specialist to Siemens in 2001. Four years later, in 2005, the current name Dematic is launched as an independent brand on the market and its ground-breaking multishuttle system revolutionized the material handling industry. In 2016, Dematic

became a member of the KION Group and continues to play a leading role in warehouse automation and software solutions as well as in the development and management of internal material flow.

Dematic provides individual hardware as well as software products and entire turnkey solutions such as warehouse management, conveyors and sortation systems or systems for manual and automatic order picking in warehouses and distribution centers. This includes storage and retrieval systems such as unit load miniload and multishuttle systems, light and heavy goods conveyors, workstations and robotic picking, sorters or integrated logistics systems. Using automation, it also develops customized intralogistics solutions for numerous vertical markets, which raise the efficiency of processes. Dematic uses in-house software solutions combined with SAP for warehouse management, paperless order picking or for material flow applications. Project management, mechatronics, IoT approaches, and life cycle services complement the broad portfolio.

The company has development centers and production sites around the world in the US, Mexico, Germany, Italy, Australia and China. Its global headquarters are in the Atlanta, Georgia (USA).

### Dematic's solutions and services

#### Solutions

- Warehouse equipment and management
- Operation hub management
- In-store fulfilment (micro-fulfilment)
- Mixed case fulfilment
- Lights out fulfilment
- Life cycle support
- Asset management

#### Services

- Mobile automation (Automated Guided Vehicles, Automated Mobile Robots)
- Storage systems and AutoStore™
- Conveyor systems
- Picking technology and workstations
- Robotic palletizing and depalletizing systems
- Sortation systems



# Sustainability management

## Sustainability strategy, action fields and targets

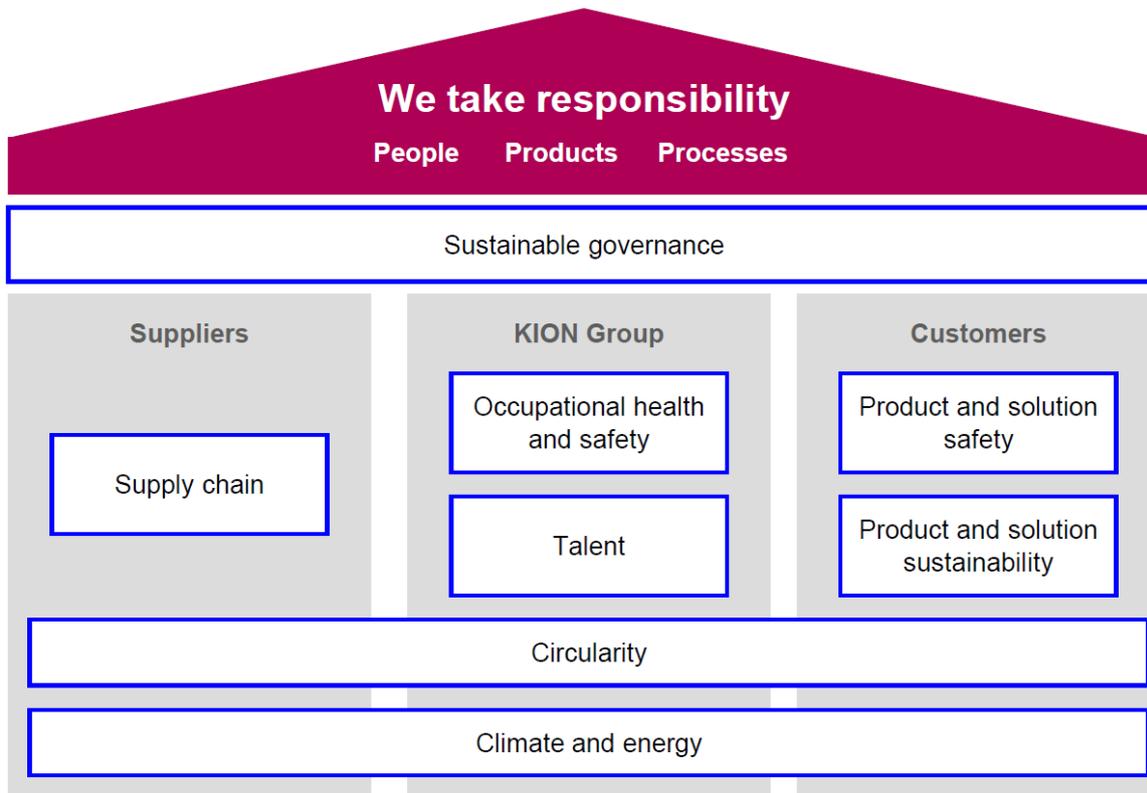
### NfB: Social matters

For years, the KION Group has been constantly integrating sustainability criteria along the entire value chain: from design and supply chain to own operations and product life cycle. The KION Group aspires to understand and address the needs of its customers like no other company in the world and to convince them with highly customized material handling solutions. Sustainable business practices are a logical consequence of this aspiration. This makes sustainability a task for all employees in the Group as well as our business partners. They are encouraged to contribute through ideas, innovations and consistent action to ensure that the KION Group is acting as a sustainable partner and fulfils its mission to lead the way in sustainable development in the material handling industry. With a clear sustainability strategy, ambitious objectives, and effective measures, the KION Group takes responsibility and aims to shape a sustainable future to keep the world moving.

Acting along the corporate values Integrity, Collaboration, Courage, and Excellence, and the principles in the [KION Group Code of Compliance](#), which applies throughout the Group, the KION Group is responding to demanding expectations of the capital market, customers and further stakeholders. Since 2021, sustainability is firmly anchored in the “KION 2027” corporate strategy as an individual field of action and is accompanied by the other five fields of action which were further developed in the fiscal year 2022 ([Annual Report 2022 > Strategy of the KION Group](#)).

Sustainability is linked to the wider-reaching targets and initiatives within the three strategic dimensions *People*, *Products* and *Processes* with the overall principle "We take responsibility". These three dimensions provide the framework for specific sustainability action fields. In the reporting year, in the context of a review of the sustainability approach and ambitions, the former 14 action fields were consolidated and further developed to eight highly interdependent action fields along the entire value chain (Figure 2), underpinned by an update of the [materiality analysis](#). This Sustainability Report is essentially aligned with these action fields, each of which is presented in an individual chapter.

The KION Group pursues a systematic Group-wide approach for the operational implementation of the sustainability strategy and the underlying program. Derived from the sustainability strategy and materiality analyses, each action field is corroborated by a specific program with objectives, measures and monitoring (quantitative where appropriate). For each action field a general ambition level, the main levers and relevant KPIs are defined. A revision of individual targets, further breakdowns and corresponding measures is ongoing, including the alignment with external requirements, between action fields, with internal stakeholders on Group level and within the OUs. Progress made at the Group level and in the Operating Units is reviewed regularly (for example via Steering Committees and Board meetings) and reported to the Executive Board of KION GROUP AG.

**Figure 2: The eight action fields of KION Group sustainability management**

## People

### 01 | Occupational health and safety (OHS)

Ensuring the health and safety of the KION Group employees is a fundamental precondition for business success. The KION Group is both morally and legally obliged to provide a safe working environment for its employees and contractors. OHS is a significant contributor to the wellbeing of employees, which in turn is one of the key aspects of being a sustainable, high-performing company. The KION Group strives for a behavior-based safety culture regarding physical as well as mental health and minimizing hazards, workplace-related injuries, occupational illnesses, and serious incidents ([01 | Occupational health and safety](#)).

### 02 | Talent

People are an integral part of the KION Group's sustainability strategy. The KION Group employees decisively shape the efforts for sustainability and bring them to life. In a highly competitive industry, attracting, developing, engaging, and retaining talents is a major driver for business success and profitable growth. In alignment with the corporate values the KION Group further focuses on creating an attractive as well as diverse workplace and fostering an inclusive culture ([02 | Talent](#)).

## Products

### 03 | Product and solution safety

The safe operation of all KION Group products and solutions has always been a focus of the Group's activities. The KION Group is constantly working to improve its high standard of customer safety. The goal is to increase safety for the environment as well as for customers and their property and to avoid any risk. To achieve this, safety features and functions are continuously expanded and developed, and customers are provided with safety information in a variety of ways ([03 | Product and solution safety](#)).

### 04 | Product and solution sustainability

The KION Group considers its products and solutions as essential enablers for achieving sustainability targets. Driven by steadily rising customer expectations, climate change, cost developments, resource boundaries and compliance requirements, the KION Group strives to offer solutions that comprise an effective combination of product portfolio elements tailored to solve a specific customer case considering sustainability criteria. Besides performance improvements, the focus is on an increasing transparency regarding the environmental and social aspects of products and solutions as well as their continuous improvement in terms of sustainability ([04 | Product and solution sustainability](#)).

## Processes

### 05 | Climate and energy

The worldwide efforts to limit global warming and corresponding challenges for the planet demand active and forward-looking climate-related action from the KION Group. To achieve net-zero within the established timeframe, the KION Group's climate and energy management takes the entire value chain into account and encompasses a holistic decarbonization approach. Beyond the company's own operations, the KION Group will closely cooperate with its customers, suppliers and business partners regarding energy use, resource efficiency, greenhouse gas (GHG) emissions reduction and adaptation action. In addition, the action field covers further matters of (local) environmental protection and biodiversity ([05 | Climate and energy](#)).

### 06 | Circularity

Due to pervasive planetary boundaries, circularity is a logic step in the evolution of economy from linear production to a cycle, in which the output of one process is the input for another. This process starts at the very beginning of a product's life cycle: integrating smart product and solution design as well as production processes, saving and securing valuable resources, ensuring efficient waste management, increasing flexibility and creating new business opportunities. The KION Group aspires a responsible and modular approach of resource use along the entire product and solution life cycle as well as the entire value chain while creating customer benefits and ensuring the company's mid- and long-term success ([06 | Circularity](#)).

### 07 | Supply chain

The KION Group strives for a robust, agile, and cost-efficient supplier base which sustainably ensures the supply of materials to all KION Group production, installation as well as sales and service

activities. The supply chain is highly interconnected to product and solution sustainability, circularity as well as climate and energy. Following a holistic approach and in close cooperation, the KION Group is encouraging and demanding the commitment of its suppliers and business partners towards responsible and carbon-reduced operations ([07 | Supply chain](#)).

## 08 | Sustainable governance

Sustainable Governance is the foundation for decision-making and for decision implementation – in general and for all sustainability action fields in particular. In a wider sense it encompasses business ethics as well as the KION Group's understanding of sustainable business management, including compliance, corporate citizenship and communications. The KION Group aims to maintain a sustainable governance which is as effective, efficient and responsive as possible. By regularly reviewing and adequately adjusting the organizational structure, processes and rules, staffing and skillsets, tools and infrastructure the KION Group ensures not only that stakeholder requirements are met, but also the company's success in the long-run ([08 | Sustainable governance](#)).

## Sustainability targets

Specific strategic quantitative sustainability targets are set out for each action field and backed up with corresponding indicators (Table 1). These targets are further detailed and operationalized through comprehensive action field programs. For the revised near-term and long-term climate targets, the formal final approval by the Boards of KION GROUP AG is scheduled for 2023.

**Table 1: Leading targets of the KION Group sustainability strategy<sup>1</sup>**

Dimension	Action field	Targets and indicators	Target year
People	Occupational health and safety	<b>Reduction of accident frequency rate by 5 % per annum</b> (based on the annual upper limit; long-term: no occupational accidents)	per annum
		<b>100 % ISO 45001 certification rate<sup>2</sup></b> (all sites)	2024
	Talent	Increase in employee satisfaction to an <b>engagement score</b> of at least <b>75</b> and a <b>participation rate</b> of at least <b>68 %</b> , as measured by an annual, global employee survey	2023
		<b>No cases of non-compliance</b> with KION Group minimum employment standards	ongoing
Products	Product and solution safety	<u>ITS segment</u> : Average number of selected <b>safety features per industrial truck</b> increased to <b>4</b> and an <b>equipment rate with active safety features</b> of <b>10 %</b>	2027
		<u>SCS segment</u> : Mitigating risks of noise pollution by offering quieter and safer solutions: <b>20 %</b> of Dematic's <b>solution portfolio</b> targeted to <b>operate under 85 dB(A)</b>	2027
	Product and solution sustainability	<u>ITS segment</u> : Strive for an electric-focused portfolio incl. battery and fuel cell-driven products by increasing the <b>share of electric-powered vehicles sold annually</b> to <b>90 %</b>	2027
		<u>SCS segment</u> : Development towards a sustainability focused portfolio: <b>100 %</b> of Dematic's <b>new product / solution portfolio</b> will be <b>measured by sustainability related targets<sup>3</sup></b>	2027
		<u>ITS segment</u> : <b>Increase</b> in average <b>charging efficiency</b> of vehicles with <b>electric drives</b>	2027

Processes	Climate and energy	<b>Absolute reduction</b> in GHG emissions ( <b>scope 1,2,3</b> ) in metric tons of <b>CO<sub>2</sub>e</b> compared with 2021	
		* Near-term: <b>Scope 1+2</b> by <b>4.2 %</b> , <b>Scope 3</b> by <b>2.5 %</b> per year (linear)	*2030
		* Long-term: <b>net-zero</b> , <b>Scope 1, 2, 3</b> by <b>100 %</b>	*before 2050
		<b>CO<sub>2</sub> neutrality</b> of products and solutions during use phase (in metric tons of <b>CO<sub>2</sub>e Scope 3</b> GHG emissions caused by the <b>use of annually shipped KION Group products and solutions</b> )	before 2050
		<b>30 % absolute reduction</b> of energy related GHG emissions of <b>own operations</b> in metric tons of <b>CO<sub>2</sub>e (Scope 1, 2, 3.3)</b> compared to 2017	2027
		<b>100 % ISO 14001 certification rate<sup>2</sup></b> (all sites)	2024
	Circularity	♦	♦
	Supply chain	<b>EcoVadis or equivalent rating<sup>4</sup></b> (Corporate Social Responsibility performance) available for:	
		<b>25 % of top spend on strategic suppliers</b> for all OUs	2022
		<b>100 % of strategic and high-risk suppliers</b>	2023
		<b>100 % of direct suppliers</b>	2025
		<b>Definition</b> and communication of <b>minimum EcoVadis or equivalent score<sup>4</sup></b> for all suppliers	2023
		<b>Minimum EcoVadis score mandatory</b> for all suppliers	2027
	Sustainable governance	<b>EcoVadis "gold" rating</b> for all OUs and the KION Group	2027
		<b>S&amp;P Global Corporate Sustainability Assessment (CSA) score ≥ 70</b> points for the KION Group	2027

1 Status and details in the corresponding subchapters

2 Or equivalent standards

3 Defined by internal or international standards, scorecards or certification schemes

4 Group or site rating

\* Subject to final approval by the Boards of KION GROUP AG, scheduled for 2023

♦ In process

## Group-wide materiality analysis

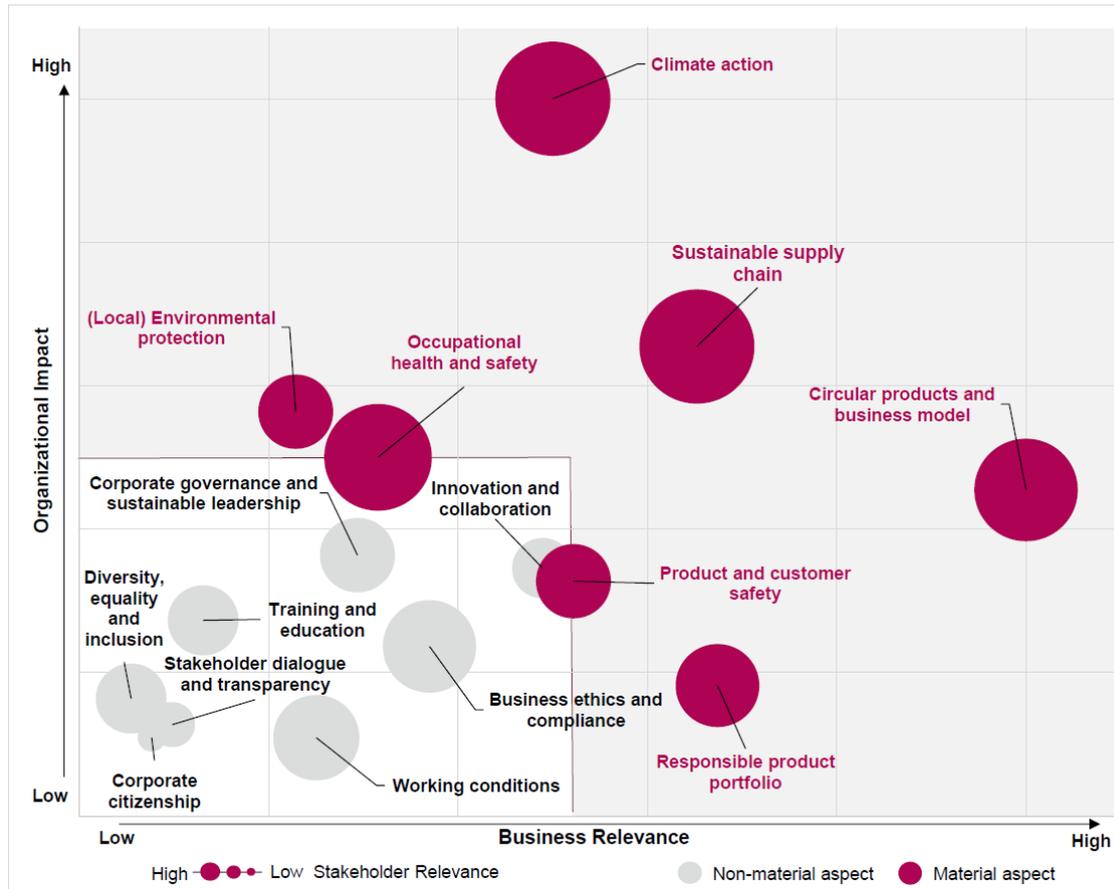
**NfB: Identification of material issues, non-financial risks, specific financial items in the Financial Statement, Social matters**

The KION Group regularly revises its sustainability approach with Group-wide materiality analyses. Based on the United Nation's Sustainable Development Goals (UN SDGs) and other frameworks, current and future trends as well as stakeholder requirements potentially relevant aspects are identified and evaluated. Global surveys addressing the most relevant stakeholder groups, on Group level and in Operating Units, are combined with a sustainability benchmark of industry, peers and market expectations. These provide important input for further discussion, evaluation, finalization and presentation in expert groups, such as the Sustainability Steering Committee and KION Group Boards.

The materiality analysis is based on three perspectives to assess topics in terms of their importance for the company: business relevance (outside-in, opportunities and risks for the Group's business development), organizational impact (inside-out, environmental and social impact of the Group's business activities) and stakeholder relevance (significance for the creation and shaping of expectations and decision-making by stakeholders). The results of the materiality analysis, which cover double materiality, are further incorporated in the sustainability strategy and action field activities.

The latest update of the Group's materiality analyses was performed in the second half of the reporting year, accompanied by a partial revision of the currently 15 potentially relevant aspects. As a result, seven focus areas (material aspects) were identified (Figure 3). An allocation of relevant aspects is available in the index for the Group non-financial report (Table 22). The comprehensive list of aspects with related details can be found in the Annex (Table 26).

**Figure 3: Results of the current KION Group materiality analysis 2022, details on aspects in Annex (Table 26)**



## Stakeholder dialog

The social and environmental expectations of internal and external stakeholder groups with regard to the KION Group's business activities are addressed as part of an active stakeholder management. The KION Group's stakeholder management is designed to identify expectations and requirements at an early stage, analyze them in terms of the Company's interests and incorporate them into decision-making. The KION Group identifies stakeholder groups that are particularly relevant to sustainability management according to clear criteria. These take into account the importance and contribution of stakeholders to the KION Group's success as well as their specific requirements with regard to the Group's sustainability performance. The Group's key stakeholders are customers, employees, the finance and capital markets (investors, shareholders), suppliers and legislators.

The KION Group pursues an open dialog with a wide range of stakeholder groups, either directly via surveys or at events (Table 27). As carried out in the materiality analysis update, not only the inside-

out perspective, but also the outside-in perspective and the stakeholder relevance play an equally pivotal role for the KION Group. In the reporting year, the opinions of customers, employees, suppliers, and financial and capital market representatives were taken into account to identify and analyze material topics. With regard to the most important stakeholder groups, for example, the KION Group held investor calls and sustainability conferences for the capital market. Specific sustainability interests, particularly regarding GHG emissions, are addressed in direct and individual dialog with customers, suppliers and further stakeholders. In this reporting year, the KION Group again collected employees' perspectives in the Group-wide 'KION Pulse' survey. Local initiatives and site-specific communication measures were also launched.

The KION Group constantly monitors new regulations as well as amendments and participates in dialog with policy makers through its engagement in industry associations, for instance regarding the EU Taxonomy. In addition, the Group is a committed member of the VDMA initiative Blue Competence and many of the KION Group's subsidiaries are also actively involved in industry associations as well as international institutions memberships. Furthermore, the KION Group is part of, for example, the Federation of the German Foundry Industry (BDG) and the European Materials Handling Federation (Fédération Européenne de la Manutention, FEM). Environmental standards such as ISO, CEN or DIN are further developed through the involvement of the KION Group. In keeping with the , the Group does not maintain any political relationships beyond its association work.

## Incorporating the EU Taxonomy

Since 2020/2021, the KION Group systematically analyzes its business activities in accordance with the criteria of the EU Taxonomy Regulation 2020/852 as well as related regulations and publishes the results annually. This relates to the share of taxonomy-eligible and non-taxonomy-eligible as well as taxonomy-aligned and non-taxonomy-aligned economic activities in total revenue, capital expenditures (CapEx) and operating expenditures (OpEx) in relation to the two EU Taxonomy objectives of "climate change mitigation" and "climate change adaptation" pursuant to Article 10 and 11 of the Delegated Act supplementing Article 8 of the Taxonomy Regulation.

Analysis of the KION Group's economic activities for the 2021 and 2022 financial years shows the following results (Table 2). Detailed tables according to the Taxonomy Regulation are available in the Annex ([Further disclosure on EU Taxonomy](#)).

**Table 2: Business in terms of EU Taxonomy - taxonomy-eligible and taxonomy-compliant revenue, capital expenditure (CapEx) and operating expenses (OpEx) from KION Group business activities\***

	2022		2021		Change
	€ million	%	€ million	%	Total
<b>Revenues</b>					
KION Group total	11,149.1	100.0 %	10,294.3	100.0 %	+8.3 %
thereof taxonomy-eligible activities	3,770.4	33.8 %	3,271.9	31.8 %	+15.2 %
thereof taxonomy-aligned activities	26.2	0.2 %	-	-	-
<b>Capital expenditures (CapEx)</b>					
KION Group total	1,161.5	100.0 %	982.6	100.0 %	+18.2 %
thereof taxonomy-eligible activities	771.9	66.5 %	586.2	59.7 %	+31.7 %
thereof taxonomy-aligned activities	12.1	1.0 %	-	-	-
<b>Operating expenses (OpEx)</b>					
KION Group total	215.2	100.0 %	169.7	100.0 %	+26.8 %
thereof taxonomy-eligible activities	186.5	86.7 %	141.2	83.2 %	+32.1 %
thereof taxonomy-aligned activities	8.9	4.1 %	-	-	-

\* For general information on revenues, capital expenditures and operating expenses, please refer to the Annual Report 2022, especially notes to the consolidated financial statements (notes to the consolidated income statement) and combined management report (analysis of capital expenditure). Detailed tables available in annex (EU Taxonomy). Among others the increase in the share of electric-powered vehicles sold in the ITS segment leads to a higher share of taxonomy-eligible activities compared to the previous year. Capital expenditure and operating expenses are partially project related which can additionally lead to higher deviations between reporting years.

