
SEPARATE COMBINED NON-FINANCIAL REPORT

112	About this report
113	Business model
114	Sustainability organization and management
115	Materiality analysis
116	Sustainability strategy and objectives
118	Corporate responsibility
118	Corporate governance and compliance
121	Data protection
123	HR management
127	Occupational health and safety
129	Supplier management
132	Environmental responsibility
132	Product stewardship
135	Product quality
138	Corporate citizenship
139	Environmental responsibility
139	Environmental and climate protection
143	Information on regulation (EU) 2020/852 -Taxonomy Regulation
157	Independent practitioner's report

About this report

Scope, report content and reporting period The content of this separate combined non-financial report relates to the 2023 financial year and summarizes the reports of DEUTZ AG as the parent company and the DEUTZ Group in accordance with sections 289b (3) and 315b (3) HGB (hereinafter referred to as the »non-financial report«). Unless indicated otherwise, all quantitative and qualitative disclosures pertain to the Group as a whole (»we«), including the Torqueedo Group. Disclosures that relate only to DEUTZ AG are labeled accordingly.

In accordance with Article 8 of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (»EU Taxonomy Regulation«), any company that is required to publish non-financial information pursuant to Article 19a or Article 29a of Directive 2013/34/EU must disclose in its non-financial statement how and to what extent its activities are associated with economic activities that qualify as environmentally sustainable in the sense of Article 3 and Article 9 of the EU Taxonomy Regulation. We make the relevant disclosures in our non-financial report. [See also](#) Information on the Taxonomy Regulation (EU) 2020/852, p. 143.

On January 12, 2024, we signed an agreement to sell our subsidiary Torqueedo.¹²² As a result, this activity is presented as a discontinued operation in accordance with IFRS 5 in both our consolidated financial statements and our combined management report. With regard to our non-financial report, with the exception of the disclosures on the EU Taxonomy Regulation and the key figures contained therein for the 2023 reporting year, Torqueedo will continue to be included unless otherwise stated. [See](#) Product stewardship, p. 132, and Events after the reporting date, p. 224, for further information. With regard to the disclosures on the EU Taxonomy Regulation, Torqueedo's business activities are only taken into account in the calculation of taxonomy-eligible/compliant investment and operating expenses. [See](#) Information on regulation (EU) 2020/852 - Taxonomy Regulation, p. 143

This non-financial report makes reference to further information provided elsewhere in the annual report. References to disclosures outside the scope of the consolidated financial statements, the annual financial statements of DEUTZ AG, and the combined management report for 2023 do not form part of the non-financial report.

Reportable topics and framework In accordance with section 315c in conjunction with sections 289c to 289e HGB, this non-financial report summarizes the key topics identified as a result of the materiality assessment of environmental matters, treatment of employees, social responsibility, respect for human rights, measures to combat corruption and bribery, and other matters. [See also](#) Materiality analysis, p. 115.

Key topics	Aspects under the HGB
Product stewardship	<ul style="list-style-type: none"> ■ Social responsibility ■ Environmental matters
Product quality	<ul style="list-style-type: none"> ■ Environmental matters ■ Other
Corporate governance and compliance	<ul style="list-style-type: none"> ■ Treatment of employees ■ Respect for human rights ■ Measures to combat corruption and bribery
Data protection	<ul style="list-style-type: none"> ■ Respect for human rights ■ Other
HR management	<ul style="list-style-type: none"> ■ Treatment of employees ■ Respect of human rights
Occupational health and safety	<ul style="list-style-type: none"> ■ Treatment of employees ■ Respect for human rights
Supplier management	<ul style="list-style-type: none"> ■ Respect for human rights ■ Measures to combat corruption and bribery ■ Environmental matters
Environmental and climate protection	<ul style="list-style-type: none"> ■ Environmental matters

As a result of our last stakeholder survey conducted in 2022, we also identified material topics that can only partly be assigned to the aspects defined under HGB. [See also](#) the 2022 Non-financial report, p. 97. These topics are therefore included in the preceding table under the non-HGB-defined »Other« aspect. The ongoing war in Ukraine did not have any direct material impact on the topics defined as material or on the related KPIs in 2023.

The **German Sustainability Code** serves as the framework for this report. The content, for example, is based in part on the underlying aspects of the **Code's** criteria and in particular criteria 1–3, 5–9, 13–15, 17–18, and 20.


Risks pursuant to section 289c (3) nos. 3 and 4 HGB Using the **net method**, no material risks were found in relation to our own business activities, business relationships, products, or services or to aspects relating to the key topics pursuant to section 289c (3) nos. 3 and 4 HGB that are very likely to have a serious impact on those aspects subject to reporting requirements now or in the future. [See](#) Combined management report, risk report, p. 74 onward, for information on risks and opportunities.

Content review On behalf of the Supervisory Board of DEUTZ AG, our non-financial report was voluntarily submitted for an external review with limited assurance pursuant to ISAE 3000 (Revised). [See](#) p. 157 for the limited assurance engagement and the independent practitioner's report.