To identify taxonomy-eligible as well as taxonomy-aligned economic activities, an interdisciplinary team was compiled to analyze and evaluate the KION Group's economic activities based on the technical screening criteria of the Delegated Act. The KION Group especially refers to the set of criteria "3.6: Manufacture of other low-carbon technologies", as there are currently no specific criteria for the intralogistics sector. This relates to technologies that demonstrate substantial life cycle GHG emission savings compared to the best performing alternative technology available on the market. Within the KION Group, this includes manufacturing of e-trucks and warehouse trucks which significantly reduce GHG emissions due to their electric drives, when compared with conventional engines. Additionally, criterion "3.2: Manufacture of equipment for the production and use of hydrogen" and criterion "3.4: Manufacture of batteries" are also relevant, as they cover the KION Group's production of lithium-ion batteries, fuel cells and hydrogen refueling stations. Further relevant sets of criteria and details are listed in the annex ([Further disclosure on EU Taxonomy](#)).

Among the taxonomy-eligible activities, taxonomy-alignment according to currently available criteria could be demonstrated for those electrically powered industrial truck models whose applications are in an area, in which the highest performing alternatives available on the market are powered exclusively by a conventional combustion engine. Additionally, taxonomy-alignment could be partially determined for activities regarding the manufacture of batteries as well as the manufacture of equipment for producing and using hydrogen. Apart from the technical screening criteria, a diligent assessment of potential considerable impairments towards further environmental objectives (Do-No-Significant-Harm, DNSH) and Minimum Social Safeguards was successfully performed. This means no indications were identified that are opposed to taxonomy-alignment. For these taxonomy-aligned

activities, the share of total revenue, more specifically capital expenditures (CapEx) and operating expenditures (OpEx) are reported in each case.

The survey of revenue, investment and operating costs was carried out in accordance with the Delegated Regulation on Article 8 of the Taxonomy Regulation and referring to the guidance on applying Article 8 of the Taxonomy Regulation by the Institute of Public Auditors in Germany, Incorporated Association (Institut der Wirtschaftsprüfer in Deutschland e.V., IDW).

To calculate the proportion of taxonomy-eligible as well as taxonomy-aligned share of revenue, the global revenue from the sale, rental and used-goods market of the e-trucks and warehouse trucks as well as the revenue from the sale of lithium-ion batteries, fuel cells and hydrogen refuelling stations were taken into account and set in relation to KION Group's total revenue.

To calculate the taxonomy-eligible as well as taxonomy-aligned share of the capital expenditures (CapEx), investments in property, plant and equipment for the production of e-trucks, warehouse trucks, lithium-ion batteries, fuel cells and hydrogen refuelling stations as well as investments in their research and development were included. In addition, all investments in KION Group's own rental fleet of e-trucks and warehouse trucks, as well as procurement leasing, were classified as taxonomy-eligible. This was then set in relation to KION Group's total capital expenditures.

To calculate the taxonomy-eligible as well as taxonomy-aligned share of the operating expenditures (OpEx), the material and personnel expenses for the maintenance of producing e-trucks, warehouse trucks, lithium-ion batteries, fuel cells and hydrogen refuelling stations were included. Operational research and development expenditures for these products was also considered and set in relation to KION Group's operating expenditures as defined in the Delegated Regulation on Article 8 of the Taxonomy Regulation.

The EU Taxonomy Regulation is at an early stage and will develop further. The KION Group is convinced that the company and its portfolio consisting of efficient product and solutions in all segments can make and makes a major contribution to the defined objectives. The current state of the EU Taxonomy Regulation does not provide appropriate descriptions and assessment criteria for all economic activities. Hence, there is currently for example no basis for consideration regarding service activities which are relevant to the lifetime of products and solutions. What is more, with their complexity and individuality of automated supply chain solutions there is currently no approach for assessment or comparison available with the non-specific criteria. By an expected progression of the EU Taxonomy further sets of criteria for further objectives and particularly industry-specific criteria inside as well as outside the EU Taxonomy could be the foundation to appropriately map economic activities and demonstrate key benefits. In the further course of this report, detailed descriptions of the activities within the individual action fields provide an overview. Along with further requirements, the specifications and objectives of the EU Taxonomy are systematically pursued within the sustainability strategy and integrated in the company activities.

# People

## 01 | Occupational health and safety

**27**

Comprehensive management approach  
Establishing a permanent health and safety culture  
Dedicated rules, Group-wide certification and pro-activity

## 02 | Talent

**30**

Development instead of administration  
Employee feedback  
Broad spectrum of skills and cultures  
Diversity as a strength  
Wages and salaries in line with the market  
Compliance with international labor and human rights  
Extensive international KION Group employment standards  
Co-determination by employees

## 01 | Occupational health and safety

### NfR: Occupational health and safety

#### Comprehensive management approach

Occupational health and safety (OHS) is a top priority for the KION Group. The KION Group has set itself the goal of being one of the leading companies in the industry of material handling and warehouse automation technology when it comes to occupational health and safety. The [KION Group Health, Safety and Environment \(HSE\) Statement of Intent](#) provides the general guidance for all KION Group HSE activities. The policy document is derived from the [KION Group Code of Compliance](#). Following this guidance, the Group has established a comprehensive health and safety management system that covers all aspects of occupational health and safety protection and encompasses the entire workforce of the Group. As a responsible employer, the KION Group strives for a behavior-based safety culture that minimizes hazards, workplace-related injuries, occupational illnesses and serious incidents and preserves physical as well as mental health of employees.

In the company's efforts to improve OHS, the KION Group focuses on three dimensions. Health and safety start with the individual. In the first dimension "Employees and leadership" the KION Group pursues the target of encouraging colleagues to take responsibility – for themselves and for others. Responsible individuals rely on workplaces that are safe for everyone - whether they are on the Group's premises or at customer sites. In the second dimension the KION Group focuses on a healthy and safe "Work environment". The third dimension, "Organization" covers building overarching foundations for a solid OHS management system and governance.

In this framework the KION Group sets the strategic long-term target to eliminate occupational accidents and to reduce the accident frequency annually by five percent. Externally certified occupational health and safety management systems at all sites by 2024 shall support the local implementation (Table 3).

**Table 3: Strategy status OHS (certification of management system, accident frequency)**

Target and indicator, [target year]	Status 2022	Status 2021
<b>Reduction of accident frequency rate<sup>1</sup> by 5 % per annum</b> (based on the annual upper limit (2022: 7.4; 2021: 7.8); long-term: no occupational accidents), [per annum]	5.8	7.7
<b>100 % ISO 45001 certification rate<sup>2</sup></b> (all sites), [2024]	80 %	70 %

<sup>1</sup> Calculation is based on the actual number of lost-time injuries of active employees (work-related accident resulting in the loss of one full working day or more) and the total number of actual working hours in the reporting period relative to one million hours worked.

<sup>2</sup> Or equivalent standards

#### Establishing a permanent health and safety culture

The KION Group strives to create a behavior-based safety culture that minimizes risks to physical and mental health such as work-related injuries, occupational illnesses or overexertion. In this culture, all employees of the KION Group are responsible for their own safety and for taking care of others by actively contributing to a safe working environment.

The KION Group management is committed to setting a good example and showing a strong commitment to occupational safety. Furthermore, initiatives such as "Safety Weeks", "Safety Moments" as part of each meeting, "Safety Walks" and cross-functional safety audits are important elements

of the company's approach to safety culture. With the KION HSE Championship, the KION Group underscores the importance of occupational health and safety as well as environmental protection throughout the Group. The competition, first introduced in 2014, creates additional incentives for employees to deal with these important issues. Teams from across the KION Group can submit projects and measures that contribute significantly to greater safety and improve health and environmental protection.

Occupational safety incidents are meticulously recorded, documented and evaluated. The results serve as a trigger for improvements, are incorporated into KION Group's risk analysis and are also used for setting new targets and adjusting audit programmes. All these developments are summarized annually in a management review on occupational health and safety. Typical occupational accidents include injuries to extremities as a result of a fall or the use of tools.

After challenging years impacted by the pandemic, in which individual operations and the HSE community were additionally focused on managing the pandemic situation while ensuring a safe environment, more attention could be put on improving the safety of the work environment in the reporting year. The initiatives were led centrally (for example, the revision of policy documents, the intensification of corporate on-site audits), at the individual OUs (directed towards behavior-based safety, communication and setting improvement plans) or ultimately at local levels. Moreover, regular sharing of best practices and increased communication among the HSE community also contributed to the significant reduction of LTIFR to 5.8 (2021: 7.7) (Table 3). Further OHS indicators show a positive development in the course of 2022 (Tables 4 and 5).

**Table 4: Lost Time Injuries and fatalities**

	2022	2021	Change
<b>Lost Time Injuries (LTIs)<sup>1</sup></b>	<b>461</b>	<b>596</b>	<b>-22.7 %</b>
Employees	422	531	-20.5 %
Temporary agency workers	31	51	-39.2 %
Others	8	14	-42.9 %
<b>Fatalities</b>	<b>0</b>	<b>2</b>	<b>-100.0 %</b>
Employees	0	1	-100.0 %
Temporary agency workers	0	0	-
Contractors and guests at KION Group locations (as reported)	0	1	-100.0 %

<sup>1</sup> The number of reported work-related accidents resulting in the loss of one full working day or more

**Table 5: Further OHS indicators (active employees)**

	2022	2021	Change
Lost days due to Lost Time Injuries	8,554	11,864	-27.9 %
Minor injuries	1,480	1,380	+7.2 %
Reported near misses <sup>1</sup>	3,322	2,521	+31.8 %
Commuting accidents	173	172	+0.6 %
Illness rate <sup>2</sup>	3.4	2.9	+17.2 %
Days of absence due to accident or illness	343,572	271,763	+26.4 %

<sup>1</sup> A near miss is an unintentional and unplanned incident that has the potential to cause harm, but does not actually result in human injury, death or ill health. Near misses provide an indication of risk for more serious incidents. The voluntary reporting relies on the individual person and improves data quality as well as transparency.

<sup>2</sup> Absence days due to illness or occupational accidents related to planned working days of active employees.

With regard to health, the KION Group continued to offer employees a range of preventive occupational health services in 2022. The workforce was able to participate in health-related measures initiated by the KION Group, including noise reduction, air quality improvements, vaccination campaigns, first-aid trainings and health weeks. Around 74 percent of the workforce was offered health-related training in 2022 (2021: 68 percent). A total of 110 entities provided own occupational health checks, a company doctor or voluntary check-ups (2021: 113 entities).

## Dedicated rules, Group-wide certification and pro-activity

Since 2018, the “KION HSE Standard”, a Group-wide standard for occupational health, safety and environmental aspects, has been in place at the KION Group. An updated version was introduced in the course of 2022. The new specifications take into account work-specific and regional particularities in production and installations or at sales and service locations. These also apply to business trips or office work, but especially to areas with increased risk potential such as the foundry, plant assembly, paint shop or during certain customer assignments.

Business partners, suppliers and guests of the KION Group are included in that comprehensive OHS concept. This applies both to the application of the safety standards and to the review of the relevant processes through audits. Visitors entering a KION Group site must familiarize themselves with the necessary safety instructions – for example, emergency plans, first aid measures, work permits or the safe handling of machinery and equipment. Suppliers working at the sites via contracts (“on-site management”) are also part of the KION Group’s “Serious Incident Reporting” and are instructed accordingly. In addition, these suppliers are included in the KION Group’s accident recording.

Regular certifications and corresponding audits contribute to maintaining standards and help identify possible improvements. The KION Group has set itself the target of having all its sites certified according to ISO 45001 or equivalent standards by the end of 2024. In addition to external, corporate and local auditing, a HSE self assessment (as part of the internal reporting) provides insight with regard to HSE risk assessment. It enables the company to check the degree of compliance with the HSE standard at site level in combination with further aspects of the Group-wide risk assessment. This creates a comprehensive picture of HSE risks and the corresponding risk management at the sites.

OHS management continues to pursue the goal of developing measures at the sites to change from reactive to active conduct. Changes should not only be initiated after accidents, but if possible before potential incidents occur, so that they do not happen at all. To this end, the KION Group trains employees on an ongoing basis to raise awareness of potential hazards and to inform about potential risks. The KION Group's health and safety culture explicitly provides not only the right, but above all the duty, for employees to immediately inform OHS management, their supervisors and potentially affected colleagues in cases that are identified as work situations with increased risks. The KION Group's whistleblowing system can be used for this purpose as well.

### Intensive training and involvement

Employees are intensively involved in occupational safety topics, for example in risk and incident analyses or occupational safety committees. In 2022, 93 percent of the employees in the KION Group were represented by employee committees on occupational safety (2021: 86 percent). The functioning and responsibilities of the employee committees vary according to local conditions, in particular country-specific legislation.

In 2022, 98 percent of the employees were trained on the topic of occupational safety (2021: 98 percent). The goal is to provide all new employees with appropriate instructions on their first day of work and to train them on the topic of safety at least once a year thereafter. In addition, employees receive practical information on the subject of occupational safety via the KION Group Social Intranet and are informed of current developments ("Safety Alerts").

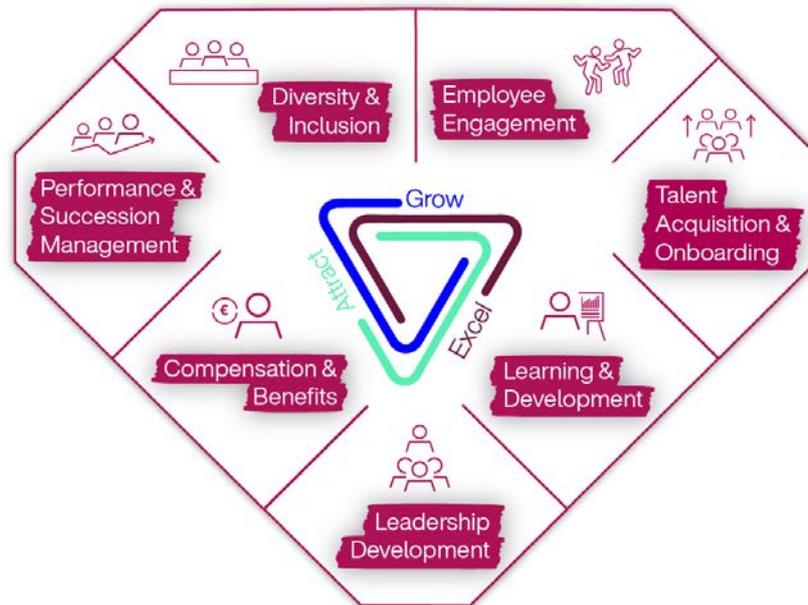
## 02 | Talent

### NfB: Employee matters

Successful human resources (HR) work is the result of many individual disciplines. The KION Group's HR approach supports all aspects of the employee life cycle: attract, grow and excel.

The focus is on seven major topics:

- Talent acquisition and onboarding
- Learning and development
- Leadership development
- Compensation and benefits
- Performance and succession management
- Diversity and inclusion
- Employee engagement

**Figure 4: HR approach of the KION Group**

However, one aspect takes center stage at the KION Group: Human resources management places particular emphasis on the training and development of employees and on the search for talent with qualifications that are particularly useful to the KION Group. Employee empowerment and the attractiveness of high performance are therefore of paramount importance for the KION Group's human resources management.

Highly qualified and motivated employees are a key driver of the KION Group's business success and sustainable profitable growth. To achieve this, the KION Group offers an attractive working environment, fair remuneration and numerous opportunities for personal and professional development. Through their performance, employees create the basis for the Group's sustainable development.

In this context, effective HR work provides crucial support for the company's development. The KION Group can then employ a sufficient number of excellently-trained and highly-motivated employees at all times and in all areas of business. This expressly includes the recruitment of employees with above-average qualifications and a good track record.

Worldwide, the KION Group employed 41,149 full-time equivalents including apprentices in 2022 compared with 39,602 in the previous year.

## Development instead of administration

Employee development is an important task for the KION Group's human resources. The task includes general qualification and development programs as well as individual talent management. In the programs, the KION Group companies work closely together under the leadership of the KION Group's Corporate Human Resources department. With a uniform international quality standard, the respective training and development programs are geared to respective national and local needs. This also includes training concepts to prepare for changes associated with increasing automation and digitalization.

Personnel development measures are generally open to the entire workforce. Targeted support, in line with individual potential and skills, is designed to enable all employees to take up and fill suitable positions within the KION Group. The KION Group uses a standardized, comprehensive talent and performance management process that takes into account numerous aspects that are relevant to the company as well as to individual employees. This ensures a uniform process for performance, talent and succession management across the KION Group. In addition to a clearly defined competency model and leadership principles, the process is based on the shared KION Group values of Integrity, Collaboration, Courage and Excellence.

Employees are promoted at all levels. Employees who are qualified and show good leadership capabilities are specifically prepared for management positions. The precise aim is to prepare internal candidates for management positions to accomplish the tasks and challenges of the KION Group's future. In addition, qualified employees are also recruited from outside the company. At the end of 2022, the KION Group was able to appoint suitable successors for half of its management positions. By 2027, this is expected to be the case for three-quarters of the positions.

The KION Group conducts a standardized employee dialog worldwide to assess performance fairly and to explore individual development needs. Since 2020, all this information is collected in a Group-wide HR IT system. This ensures that all relevant personnel data is available and employees can be given the best possible support and development.

## Employee feedback

In 2021 and 2022, the KION Group conducted a global employee survey: "KION Pulse". This addresses topics such as internal communication, personal perspectives, and opportunities for improvement. The survey provides important information on how to further improve employee engagement and motivation.

The intention is to gather ideas, suggestions, and proposals from all employees in order to further develop corporate culture throughout the Group, to initiate changes and to generate sustainable growth for the KION Group. At the same time, the survey is intended to serve as a basis for measures to promote employee satisfaction, motivation and commitment and thus further enhance the KION Group's attractiveness as an employer.

Above all, the survey is also a barometer of employee satisfaction and motivation. The "engagement score" determines this with a score between one (weak) and 100 points (very good) and provides information on the attractiveness of the KION Group as an employer. The 2022 survey produced an engagement score of 74 points as in the previous year. Comparing the survey results with similar scores from other companies serves as a reference for ranking the results of "KION Pulse". The rate of employees participating in the survey was 77 percent in 2022, up from 64 percent in the previous period.

The KION Group has set itself the target of achieving an engagement score of 75 points or more (with a participation rate of at least 68 percent) in the 2023 survey and 77 points or more (with a participation rate of at least 72 percent) in the 2024 survey.

**Table 6: Strategy status employee satisfaction**

Target and indicator, [target year]	Status 2022	Status 2021
Increase in employee satisfaction to an <b>engagement score</b> of at least <b>75</b> and a <b>participation rate</b> of at least <b>68 %</b> , as measured by an annual, global employee survey <sup>1</sup> , [2023]	Engagement score: 74 Participation rate: 77 %	Engagement score: 74 Participation rate: 64 %

<sup>1</sup> The engagement score is based on two questions: employee satisfaction ("How much do you enjoy working at your company?") and recommendation ("I would recommend my company as an excellent employer."). All ratings are presented on a 100-point scale. The participation rate indicates how many employees took part in the global survey compared to the total group of requested respondents, at effective date (01.09.2022).

## Broad spectrum of skills and cultures

A diverse and inclusive working environment enhances the performance, creativity and problem-solving skills of all employees. With this in mind, the KION Group promotes a culture of diversity, inclusion, equal treatment and psychological safety while developing attractive career and development opportunities. The KION Group serves customers worldwide. This internationality should also be reflected in the structure of the workforce as one element of diversity. In this context, the KION Group pursues several appropriate approaches:

- Developing an understanding of uniform corporate identity worldwide
- Developing a culture of inclusion, diversity, psychological safety, trust and professional development opportunities

With this in mind, too, the KION Group has launched numerous programs in recent years to promote and develop employees with a wide variety of offerings, including training and development specifically. The KION Group attaches great importance to both attracting and developing the broadest possible range of skills in its workforce and to leveraging individual strengths.

The KION Group aims to equip all employees with the skills and resources that they need to work even more efficiently and innovatively. The KION Group companies have already set an example in this respect. The KION Group also wants to make itself even more attractive as an employer and retain employees for as long as possible by offering modern family policies, to cite one example.

The KION Group treats all employees with the same respect, regardless of personal characteristics such as gender, color, ethnic or social origin, age or religious beliefs. These principles are set out in the KION Group's binding minimum employment standards and therefore apply worldwide at all KION Group sites.

Furthermore, the KION Group is committed to enabling people with disabilities to work in the best possible conditions. To this end, the Group creates working environments that are suitable for people with disabilities, supports reintegration into work processes and enables people with physical disabilities to remain in employment. The aim is to provide appropriate employment for people with disabilities and thus enable them to participate in social life.

The KION Group sees the heterogeneity of its employees as a competitive advantage. As of the end of 2022, people of more than 110 nationalities were employed across the KION Group, bringing different skills and talents to the company. This creates the basis for innovative and creative solutions. That is why the KION Group emphasizes ensuring a diverse workforce and seeking the best candidates for vacant positions. The KION Group recruits, employs and promotes employees solely on the basis of their qualifications and skills for the respective positions and does not discriminate in any way. Employees are recruited solely on the basis of their suitability for the position to be filled

and their individual potential for a successful future with the KION Group – in line with its corporate strategy and objectives.

The KION Group sees itself as a global provider with intercultural expertise and attaches great importance to ensuring that internationality is visible not only in the workforce but also at management level. Wherever possible, local talent is used to fill management positions locally. Top management positions in the Group are generally filled internationally. The KION Group expatriate program promotes international cooperation and encourages employees to move to other countries.

## Diversity as a strength

For the KION Group, diversity does not just mean equal opportunities and equal and fair treatment of all employees. Diversity also means tolerance and appreciation of other ways of thinking. When staffing supra-regional projects and training programs, the KION Group makes a point of having preferably an international composition. This is because intercultural communication promotes mutual understanding and helps to prevent diversity-specific barriers to career development. For example, the finance talent management program focuses on diversity criteria when nominating potential candidates and thus, fosters diversity in the finance organization. The company-wide female mentoring program, in which females with high potential are supported by leaders of the highest management level, further appreciates diverse ways of thinking and strengthens equal opportunities.

Since 2019, the KION Group has been involved in the [German “Chefsache” network](#), which is dedicated to equal opportunity and is under the patronage of the German Chancellor with participation from leaders in business, academia, the media and the public sector. Furthermore, Dematic (USA) is active in the material handling industry’s “Diversity Equity and Inclusion Advisory Committee” and shares best practices. To set the right priorities and monitor the progress of the diversity and inclusion activities, in 2022 a diversity and inclusion council has been established at the KION Group. Consisting of both business and HR representatives the council has set an ambitious roadmap to foster diversity and will hold the KION Group accountable for implementing it accordingly.

## Wages and salaries in line with the market

The KION Group pays performance- and market-related remuneration, which is generally determined by locally relevant competitive markets. The employment contracts are to a large extent based on collective agreements with trade unions or other employee representatives, which take country-specific features into account. Activities in managerial positions are generally not based on such agreements. As a matter of principle, the KION Group endeavors to pay its employees fair and appropriate wages and salaries with social components and other benefits. This remuneration must at least meet the minimum legal standards in each country, in which the KION Group operates.

## Compliance with international labor and human rights

It goes without saying that the KION Group complies with internationally agreed labor and human rights and regards them more as a minimum standard to be achieved than as a target. The starting point for this are the stipulations in relevant regulatory areas in the “United Nations Guiding Principles on Business and Human Rights” (Universal Declaration of Human Rights), which have been codified by the signatory states in the “International Covenant on Civil and Political Rights” (CCPR) and the “International Covenant on Economic, Social and Cultural Rights” (CESCR). As a matter of course, the KION Group’s compliance with human rights also applies to the requirements of the German Supply Chain Duty Act (Lieferkettensorgfaltspflichtengesetz, LkSG).

In addition, there are the employment-related principles and rights set out in the eight fundamental labor conventions of the International Labour Organization (ILO). KION Group applies minimum employment standards which based on the core labor standards drawn up by the ILO. These standards guarantee employees freedom of association and the right to collective bargaining, prohibit forced, compulsory labor or child labor, and prohibit discrimination in employment and occupation.

The KION Group also applies high standards of occupational health and safety worldwide. The KION Group employees receive remuneration that is adequate with national industry standards and is always sufficient to secure a subsistence level of income.

## Extensive international KION Group employment standards

The KION Group has a direct presence in around 40 countries. The respective national working conditions vary considerably, as the legal, social, economic and cultural standards differ greatly from region to region. Regional differences are valuable and must be taken into account. Nevertheless, in view of its responsibility for the welfare of all employees, the KION Group is committed to applying the same binding minimum standards. A corresponding policy documents these standards and defines the responsibilities for implementing and monitoring them. The policy does not restrict any standards that prescribe a higher level of protection.

The policy covers all KION Group employees and all companies, in which KION GROUP AG directly or indirectly holds a majority of shares or that are under the direct or indirect control of KION GROUP AG. Compliance with the standards is the responsibility of the management boards and the management of the individual Operating Units. The standards are regularly reviewed by means of internal on-site audits and queries in connection with the annual sustainability reporting. The whistleblower hotline is available for employees and externals at any time and anonymously for reporting violations. The selection of standards and procedures to be audited is based on a risk assessment process, which is used to assess the overall risks for the KION Group.

Neither the KION Group's business model, business purpose or Group structure nor the regions, in which the KION Group operates indicate a structural risk of individual entities violating minimum employment standards. As in previous years, no violation of the KION Group's employment standards were reported in 2022 either (Table 7). This also applies in particular to cases of discrimination. Here too, no incidents were reported in the reporting year.

**Table 7: Strategy status minimum working conditions**

Target and indicator, [target year]	Status 2022	Status 2021
No cases of non-compliance with KION Group minimum employment standards, [ongoing]	0 cases, target achieved	0 cases, target achieved

The standards are continually reviewed to ensure that they are up-to-date and sufficiently suitable and are adapted or supplemented as necessary. Should violations become known, these are to be eliminated and sanctioned according to the legal instruments available locally. Furthermore, findings are to be used for the introduction of suitable preventive measures. In order to further sensitize employees to labor and human rights and respectful treatment of each other in the workplace, e-learning sessions on the topic of anti-discrimination have been made mandatory (see more information in [08 | Sustainable governance](#)).

## Co-determination by employees

At the end of 2022, collective agreements apply to approximately 25,500 employees of the KION Group; this corresponds to 62 percent of the total workforce. The involvement of the workforce within the framework of co-determination, as well as the formation of employee representatives at company and supra-company level, is carried out in accordance with the relevant national laws. On cross-border issues, the European Works Council represents the interests of employees in the European Union.

# Products

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## 03 | Product and solution safety

### NfR: Responsible product portfolio, Product and customer safety

At a time when logistics is changing rapidly, digitalization is enabling ever shorter turnaround times and warehouse speeds are increasing to target short delivery times. At the same time, the growing number of different products is leading to ever larger warehouses and the interaction of people and automated systems increases the complexity of logistical processes.

According to an accident statistic by Deutsche Gesetzliche Unfallversicherung (German Statutory Accident Insurance) 34,051 accidents involving industrial trucks occurred in Germany in 2021 (2020: 31,787), thereof 15,383 accidents with counterbalance trucks (2020: 13,689). In 51 percent of these accidents, people or objects were overlooked and collisions occurred. In 20 percent of the accidents, the injured person was the truck driver. There were 11 fatal injuries people (2020: 10). These figures show the importance of safety of products and solutions.

Within the scope of the KION Group sustainability strategy and the Group-wide sustainability program, two action fields directly address product-related sustainability priorities: [03 | Product and solution safety](#) and [04 | Product and solution sustainability](#).

Within the reporting year, the action field Product and Solution Safety was further developed, and its scope expanded. The focus on providing user-oriented, safe and ergonomic products and solutions is maintained and expanded to include the topics of attractive pricing and industry standards.

Customer safety and the safe, ergonomic operation of all KION Group products and solutions has always been a top priority of the KION Group's product development activities. The KION Group considers its safety portfolio as outstanding and being top of the industry and strives to ensure a competitive and convincing value proposition to customers by an attractive pricing for safety features.

The KION Group aims to entirely prevent serious, or even fatal, accidents at customers. By constantly improving and providing more and highly efficient safety assistance systems the KION Group aims to significantly minimize the risk of environmental or personal, as well as property, damage. The KION Group will also extend the safety product portfolio by software defined solutions and will actively drive new safety standards.

Due to their different products and business models, the ITS and SCS segments pursue differentiated approaches to implementing the common mission statement. The respective aspects of strategy are being successively further defined and backed up in each case with strategic targets and concrete indicators.

**Table 8: Strategy status Product and solution safety**

Target and indicator, [target year]	Status 2022	Status 2021
<i>ITS segment:</i>		
Average number of selected <b>safety features per industrial truck</b> <sup>1</sup> increased to <b>4</b> , [2027]	3.3	3.8
and an <b>equipment rate with active safety features</b> <sup>2</sup> of <b>10 %</b> , [2027]	5.5 %	5.8 %
<i>SCS segment:</i> Mitigating risks of noise pollution by offering quieter and safer solutions: <b>20 %</b> of Dematic's <b>solution portfolio</b> targeted to <b>operate under &lt;85 dB(A)</b> , [2027]	♦	♦

<sup>1</sup> Number of selected safety features ordered by customers in addition to the standard truck (which is safe in accordance with legal requirements), based on the number of counterbalance trucks, reach trucks (for LMH and STILL EMEA as well as expanded by STILL KSA) and VNA trucks (LMH EMEA) sold in the ITS segment in 2021. For the reporting year, the data basis was expanded to include counterbalance trucks, reach trucks (for LMH and STILL EMEA as well as STILL KSA and APAC) and VNA trucks (LMH and STILL EMEA).

<sup>2</sup> Proportion of trucks sold in the reporting period equipped with safety features that actively intervene in operation, based on the number of counterbalance trucks, reach trucks (for LMH and STILL EMEA as well as expanded by STILL KSA) and VNA trucks (LMH EMEA) sold in the ITS segment in 2021. For the reporting year, the data basis was expanded to include counterbalance trucks, reach trucks (for LMH and STILL EMEA as well as STILL KSA and APAC) and VNA trucks (LMH and STILL EMEA).

♦ In process

As part of the product development process, all products are checked for potential improvements in accordance with legal requirements in terms of their health and safety impacts and taking into account experience from previous projects, safety-related incidents and customer surveys. All products must comply with the laws and regulations of the respective country which is ensured by the responsible sales unit.

In the reporting year, no incidents were reported in which corresponding regulations were violated. Nor were any significant fines imposed owing to non-compliance with laws and regulations concerning the supply and use of products and services or their impact on health and safety.

For the ITS segment, each operating manual is issued with a reference to compliance with national law. Besides the operator's manual and the ISO 3691 standard, which regulates the safety requirements for vehicles, other laws and regulations apply in Europe. These include, for instance, directives on electromechanical compatibility and explosion protection, the Outdoor Noise Directive on noise protection, the Radio Equipment Directive and German road traffic licensing regulations (StVZO).

In the SCS segment, Dematic has committed to comply with European CE standards, the US UL certification and with the Australian C-Tick/RCM standards system. This means products always meet the highest safety standards – even if these are not explicitly required in the respective region. Product updates have been developed meeting CE standards.

To ensure the highest level of safety for both operators and the environment, the KION Group's standards for its own products and solutions usually go beyond the legal requirements and are backed up by numerous tests and trials with industrial trucks. Besides procedures such as the simulation of different driving conditions or load tests, the KION Group also employs in-house developed test methods in the product development process. In some cases, these go far beyond the requirements set out in the relevant standards.

## Improving customer safety

The KION Group is continuously increasing and improving the safety features of its products. This includes the range of products and solutions offered, the attractive pricing of safety equipment and the ability to set standards in the industry with ever new developments.

Many of the safety features in the ITS segment are part of the vehicles' standard equipment. Active and passive safety assistance systems offer the best possible protection and therefore reduce the risk of accidents. In addition, assistance systems provide support in critical situations. Various safety packages guarantee that the trucks optimally meet the requirements in their respective areas of application. SCS also regularly evaluates product and solution safety to ensure keeping users safe and meeting the customer's needs. The results of these evaluations drive a practice of continuous safety improvements.

The latest example at ITS is the Pedestrian Leg Detection. The feature becomes active when a special light barrier is breached by the operator's foot and stops the moving or accelerating truck, thus preventing accidents with squeezed feet.

Another example of portfolio extension is the new smart camera with person recognition. It is an intelligent camera that can distinguish people from other obstacles in real time. Depending on the distance of the detected person, the operator is warned visually and acoustically in stages. This warning function can be combined with a speed reduction of the truck.

The innovative Linde Motion Detection assistance system won the Best of Industry Award 2022 in the warehouse technology category. The system is now optionally available for all Linde Material Handling counterbalance trucks. Linde Motion Detection checks whether any movement can be detected behind the vehicle and subsequently prevents the forklift from reversing from a standstill. Inside the vehicle, the warning is issued via the vehicle display, while an acoustic signal alerts the surroundings of the imminent danger.

Two indicators were established for the ITS segment that provide information on particularly high-value safety features that can be selected by the customer at product level ([Table 8](#)). The first indicator records the number of safety features per vehicle ordered. The second indicator measures the equipment rate of assistance systems that actively intervene in a hazardous situation. The continuous improvement of the key figures in relation to the target is not the only focus. In the reporting year, the quality of the data was improved as well and the number of vehicle types considered was expanded. In addition, another Operating Unit was included in the calculation. Due to these adjustments, both key figures decreased slightly. Having the appropriate vehicle equipment is particularly effective in preventing accidents resulting in personal injury.

The SCS development process includes safety aspects when developing innovative logistics solutions. The SCS segment has continued to perform risk assessments, assuring the design of the solutions to comply with international safety standards and requirements.

Smart control software not only increases efficiency, but also helps to minimize risks through optimized coordination and control. Even after an intralogistics solution has been installed, the SCS segment supports customers by offering appropriate consulting services where there are any safety optimization concerns.

Employee exposure to elevated sound levels poses a major challenge. A corresponding target below 85 dB(A) at workstations is currently one of the requirements for new product development in the SCS segment. In special cases a level of 80 dB(A) or 70 dB(A) is considered. In the year under

review, new offerings are available including the linear sorter quiet shoe, the merge wedge and the slider belt that reduces noise levels.

## Ergonomics as a development goal

The KION Group aims to minimize the strain on operators by ensuring that its products are as ergonomic as possible. The range of equipment variants and standard equipment available to customers in the ITS segment is constantly being expanded. A few examples include multi-adjustable driver's compartment with elements such as ergonomically shaped joysticks, height-adjustable seats, suspension of the workstations, displays for visualizing and operating vehicle functions and patented, particularly ergonomic workstations on low lift pallet trucks. These are all measures designed to contribute to the most ergonomic possible vehicle operation, focused on the perfect interaction between operator and machine.

A particular emphasis of the Operating Units in the ITS segment lies on reducing human body vibration – mechanical oscillations and vibrations to which the drivers and operators of forklift trucks and warehouse technology are exposed during the course of their day-to-day work. Once again, the goal is to exceed the applicable standards for the benefit of the operators. For the majority of the product portfolio in the ITS segment, decoupled cabs, vibration-damped seats or damped driver workplaces are therefore available as standard or optional equipment.

The SCS segment is taking a clear commitment on ergonomic requirements to drive worker safety, meaning that all new workstations being developed will have a low-risk category RULA score ensuring worker safety. The Rapid Upper Limb Assessment (RULA) is a tool that provides ergonomic risk assessments. The best example of this is the new ergonomically optimized and highly dynamic picking station which was nearing completion in 2022.

## Close exchange with customer on safety

The KION Group attaches great importance to regular exchanges with its customers, especially on the subject of safety. Here, both internally and externally organized trade fairs like LogiMAT, Linde World of Material Handling, Linde Driving Days or STILL Customer Days, as well as customer training sessions, provide the opportunity to point out the importance and optimization possibilities in direct contact. In all cases consulting on safety assistance systems is provided.

One of the events held at STILL in 2021 was the webinar "Navigating warehouses safely in an industrial truck", which helped to present the safety solutions available to customers in spite of the restrictions imposed by the COVID-19 pandemic. The live event included over 1,000 participants from 40 countries and saw the presentation of all available safety features. In the reporting year, the significant support in identifying problems in the logistics environment and the introduction of technical solutions for accident prevention continued to be accessible on the [STILL website](#).

In the last two years several new Dematic academies have been installed globally to provide trainings and to foster the development of skills for employees and customers. Additionally, informative sessions on topics such as electrical safety, height safety, and various other measures were provided. These are carried out by certified training personnel. To meet the high demand, there has been a general increase in training opportunities: while a total of 712 training sessions were held in 2021 by Dematic EMEA, their number decreased to 640 in 2022 due to the economic situation.

## Standards and quality

Standards ensure that new product developments are brought to market efficiently and quickly and make a major contribution to defining quality and minimum requirements. The KION Group actively drives safety standards for the industry. For example, its safety specialists participate in various standardization groups and create guideline documents supporting suppliers and customers. Market observation and regular exchange with customers support the development of novel safety solutions. The KION Group aims to actively raise safety standards across the industry to a higher level, which offers the opportunity to be a pioneer in an important field of sustainability.

Quality is a central value proposition that encompasses all products, solutions, and processes. In adopting this principle, the KION Group pursues ambitious targets. These include the external complaint rate, which describes the number of complaints during the first 50 working hours in relation to the number of products delivered. This rate is to be continuously reduced. The aim is to minimize vehicle downtimes and to consolidate and expand standardized quality assurance processes worldwide.

The quality management systems of the KION Group and its operational entities are certified according to ISO 9001. At the end of 2022, 92 percent (2021: 83 percent) of all production plants and administrative offices as well as the entire CTO organization are covered by the certification. When selecting suppliers, the KION Group also attaches great importance to quality and reliability and thus also to the safety of the (preliminary) products ([07 | Supply chain](#)).

Compliance and traceability of materials along the value chain are also considered. Substituting chemical substances which may be harmful to humans or may have an adverse effect on the environment is a constant challenge and a key aspect in terms of product responsibility at the KION Group.

The emphasis on environmental product requirements is underlined by regular stakeholder dialogs of the KION Group, for example, by actively contributing to the new VDMA's practical guide to "Material Compliance". In addition, the KION Group specifically participated in the consultation of the EU Commission on the inclusion of lead metal in the list of substances subject to authorization under the REACH Regulation.

As early as 2016, the KION Group committed to eliminating components that are manufactured using chromium VI. In recent years, the Group has taken important steps to achieve this. At present, only small amounts of old stock are still being used up as well as a few materials for which purchase commitments are still in place. As far as product development is concerned, the technical conversion in Europe is now complete. In the other Operating Units, the transition is ongoing. Overall, the KION Group attaches great importance to material compliance and strives to systematically improve the relevant internal governance and processes.

In addition, the introduction of a material database is in planning. The database is intended to support the selection of conform materials, consider sustainable criteria like resource use, and identify material risks regarding usability due to restricted or prohibited substances at an early stage. Thus, the material database will become an important building block to reduce the environmental impact of KION's products by simultaneously making the Group more resilient and adaptive against future regulatory changes.

## 04 | Product and solution sustainability

### NfB: Climate action, Circular products and business models

The demands placed on products and solutions today are increasing in diversity. Besides others, the main reasons for this are climate change and the legal requirements designed to prevent it. Corresponding laws have already come into force or are expected in the next few years. Moreover, the increasingly complex situation in supply chains and the associated rising material and energy costs are leading to new challenges. In future, the success of a company will therefore be measured more and more by the criterion of product sustainability.

Within the reporting year, the sustainability action field Product and solution sustainability was further developed, and its scope considerably expanded. While the focus is still on climate- and environmentally friendly products and solutions reducing GHG emissions, additional aspects such as improving transparency, collaboration on standards and innovations are being considered.

The present action field and the action fields [05 | Climate and energy](#), [06 | Circularity](#) and [07 | Supply chain](#) are highly interdependent as, for example, the areas of GHG reduction and life cycle assessment of products are also important here.

For the KION Group, the focus will be on both areas: appropriately aligning the company's own business activities along the entire value chain as well as on designing more sustainable products, solutions and services for its customers. These products and solutions are considered essential enablers for KION's own sustainability targets. To achieve these targets, a versatile product portfolio is necessary: physical units, software and services must meet the requirement to implement sustainability in all phases of their life cycle - from design and production to use phase and end of life, in the best possible way. The aim is to satisfy the customers' demand and optimally support customers' sustainability commitments.

In future, the KION Group will measure the developments in its product portfolio towards the contribution to improving environmental sustainability and the circular economy with several performance indicators. Given their different products and business models, the ITS and SCS segments pursue differentiated approaches in implementing the common guiding principle.

**Table 9: Strategy status composition of product portfolio, efficiency**

Target and indicator, [target year]	Status 2022	Status 2021
<i>ITS segment:</i> Strive for an electric-focused portfolio incl. battery and fuel cell-driven products by increasing the <b>share of electric-powered vehicles sold annually</b> <sup>1</sup> to <b>90 %</b> , [2027]	88.1 %	87.0 %
<i>SCS segment:</i> Development towards a sustainability focused portfolio: <b>100 % of Dematic's new product / solution portfolio will be measured by sustainability related targets</b> <sup>2</sup> , [2027]	♦	♦
<i>ITS segment:</i> <b>Increase</b> in average <b>charging efficiency</b> <sup>3</sup> of vehicles with <b>electric drives</b> , [2027]	♦	♦

<sup>1</sup> Proportion of electric-powered products in ITS segment in order intakes in terms of units; data source: World Industrial Truck Statistics (WITS) / Fédération Européenne de la Manutention (FEM)

<sup>2</sup> Defined by internal or international standards, scorecards or certification schemes

<sup>3</sup> Average charging efficiency of electrified vehicles in the ITS segment sold in the reporting year

♦ In process

In pursuing a cross-brand and cross-regional development approach, the KION Group is aiming to achieve uniform standards and global coordination of technical activities, which means more product and solution variants with less effort and shorter development processes. Functions such as research and development, purchasing, quality and sustainability management have been bundled and are part of KION GROUP AG Executive Board portfolio of the Chief Technology Officer (CTO). This also allows sustainability requirements for products to be taken into account much more effectively. Further information on research and development in the KION Group can be found in the [Annual Report 2022](#).

The Group-wide CTO organization coordinates and pools development projects. They are determined by the product managements of the Operating Units depending on the needs of their respective markets. Within the CTO organization, the product sustainability department forms an important interface with the KION Group sustainability management team. The KION Group's product development and innovation processes are also characterized by close involvement of customers.

In both segments, ITS and SCS, the aim is to design products and solutions that are as environmentally friendly and energy-saving as possible in order to offer customers resource-efficient, and thus cost-efficient, solutions. This also includes selecting materials that are as environmentally friendly as possible and allow easy reuse, repair, and refurbishing.

In the reporting period, further efforts have been taken to improve the product creation process. In line with the KION Group's sustainability strategy, a corresponding adjustment in the product creation process by further systematically integrating sustainability criteria has been started, which is to be completed in 2023.

## Transparency

The KION Group strives to make the environmental and social impacts of products and solutions fully transparent to stakeholders, both internally and externally. Since customers expect information about the impact of products over their life cycle, the KION Group will continue to improve its understanding of the environmental impact of product design and the decisions to be made in the process. Therefore, life cycle assessments will become an important tool for the continuous improvement of sustainability performance.

In the ITS segment, Linde Material Handling has analyzed representative products along the entire product life cycle and carried out an assessment of the entire fleet. The methodology applied was regularly examined by TÜV Rheinland. In terms of GHG emissions, for example, energy and fuel consumption during the use phase proved to be the biggest emission driver across all product groups. For this reason, the drives' energy efficiency is always of priority, both for combustion engine drives and in the further development of high-performance and efficient electric drive technologies.

Based on the results of life cycle assessments previously conducted, the SCS segment has identified that energy consumption during the use phase is the largest contributor to the emissions footprint for SCS products too. This data has driven a strategy of promoting energy and process efficiency for the SCS segment.

A specifically established team of dedicated sustainability specialists supports the implementation of this strategy. Targets are to identify key data & metrics, conduct life cycle assessments and cradle to cradle analysis, steer research and development sustainability goals, and report progress.

The SCS segment drives customer success with the overall goal of supplying solutions that target key areas such as increased efficiency, customer health and safety, resource productivity and improved reliability.

## Reduction of greenhouse gas emissions in products and solutions

The KION Group products and solutions are an essential part of its customers' value chain and directly impact their sustainability ambitions. It is therefore no surprise that sustainability aspects such as energy consumption and GHG emissions have become decisive purchasing criteria.

Assuming that customers are using a standard energy mix, the life cycle assessments performed by Linde Material Handling and Dematic described above, show the usage phase as the main source of GHG emissions. For this reason, the KION Group strives to significantly reduce the Scope 3 GHG emissions of products and solutions in particular, also taking into account the design phase, with energy efficiency and material selection being the two main levers.

The KION Group aims to provide the ideal solution for every application in its portfolio – regardless of the drive technology. For the customer, the aim is to combine cost efficiency (total cost of ownership) with maximum environmental protection. Being a comprehensive solution provider, the KION Group offers both electric and internal combustion (IC) engine-powered vehicles in the ITS segment.

By far the largest part of the KION Group's entire sold products had those with an electric drive at the end of 2022; this means a ratio of 88 percent in ITS segment and 100 percent in SCS segment.

It follows that customer in the ITS segment opted for an IC truck for 12 percent of the trucks sold. IC trucks are often chosen when the customers' infrastructure is not suitable for battery charging facilities, or where rough terrain must be tackled with heavy loads. The KION Group strives to continuously improve its IC trucks and offer customers a truck portfolio with the lowest possible fuel consumption and emissions.

In the reporting year, the KION Group was able to approve Hydrotreated Vegetable Oil (HVO) fuel for Linde Material Handling IC trucks. Customers with diesel trucks can now also fill up with HVO fuel, thus saving up to 90 percent GHG emissions compared with conventional diesel. Depending on the manufacturer, HVO diesel is made to a high degree from renewable materials.

## Improving energy efficiency by using lithium-ion batteries

The KION Group is a global market leader in electric forklift trucks and warehouse trucks and intends to strengthen this position further in the future. In recent years, the electric drive has been continuously developed so that electrified vehicles with lithium-ion batteries have penetrated load capacity classes that were previously reserved for powerful diesel or gas drives.

Energy-efficient lithium-ion batteries are available for the majority of the fleet at Linde Material Handling and STILL, with having added new KION Battery Systems GmbH 24-volt batteries to further warehouse truck series within the reporting year. Their key advantages over conventional lead-acid batteries include faster charging times and increased charging efficiency, as well as a three to four times longer service life and a much higher energy content. Moreover, the energy efficiency of lithium-ion batteries is over 90 percent, which allows customers to achieve savings of around 30 percent in terms of their energy consumption as well as substantially reducing GHG emissions compared to a conventional battery-charger combination.

The KION Battery Systems GmbH has been producing lithium-ion batteries for industrial trucks since 2020. In the process, emphasis is also placed on the origin, and above all, the degradation conditions of the material used. With its own production facility, the KION Group has been able to expand its range of products equipped with this high-performance type of battery. In the approximately 4,000 square meters production hall near Aschaffenburg, more than 12,000 batteries can be manufactured annually. In 2022, around 7,500 24-volt, 48-volt and 80-volt batteries for warehouse and counterbalance trucks were being produced with single-shift working (2021: 4,300 batteries). The KION Battery Systems GmbH combines research & development and production under one roof, which shortens coordination processes and eliminates potential sources of error. The joint venture with BMZ Holding GmbH is primarily intended to meet the high demand for vehicles with this battery technology from the European region. In addition, the KION Group refurbishes here lithium-ion batteries from returned leased trucks. In 2022, around 60 batteries were given a second life. Batteries that have reached the end of their life are sent for recycling.

To further improve product efficiency, the KION Group is also taking overarching on-site energy management on customers' sites into account. In the ITS segment, for example, solutions are being developed for the smart connectivity and control of chargers. In this way, the available amount of electricity is managed as efficiently as possible depending on the area of application. In addition, data-based analysis software will enable the KION Group's customers to reduce energy costs and promote the achievement of sustainability targets through flexible procurement on the energy markets and the optimal use of energy. For this purpose, for example charging data of the forklift fleet are considered as well as photovoltaic systems and energy storage systems at the customers' site.

The KION Group not only wants to offer its customers the most-efficient technology but also to encourage them to opt for this technology. To this end, the indicator 'average charging efficiency of vehicles with electric drives' was developed to improve efficiency in the ITS segment ([Table 9](#)).

### Focus on hydrogen and resource efficiency

At customer's request, KION ITS EMEA also provides ex-factory integration of fuel cells into its industrial trucks and also offers the "fuel cell ready" option. The aim is to offer trucks with fuel cell technology to give customers an environmentally friendly energy alternative. Hydrogen drives are on a par with conventional IC engines in terms of performance and when using hydrogen produced with renewable energies, the fleet operates emission-free and thus makes a major contribution to GHG emission savings.

For example, Linde Material Handling has one of the largest fuel cell fleets used in the production site of a German automotive group. Further STILL currently has Europe's largest fuel cell fleet in operation at a French food company with over 100 industrial trucks. Customers who want to acquire a hydrogen-powered forklift fleet are faced with a big step, because in many cases the entire necessary infrastructure must first be built. This requires engineering specialists who advise the customer, prepare feasibility analyses and take over project management right through to implementation. KION ITS EMEA is cooperating with respective partners, providing the best fuel cell trucks solution for the customer.

Moreover, set up as an overarching KION project, Linde Material Handling is currently engineering KION 24-volt and 48-volt HyPower fuel cell systems in Aschaffenburg. STILL will take over in 2023, producing the 24-volt version at the company's main plant in Hamburg.

In addition, a hydrogen filling station consisting of an electrolyzer, compressor, storage tank and refueling system has been built on premises of the Linde Material Handling in Aschaffenburg in 2022 and will be used to operate 21 electric forklift trucks in the plant fleet from 2023.

For several years now, the Operating Units in the ITS segment have been offering attractive deals on rental and used trucks that help customers cut costs while saving valuable primary resources. In the year under review, the KION Group generated around € 1,523.9 million in rental and used truck business (2021: € 1,413.2 million). In 2022, like in the previous year, one in six forklift trucks sold in the company's ITS segment was an item of used equipment. In this way, the KION Group is already playing a part in developments toward a circular economy.

Innovation, optimization, and efficiency are key aspects that drive efforts in the SCS segment in supporting customers' logistics sustainability goals. These translate into a focus to improve energy efficiency, process efficiency, and reduced resource consumption. In alignment with energy efficiency goals, SCS is integrating high efficiency motor technology into standard products. This effort will enable an energy reduction for both the current and new customer solutions.

SCS continues working to increase sustainability contributions in 2023 by fostering employees' engagement through enhanced sustainability focused training and creating an idea submittal portal.

## Shape standards and think ahead

The KION Group is aware that legislation requirements regarding sustainability will increase. For this reason, the commitment already made in several standardization committees at ISO and CEN will be maintained and further expanded. The KION Group wants to think ahead and actively shape important and sustainable standards in the industry.

Innovations in particular will be major drivers for more sustainable products and solutions and will set new standards. In addition to explicitly responsible innovation areas, many other parts of the company can also provide innovations. The KION Group wants to strengthen the company-wide culture of innovation and fosters enthusiasm for innovation and sustainability among all its employees. To this end, various idea competitions were held in the area of sustainability during the reporting period.

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## 05 | Climate and energy

### NfR: Climate action, (Local) Environmental protection

From the first materiality analyses within the KION Group, the climate and climate protection were identified as material topics. Worldwide efforts to limit global warming and corresponding challenges for the planet demand active and forward-looking climate action from the Group and its partners. To achieve net-zero within the established timeframe worldwide, the KION Group's climate and energy management takes the entire value chain into account and encompasses a holistic decarbonization approach. Beyond the company's own operations, the KION Group will closely cooperate with its customers, suppliers and business partners regarding energy use, resource efficiency, GHG emission reduction and adaptation action. In this context, Climate and Energy is closely connected to other action fields such as [04 | Product and solution sustainability](#), [06 | Circularity](#) and [07 | Supply chain](#) in order to coordinate the efforts towards a carbon-neutral economy.

### Targets and levers

The KION Group has based its activities on the Agreement of the United Nations Climate Change Conference in Paris 2015 (Paris Agreement) and the objective stipulated therein of limiting global warming. A science-based climate target was developed in 2017/2018 to reduce the company's energy-related emissions (Scope 1, 2 and 3.3) by 30 percent by 2027 compared to 2017. In 2021, a comprehensive revision of the existing climate strategy was started and further continued during the reporting year. As a key interim result, new strategic targets were developed that are fully aligned with the current criteria of the Science Based Targets initiative (SBTi) for preparing a formal commitment. In addition to an expansion of the scope of the climate targets to include further scope 3 emissions, the Net-Zero Standard for companies to limit global warming to 1.5 degrees Celsius is taken as a basis, in line with the Paris Agreement. The corresponding final resolution by the Boards of KION GROUP AG is foreseen for 2023. Following the new targets under final resolution, the KION Group intends to clearly reduce GHG emissions within the value chain by 2030 (near-term) and to pursue a path to achieve net-zero before the year 2050 (long-term, scope 1, 2 and 3) (Table 10). The strategy considers carbon dioxide (CO<sub>2</sub>) as biggest contributor as well as other greenhouse gases (GHG) such as methane, nitrous oxide, hydrofluorocarbons, sulphur hexafluoride and nitrogen trifluoride where applicable and possible. With these targets, the KION Group also prepares for regulations such as the European Green Deal and the EU Taxonomy.

**Table 10: Strategy status GHG emissions**

Target and indicator, [target year]	Status 2022	Status 2021
<b>Absolute reduction</b> in GHG emissions ( <b>scope 1, 2, 3</b> ) in metric tons of <b>CO<sub>2</sub>e</b> compared with 2021		Base year
* Near-term, [2030]:		
<b>Scope 1 + 2</b> by <b>4.2 %</b> per year	-5.7 %	149,306 tons
<b>Scope 3</b> by <b>2.5 %</b> per year	-6.5 %	19.6 million tons
* Long-term, [before 2050]: <b>net-zero, Scope 1, 2, 3 by 100 %</b>	18.5 million tons	19.8 million tons
<b>CO<sub>2</sub> neutrality</b> of products and solutions during use phase (in metric tons of <b>CO<sub>2</sub>e Scope 3</b> GHG emissions caused by the <b>use of annually shipped KION Group products and solutions</b> ), [before 2050]	14.4 million tons <sup>1</sup>	15.3 million tons <sup>1</sup>
<b>30 % absolute reduction</b> of energy related GHG emissions of <b>own operations</b> in metric tons of <b>CO<sub>2</sub>e (Scope 1, 2, 3.3)</b> compared to 2017, [2027]	29.8 % <sup>2</sup>	26.4 % <sup>2</sup>

<sup>1</sup> Based on product and sales data as well as location-, fuel- or technology-based emission factors, direct greenhouse gas emissions, 2021 re-calculated based on updated emission factors and separation into direct and indirect emissions

<sup>2</sup> Market-based, 2017-2021 re-calculated based on updated emission factors

\* Subject to final approval by the Boards of KION GROUP AG, scheduled for 2023

The work on a detailed roadmap and potential scenarios for the transformation of the KION Group and the whole economy has continued during the reporting year and will be further advanced in the course of 2023. This also includes the definition of potential intermediate targets, for example the Group's target date to have 100 percent of electricity used in own operations come from renewable sources. Currently, the following main levers have been identified:

- Maintain and expand active climate performance management, which means refining the breakdown of targets, evaluating and using location, technology and value chain partner specific potentials, a continuous monitoring, and allocating clear responsibilities
- Drive systematic integration of climate action into business decisions (for example by establishing an internal CO<sub>2</sub>-price), and include it in the programs of other action fields
- Foster close collaboration with value chain partners and their engagement, for example starting with climate relevant information exchange or the definition of common targets.

The regular evaluation of the individual contribution of each lever to climate action, potential opportunities and related risks play an important role for all action fields. Over all scopes products and solutions in their use phase make up the largest GHG emission category. For this reason, special focus is placed on continuous reduction down to CO<sub>2</sub> neutrality during use for the portfolio of the KION Group products and solutions that are shipped every year (Table 10).

## Comprehensive climate management

For the effective and efficient management of GHG emissions and energy use, the KION Group has installed and will further expand a comprehensive climate management system that covers own operations as well as other parts of the value chain from production to use and further use after end of current product life. The KION Group's measures to reduce emissions and atmospheric concentration of the greenhouse gases follow clear principles. The company will constantly strive to cut absolute GHG emissions. In addition to reduction measures, it will endeavor to change its energy sources and processes with lower-emission ones. Along with this technological, physical or economic potential for absolute reductions, the company will explore nature-based solutions for further climate change mitigation beyond net-zero, after individual thorough assessment according to best available science-based standards and certifications. If nature-based solutions need to be credited

partially for compensation of remaining GHG emissions in the value chain as last option, the use will be limited to a minimum extent and within the applicable rules stipulated by SBTi.

With regard to scope 1 and 2 GHG emissions, energy use in the company will be further reduced by improving processes and using more energy-efficient technology. Continuous measures initiated through the local energy or environmental management systems (for example, switching to energy efficient motors and recovery of waste heat in production, optimization of heating systems and building infrastructure, LED technology and transport optimization in sales and services) are combined with central initiatives, for example to convert the own vehicle fleet to low carbon drive technologies or to further promote increased sourcing energy from renewables and further options for self-generation based on renewables. For locations or subsidiaries with high energy consumption dedicated energy management systems according to ISO 50001 or equivalent ensure the systematic local approach. At the end of 2022, 52 percent of the KION Group locations had a dedicated energy management system in addition to environmental management implemented. 14 percent of all Group locations were externally certified according to ISO 50001 or equivalent, representing 46 percent of the Group wide energy use (2021: 15 percent representing 48 percent of energy use). The regular sharing of experiences in the network of local experts, as well as measures to raise awareness among the workforce and get them actively involved, also help to anchor the climate goals in the mindset of the entire KION Group workforce and make sure that all employees know what contribution they can make. Further information and details on the Group's launched and planned initiatives in the context of climate management can be found in the [CDP Climate Change questionnaire](#), which is regularly updated in the mid-year.

In scope 3 relevant categories based on a GHG emissions materiality analysis are considered. Providing clearly the largest category emissions from products in use are prioritized. Besides product design customers are sensitized to choose solutions considering sustainability aspects, to operate them increasingly energy-efficiently and based on energy from renewable sources. Comparably, purchased goods and services as second largest emission category, such as material and supplier specific GHG emissions, will be addressed particularly besides scope 1 and 2. For both major scope 3 categories, a stepwise integration of life cycle assessment insights, material, supplier and customer data as well as engagement measures are ongoing.

A break-down of the development of GHG emissions and energy use as well as other relevant parameters to be further addressed are available in tables 11, 12 and 13. Overall, a positive development in energy and GHG indicators could be realized with clear reductions over most of the energy and emission sources. Constant parallel focus is put on the continuous improvement of data quality and methodology that provide the decisive fundament for climate action. Further detailing of calculations for scope 3 categories as well as a change of the data source for location-based emission factors are example activities during the reporting year.

The KION Group calculates and presents its GHG emissions on the basis of the internationally recognized rules of the Greenhouse Gas Protocol. In this context, consumption data is converted using emission factors derived from the database of the Department for Environment, Food & Rural Affairs (DEFRA) in the United Kingdom (year specific versions). Location-based emission factors for purchased electrical energy are retrieved from the ecoinvent database (year specific versions). In order to ensure comparable data rows re-calculations combined with previous sources for emission factors were performed.

**Table 11: Energy use**

in GJ	2022	2021	Change
<b>Total energy use within the organization (direct and indirect)</b>	<b>2,212,046</b>	<b>2,289,737</b>	<b>-3.4 %</b>
<b>Direct energy use</b>	<b>1,513,566</b>	<b>1,588,312</b>	<b>-4.7 %</b>
<b>Non-renewable sources</b>	<b>1,502,502</b>	<b>1,575,421</b>	<b>-4.6 %</b>
Diesel	664,386	677,610	-2.0 %
Natural gas	486,061	521,012	-6.7 %
Coking coal	213,718	251,656	-15.1 %
Gasoline	91,430	81,326	+12.4 %
Others (oil for heating, CNG, LNG, LPG, coal, ethanol)	46,908	43,818	+7.1 %
<b>Renewable sources (solar, geothermal, woodchips, biodiesel, bioethanol, hydrogen)</b>	<b>11,063</b>	<b>12,891</b>	<b>-14.2 %</b>
<b>Indirect energy</b>	<b>698,481</b>	<b>701,425</b>	<b>-0.4 %</b>
Electricity	607,310	617,662	-1.7 %
Heating	91,170	83,763	+8.8 %
<b>Self-generated energy not consumed</b>	<b>5,766</b>	<b>5,947</b>	<b>-3.0 %</b>
<b>Energy sold</b>	<b>7,615</b>	<b>6,292</b>	<b>+21.0 %</b>
Electricity	6,576	5,637	+16.7 %
Heating	1,038	655	+58.5 %

Percentage of grid electricity used in relation to total energy consumed: 27.5 % (2021: 27.0 %).

19.2 % of total energy use is based on renewable sources, of which 11,063 GJ of direct energy and 414,534 GJ of indirect energy (2021: 19.2 % energy use from renewable sources, 12,891 GJ of direct energy and 427,451 GJ of indirect energy). Renewable energy is calculated as sum of fuels from renewable sources (e.g. geothermal, biofuels) and electricity from renewable sources (e.g. wind, solar) from market based mixes or own installations.

In 2022, the amount of self-generated, renewable energy (consumed and not) was 10,821 GJ (2021: 9,267 GJ).

**Table 12: Greenhouse gas emissions**

in t CO <sub>2</sub> e	2022	2021	Change
<b>Total greenhouse gas emissions (Scope 1, 2, 3.3<sup>1</sup>)</b>	<b>219,836</b>	<b>236,320</b>	<b>-7.0 %</b>
<b>(Total GHG emissions, market-based)</b>	<b>(177,403)</b>	<b>(186,031)</b>	<b>-4.6 %</b>
<b>Direct (Scope 1)</b>	<b>106,154</b>	<b>111,431</b>	<b>-4.7 %</b>
Diesel	47,246	47,311	-0.1 %
Natural gas	27,316	29,381	-7.0 %
Coking coal	22,373	26,344	-15.1 %
Gasoline/petrol	6,088	5,475	+11.2 %
Others <sup>2</sup>	3,132	2,919	+7.3 %
<b>Indirect from energy purchased (Scope 2)</b>	<b>77,132</b>	<b>88,164</b>	<b>-12.5 %</b>
<b>(Indirect Scope 2, market-based)</b>	<b>(34,700)</b>	<b>(37,876)</b>	<b>-8.4 %</b>
Electricity purchased	72,804	84,188	-13.5 %
(Electricity purchased, market-based)	(30,372)	(33,899)	-10.4 %
Heating purchased	4,328	3,976	+8.8 %
<b>Other indirect GHG emissions from direct and indirect energy use (Scope 3.3)<sup>1</sup></b>	<b>36,549</b>	<b>36,725</b>	<b>-0.5 %</b>
Scope 3 emissions from direct energy use	21,544	22,539	-4.4 %
Scope 3 emissions from energy purchased	15,005	14,187	+5.8 %

Location-based data, (market-based data in brackets)

Explanation: Location-based greenhouse gas emissions are calculated by combining company energy use data and regional average emission factors (e.g. country electricity mix) whereas market-based calculations are using emission factors according to the company's specific energy mix as sourced from suppliers (e.g. certified renewable electricity).

Changes due to updates in emissions factors or global warming potentials are calculated retrospectively where applicable in order to ensure comparable methodology and data rows.

<sup>1</sup> Scope 3.3: fuel- and energy-related indirect greenhouse gas emissions (upstream)

<sup>2</sup> Oil for heating, ethanol, LPG, Coal, Woodchips, Hydrogen, CNG, LNG, bio-diesel, bio-ethanol

Calculated biogenic emissions (not included in scope 1, 2, 3): 7,449 t CO<sub>2</sub>e (2021: 7,240 t CO<sub>2</sub>e) from indirect energy and 475 t CO<sub>2</sub>e (2021: 735 t CO<sub>2</sub>e) from direct energy.

**Table 13: Greenhouse gas emissions - Scope 3**

in kt CO <sub>2</sub> e <sup>1</sup>	2022	2021	Change
<b>Material greenhouse gas emissions Scope 3<sup>2</sup></b>	<b>18,352</b>	<b>19,633</b>	<b>-6.5 %</b>
3.1 Purchased goods and services	3,458	3,899	-11.3 %
3.3 Upstream fuel- and energy-related activities	37	37	-0.5 %
3.4 Upstream transportation and distribution	174	112	+55.7 %
3.6 Business travel	28	23	+19.3 %
3.7 Employee commuting	52	51	+2.0 %
3.11 Use of sold products + 3.13 Downstream leased assets (direct)	14,443	15,322	-5.7 %
[ 3.11 Use of sold products + 3.13 Downstream leased assets (indirect) ]	[ 3,167 ]	[ 3,054 ]	+3.4 %
3.12 End-of-life treatment of sold products	161	190	-14.8 %

<sup>1</sup> Thousand tons of CO<sub>2</sub>-equivalent

<sup>2</sup> Expenditure-based methods (3.1, 3.4, 3.6), activity data (3.3), employee data (3.7), life cycle assessment data (3.12) and product and sales data (3.11, 3.13) were used as the basis for the survey in combination with database values and emission factors. Comparative data, expert assessments and the results of existing life cycle assessments were used for plausibility checks. Changes due to updates in emissions factors or global warming potentials are calculated retrospectively where applicable in order to ensure comparable methodology and data rows.

Further measures during the reporting year focused the system to manage climate performance. Besides changes resulting from the restructuring of sustainability action fields and the general governance structure options for the enhancement of the action field specific governance were explored, i.e. adaptations to the involvement of boards on different levels, how action and implementation is coordinated within the action field lead, corporate functions, Operating Units and local teams. Risk management was picked up by an explicit integration of more climate related aspects in the context of a revision of the Group wide risk catalogue. Chronic physical risks were analyzed with external partners for first prioritized representative sites using different scenarios in order to discuss impact and mitigation or adaption measures. On the other hand, opportunities are analyzed within action fields, for Operating Units and locations. This approach will be extended and further developed during the following year. Transparency could be further increased, for example through disclosure of continuously added details in [CDP Climate Change questionnaire](#), refining scope 3 calculations and reporting from 2021 annually for all 3 scopes or by including an index on the recommendations of the Task Force on Climate-related Financial Disclosures ([TCFD content index](#)).

Overall, stepwise progress could be made in different areas of climate action which is, eventually, mirrored by the score improvement in CDP Climate Change to leadership level A- in 2022.

## (Local) environmental protection and biodiversity

The action field also considers further matters of (local) environmental protection and biodiversity. Protecting the environment is one of the key concerns of the KION Group. To achieve this objective a range of measures is available that also make practical economic sense. The policy document [KION Group HSE Statement of Intent](#) derived from [KION Group Code of Compliance](#) provide both the frameworks for its activities. This applies in particular to the compliance to national laws and standards, performance objectives, monitoring, responsibilities, training and continuous improvement. In brief, the KION Group and its workforce shall continually work to reduce emissions, discharges to air, land and water; the amount of waste generated; and the amount of natural resources used, including water, energy and raw materials. The KION Group HSE Standard provides further details for local action for entities, partially going beyond national legislation. Risks and performance

are continuously monitored through the central internal reporting, which covers for example water, waste and emissions as well as an updated self-assessment on site level. In addition, central audits, awareness initiatives and the promotion of Group wide expert exchange support locations.

In general, potential local environmental impacts as location specific matter are managed primarily on a local basis by the Operating Units and sites. This includes the definition of objectives and measures regarding material use, water and effluents, waste and emissions (air, soil, water, noise).

To strengthen local activities and a comprehensive approach certifications and systematic audits ensure that environmental aspects are appropriately managed, all relevant data is available in the required quality at all times so that corrective action can be taken. Expanding environmental management certification is a key aim as part of the KION Group's sustainability strategy. Every year, the number of certified sites increases (Table 14). By 2024, all plants as well as sales and service locations are to be certified in accordance with ISO 14001 or equivalent.

**Table 14: Strategy status sites covered by certified management systems**

Target and indicator, [target year]	Status 2022	Status 2021
100 % ISO 14001 certification rate <sup>1</sup> (all sites), [2024]	81 %	72 %

<sup>1</sup> Or equivalent standards

On central level, in addition to certifications, energy and GHG emissions, several main metrics are in place to monitor environmental performance. Selected sites observe other relevant air emissions (Table 15), depending on local regulation. As the KION Group's business activities only have a relatively low impact on water quality, the company does not need to carry out its own pre-treatment prior to discharge, except for the use of volatile liquid separators. For indicators on water withdrawal and wastewater, see Tables 16 and 17. Finally, the KION Group intends to systematically reduce the amount of waste it generates (Table 18).

**Table 15: Other significant air emissions monitored at selected sites (direct)**

in kg	2022	2021	Change
Carbon Monoxide (CO)	959,213	958,407	+0.1 %
Volatile Organic Compounds (VOC)	120,648	128,045	-5.8 %
Particulate Matter (PM)	7,583	6,853	+10.6 %
Nitrogen Oxides (NOx)	22,743	32,033	-29.0 %
Others (SOx, Phosphats etc.)	68,965	69,994	-1.5 %

**Table 16: Water withdrawal**

in million liters	2022	2021	Change
<b>Water withdrawal</b>	<b>553.4</b>	<b>583.9</b>	<b>-5.2 %</b>
Third-party water	514.6	553.3	-7.0 %
Ground water	25.7	19.3	+32.6 %
Surface water	0.2	0.3	-49.5 %
Water withdrawal from other sources (rain, seawater, etc.)	13.0	11.0	+19.0 %

**Table 17: Waste water**

in million liters	2022	2021	Change
<b>Water discharge by destination</b>	<b>498.6</b>	<b>487.1</b>	<b>+2.4 %</b>
Third-party	496.9	486.6	+2.1 %
Seawater bodies	1.1	-	-
Other freshwater discharge	0.6	0.5	+27.1 %

**Table 18: Waste**

in t	2022			2021			Change
	Non-hazardous	Hazardous	Total	Non-hazardous	Hazardous	Total	Total
<b>Total amount of waste</b>	<b>88,809</b>	<b>13,125</b>	<b>101,934</b>	<b>63,234</b>	<b>13,164</b>	<b>76,399</b>	<b>+33.4 %</b>
<b>Waste recovered</b>	<b>76,285</b>	<b>8,851</b>	<b>85,135</b>	<b>47,734</b>	<b>8,834</b>	<b>56,568</b>	<b>+50.5 %</b>
Recycled	70,336	7,251	77,587	41,256	7,677	48,932	+58.6 %
Prepared for reuse	4,850	554	5,403	5,189	640	5,829	-7.3 %
Other recovery method	1,099	1,046	2,145	1,289	518	1,807	+18.7 %
<b>% Waste recovered</b>	<b>85.9 %</b>	<b>67.4 %</b>	<b>83.5 %</b>	<b>75.5 %</b>	<b>67.1 %</b>	<b>74.0 %</b>	
<b>Waste disposed</b>	<b>12,525</b>	<b>4,274</b>	<b>16,799</b>	<b>15,501</b>	<b>4,330</b>	<b>19,830</b>	<b>-15.3 %</b>
Incineration	887	1,303	2,190	1,075	1,035	2,110	+3.8 %
Landfill	9,846	1,291	11,137	4,646	1,232	5,879	+89.4 %
Other disposal method	1,792	1,680	3,472	9,779	2,063	11,842	-70.7 %
<b>% Waste by type (hazardous/non-hazardous)</b>	<b>87.1 %</b>	<b>12.9 %</b>		<b>82.8 %</b>	<b>17.2 %</b>		

The increase in recycled waste recovered is to be attributed to building dismantling activities that occurred at a German site. The variations in landfilled waste and waste disposed by other method are due to a shift in categorization.

Despite the fact that previous materiality analyses indicated lower impact and priority, the KION Group pays attention to the growing relevance of biodiversity, ecosystems and land use, as well as the close relation to climate action and circularity. Consequently, further opportunities and risks in this context could be identified when advancing the action field programs. With regard to potential future disclosure, for example, the KION Group will observe the development of recommendations by the Taskforce on Nature-related Financial Disclosures (TNFD).

## 06 | Circularity

### NfR: Circular products and business models

With the newly structured action area of circularity, activities of previous action areas such as resource efficiency, environmental protection, energy- and resource efficient products, innovative solutions, and customer benefit are explicitly bundled and circular thinking is emphasized. Aware of planetary limits, the KION Group's circular economy aims to maintain the value of resources, materials, and products for as long as possible by returning all of them to the value chain at the end of their current use while at the same time minimizing losses, the generation of waste, and the need for additional resources. Discarding fewer products means obtaining fewer materials and is better for the environment and the economy in the long run. This process starts at the very beginning of the life cycle: integrating smart product design, smart solution design, smart production processes, saving and securing valuable resources, ensuring efficient waste (more accurately "resource") management, and lastly creating more flexibility and new business opportunities. Circular economy is a logic step in the evolution of economy and offers the opportunity to reinvent to be more sustainable and competitive.

The KION Group incorporates the high level of potential of circularity for its own operations, customers, suppliers as well as other shareholders and makes this one of its main goals. For the KION Group, this means developing a comprehensive circularity strategy and an action roadmap that addresses three cascading levels of circularity, which are circular and closed loop material flows, sustainable products and solutions, and circular business models. Circularity is closely connected to other action fields: It is not only a key lever to reaching net-zero climate targets for the KION Group and its customers, but also creates a foundation for a sustainable product and solution portfolio as well as responsible and strong supply chains. With time, the KION Group will become more resilient. Following this transition, the KION Group is also making early preparations for upcoming and potentially additional regulations such as the EU Circular Economy Action Plan.

The KION Group has identified four areas in its business model to help improve the circular economy in the coming years:

- Resource use: Use renewable resources such as energy and recyclable/recycled materials
- Shared and modular use: Deploy innovative concepts during the life cycle such as shared use of vehicles in industrial parks, renting flexible products to several users, and products and solutions as a service through subscription or outcome-based contract models for a limited time
- Product lifetime: Extend the life cycle of products, solutions and their components via methods such as appropriate design, optimal maintenance and service intervals, upgrading, and reselling
- Resource recovery: Recover resources at the end of their initial lives such as through an increased commitment to recycling

Concrete targets for the action field will be developed during the upcoming year in alignment with the other action fields and the corporate strategy. The KION Group will start with initial pilot projects, for example cradle-to-cradle options, to explore concrete business opportunities and gain practical insights and experiences. Then it will gradually work towards establishing comprehensive circularity. The substitution of existing materials and supply routes, modular thinking, and innovative customer solutions will play a role but also the commitment of value chain partners. On the other hand, the Group can build on existing activities like used trucks and the rental and refurbishment business (04 | [Product and solution sustainability](#)). Comprehensive expertise from life cycle assessments in both segments is further systematically integrated in the research and development of products, solutions and services.

## 07 | Supply Chain

### NfR: Sustainable supply chain

The KION Group's supply chain management designs and manages logistics chains – the flow of materials and information throughout the entire value creation process – based not only on business criteria but also in terms of sustainability. The KION Group works on shaping all important processes, from the purchase of material requirements through the finishing stages to the customer, are humane and environmentally friendly.

The goals are not only to optimize products and services in relation to the resources used, but also to ensure that the parts of the value chain live up to certain defined standards of human dignity, working conditions and environmental compatibility. To this end, the KION Group is setting up an information and analysis system that records relevant data and information for effective supply chain management with regard to the main purchasing and material items.

In the near future, the KION Group will examine the individual conditions in the value chain, particularly with regard to environmental impacts and their compatibility with a functioning circular economy. In this scenario, labor and human rights as well as the effects of economic activity on the environment form the core areas of the KION Group's supply chain management.

### KION Group's responsibilities for supply chain management

- Establish a supply chain risk management system
- Define internal responsibilities
- Carry out regular risk analyses
- Adopt a set of policy statements which are binding for all legal entities of KION and applied locally
- Establish preventive measures within the business unit and with immediate suppliers
- Initiate corrective and improvement actions together with the suppliers
- Establish a complaints procedure (whistleblower system) accessible to suppliers and their employees
- Implement risk due diligence with direct and indirect suppliers
- Carry out documenting and reporting

### Sustainable procurement

The KION Group's sustainable procurement approach is based on a model of Continuous Improvement (Require – Assess – Improve). Regular review of the supply chain sustainability strategy, work plan, and performance is conducted via regular meetings of the Procurement Governance Team

comprised of the Executive Vice President of Procurement and his top leaders across the organization.

The KION Group also evaluates the individual conditions in the upstream value chain on the basis of sustainability criteria. The central purchasing organization defines and manages a set of supplier base requirements as well as a leveled sustainability risk assessment program and engages with suppliers on sustainability improvement opportunities. The Central Procurement Functions organization sets guidelines for the category specific purchasing departments and controls the corresponding evaluation procedures. The results provide insight into the sustainability performance of the KION Group's suppliers worldwide, with the aim of providing a central information system for all sites.

The KION Group's procurement spectrum is characterized by a high degree of heterogeneity and complexity. About half of the products are customized for the relevant customer and require a correspondingly large number of individual parts. The service department also handles a wide range of parts.

The largest part of the purchased volume of goods and services financially – around six and a half billion euros in 2022 – is accounted for by materials (about 60 percent), which include electronic and hydraulic components, assembly lines and assembly line components, structural steel and sheet steel components, drive units, and wheels. The most important items in services are logistics services, installation services and maintenance services.

The KION Group uses around 50,000 suppliers for its orders, with 80 percent of the purchasing volume coming from just 2.6 percent of suppliers. Geographically, Europe and the Middle East account for largest share of the purchasing volume (2022: 69 percent, 2021: 69 percent), followed by North and South America (2022: 18 percent, 2021: 19 percent) and Asia-Pacific (2022: 13 percent, 2021: 10 percent).

The KION Group formulates its sustainability requirements for suppliers through specific guidelines and regulations and also obliges suppliers to adhere to those requirements and laws when concluding business with the KION Group. The [KION Group Code of Compliance](#) and the [Principles of Supplier Conduct](#) contain specific requirements and rules of conduct for responsible procurement. The [Principles of Supplier Conduct](#), which are available in KION's three main languages according to the most important procurement markets and formulate clear ecological and ethical guidelines for the global supplier base. The KION Group's [General Terms and Conditions for Purchasing](#) as well as individual agreed contracts additionally contain detailed obligations to ensure the compliance with applicable laws, the KION Group [Principles of Supplier Conduct](#) as well as transparency throughout the supply chain. All these rules and regulations are, of course, binding for the entire KION Group with all its legal entities and are regularly checked to ensure that they are up to date and complete.

The KION Group explicitly aligns its own labor policy and the labor policy required of its affiliated companies and its suppliers with the basic principles of the ILO and its corresponding conventions. The KION Group is expressly committed to respecting, complying with and enforcing the United Nations Universal Declaration of Human Rights with its 30 articles and the eight fundamental principles (conventions, core labor standards) of the ILO. This commitment applies both to employees in the company's own division – regardless of the type of employment contract they have – and to employees in the value chain.

There is a dedicated supply chain sustainability team within central purchasing department that organizes the sustainability strategy holistically and the work plan across the categories. The respective purchasing areas are responsible for their suppliers' compliance with the aforementioned

guidelines and facilitating supplier engagement and commitment to improvement actions in case of deviating standards at suppliers.

**Table 19: Strategy status transparency on sustainability in the supply chain**

Target and indicator, [target year]	Status 2022	Status 2021
<b>EcoVadis or equivalent rating</b> (Corporate Social Responsibility performance) available for:		
<b>25 % of top spend on strategic suppliers</b> for all OUs <sup>1</sup> , [2022]	KION Group 49 % ITS EMEA 51 % ITS APAC 56 % ITS Americas ♦ SCS - Global 46 %	One OU reached the target, the other OUs are working on implementation.
<b>100 % of strategic and high-risk suppliers</b> <sup>1</sup> , [2023]	65 % of high-risk suppliers <sup>2</sup> are covered.	♦
<b>100 % of direct suppliers</b> <sup>1</sup> , [2025]	♦	♦
<b>Definition and communication of minimum EcoVadis or equivalent score</b> for all suppliers <sup>1</sup> , [2023]	♦	♦
<b>Minimum EcoVadis score mandatory</b> for all suppliers <sup>1</sup> , [2027]	♦	♦

<sup>1</sup> Group or site rating

<sup>2</sup> High risk refers to industry and country risk based on sustainability criteria.

♦ In process

For an objective and robust assessment of sustainability risk and performance of its key suppliers, the KION Group has implemented a three level ESG evaluation program utilizing the expert software-as-a-service (SaaS) platforms of EcoVadis and IntegrityNext. In 2022, all suppliers with a spend greater than 50,000 euros with the KION Group were the focus to be entered onto the EcoVadis IQ platform to understand their inherent sustainability risk profile. The second-level assessment utilizes the IntegrityNext platform to understand the maturity of the suppliers relative to human and labor rights and environment compliance and protection. The third level and most rigorous assessment, initially focused on the top spend and strategic/critical suppliers, is managed through the supplier assessment on the EcoVadis platform. By utilizing this leveled approach to assessing suppliers, the KION Group validates compliance with specific standards in the areas of HSE, anti-corruption and anti-bribery, product-related environmental protection and upstream supply chain monitoring. Compliance with human rights, labor rights and employment standards at suppliers is also checked in this way.

New suppliers are asked about their sustainability assessment as part of the supplier introduction process. This should be proven by IntegrityNext and/or EcoVadis or accepted equivalent. Existing suppliers are periodically checked. The KION Group aims to further increase transparency in the sustainability performance of its suppliers and to manage risks and opportunities related to the sustainability of the supply chain in a more targeted manner.

If supplier weaknesses are identified, improvement actions are initiated, and progress is reviewed through the EcoVadis platform. The ultimate validation of resolved deficits is the results in the next assessment. This strategy is proving successful: In 2022, the KION Group considerably increased the number of reviewed suppliers (compared to 2021) of which 63 percent (same as previous year) were able to improve their EcoVadis ratings compared to the previous period.

From 2020 to 2022, supplier auditing and the implementation of effective controls were hampered by the global governmental anti-COVID 19 restrictions. With the exception of a few countries, these restrictions are expected to be significantly reduced in the course of 2023, so that more on-site review and control of the supply chain are to be expected. With the ongoing implementation and usage of this set of tools the KION Group is able to manage risks and opportunities in its worldwide supplier base for all legal entities in the most efficient manner, reducing duplicate solutions locally and enabling the highest level of synergies across the entire Group.

## Supplier diversity program

Just as the KION Group benefits from the diversity of the workforce, the company recognizes it is essential to have a diverse pool of suppliers that help to offer products and services with new and fresh perspectives. As supplier diversity is a long-standing business requirement in North America, the procurement team supporting Dematic is taking the lead in developing the supplier diversity program. The KION Group intentionally adds highly capable small and diverse suppliers (companies that are nationally certified as meeting the requirement to be considered small and underrepresented, or that are owned and operated by women, minorities, or military service veterans). The KION Groups works on establishing strong, mutually beneficial relationships with these businesses and the communities they represent. In addition, the KION Group strives to grow the relationship with business leaders, community organizations, and trade associations that represent the interests of diverse businesses.

## Supply chain risk management

In the reporting year, the KION Group rolled out Everstream Analytics across the Group's supply chain organizations. Everstream's advanced analytics and predictive insights provides a uniform and comprehensive system for monitoring supplier risks from planning, logistics and procurement. In addition to monitoring default risks, the platform also includes the geopolitical and physical environment risks in the suppliers operating surroundings. To date, 3,400 of the most critical direct suppliers are monitored 24/7/365 with alerts set up to notify the appropriate supply chain staff. In 2023, the system will be enhanced to display sustainability risk scores from the robust assessment program as well as on-going monitoring of sustainability watch lists.

In addition, the Procurement Leadership team formed a Global Supply Chain Risk Council that meets monthly to review the risk profile of the top 10 spend by Operating Unit and to delve into deeper review of the top 5 at risk suppliers. Whilst the Supply Chain Risk Council is defining and normalizing its monthly agenda, the structure is firmly set. Meetings are focused on confirming priorities, aligning on operational and legal insights, and making decisions on actions where needed.

## German Supply Chain Sourcing Obligations Act (LkSG)

The requirements of the Act on Corporate Due Diligence Obligations in Supply Chain 2021 (Lieferkettensorgfaltspflichtengesetz, LkSG) provided the catalyst for KION GROUP AG to look deeper into the supplier evaluation and assessment program across all regions for direct and indirect purchasing categories. The three level assessment program, described earlier, took shape and was implemented. New supplier evaluation processes were modified to include additional sustainability requirements.

A key element of Act on Corporate Due Diligence Obligations in Supply Chain 2021 is building awareness and capabilities within the own purchasing organization. 84 percent of Procurement employees globally completed training on the action which the KION Group implemented to engage suppliers on critical compliance with human rights, labor rights and employment standards and

environmental protection. Further trainings as well as closing the remaining 16 percent will take place in 2023 on the broader three level approach and active sustainability initiatives.

## Conflict minerals and conflicted areas

The KION Group strategy strives to balance economic, environmental, and social aspects. The KION Group's supply chain is global. It is a top priority to adhere to all international laws and regulations, thereby exceeding the customer expectations. While the KION GROUP AG is not required to report on conflict minerals with the United States of America's Securities and Exchange Commission; nor is it affected by European Union regulations, the KION Group acknowledges them and is moving forward to include Conflict Minerals and Conflicted Areas in the Assess and Improve aspects of sustainable supply chain model. To improve transparency of these practices in the supply chain, the KION Group has implemented the request for Conflict Minerals Reporting Template (CMRT) into its General Terms and Conditions of Purchase. In 2022, the KION Group has joined with over 200 companies utilizing the SaaS platform of Assent's regulatory compliance program to engage smelters or refiners into an industry-recognized audit/assessment program.

## Supply chain management over the coming years

Key aspects of the KION Group's sustainability ambition are also the reduction of GHG emissions and the promotion of a circular economy, not only within the KION Group itself, but also along the supply chain. The path to climate neutrality and circular economy criteria therefore play an increasing role in supplier selection and procurement decisions. Against this backdrop, the KION Group will continuously improve the carbon footprint of its products in the coming years ([04 | Product and solution sustainability](#), [05 | Climate and energy](#)) and record upstream Scope 3 emissions for this purpose in order to be able to derive potential for improvement.

Recording all GHG emissions also enables more effective and efficient planning on the path to climate-neutral economy. At the same time, the KION Group obtains information about the potential for the use of renewable energies in the value chain. In addition, the KION Group will design materials and products suitable for the circular economy – together with all partners in the supply chain.

## 08 | Sustainable governance

### NfR: Social matters

Sustainable governance provides the structure by which sustainability objectives are set for the KION Group, and the means of attaining those objectives, on a Group and Operating Unit level as well as within action fields. In a wider sense governance encompasses business ethics as well as the KION Group's understanding of sustainable business management including but not limited to compliance, corporate citizenship and communications. The main target is to maintain a leading and holistic sustainable governance that is effective, efficient and responsive to ensure that stakeholder requirements are met and, eventually, the KION Group's success in the long-run is secure.

## Organization and management

The Executive Board of KION GROUP AG is responsible for the strategic and operational management of the KION Group. For further information on the duties and the composition of the Executive Board and Supervisory Board of KION GROUP AG see the [Annual Report 2022](#) and [KION Group's corporate website](#). The KION Group works according to recognized standards of sound and responsible corporate governance. Besides statutory regulations, the German Corporate Governance Code (DCGK) guides how the KION Group is managed and controlled. Further information on the

applied standards is included in the Corporate Governance Statement. The statement is also part of the [Annual Report 2022](#) and available on the [corporate website](#). The KION Group's risk management system is documented in a Group risk management policy. This policy defines tasks, processes and responsibilities and sets out the rules for identifying, assessing, reporting, and managing risks. In addition, management systems are available for governance processes in the KION Group, including an internal control system, the compliance management system, and the internal audit system. Further information on this can also be found in the [Annual Report 2022](#).

## Sustainability organization

The KION Group's sustainability approach is characterized by the clear allocation of responsibilities. It falls to KION GROUP AG Executive Board to make decisions that ensure that the KION Group's commitment to sustainability translates into specific measures.

Until and including April 30, 2023 the Chief Technology Officer (CTO) on KION GROUP AG Executive Board will deal with all sustainability issues and also manages the sustainability strategy and its implementation in this context. As chair of the Sustainability Steering Committee, the CTO is instrumental in continuously reviewing and implementing the sustainability vision for the KION Group. From 1 May, 2023 onwards, a new Board member – the Chief People and Sustainability Officer including the role of Labor Director – will take over the area of sustainability.

As part of the Sustainability Steering Committee, the sustainability action field leads, the sustainability coordinators of the Operating Units and central sustainability management ensure that the sustainability program is uniform across the Group, continually enhanced and further implemented. The Sustainability Steering Committee also regularly deals with the provisions of the German Commercial Code (HGB) and EU legislation (for example the EU taxonomy) relating to non-financial reporting and what these require on the part of KION GROUP AG, as well as additional regulations the Group deems as relevant in this area ([About this report](#)).

The KION Group's central sustainability management controls and coordinates the Group's sustainability program, defines sustainability-related performance indicators and tracks target achievement in the action fields. It furthermore ensures coordination between the individual action fields, the Operating Units and within the Group. It is also available to provide internal and external specialist support.

Those responsible for the individual action fields (action field leads) manage the corresponding programs, budgets, and resources ([Sustainability strategy, action fields and targets](#)). They are also responsible for implementing the agreed action plans, including their transfer to business processes, Operating Units and subsidiaries, together with the respective sustainability coordinators. At the operational level, sustainability programs corresponding to the KION Group action field model are established and cascaded to the local level. The KION Group's sustainability strategy and the corresponding objectives are based on existing Group-wide standards and codes of conduct that ensure compliance with rules and regulations ([Table 33](#)). In particular, [KION Group Code of Compliance](#) serves as a Group-wide guideline in that respect.

## Sustainability performance recognized

The KION Group aims to be appropriately represented in the relevant sustainability ratings and rankings and transparently publishes respective results on its [corporate website](#). Of particular importance in this regard is the annual Corporate Sustainability Assessment (CSA) carried out by the financial services company S&P Global as well as the assessment carried out by EcoVadis, a platform specializing in the rating of business in terms of sustainability. In the action field of Sustainable governance, both ratings are strategically anchored and serve as the basis for setting out tangible targets and specific indicators ([Sustainability strategy, action fields and targets](#)). In the reporting year, the KION Group achieved clear improvements in both ratings: EcoVadis could be raised to Gold status, in the S&P Global CSA a score of 62 was accomplished. In addition, the CDP Climate Change score could be improved to leadership level A-. Up-to-date ratings from CDP, EcoVadis, FTSE Russell ESG, ISS ESG, MSCI ESG, S&P Global CSA, Sustainalytics ESG Risk Rating and Vigeo Eiris ESG can be found on the [corporate website](#).

**Table 20: Strategy status customer requirements**

Target and indicator, [target year]	Status 2022	Status 2021
EcoVadis "gold" rating for all OUs and the KION Group, [2027]	KION Group: Gold Operating Units <sup>1</sup> : 1 Platinum; 1 Gold; 2 Silver; 1 no medal; 1 unrated	KION Group: Silver Operating Units <sup>1</sup> : 2 Gold; 1 Silver; 2 Bronze; 1 unrated

<sup>1</sup> The OU KION ITS EMEA is covered by the assessments of LMH EMEA and STILL EMEA.

**Table 21: Strategy status investor requirements**

Target and indicator, [target year]	Status 2022	Status 2021
S&P Global Corporate Sustainability Assessment (CSA) score $\geq$ 70 points for the KION Group, [2027]	62	57 (2020: 53)

The variable remuneration of the Executive Board of KION GROUP AG and the KION Group management also mirrors the KION Group's sustainability performance. Both the long-term variable remuneration and the short-term variable remuneration of the Executive Board of KION GROUP AG and the KION Group management are linked to non-financial targets from core areas of the sustainability strategy. In addition to the Lost Time Injury Frequency Rate (LTIFR), relevant targets are ISO 14001 certification of the environmental management system at the KION Group's locations, the assessment of ESG performance as part of the S&P Global CSA and employer attractiveness as measured by the employee survey. Sustainability criteria determine a total of approximately 20 percent of variable short-term and long-term Executive Board and management remuneration. Further details of Executive Board remuneration, including the individual amounts for each member, are presented in KION GROUP AG's separate [2022 remuneration report](#), which will be made available on the KION Group website.

## Strict and unambiguous compliance management

### NfR: Anti-corruption and bribery matters

As a long-standing member of the German Institute for Compliance (Deutsches Institut für Compliance, DICO), the KION Group stands for consistent compliance with laws, guidelines and voluntary codes in the Group and relies on a comprehensive compliance management system. The basis for this is the [KION Group Code of Compliance \(KGCC\)](#), which defines the guidelines for ethical, value-oriented and lawful business activity. It is supplemented by numerous other Group-wide regulations on various topics covering the entire scope of the KION Group's activities.

The KGCC is a binding framework for all employees. It sets out guidance on correct conduct with each other as well as with customers, business partners, and the public. The rules and regulations are available on the KION Group Social Intranet in 24 languages and are updated continuously in order to comply with the prevailing legal situation and the current environment of the KION Group at all times. External parties can access the KGCC via the [KION Group's website](#). As a German corporation, KION GROUP AG is primarily subject to German law. At the same time, the KION Group is required to uphold national laws at its global locations. Where there are legal conflicts, the KGCC determines the company's approach. In cases of doubt concerning legal requirements, the Group's compliance or legal department serves as the point of contact.

The KION Group's compliance program is continually updated to include new topics and new priorities. As in previous years, work in 2022 continued as far as anti-corruption is concerned, data protection and IT-security, foreign trade and export control, the fight against money laundering, fraud prevention with a focus on cybercrime, as well as directors' and officers' liability and responsibility. Recently, more cases of allegations of sexual harassment and discrimination have been reported due to increased awareness. In addition, integrating compliance aspects into the internal control system, whistle-blower protection and the topic of anti-discrimination continued to be a focus in the reporting year.

## Efficient compliance organization

### NfR: Anti-corruption and bribery matters

The Executive Board of KION GROUP AG bears overall responsibility for the compliance management system at the KION Group. In organizational terms, the compliance department reports to the Chief Executive Officer (CEO) and is headed by the Chief Compliance Officer. Together with the compliance team, the Chief Compliance Officer is responsible for further developing the compliance management system, providing advice and information on compliance topics, resolving cases of non-compliance, and appropriate training. Each Operating Unit has a full-time compliance officer who reports directly to the Chief Compliance Officer and supports the management of the Operating Unit in implementing compliance requirements.

Local and regional compliance representatives ensure that operations at subsidiaries comply with statutory and regulatory requirements. Consequently, they are the first points of contact for questions on and reporting of, possible instances of non-compliance. Together they form the Group-wide compliance team, reporting to the compliance officer of the Operating Unit. In 2021, a position was also created with a direct reporting line to the Chief Compliance Officer, who is responsible for the general coordination of all Group-wide compliance processes and projects.

On a quarterly basis, the local compliance representatives report their activities to the compliance department. These reports contain information on inquiries received and potential compliance violations as well as locally conducted compliance training. Information on donations and sponsoring activities is reported ad hoc to Corporate Compliance, where it is subject to an integrity check. The

KION Group compliance department works closely with the legal, internal audit, and human resources departments. As a cross-functional body, the KION Group Compliance Committee is staffed by senior managers from these departments. It deals primarily with addressing compliance concerns, managing investigation and advising on sanctions when compliance violations are identified.

Actual or suspected incidents of non-compliance can be reported in person or by telephone, mail, e-mail or via an online form. In addition, all KION Group employees as well as external stakeholders can use a whistleblowing hotline around the clock to report potential compliance violations. This can be done anonymously if they wish. Contact information for reporting can be found in the compliance department's section on the [KION Group's website](#).

Since March 2021, there has also been the option to submit compliance-related questions on the intranet or on the [KION Group's website](#) via a corresponding tool, and anonymous reports can also be submitted and tracked. The integrated case management system ensures that all reports are reviewed and that each case is processed systematically. Details on the type of reported issues during the reporting year are available in the Annex ([Table 34](#)).

The whistle-blower system is designed to be global, but as local as possible, so that every KION Group employee, every business partner employee and every individual has access to the whistle-blower system. Inputs to the system are managed and assessed by the compliance organization and ultimately the Compliance Committee, which includes the chief compliance officer, HR, Audit and Legal. Future implementation of the EU whistle-blower directive into German law will be taken into account by adapting the KION Group's whistle-blower system accordingly.

The efficacy of the KION Group's compliance management system is continually reviewed and refined. It is based on the model of the IDW PS 980 auditing standard, which focuses on preventing compliance violations. When it comes to the anti-corruption section, the aim is to prevent, detect, track and penalize corruption within the KION Group. As part of its regular audits and ad-hoc audits, the Group audit department checks compliance at KION GROUP AG and its consolidated subsidiaries against the compliance requirements.

In the year under review, the external audit of the compliance management system in the anti-corruption section was completed in accordance with IDW PS 980, based on ISO 19600. In addition to effectiveness, the audit focused on the adequacy and design of the compliance management system. In 2022, it was confirmed that the measures are effective, in accordance with the principles applied, in identifying risks of material non-compliance with reasonable assurance in a timely manner as well as preventing non-compliance.

## Zero tolerance for corruption and bribery

### **NfR: Anti-corruption and bribery matters**

The KION Group expressly supports the fight against any form of corruption and bribery. To this end, it follows a "prevent, detect, respond" approach. In the reporting year no confirmed cases of anti-competitive or anti-trust behavior were registered. No confirmed cases of active corruption by KION Group employees were identified either.

The KGCC sets out specific requirements on conduct to prevent corruption. It focuses on the handling of gifts or benefits granted by or to business partners, dealing with public officials and the topics of donations and sponsorship. Detailed rules are included in the KION Anti-Bribery and Corruption Policy (ABC Policy), the KION Group Guidelines on avoiding conflicts of interest (updated in 2022) and the KION Group Donations and Sponsorship Policy ([Table 33](#)). The KION Purchasing Policy, which was updated in 2021, also contains a subsection on compliance and anti-corruption.

The ABC policy sets country-specific approval limits and a uniform approval process for handling gifts and invitations and defines guidelines for the correct documentation of such transactions. In light of this, a new IT-based register was introduced in 2020 for recording gifts and invitations that the KION Group employees receive or give to business partners. The application also includes an approval process and can be used via the KION Group Social Intranet as well as on mobile devices. Since it was rolled out across the Group in 2021, its use has been mandatory for all employees with access to the KION Group Social Intranet. As a result, the IT-based register now covers almost the entire KION Group workforce.

Dedicated training on the ABC Policy was also introduced via a Group-wide digital learning platform in 2021 as well as training on the Conflicts of Interest Policy in 2022. Evaluating participant data reflects across the Group which people working with the KION Group are informed about the guidelines set out in the Anti-Bribery and Anti-Corruption Policy. The compliance department receives a daily report on the current status of training activities, allowing it to identify gaps at an early stage and take appropriate action.

## Extensive training measures on compliance issues

### NfR: Anti-corruption and bribery matters

All new employees at KION Group are required to complete an e-learning course that covers all aspects of the [KION Group Code of Compliance](#). Employees without a work PC and those who are exposed to particular compliance risks due to their activities such as sales receive special training in person. The aim is to train all employees regularly on the most critical topics (anti-corruption, avoiding conflicts of interest, antitrust and competition law, anti-money laundering, data protection, IT security and human rights). As along with findings from its compliance management system, changes to legislation or internal regulations are also incorporated into the face-to-face training courses. The compliance training program was expanded in 2021 to include new e-learning courses on respectful workplace culture (anti-discrimination), conflicts of interest, whistleblower protection and fraud, with a focus on money laundering. Also new to the program are e-learning courses on cybersecurity and antitrust law (the latter from 2022). Details on the online and face-to-face compliance training during the reporting year, primarily on anti-corruption, handling conflicts of interest, respectful workplace culture, money laundering and compliance for management can be found in the appendix ([Table 35](#)).

The compliance training courses are individually tailored and focus on three groups of participants. Risk category I are employees with external contacts according to their position descriptions; these include sales, purchasing, managers with decision-making authority, and service technicians. Risk category II are the middle office, finance department, accounting, and legal department. Risk category III are production workers and all employees without business decision-making authority. KION Group offers e-learning programs on compliance for all employees and in principle always for new employees. Participation in these programs is tracked and documented.

## Periodic risk analysis

As part of a systematic analysis, the KION Group records and evaluates corruption and bribery risks on a regular basis throughout the Group (including KION GROUP AG). Money laundering risks and the risks of non-compliance with antitrust laws, tax-compliance and human rights are also assessed. Non-financial risks that arise on an ongoing basis are screened, evaluated, and managed. Adequate measures are subsequently derived to eliminate both process and control weaknesses. The characteristics of the corruption perception index for the respective country, the size and structure of the local purchasing or sales organization and contacts with public officials play an important role in risk

assessment. The analysis has already been completed for all KION Group subsidiaries, including KION GROUP AG, and no significant risks of corruption have been identified.

All reported suspected cases are followed up rigorously. Violations that have already occurred are investigated through effective control measures, such as regular or special audits. Disciplinary action is taken in any identified cases of misconduct. If necessary, the compliance management system is modified to counter future violations. Appropriate clauses in contracts with dealers, consultants and suppliers also have a preventive effect. The regular training of employees who are exposed to an increased risk of corruption also serves to prevent bribery and corruption risks. In the reporting year, there were no confirmed cases of active corruption, bribery or anti-competitive behavior of employees of the KION Group.

## Donations and sponsorships follow clear guidelines

With the revision of the KION Group's Donations and Sponsorship Policy in 2020, existing rules within the Group were standardized. Approval processes for donations and sponsorship activities were also harmonized across the KION Group. Among other topics, the policy stipulates that every donation and every sponsorship activity must be reviewed and approved in advance by the compliance department.

The KION Group's global strategy for sponsoring activities also defines clear focal points. These are the promotion of social institutions, the areas of education and science as well as the support of environmental projects. With its donations, the KION Group primarily supports social institutions, humanitarian aid projects (including disaster relief), education and science and environmental projects. Details on the type and amount of contribution by the KION Group in the reporting year are available in the Annex ([Table 36](#)).

## Data protection and information security

As digitalization and networking continue to pick up speed, the importance of a secure IT infrastructure, that is reliable all the time is also growing. This serves as an important basis for internal KION Group processes, as well as for the services that the KION Group offers its customers. At the same time, the threat level is also becoming more acute, as both the number of attacks and their potential to cause damage have increased in recent years. Against this backdrop, the demands placed on the KION Group by customers are also growing, not least of all with regard to compliance with regulatory requirements.

It follows that data protection and information security are high priorities at the KION Group and both are governed by Group-wide policies. The Data Protection Policy aims to implement technical and organizational measures to protect personal data, while the KION Information Security Policy focuses on safeguarding the confidentiality, integrity, and availability of information, as well as on protecting the KION Group from corresponding attacks. The two areas go hand in hand in terms of their practical implementation, as the respective measures and objectives are largely the same.

A range of Group operating agreements and mandatory standards on topics such as IT security in the workplace or the handling of IT systems, e-mail and the Internet are also in place to supplement the two policies. Samples and templates for the day-to-day handling of personal data and sensitive business information are also available.

The policies are regularly adapted to the legal framework. In particular, the European Union's General Data Protection Regulation (GDPR) as well as national laws must be observed with regard to data protection. In order to uphold information security, the focus is not only on the European NIS

Directive, which ensures a high level of network and information security, but also on additional national IT security laws, such as the U.S. Federal Information Security Management Act or the relevant security laws in place in China.

It falls to the Operating Units to implement the central requirements. Those responsible for data protection and its coordination in the individual subsidiaries report to their respective management. At Group level, the Group Data Protection Officer reports to the Chief Compliance Officer, and the KION Group Chief Information Security Officer reports to the KION Group's Chief Information Officer who reports to the Executive Board of KION GROUP AG.

In addition to the reporting channels in the general compliance reporting system, a central e-mail inbox is available both internally and externally for any complaints or notifications relating to a possible breach of data privacy. These reports are documented in a traceable manner and their outcome is monitored.

### Comprehensive technical security concept

The KION Group's Information Security Management System is based on ISO 27001 (establishment, implementation, maintenance, and continuous improvement of a documented information security management processes) for the entire Group. A document framework has been established that includes the requirements in respect to Information Security.

The KION Group's Chief Information Security Officer (CISO) has three main responsibilities: the organization and management of a "Global Cyber Defense Centre", the continuous execution of vulnerability assessments, and the permanent further development and improvement of the IT security architecture and policy framework.

The KION Group regularly analyzes potential or existing risks to information security. Where the risk analyses identify an IT security risk or where there is deviation from a KION Group security standard, the risk is described and appropriate action is set out. Once the residual risk has been assessed, the risk owner decides on whether to accept the residual risk, it needs to be reassessed regularly and safeguarded by means of renewed risk acceptance.

Every year, there are about 100 million attacks on the KION Group's IT network, which have so far been averted. An important component of success is the permanent vulnerability scan of the complete IT and operational technology infrastructure:

- Search for errors and gaps in appropriate software and then report and evaluate the results.
- Simulate attacks with joint external partners
- Involve specialist departments in the search for vulnerabilities
- Carry out regular security tests on all platforms

A second important component of success is the regular security training of all approximately 41,000 employees worldwide:

- Online training on IT security issues at least once a year
- Implementation of global anti-phishing campaigns
- Monthly video sequence on the Intranet on the topic of information security
- Target group-specific Information Security training
- Instructions on how to secure the IT infrastructure

# About this report

## Scope and assurance

### **NfR: Identification of material issues, non-financial risks, specific financial items in the Financial Statement**

This Sustainability Report shows the progress KION GROUP AG and its consolidated subsidiaries (collectively: the “KION Group”) have made in terms of sustainability management during the reporting period from January 1 to December 31 2022 (fiscal year 2022). A list of the consolidated entities can be found in the notes to the consolidated financial statements in the [Annual Report 2022](#). Through this report, KION GROUP AG also fulfils its obligation to prepare a Group non-financial report (NfR) as required by Sections 315b, 315c in conjunction with Sections 289c to 289e of the German Commercial Code (HGB). The Sustainability Report also contains further information on the KION Group’s sustainability activities that goes beyond the statutory reporting requirements. The content of this report by KION GROUP AG is basically oriented on the standards of the Global Reporting Initiative (GRI). The GRI content index can be found in the [Annex](#) to this report.

The Supervisory Board of KION GROUP AG has commissioned an auditing company with an external audit to obtain limited assurance in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (revised) of the separate non-financial group report in accordance with Section 315b of the HGB, in reference to the EU Taxonomy Regulation 2020/852 (Taxonomy Regulation) as well as in reference to the GRI standards. Reporting in accordance with SASB is not part of the external audit. The Supervisory Board of KION GROUP AG included the auditor’s opinion in its independent review of the non-financial consolidated report and its corresponding resolution. The audit mandate and the results of the audits can be found in the [Assurance Report](#) (“Limited assurance report of the independent practitioner regarding the sustainability report”).

The regularly updated [Group-wide materiality analysis](#) also assesses the relevant material issues for the Group’s non-financial report. Issues relevant for the NfR can be found in [Table 22](#).

Non-financial risks for the KION Group’s business activities are addressed within the scope of the KION Group’s risk management, which is explained in detail in the risk report of the combined management report in the KION Group [Annual Report 2022](#). Pursuant to Section 289c (3) nos. 3 and 4 of the HGB, no material risks with a very likely serious negative impact on the aspects mentioned in the CSR RUG have been identified that are linked to the KION Group’s own business activities, business relationships, products and services. Furthermore, there are no non-financial indicators that have been identified as core key performance indicators according to sections 289b (3) no. 5, 315 (3) of the HGB. References to values reported in the consolidated financial statements are not necessary for understanding.

## SASB and TCFD reporting

This report aligns with the requirements of SASB (Sustainability Accounting Standards Board) in accordance with the “Industrial Machinery & Goods” sector standard (version 2018-10). In addition, the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) are incorporated. By taking the SASB standard and TCFD recommendations into account, the transparency requirements of the capital market with regard to sustainability are considered in particular. The [SASB content index](#) and [TCFD content index](#) in the Annex include the essential topics for the KION Group in accordance with SASB and TCFD related disclosures.

## Collection and comparability of data and information

### NfR: Identification of material issues, non-financial risks, specific financial items in the Financial Statement

The key figures in this report were generally collected via 134 reporting units. Data for 41 production and administration locations, so-called plants, were collected individually, while 93 reporting points for sales, service and installation companies partially comprise aggregated data from several locations. Varying degrees of aggregation in data collection are shown at the appropriate points, and all employees or subsidiaries of the KION Group are included aside from exceptional cases. The report thus covers all consolidated companies based in 37 countries and with around 400 locations.

The collection of data, which forms the essential basis for the key figures contained in the report, is ensured throughout the Group by internal reporting systems. Currently, around 1,000 indicators are recorded throughout the Group. Figures in this Sustainability Report have been rounded, so there may be discrepancies between the totals of the individual amounts in the tables and the totals given as well as between the figures in the tables and their respective analysis in the text section of the Sustainability Report. All percentage changes and ratios were calculated using the underlying data. Potential deviations from data in previous reports may result from data that has been updated in the meantime, a change in calculation methodology, or regular updates of conversion and emission factors. Significant changes to previously reported data, i.e. greater than 15 percent in total quantity, are marked in the appropriate places. Due to the divergent global situation, for example the worldwide corona pandemic, and the strong influence on environmental data in particular, a correct interpretation of changes compared to previous years is possible only in individual cases. If clear statements can be derived, this is commented on at the appropriate points.

## Forward-looking statements

This Sustainability Report contains forward-looking statements that relate to the current plans, objectives, forecasts and estimates of the management of KION GROUP AG. These statements take into account only that knowledge that was available up to and including the date on which this Sustainability Report was prepared. The management of KION GROUP AG cannot guarantee that these forward-looking statements will prove to be correct. The future development of KION GROUP AG and its subsidiaries, and the results that are actually achieved, are subject to a variety of risks and uncertainties that could cause actual events or results to differ significantly from those reflected in the forward-looking statements. Many of these factors are beyond the control of KION GROUP AG and its subsidiaries and as such cannot be estimated accurately in advance. The factors include but are not limited to changes in economic conditions and the competitive environment (including in the wake of the COVID-19-pandemic), changes in legislation, fluctuations in interest or exchange rates, litigation or inquiries and the availability of financial resources. These and other risks and uncertainties are detailed in the Group Management Report 2022, which was combined with the Company Management Report. Additional factors may also have an adverse impact on our business development and results. KION GROUP AG does not intend to, nor does it assume any special obligation to, update forward-looking statements or to adjust them to correspond with events or developments to occur after the publication of this Sustainability Report.

## Additional remarks

To ensure better readability, this report partly refrains from using gender-specific language. Where personal pronouns are used, this is to be understood as gender-neutral.

The Sustainability Report 2022 can be downloaded in PDF format in German and English in the sustainability section on the [corporate website](#). Further and more detailed information can be found on the corporate website [www.kiongroup.com](http://www.kiongroup.com) and in the [Annual Report 2022](#). The company will publish its next sustainability report for the fiscal year 2023 in spring 2024.

# Annex

## Independent auditor's report

The independent auditor's report on a limited assurance engagement of the sustainability report according to section 315b German Commercial Code (HGB), Regulation (EU) 2020/852 as well as on GRI Standards criteria can be found on the [KION Group website](#).

## Non-financial report (NfR) index

**Table 22: Index for KION Group non-financial report (NfR) in accordance with CSR-RUG**

Non-financial aspect	Material aspects	Main action fields	Chapters
Description of the business model			<a href="#">Company and brands</a>
Identification of material issues, non-financial risks, specific financial items in the Financial Statement			<a href="#">Sustainability management</a> <a href="#">About this report</a>
Environmental matters	Climate action (Local) Environmental protection Circular products and business models	Product and solution sustainability	<a href="#">04   Product and solution sustainability</a>
		Climate and energy	<a href="#">05   Climate and energy</a>
		Circularity	<a href="#">06   Circularity</a>
Employee matters	Occupational health and safety	Occupational health and safety	<a href="#">01   Occupational health and safety</a>
		Talent	<a href="#">02   Talent</a>
Social matters	Responsible product portfolio Product and customer safety	Product and solution safety	<a href="#">03   Product and solution safety</a>
		Sustainable governance	<a href="#">08   Sustainable governance</a>
Respect for human rights	Sustainable supply chain	Supply chain	<a href="#">07   Supply chain</a>
Anti-corruption and bribery matters		Sustainable governance	<a href="#">08   Sustainable governance</a>

# GRI content index

## Disclosures

## References

### GRI 1: Foundation

[GRI 1 does not contain any disclosures.]

### GRI 2: General Disclosures

#### The organization and its reporting practices

2-1	Organizational details	Company and brands AR 2022: Business model and organizational structure AR 2022: Disclosures relevant to acquisitions AR 2022: List of the shareholdings of KION GROUP AG, Frankfurt am Main
2-2	Entities included in the organization's sustainability reporting	Scope and assurance AR 2022: List of the shareholdings of KION GROUP AG, Frankfurt am Main
2-3	Reporting period, frequency and contact point  The KION Group Sustainability Report 2022 is published on April 27, 2023.	Scope and assurance Imprint AR 2022: Independent auditor's report
2-4	Restatements of information	Collection and comparability of data and information
2-5	External assurance	Scope and assurance Independent auditor's reports KION Group website

#### Activities and workers

2-6	Activities, value chain and other business relationships  The KION Group is not aware of any cases where its brands, products, and services are not permitted in certain markets.	Company and brands Sustainable procurement AR 2022: Company profile AR 2022: Business model and organizational structure AR 2022: Business performance in the Group AR 2022: Sustainability
2-7	Employees	Further disclosure on 02   Talent AR 2022: Employees
2-8	Workers who are not employees	Workers who are not active employees were employed in different areas in production, administration, sales & services and installations. The share of temporary agency workers decreased slightly with a level of below 10 % (as in the previous year) compared to active employees.

#### Governance

2-9	Governance structure and composition	Organization and management AR 2022: 3. Working methods of the Executive Board and Supervisory Board and composition of the committees of the Supervisory Board; shareholders and Annual General Meeting AR 2022: 5. Diversity AR 2022: Composition of the Supervisory Board AR 2022: Management and control
2-10	Nomination and selection of highest governance body	AR 2022: Personnel matters relating to the Executive Board AR 2022: Composition of the Supervisory Board AR 2022: Nomination Committee
2-11	Chair of highest governance body	AR 2022: Management and control
2-12	Role of highest governance body in overseeing the management of impacts	Foreword Organization and management Sustainability organization
2-13	Delegation of responsibility for managing impacts	Sustainability organization

	Introduction	Sustainability management	People	Products	Processes	About this report	<a href="#">Annex</a>
2-14		Role of the highest governance body in sustainability reporting				Sustainability targets Group-wide materiality analysis	
2-15		Conflicts of interest				AR 2022: 2.4 Avoiding conflicts of interests AR 2022: Corporate governance matters handled by the Supervisory Board	
2-16		Communication of critical concerns				Efficient compliance organization Table 34: Number of reported Issues by type, status and substantiation of closed issues	
2-17		Collective knowledge of highest governance body				Sustainability strategy, action fields and targets Sustainability targets Group-wide materiality analysis Targets and levers Comprehensive climate management AR 2022: 5. Diversity	
						In the reporting year, in addition to regular meetings, dedicated deep dive sessions on several sustainability related topics with the Boards and Board members were conducted.	
2-18		Evaluation of the performance of the highest governance body				KION Group website (remuneration)	
2-19		Remuneration policies				Sustainability performance recognized Remuneration report 2022	
2-20		Process to determine remuneration				Remuneration system of the Executive Board Voting Results Annual General Meeting 2021 AR 2022: Remuneration Committee	
2-21		Annual total compensation ratio				Remuneration report 2022 AR 2022: Employees	
<b>Strategy, policies and practices</b>							
2-22		Statement on sustainable development strategy				Foreword	
2-23		Policy commitments				Comprehensive management approach Extensive international KION Group employment standards (Local) environmental protection and biodiversity Sustainable procurement Organization and management Strict and unambiguous compliance management Zero tolerance for corruption and bribery Donations and sponsorships follow clear guidelines Data protection and information security Table 33: Group-wide sustainability principles and guidelines	
2-24		Embedding policy commitments				Comprehensive management approach Extensive international KION Group employment standards (Local) environmental protection and biodiversity Sustainable procurement Organization and management Strict and unambiguous compliance management Zero tolerance for corruption and bribery Extensive training measures on compliance issues Donations and sponsorships follow clear guidelines Data protection and information security	
2-25		Process to remediate negative impacts				Sustainability strategy, action fields and targets Sustainability targets Group-wide materiality analysis Targets and levers Stakeholder dialog Strict and unambiguous compliance management Compliance with international labor and human rights Extensive international KION Group employment standards Sustainable procurement	
2-26		Mechanisms for seeking advice and raising concerns				Strict and unambiguous compliance management Efficient compliance organization	
2-27		Compliance with laws and regulations				Extensive international KION Group employment standards Co-determination by employees 03   Product and solution safety (Local) environmental protection and biodiversity Sustainable procurement	

		Conflict minerals and conflicted areas Strict and unambiguous compliance management Zero tolerance for corruption and bribery Data protection and information security Table 33: Group-wide sustainability principles and guidelines Table 34: Number of reported Issues by type, status and substantiation of closed issues
2-28	Membership associations	Stakeholder dialog Table 27: Stakeholder dialog Table 36: Contributions by type (see Trade Associations)
<b>Stakeholder engagement</b>		
2-29	Approach to stakeholder engagement	Group-wide materiality analysis Sustainability performance recognized Stakeholder dialog
2-30	Collective bargaining agreements	Wages and salaries in line with the market Co-determination by employees

### GRI 3: Material topics

#### Disclosure on material topics

3-1	Process to determine material topics	Group-wide materiality analysis Table 26: Materiality analysis aspects
3-2	List of material topics	Group-wide materiality analysis
3-3	Management of material topics	Group-wide materiality analysis 01   Occupational health and safety 03   Product and solution safety 04   Product and solution sustainability 05   Climate and energy 06   Circularity 07   Supply chain Table 26: Materiality analysis aspects

### GRI 200: Economic

#### Topic: Economic Performance

##### GRI 201: Economic Performance

201-1	Direct economic value generated and distributed	Company and brands Table 36: Contributions by type AR 2022: Consolidated income statement
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#### Topic: Anti-corruption

##### GRI 205: Anti-corruption

205-1	Operations assessed for risks related to corruption	Zero tolerance for corruption and bribery
205-2	Communication and training about anti-corruption policies and procedures	Extensive training measures on compliance issues Zero tolerance for corruption and bribery
205-3	Confirmed incidents of corruption and actions taken	Zero tolerance for corruption and bribery

#### Topic: Tax

##### GRI 207: Tax

207-1	Approach to tax	Taxes were not identified as a material issue in the 2022 group-wide materiality analysis update and are therefore currently not reported in greater detail by KION GROUP AG.
207-2	Tax governance, control, and risk management	
207-3	Stakeholder engagement and management of concerns related to tax	
207-4	Country-by-country reporting	

## GRI 300: Environmental

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### Topic: Energy

#### GRI 3-3: Management of material topics

01 | Occupational health and safety  
05 | Climate and energy  
06 | Circularity

#### GRI 302: Energy

302-1	Energy consumption within the organization	Comprehensive climate management
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### Topic: Water and Effluents

#### GRI 3-3: Management of material topics

(Local) environmental protection and biodiversity

#### GRI 303: Water and Effluents

303-3	Water withdrawal	(Local) environmental protection and biodiversity
303-4	Water discharge	(Local) environmental protection and biodiversity

### Topic: Emissions

#### GRI 3-3: Management of material topics

04 | Product and solution sustainability  
05 | Climate and energy  
Supply chain management over the coming years

#### GRI 305: Emissions

305-1	Direct (Scope 1) GHG emissions	Comprehensive climate management
305-2	Energy indirect (Scope 2) GHG emissions	Comprehensive climate management
305-3	Other indirect (Scope 3) GHG emissions	Comprehensive climate management
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Comprehensive climate management

### Topic: Waste

#### GRI 3-3: Management of material topics

06 | Circularity  
(Local) environmental protection and biodiversity

#### GRI 306: Waste

306-3	Waste generated	(Local) environmental protection and biodiversity
306-4	Waste diverted from disposal	(Local) environmental protection and biodiversity
306-5	Waste directed to disposal	(Local) environmental protection and biodiversity

### Topic: Supplier Environmental Assessment

#### GRI 3-3: Management of material topics

07 | Supply chain

#### GRI 308: Supplier Environmental Assessment

308-1	New suppliers that were screened using environmental criteria	Sustainable procurement
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## GRI 400: Social

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**Topic: Occupational Health and Safety**

<b>GRI 3-3: Management of material topics</b>		
		01   Occupational health and safety
<b>GRI 403: Occupational Health and Safety</b>		
403-1	Occupational health and safety management system	Comprehensive management approach Dedicated rules, group-wide certification and pro-activity
403-2	Hazard identification, risk assessment, and incident investigation	Establishing a permanent health and safety culture Dedicated rules, group-wide certification and pro-activity
403-3	Occupational health services	Establishing a permanent health and safety culture
403-4	Worker participation, consultation, and communication on occupational health and safety	Intensive training and involvement
403-5	Worker training on occupational health and safety	Intensive training and involvement
403-6	Promotion of worker health	Establishing a permanent health and safety culture
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	01   Occupational health and safety 03   Product and solution safety
403-8	Workers covered by an occupational health and safety management system	Dedicated rules, group-wide certification and pro-activity
403-9	Work-related injuries	Establishing a permanent health and safety culture  <ul style="list-style-type: none"> <li>• LTIFR for temporary agency staff: 8.6 (2021: 14.8)</li> <li>• Gross LTIFR<sup>1</sup> = 6.3 (2021: 8.6)</li> </ul> <p><sup>1</sup> The number of reported work related accidents resulting in the loss of one full working day or more among active employees, temporary agency staff, third-party companies and visitors to company sites relative to one million hours worked by active employees and temporary agency staff</p>

**Topic: Diversity and Equal Opportunities**

<b>GRI 3-3: Management of material topics</b>		
		Broad spectrum of skills d cultures Diversity as a strength AR 2022: 5. Diversity
<b>GRI 405: Diversity and Equal Opportunities</b>		
405-1	Diversity of governance bodies and employees	Further disclosure on 02   Talent AR 2022: 5. Diversity KION Group Website: Management

**Topic: Non-discrimination**

<b>GRI 3-3: Management of material topics</b>		
		Diversity as a strength Extensive international KION Group employment standards Sustainable procurement
<b>GRI 406: Non-discrimination</b>		
406-1	Incidents of discrimination and corrective actions taken	Compliance with international labor and human rights Extensive international KION Group employment standards Strict and unambiguous compliance management Extensive training measures on compliance issues

**Topic: Freedom of Association and Collective Bargaining**

<b>GRI 3-3: Management of material topics</b>		
		Compliance with international labor and human rights Extensive international KION Group employment standards Sustainable procurement

**GRI 407: Freedom of Association and Collective Bargaining**

407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<ul style="list-style-type: none"> <li>Compliance with international labor and human rights</li> <li>Extensive international KION Group employment standards</li> <li>Sustainable procurement</li> <li>German Supply Chain Sourcing Obligations Act (LkSG)</li> </ul>
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**Topic: Child Labor****GRI 3-3: Management of material topics**

- Compliance with international labor and human rights
- Extensive international KION Group employment standards
- Sustainable procurement

**GRI 408: Child Labor**

408-1	Operations and suppliers at significant risk for incidents of child labor	<ul style="list-style-type: none"> <li>Compliance with international labor and human rights</li> <li>Extensive international KION Group employment standards</li> <li>Sustainable procurement</li> <li>German Supply Chain Sourcing Obligations Act (LkSG)</li> </ul>
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**Topic: Forced or Compulsory Labor****GRI 3-3: Management of material topics**

- Compliance with international labor and human rights
- Extensive international KION Group employment standards
- Sustainable procurement

**GRI 409: Forced or Compulsory Labor**

409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	<ul style="list-style-type: none"> <li>Compliance with international labor and human rights</li> <li>Extensive international KION Group employment standards</li> <li>Sustainable procurement</li> <li>German Supply Chain Sourcing Obligations Act (LkSG)</li> </ul>
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**Topic: Supplier Social Assessment****GRI 3-3: Management of material topics**

Sustainable procurement

**GRI 414: Supplier Social Assessment**

414-1	New suppliers that were screened using social criteria	<ul style="list-style-type: none"> <li>Sustainable procurement</li> <li>Supplier diversity program</li> </ul>
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**Topic: Customer Health and Safety****GRI 3-3: Management of material topics**

03 | Product and solution safety

**GRI 416: Customer Health and Safety**

416-1	Assessment of the health and safety impacts of product and service categories	<ul style="list-style-type: none"> <li>03   Product and solution safety</li> <li>Close exchange with customers on safety</li> </ul>
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	03   Product and solution safety

## SASB content index

### Index SASB Accounting Standard Industrial Machinery & Goods (Version 2018-10)

Sustainability Disclosure Topics	Accounting Metrics	References and Comments
Energy	Total energy consumed	Table 11: Energy use
Management	Percentage grid electricity	Table 11: Energy use
	Percentage renewable	Table 11: Energy use
Employee Health & Safety	Total recordable incident rate (TRIR)	Comprehensive management approach Establishing a permanent health and safety culture
		KION reports the Lost Time Injury Frequency Rate (LTIFR) <sup>1</sup>
	Fatality rate	Comprehensive management approach Establishing a permanent health and safety culture
		Number of fatalities: 0 (2021: 1 active employee, 1 external contractors) Fatality rate <sup>2</sup> : 0 (2021: 0.003)
	Near miss frequency rate (NMFR) <sup>2</sup>	9.2 (2021: 7.3)
Fuel Economy & Emissions in Use-phase	Sales-weighted fuel efficiency for non-road equipment <sup>4</sup>	Diesel: 3.8 l/h LPG: 3.3 kg/h CNG: 3.2 m <sup>3</sup> /h
	Sales-weighted emissions of nitrogen oxides (NO <sub>x</sub> ) for non-road diesel engines <sup>3</sup>	♦
	Sales-weighted emissions particulate matter (PM) for non-road diesel engines	♦
Materials Sourcing	Description of the management of risks associated with the use of critical materials	07   Supply chain
Remanufacturing Design & Services	Revenue from remanufactured products and remanufacturing services	m€ 314

♦ Not yet reported. KION Group is currently working on providing the data quality and availability necessary for reporting.

<sup>1</sup> Calculation is based on the actual number of lost time injuries (work related accident resulting in the loss of one full working day or more) and the total number of actual working hours in the reporting period relative to one million hours worked.

<sup>2</sup> Fatalities of active employees in relation to 200,000 actual hours worked

<sup>3</sup> Known near misses in relation to 200,000 actual hours worked

<sup>4</sup> Refers to worldwide order intake of respective diesel, LPG or CNG engine based products in ITS segment. This covers all parts of KION Group's product portfolio that are relevant for the SASB indicator.

## TCFD content index

TCFD Core elements	Required information	References
<b>Governance</b>		
Disclosure of the organization's governance around climate-related risks and opportunities	A. Executive Board's oversight of climate-related risks and opportunities	<a href="#">08   Sustainable governance &gt; Sustainability organization CDP Climate Change 2022 - C1.1a, C1.1b</a>
	B. Management's role in assessing and managing climate-related risks and opportunities	<a href="#">08   Sustainable governance &gt; Sustainability organization CDP Climate Change 2022 - C1.2, C1.2a</a>
<b>Strategy</b>		
Disclosure of the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	A. Description of climate-related opportunities and risks	<a href="#">Annual Report 2022 &gt; Risk report</a> <a href="#">Annual Report 2022 &gt; Opportunity report</a> <a href="#">CDP Climate Change 2022 - C2.2a</a> <a href="#">CDP Climate Change 2022 - C2.4, C2.4a</a>
	B. Impact of climate-related risks on the organization's businesses, strategy, and financial planning	<a href="#">CDP Climate Change 2022 - C2.1b</a> <a href="#">CDP Climate Change 2022 - C2.3, C2.3b</a> <a href="#">CDP Climate Change 2022 - C2.4a</a> <a href="#">Annual Report 2022 &gt; Notes to the consolidated financial statements</a>
	C. Resilience of the organizational strategy	<a href="#">CDP Climate Change 2022 - C3.1</a> <a href="#">CDP Climate Change 2022 - C3.2, C3.2a, C3.2b</a>
<b>Risk management</b>		
Disclosure of how the organization identifies, assesses, and manages climate-related risks	A. Organization's processes for identifying and assessing climate-related risks	<a href="#">CDP Climate Change 2022 - C2.1, C2.1a</a> <a href="#">CDP Climate Change 2022 - C2.2, C2.2a</a>
	B. Organization's processes for managing climate-related risks	<a href="#">CDP Climate Change 2022 - C2.2</a>
	C. Integration of processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	<a href="#">Annual Report 2022 &gt; Combined management report (p. 59)</a> <a href="#">Annual Report 2022 &gt; Risk report</a> <a href="#">CDP Climate Change 2022 - C2.2</a>
<b>Metrics and targets</b>		
Disclosure the metrics and targets used to assess and manage relevant climate-related risks and opportunities	A. Metrics used by the organization to assess climate-related risks and opportunities	<a href="#">Table 10: Strategy status GHG emissions</a> <a href="#">Table 12: Greenhouse gas emissions</a> <a href="#">Table 13: Greenhouse gas emissions – Scope 3</a> <a href="#">Table 11: Energy</a> <a href="#">Table 15: Other air emissions</a> <a href="#">Table 16 and 17: Water withdrawal and Waste water</a> <a href="#">Table 18: Waste</a> <a href="#">CDP Climate Change 2022 - C4.1, C4.2, C9.1</a>
	B. Disclosure of Scope 1, Scope 2, and Scope 3 greenhouse gas (GHG) emissions	<a href="#">Table 12: Greenhouse gas emissions</a> <a href="#">Table 13: Greenhouse gas emissions – Scope 3</a> <a href="#">CDP Climate Change 2022 - C6.1, C6.3, C6.5</a>
	C. Targets used by the organization to manage climate-related risks and opportunities	<a href="#">Table 10: Strategy status GHG emissions</a> <a href="#">05   Climate and energy &gt; Targets and levers</a> <a href="#">CDP Climate Change 2022 - C4.1, C4.1a, C4.2, C4.2c</a>

## Further disclosure on EU Taxonomy

**Table 23: Proportion of turnover from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2022 (previous year 2021)**

Economic activities (1)	Codes (2)	Substantial contribution						DNSH criteria							2022 Taxonomy-aligned % of Turnover (18)	2021 Taxonomy-aligned % of Turnover (19)	Category - enabling (E) or Transitional (T) activity (20-21)
		Absolute turnover (3) €	Proportion of turnover (4) %	Climate change mitigation (5) %	Climate change adaptation (6) %	Other objectives (water and marine resources, circular economy, pollution and biodiversity) (7-8-9-10) %	Climate change mitigation (11) Y/N	Climate change adaptation (12) Y/N	Water and marine resources (13) Y/N	Circular economy (14) Y/N	Pollution (15) Y/N	Biodiversity & eco-systems (16) Y/N	Minimum safeguards (17) Y/N	E/T			
<b>A. TAXONOMY-ELIGIBLE ACTIVITIES</b>																	
<b>A.1 Taxonomy-aligned activities</b>																	
Manufacture of equipment for the production and use of hydrogen	3.2	-	-	-	-	n/a	-	-	-	-	-	-	-	-	-	-	n/a
Manufacture of batteries	3.4	6,703	0.1 %	0.1 %	0.0 %	n/a	Y	Y	Y	Y	Y	Y	Y	0.1 %	-	n/a	
Manufacture of other low carbon technologies	3.6	19,492	0.2 %	0.2 %	0.0 %	n/a	Y	Y	Y	Y	Y	Y	Y	0.2 %	-	n/a	
Manufacture of hydrogen	3.10	-	-	-	-	n/a	-	-	-	-	-	-	-	-	-	n/a	
Transport by motorbikes, passenger cars and light commercial vehicles	6.5	-	-	-	-	n/a	-	-	-	-	-	-	-	-	-	n/a	
Acquisition and ownership of buildings	7.7	-	-	-	-	n/a	-	-	-	-	-	-	-	-	-	n/a	
<b>Turnover of taxonomy-aligned activities (A.1)</b>		<b>26,195</b>	<b>0.2 %</b>	<b>0.2 %</b>													
<b>A.2 Taxonomy-eligible activities (not taxonomy-aligned)</b>																	

**Table 23: Proportion of turnover from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2022 (previous year 2021)**

Economic activities (1)	Codes (2)	Absolute turnover (3)	Proportion of turnover (4)	Substantial contribution				DNSH criteria							2022 Taxonomy-aligned % of Turnover (18)	2021 Taxonomy-aligned % of Turnover (19)	Category - enabling (E) or Transitional (T) activity (20-21)
				Climate change mitigation (5)	Climate change adaptation (6)	Other objectives (water and marine resources, circular economy, pollution and biodiversity) (7-8-9-10)	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity & eco-systems (16)	Minimum safeguards (17)	%			
		€	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E/T
Manufacture of equipment for the production and use of hydrogen	3.2	-	-														
Manufacture of batteries	3.4	-	-														
Manufacture of other low carbon technologies	3.6	3,744,217	33.6 %														
Manufacture of hydrogen	3.10	-	-														
Transport by motorbikes, passenger cars and light commercial vehicles	6.5	-	-														
Acquisition and ownership of buildings	7.7	-	-														
<b>Turnover of taxonomy-eligible activities (not taxonomy-aligned) (A.2)</b>		<b>3,744,217</b>	<b>33.6 %</b>												<b>33.6 %</b>		
<b>Total (A.1 + A.2)</b>		<b>3,770,412</b>	<b>33.8 %</b>												<b>33.8 %</b>		
<b>B. TAXONOMY-NON-ELIGIBLE ACTIVITIES</b>																	
<b>Turnover of taxonomy-non-eligible activities (B)</b>		<b>7,378,702</b>	<b>66.2 %</b>														
<b>Total (A+B)</b>		<b>11,149,114</b>	<b>100.0 %</b>														

Table 24: Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2022

Economic activities (1)	Codes (2)	Absolute CapEx (3) €	Proportion of CapEx (4) %	Substantial contribution				DNSH criteria							2022 Taxonomy-aligned % of CapEx (18) %	2021 Taxonomy-aligned % of CapEx (19) %	Category - enabling (E) or Transitional (T) activity (20-21) E/T
				Climate change mitigation (5) %	Climate change adaptation (6) %	Other objectives (water and marine resources, circular economy, pollution and biodiversity) (7-8-9-10) %	Climate change mitigation (11) Y/N	Climate change adaptation (12) Y/N	Water and marine resources (13) Y/N	Circular economy (14) Y/N	Pollution (15) Y/N	Biodiversity & eco-systems (16) Y/N	Minimum safeguards (17) Y/N				
<b>A. TAXONOMY-ELIGIBLE ACTIVITIES</b>																	
<b>A.1. Taxonomy-aligned activities</b>																	
Manufacture of equipment for the production and use of hydrogen	3.2	3,511	0.3 %	0.3 %	0.0 %		n/a	Y	Y	Y	Y	Y	Y	Y	0.3 %	n/a	
Manufacture of batteries	3.4	8,098	0.7 %	0.7 %	0.0 %		n/a	Y	Y	Y	Y	Y	Y	Y	0.7 %	n/a	
Manufacture of other low carbon technologies	3.6	497	0.0 %	0.0 %	0.0 %		n/a	Y	Y	Y	Y	Y	Y	Y	0.0 %	n/a	
Manufacture of hydrogen	3.10	-	-	-	-		n/a	-	-	-	-	-	-	-	0.0 %	n/a	
Transport by motorbikes, passenger cars and light commercial vehicles	6.5	-	-	-	-		n/a	-	-	-	-	-	-	-	0.0 %	n/a	
Acquisition and ownership of buildings	7.7	-	-	-	-		n/a	-	-	-	-	-	-	-	0.0 %	n/a	
<b>CapEx of taxonomy-aligned activities (A.1)</b>		<b>12,106</b>	<b>1.0 %</b>	<b>1.0 %</b>													
<b>A.2. Taxonomy-eligible activities (not taxonomy-aligned)</b>																	

**Table 24: Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2022**

Economic activities (1)	Codes (2)	Sustantial contribution		DNSH criteria												2022 Taxonomy- aligned % of CapEx (18)	2021 Taxonomy- aligned % of CapEx (19)	Category - enabling (E) or Transitional (T) activity (20-21)	
		Absolute CapEx (3)	Proportion of CapEx (4)	Climate change mit- igation (5)	Climate change adaptation (6)	Other objectives (water and marine resources, circular economy, pollution and biodiversity) (7-8-9-10)	Climate change mit- igation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity & eco-systems (16)	Minimum safeguards (17)	%	%				E/T
		€	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N				Y/N
Manufacture of equipment for the production and use of hydrogen	3.2	-	-																
Manufacture of batteries	3.4	-	-																
Manufacture of other low carbon technologies	3.6	686,404	59.1 %																
Manufacture of hydrogen	3.10	788	0.1 %																
Transport by motorbikes, passenger cars and light commercial vehicles	6.5	234	0.0 %																
Acquisition and ownership of buildings	7.7	72,334	6.2 %																
<b>CapEx of taxonomy-eligible activities (not taxonomy-aligned) (A.2)</b>		<b>759,759</b>	<b>65.4 %</b>																
<b>Total (A.1 + A.2)</b>		<b>771,865</b>	<b>66.5 %</b>																
<b>B. TAXONOMY-NON-ELIGIBLE ACTIVITIES</b>																			
<b>CapEx of taxonomy-non-eligible activities (B)</b>		<b>389,597</b>	<b>33.5 %</b>																
<b>Total (A+B)</b>		<b>1,161,462</b>	<b>100.0 %</b>																

**Table 25: Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2022**

Economic activities (1)	Codes (2)	Substantial contribution						DNSH criteria							2022 Taxonomy- aligned % of OpEx (18)	2021 Taxonomy- aligned % of OpEx (19)	Category - enabling (E) or Transitional (T) activity (20-21)
		Absolute OpEx (3)	Proportion of OpEx (4)	Climate change mitigation (5)	Climate change adaptation (6)	Other objectives (water and marine resources, circular economy, pollution and biodiversity) (7-8-9-10)	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity & eco-systems (16)	Minimum safeguards (17)				
		€	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%			
<b>A. TAXONOMY-ELIGIBLE ACTIVITIES</b>																	
<b>A.1 Taxonomy-aligned activities</b>																	
Manufacture of equipment for the production and use of hydrogen	3.2	1,419	0.7 %	0.7 %	0.0 %	n/a	Y	Y	Y	Y	Y	Y	Y	0.7 %	n/a		
Manufacture of batteries	3.4	7,047	3.3 %	3.3 %	0.0 %	n/a	Y	Y	Y	Y	Y	Y	Y	3.3 %	n/a		
Manufacture of other low carbon technologies	3.6	437	0.2 %	0.2 %	0.0 %	n/a	Y	Y	Y	Y	Y	Y	Y	0.2 %	n/a		
Manufacture of hydrogen	3.10	-	-	-	-	n/a	-	-	-	-	-	-	-	-	n/a		
Transport by motorbikes, passenger cars and light commercial vehicles	6.5	-	-	-	-	n/a	-	-	-	-	-	-	-	-	n/a		
Acquisition and ownership of buildings	7.7	-	-	-	-	n/a	-	-	-	-	-	-	-	-	n/a		
<b>OpEx of taxonomy-aligned activities (A.1)</b>		<b>8,903</b>	<b>4.1 %</b>	<b>4.1 %</b>													
<b>A.2 Taxonomy-eligible activities (not taxonomy-aligned)</b>																	

**Table 25: Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2022**

Economic activities (1)	Codes (2)	Sustantial contribution		DNSH criteria											2022 Taxonomy-aligned % of OpEx (18)	2021 Taxonomy-aligned % of OpEx (19)	Category - enabling (E) or Transitional (T) activity (20-21)	
		Absolute OpEx (3)	Proportion of OpEx (4)	Climate change mitigation (5)	Climate change adaptation (6)	Other objectives (water and marine resources, circular economy, pollution and biodiversity) (7-8-9-10)	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity & eco-systems (16)	Minimum safeguards (17)					
		€	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%				%
Manufacture of equipment for the production and use of hydrogen	3.2	-	-															
Manufacture of batteries	3.4	-	-															
Manufacture of other low carbon technologies	3.6	177,615	82.5 %															
Manufacture of hydrogen	3.10	-	-															
Transport by motorbikes, passenger cars and light commercial vehicles	6.5	-	-															
Acquisition and ownership of buildings	7.7	-	-															
<b>OpEx of taxonomy-eligible activities (not taxonomy-aligned) (A.2)</b>		<b>177,615</b>	<b>82.5 %</b>															<b>82.5 %</b>
<b>Total (A.1 + A.2)</b>		<b>186,518</b>	<b>86.7 %</b>															<b>86.7 %</b>
<b>B. TAXONOMY-NON-ELIGIBLE ACTIVITIES</b>																		
<b>OpEx of taxonomy-non-eligible activities (B)</b>		<b>28,685</b>	<b>13.3 %</b>															
<b>Total (A+B)</b>		<b>215,203</b>	<b>100.0 %</b>															

## Further sustainability-related disclosure

### Further disclosure on Sustainability management

**Table 26: Materiality analysis aspects**

Aspect	Details
Climate action	<ul style="list-style-type: none"> <li>• Climate change mitigation</li> <li>• Climate change adaptation</li> <li>• Carbon footprint (Scope 1, 2 and 3)</li> <li>• Energy efficiency measures</li> <li>• Net-Zero climate target (SBTi)</li> <li>• Management systems (ISO 14001)</li> <li>• Renewable energy sources</li> <li>• Energy efficient products (Scope 3)</li> <li>• Electrified Products/New energy (Fuel cell, Lithium-ion battery)</li> </ul>
Circular products and business model	<ul style="list-style-type: none"> <li>• Closed material cycles</li> <li>• Resource recovery/recycling</li> <li>• Treatment of rare raw materials</li> <li>• Resource efficiency</li> <li>• Life cycle assessments</li> <li>• Cradle-to-cradle certification</li> <li>• EU ecodesign</li> <li>• Battery recycling</li> <li>• Cooperation with partner networks</li> <li>• Maintenance and refurbishment programs</li> <li>• Rental/leasing offers</li> <li>• Sharing platforms (such as in industrial parks)</li> </ul>
Responsible product portfolio	<ul style="list-style-type: none"> <li>• Management of chemicals and hazardous substances</li> <li>• Expansion of sustainable product portfolio</li> <li>• Production of hydrogen</li> <li>• Environmental product compliance</li> <li>• Product stewardship</li> <li>• Sustainable procurement</li> </ul>
(Local) Environmental protection	<ul style="list-style-type: none"> <li>• Air quality</li> <li>• Water quality</li> <li>• Soil quality</li> <li>• Waste management</li> <li>• Biodiversity and ecosystem protection</li> </ul>
Diversity, equality and inclusion	<ul style="list-style-type: none"> <li>• Strengthening women in leadership positions</li> <li>• Culture of diversity and trust</li> <li>• Corporate childcare</li> <li>• Inclusion and diversity council</li> </ul>
Product and customer safety	<ul style="list-style-type: none"> <li>• Safety-focused product development</li> <li>• Product quality and safety</li> <li>• Maintenance and modernization</li> <li>• Material safety</li> <li>• Software solutions</li> <li>• Training for customers</li> <li>• Above-average safety standards</li> </ul>

Occupational health and safety	<ul style="list-style-type: none"> <li>• Occupational health management</li> <li>• Management systems</li> <li>• Safety culture</li> <li>• Hazard identification and safety controls</li> <li>• Continuous education and training programs</li> <li>• Campaigns and initiatives</li> <li>• Healthy nutrition</li> </ul>
Working conditions	<ul style="list-style-type: none"> <li>• Attractive compensation systems</li> <li>• Corporate benefits</li> <li>• Work-life balance</li> <li>• Employee engagement and satisfaction</li> <li>• Secure workplaces</li> </ul>
Training and education	<ul style="list-style-type: none"> <li>• Qualification measures</li> <li>• Continuing education programs</li> <li>• Individual development plans</li> </ul>
Sustainable supply chain	<ul style="list-style-type: none"> <li>• Transparency in the supply chain</li> <li>• Principles of supplier conduct</li> <li>• Ensuring labor and human rights</li> <li>• Risk assessment/evaluation</li> <li>• Supplier audits</li> <li>• Minimum ESG requirements, knock-out/incentive criteria</li> <li>• Resilient and stable supply chain</li> <li>• Small and diverse suppliers</li> </ul>
Stakeholder dialog and transparency	<ul style="list-style-type: none"> <li>• Transparency about sustainability of products and solutions</li> <li>• Participation in rankings and ratings</li> <li>• Stakeholder dialog</li> <li>• Cooperation with NGOs and associations</li> <li>• Promotion and education for sustainable development</li> </ul>
Corporate citizenship	<ul style="list-style-type: none"> <li>• Local events</li> <li>• Donations</li> </ul>
Innovation and collaboration	<ul style="list-style-type: none"> <li>• Integration of climate protection into corporate decisions</li> <li>• Long-term business partnerships</li> <li>• Facilitator for sustainability</li> <li>• Collaboration with customers for efficient solutions</li> </ul>
Business ethics and compliance	<ul style="list-style-type: none"> <li>• Compliance with legal requirements</li> <li>• Code of Conduct</li> </ul>
Corporate governance and sustainable leadership	<ul style="list-style-type: none"> <li>• Sustainability culture</li> <li>• Involvement of management</li> </ul>

**Table 27: Stakeholder dialog**

Stakeholder	Format, regularity, topics in 2022
Customers	<p><b>Format:</b> Regular customer visits, online stakeholder survey, dedicated customer surveys, service helpdesk, customer audits, external assessments (for example, EcoVadis), complaints management, customer events, participation in trade fairs and in-house exhibitions, consulting, customer publications, Internet, LMH product clinic, image brochures and one-pagers for key accounts, Sustainability Report and sustainability brochures</p> <p><b>Regularity:</b> Continuous / ongoing</p> <p><b>Topics in 2022:</b> Workshops with customers, product features, such as efficiency and emissions as well as safety, service offering, ergonomic design of vehicles and systems, assessment of sustainability performance of sites and organizations</p>
Distributors	<p><b>Format:</b> Distributors' Board, regular meetings (annual kick-off and year-end events)</p> <p><b>Regularity:</b> Continuous / ongoing</p> <p><b>Topics in 2022:</b> Zero Accident philosophy at KION ITS EMEA</p>
Employees	<p><b>Format:</b> Management and employee survey, online stakeholder survey, KEEP employee participation program, suggestion scheme, employee magazine, intranet, Sustainability Report, instruments and committees of co-determination for an in-depth exchange, management-employees dialog formats</p> <p><b>Regularity:</b> Continuous / ongoing</p> <p><b>Topics in 2022:</b> Integration of a Group-wide recruitment and training platform, internal communication audits, communication on corporate news and events and employee feedback via internal organizational platforms, measures to promote corporate culture, virtual exchange meetings, internal awards ceremonies, company development, important sustainability topics for KION Group</p>
Financial market	<p><b>Format:</b> Section on Sustainability in the Annual Report, participation in ESG conferences, answering questions in the context of investor discussions and inquiries from financial analysts, assessment by rating organizations, online stakeholder survey, Sustainability Report</p> <p><b>Regularity:</b> Continuous / ongoing</p> <p><b>Topics in 2022:</b> Sustainability management, social topics, environmental protection, important sustainability topics for KION, governance, transparent reporting on ESG criteria (Environment, Social, Governance), e.g. CDP, S&amp;P Global CSA, ISS ESG, MSCI ESG</p>
General public	<p><b>Format:</b> Journal articles, social media, campaign days, section on Sustainability in the Annual Report, Sustainability Report</p> <p><b>Regularity:</b> Continuous / ongoing</p> <p><b>Topics in 2022:</b> Sustainability management, social aspects, environmental protection, transparent reporting on sustainability</p>
(Industry) associations	<p><b>Format:</b> Participation in symposiums and working groups, membership of numerous associations such as ISO, DIN, VDMA, FEM</p> <p><b>Regularity:</b> Continuous / ongoing</p> <p><b>Topics in 2022:</b> Energy efficiency, product specifications, product safety, product life cycle sustainability, due diligence in the supply chain, EU taxonomy</p>
Legislative bodies / policy makers	<p><b>Format:</b> Dialog with authorities, association work and advocacy</p> <p><b>Regularity:</b> Intermittently, as required</p> <p><b>Topics in 2022:</b> Authorization, inspections</p>
Local communities	<p><b>Format:</b> Local events such as a forklift truck cup federal state preliminary rounds, Training Day, regular exchange with local authorities at the locations, participating in the local Agenda 21 committee</p> <p><b>Regularity:</b> Intermittently, as required</p> <p><b>Topics in 2022:</b> Corporate citizenship, for example via donations in kind in the event of natural disasters or voluntary social work by employees, especially during the COVID-19 pandemic, social and cultural engagement, products, safety standards, environment, traffic and traffic control</p>
Media	<p><b>Format:</b> Section on Sustainability in the Annual Report, press events, panel discussions, interviews, Sustainability Report, social media</p> <p><b>Regularity:</b> Continuous / ongoing</p> <p><b>Topics in 2022:</b> Sustainability management, social topics, environmental protection, transparent reporting on sustainability, efficient energy systems, safety technology, sustainability activities</p>
Non-governmental organizations	<p><b>Format:</b> Dialog forums with NGOs (e.g. Linde China)</p> <p><b>Regularity:</b> Intermittently, as required</p>

**Table 27: Stakeholder dialog**

Stakeholder	Format, regularity, topics in 2022
	<b>Topics in 2022:</b> Volunteering activities for environmental protection and education within and beyond the KION Group
Science and research	<b>Format:</b> Collaborations with education institutions, research projects, information days, internships, collaboration with students on dissertations and theses <b>Regularity:</b> Continuous / ongoing <b>Topics in 2022:</b> Diverse, for example alternative drive technologies
Suppliers	<b>Format:</b> Supplier negotiations, supplier evaluation using EcoVadis and IntegrityNext, supplier audits and corrective follow-up actions, online stakeholder survey, supplier sustainability requests and regular procurement-suppliers exchange <b>Regularity:</b> Continuous / ongoing <b>Topics in 2022:</b> Integration of sustainability- and human rights-related contract clauses, KION Group Principles of Supplier Conduct, KION Group Code of Compliance, EcoVadis and IntegrityNext supplier assessments

## Further disclosure on 02 | Talent

**Table 28: Contract types**

	2022		2021	
	Full-time	Part-time	Full-time	Part-time
<b>Full-time/part-time, gender (based on headcount)</b>				
<b>Total</b>	<b>97.2 %</b>	<b>2.8 %</b>	<b>97.1 %</b>	<b>2.9 %</b>
Male	98.7 %	1.3 %	98.6 %	1.4 %
Female	90.0 %	10.0 %	89.6 %	10.4 %
Gender not available	100.0 %	-	98.9 %	1.1 %
<b>Indefinite/fixed-term, gender (based on headcount)</b>	<b>Indefinite</b>	<b>Fixed-term</b>	<b>Indefinite</b>	<b>Fixed-term</b>
<b>Total</b>	<b>89.7 %</b>	<b>10.3 %</b>	<b>90.8 %</b>	<b>9.2 %</b>
Male	89.8 %	10.2 %	91.1 %	8.9 %
Female	89.1 %	10.9 %	89.3 %	10.7 %
Gender not available	98.9 %	1.1 %	98.9 %	1.1 %
<b>Indefinite/fixed-term, region (based on FTE)</b>	<b>Indefinite</b>	<b>Fixed-term</b>	<b>Indefinite</b>	<b>Fixed-term</b>
<b>Total</b>	<b>97.1 %</b>	<b>2.9 %</b>	<b>96.9 %</b>	<b>3.1 %</b>
<b>EMEA</b>	<b>96.0 %</b>	<b>4.0 %</b>	<b>95.7 %</b>	<b>4.3 %</b>
Western Europe	96.9 %	3.1 %	97.0 %	3.0 %
Eastern Europe	91.0 %	9.0 %	88.1 %	11.9 %
Middle East and Africa	100.0 %	-	100.0 %	-
<b>Americas</b>	<b>99.9 %</b>	<b>0.1 %</b>	<b>99.9 %</b>	<b>0.1 %</b>
North America	100.0 %	-	100.0 %	-
Central and South America	99.2 %	0.8 %	99.7 %	0.3 %
<b>APAC</b>	<b>99.4 %</b>	<b>0.6 %</b>	<b>99.4 %</b>	<b>0.6 %</b>
China	99.9 %	0.1 %	99.9 %	0.1 %
APAC excluding China	97.8 %	2.2 %	97.8 %	2.2 %

Based on headcount as at balance sheet date 31/12/

**Table 29: Age structure of employees, length of service and termination rate**

	2022	2021
<b>Employees per age group</b>	<b>100 %</b>	<b>100 %</b>
< 20 years	0.9 %	1.0 %
20–29 years	16.9 %	17.4 %
30–39 years	30.3 %	30.2 %
40–49 years	25.5 %	24.8 %
50–59 years	20.9 %	20.5 %
≥ 60 years	5.3 %	5.1 %
not specified	0.2 %	1.1 %
<b>Employees per length of service</b>	<b>100 %</b>	<b>100 %</b>
< 5 years	47.9 %	47.4 %
5–9 years	17.9 %	17.2 %
10–19 years	19.0 %	18.7 %
20–29 years	9.6 %	9.7 %
30–39 years	4.8 %	5.0 %
≥ 40 years	0.8 %	0.8 %
not specified	-	1.1 %
<b>Termination rate</b>	<b>14.6 %</b>	<b>-</b>

Based on headcount as at balance sheet date 31/12/

**Table 30: Employees per nationality**

	2022		2021	
	Total workforce	Management positions	Total workforce	Management positions
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>-</b>	<b>-</b>
Germany	25.7 %	21.2 %	-	-
China	12.3 %	12.2 %	-	-
USA	10.5 %	16.0 %	-	-
France	9.4 %	10.8 %	-	-
United Kingdom	7.0 %	7.7 %	-	-
Others	35.1 %	32.1 %	-	-

Based on headcount as at balance sheet date 31/12/

**Table 31: Share of female employees**

	2022	2021
<b>Female employees in total workforce (% of total workforce)</b>	<b>17.8 %</b>	<b>17.1 %</b>
Female employees in all management positions (% of total management positions)	17.2 %	-
Female employees in junior management positions (% of junior management positions)	16.0 %	-
Female employees in top management positions (% of top management positions)	12.5 %	-
Female employees in management positions in revenue-generating functions (% of all revenue-generating management positions incl. support functions)	10.8 %	-
Female employees in STEM-related positions (% of STEM positions)	12.0 %	-

Based on full-time equivalents (FTE) as at balance sheet date 31/12/

**Table 32: Employee satisfaction by gender, age structure, management level**

	2022		2021	
	Response rate	Engagement score	Response rate	Engagement score
<b>Employee satisfaction by gender</b>				
Male	75.0 %	74	-	-
Female	84.0 %	72	-	-
No gender available	74.0 %	76	-	-
<b>Employee satisfaction by age structure</b>				
< 30 years	73.0 %	76	-	-
30–44 years	79.0 %	74	-	-
≥ 45 years	76.0 %	73	-	-
<b>Employee satisfaction by management level</b>				
Executive	92.0 %	77	-	-
Manager	91.0 %	73	-	-
Employee	75.0 %	74	-	-

Based on headcount as at balance sheet date 31/12/

## Further disclosure on 08 | Sustainable governance

**Table 33: Group-wide sustainability principles and guidelines**

Principle/guideline	Scope
Anti-Bribery and Anti-Corruption Policy	Sets out guidelines to avoid corruption and any semblance of corruption
Antitrust Policy	Ensures conduct in compliance with competition and antitrust law for all KION Group employees
Communication Policy	Regulates the responsibilities and processes for internal and external communication at the KION Group
Compliance Principles for Independent Partners in KION's Sales & Service Organization	Commits its sales and service partners to upholding the KION Group's compliance principles
Data Protection Policy	Regulates the collection and processing of customers', contracting parties' and employees' personal data
Donations and Sponsorship Policy	Regulates the principles of social involvement and sets out the focus and requirements for donation and sponsorship activities
Emergency Management	Sets out measures to prepare for emergencies that require rapid action and in-depth communication with authorities, the KION Executive Board and employees
HSE Statement of Intent HSE Standard	Defines regulations for occupational health, safety and environmental protection, concerning the entire workforce of the KION Group, customers and the general public
Information Security Policy	Sets out the overarching goals for information security within the KION Group
International Minimum Employment Standards	Explains fundamental social rights and principles as well as the protection of human rights, for example the exclusion of child and forced labor
KION Group Code of Compliance	Sets out guidelines for all employees across the KION Group to act lawfully and ethically
KION Group Product Structure Guideline	Describes an overall standard for product segmentation
Policy on Avoiding Conflicts of Interest Guideline on Avoiding Conflicts of Interest	Sets out principles governing the KION Group's business relationships
Principles of Supplier Conduct	Set out principles with which the KION Group requires its suppliers to comply
Procurement Policy	Determines an overall process that is optimal for the KION Group, ensures the cost-efficient purchase of goods and services as well as legally compliant collaboration with suppliers
Quality Policy	Sets out guidelines for quality assurance in product development and production
Risk Management Policy Risk Management Guideline	Describes tasks, processes and responsibilities in risk management and provides rules for identifying and assessing risks
Travel Policy	Defines principles for business travel and aims, among other things, to avoid travel and replace it with digital alternatives
Treasury Policy	Defines a framework regarding the treasury and financial services function of group entities

**Table 34: Number of reported issues by type, status and substantiation of closed issues**

	KION Group		KION ITS EMEA		KION ITS APAC		KION ITS Americas		KION SCS		Corporate Services	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
<b>Total reported issues</b>	<b>214</b>	<b>173</b>	<b>84</b>	<b>89</b>	<b>22</b>	<b>16</b>	<b>14</b>	<b>4</b>	<b>78</b>	<b>51</b>	<b>16</b>	<b>13</b>
Corruption or bribery	4	7	1	2	2	-	-	1	1	4	-	-
Conflict of interest	11	9	4	2	1	2	-	-	5	4	1	1
Fraud	13	28	4	15	1	4	-	-	7	6	1	3
Accounting matters or controls	3	1	-	-	-	-	-	-	3	1	-	-
Anti-money laundering	1	1	-	1	-	-	-	-	1	-	-	-
Theft	11	1	6	1	1	-	1	-	3	-	-	-
Unprofessional behavior	26	25	15	15	2	2	-	-	6	7	3	1
Employee relations	20	20	9	11	2	1	3	2	5	5	1	1
Discrimination	9	1	1	-	-	-	1	-	7	1	-	-
Harassment	16	12	10	5	-	2	1	-	5	5	-	-
Mistreatment	8	-	1	-	1	-	-	-	5	-	1	-
Abuse of power, authority, or control	6	3	1	2	-	-	1	-	4	1	-	-
Data breach	36	20	17	11	5	-	1	-	7	3	6	6
Information security	1	1	1	1	-	-	-	-	-	-	-	-
Acceptable use violations	-	1	-	1	-	-	-	-	-	-	-	-
Safety concerns	7	3	2	3	-	-	-	-	5	-	-	-
Quality concerns	4	1	-	1	1	-	-	-	2	-	1	-
Code of Conduct violation	8	5	2	-	-	-	5	-	1	5	-	-
Compliance with laws, rules, and regulations	16	16	7	14	-	-	-	-	8	2	1	-
Other	14	18	3	4	6	5	1	1	3	7	1	1
<b>Status / substantiation (in %)</b>												
Closed cases (partially) substantiated	47 %	51 %	57 %	61 %	30 %	50 %	42 %	50 %	40 %	40 %	67 %	40 %
Closed cases unsubstantiated	43 %	38 %	38 %	36 %	35 %	42 %	58 %	50 %	50 %	35 %	22 %	40 %
Closed cases substantiation undetermined	10 %	11 %	5 %	3 %	35 %	8 %	0 %	0 %	10 %	25 %	11 %	20 %

**Table 35: Compliance trainings**

	KION Group		KION ITS EMEA		KION ITS APAC		KION ITS Americas		KION SCS		Corporate Services	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Classroom trainings (KION Group Code of Compliance, incl. Anticorruption etc.)	4,180	9,723	1,462	5,043	776	1,603	62	789	1,663	2,191	217	97
E-Learning: KION Group Code of Compliance	6,244	7,850	2,198	1,889	664	860	149	136	1,995	3,831	337	252
E-Learning: Avoiding Corruption in KION Group	6,356	6,201	2,399	1,705	627	754	157	132	1,962	2,668	335	248
E-Learning: Professional Conduct at KION	7,663	31,721	3,115	15,424	834	3,739	164	514	2,230	8,923	373	965
E-Learning: Preventing Money Laundering and Fraud at KION <sup>1</sup>	7,312	-	3,788	-	923	-	149	-	1,301	-	617	-
E-Learning: Avoiding Conflicts of Interest at KION <sup>2</sup>	35,819	-	17,452	-	4,021	-	601	-	9,923	-	1,235	-
E-Learning: Preventing Anti-Competitive Practice <sup>2</sup>	33,336	-	16,025	-	3,683	-	540	-	9,385	-	749	-
E-Learning: Preventing the trading of shares based on inside information <sup>1</sup>	957	-	399	-	40	-	15	-	169	-	302	-

<sup>1</sup> New 2022, selected functions

<sup>2</sup> New 2022, all functions

Table 36: Contributions by type

	KION Group		KION ITS EMEA		KION ITS APAC		KION ITS Americas		KION SCS		Corporate Services	
in € thousand, rounded	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
<b>Total contributions</b>	<b>4,696</b>	<b>6,018</b>	<b>2,473</b>	<b>3,852</b>	<b>14</b>	<b>47</b>	<b>8</b>	<b>4</b>	<b>740</b>	<b>757</b>	<b>1,462</b>	<b>1,357</b>
<b>Community investments</b>	<b>284</b>	<b>137</b>	<b>37</b>	<b>6</b>	-	-	-	-	<b>147</b>	<b>71</b>	<b>100</b>	<b>60</b>
Cash contributions	130	60	30	-	-	-	-	-	-	-	100	60
Working time spent	7	77	7	6	-	-	-	-	-	71	-	-
In-kind giving	64	-	-	-	-	-	-	-	64	-	-	-
Management costs (overhead)	83	-	-	-	-	-	-	-	83	-	-	-
<b>Charitable donations</b>	<b>1,419</b>	<b>1,587</b>	<b>236</b>	<b>212</b>	<b>13</b>	<b>45</b>	<b>7</b>	<b>4</b>	<b>164</b>	<b>315</b>	<b>1,000</b>	<b>1,010</b>
Cash contributions	1,348	1,528	167	198	10	1	7	4	164	315	1,000	1,010
Working time spent	14	-	14	-	-	-	-	-	-	-	-	-
In-kind giving	57	59	55	14	3	44	-	-	-	-	-	-
Management costs (overhead)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Sponsoring</b>	<b>117</b>	<b>70</b>	<b>61</b>	<b>59</b>	-	-	<b>1</b>	-	<b>49</b>	-	<b>6</b>	<b>11</b>
Cash contributions	117	70	61	59	-	-	1	-	49	-	6	11
Working time spent	-	-	-	-	-	-	-	-	-	-	-	-
In-kind giving	-	-	-	-	-	-	-	-	-	-	-	-
Management costs (overhead)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Contributions for political campaigns / organizations</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Cash contributions	-	1	-	1	-	-	-	-	-	-	-	-
Working time spent	-	-	-	-	-	-	-	-	-	-	-	-
In-kind giving	-	-	-	-	-	-	-	-	-	-	-	-
Management costs (overhead)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Contributions to trade asso- ciations (cash contributions)</b>	<b>2,876</b>	<b>4,223</b>	<b>2,139</b>	<b>3,574</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>380</b>	<b>371</b>	<b>356</b>	<b>276</b>

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