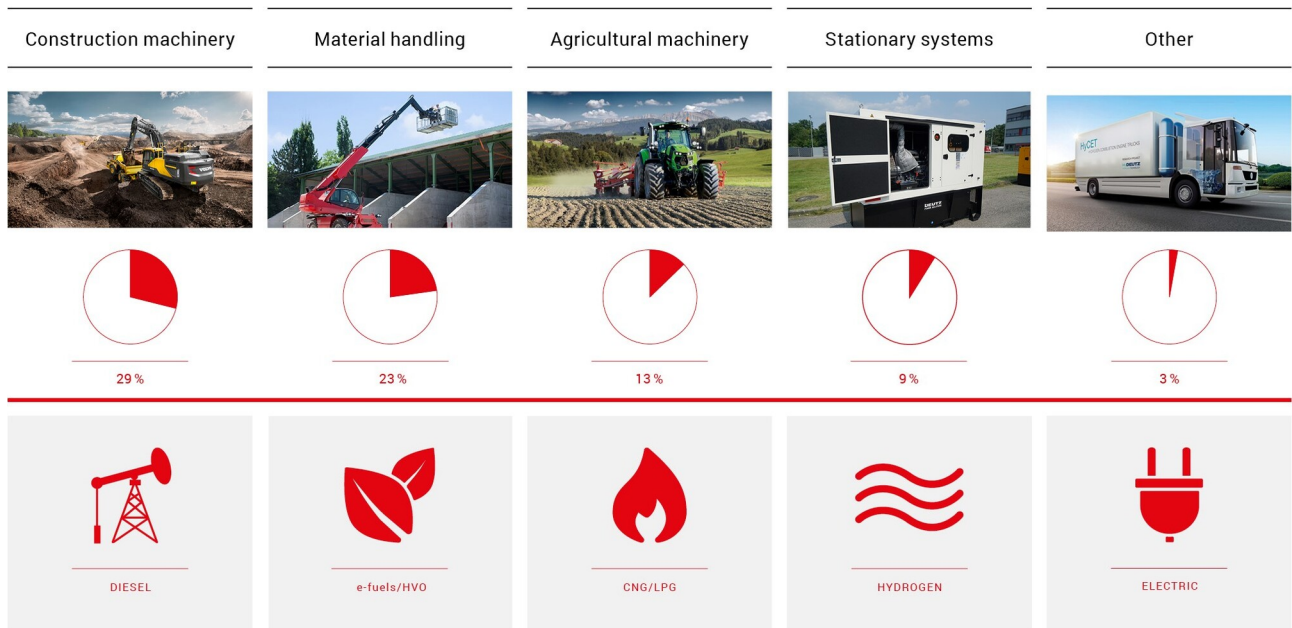
¹²² See press release dated January 19, 2024.

Business model

The core competencies of our Company, which was founded in 1864 and has around 5,300 employees around the world, are the development, production, and distribution of drive solutions for **off-highway** applications. Our product portfolio extends from diesel and gas engines to electric and hydrogen drives. Key areas of application for DEUTZ drives include construction equipment,

agricultural machinery, **material handling** equipment such as forklift trucks and lifting platforms, commercial vehicles, and rail vehicles. We also offer a comprehensive range of analog and digital services through around 1,000 sales and service partners in over 120 countries.  See Combined management report, Business model and segments, p. 36 onward, and Strategy and objectives, p. 37 onward.

Portfolio of technology-neutral drive systems for different application segments¹²³



¹²³ Revenue share based on Group revenue 2023, continuing activities, excl. service revenue (23 percent).

Sustainability organization and management

DEUTZ Sustainable Development Committee (SDC) Responsibilities and reporting structure



Sustainability is firmly anchored at senior management level in our Company, and overall responsibility lies with the Chairman of the Board of Management. The Sustainable Development Committee (SDC), which comprises the heads of the relevant departments and the individuals responsible for the key sustainability topics, provides the information that is used as the basis for making decisions related to corporate sustainability in the DEUTZ Group. The DEUTZ AG strategy team has been a permanent member of the SDC since 2023. The aim is to link the further development of our overarching corporate strategy more closely to our sustainability work, and to take greater account of the interaction between the two areas.

Guided by the Group’s Investor Relations function and the Quality Management team, the SDC sets sustainability-related targets, creates action plans for achieving them, and discusses the continuous improvement of sustainability efforts across the Group at regular intervals. Responsibility for implementing and monitoring strategic initiatives lies either with the relevant departmental heads or the individuals nominated by them. In view of the fact that the DEUTZ Group is highly decentralized, they are supported in their work by local representatives at the subsidiaries.

The SDC regularly reports to the Board of Management on progress with implementation of the sustainability strategy and on changes to its content. This reporting includes an update on the current situation with regard to the sustainability-related KPIs. The objective, as part of a preventive risk management approach, is to identify risks that might jeopardize the achievement of the targets at an early stage and to modify the action plan if necessary. [See also](#) Corporate governance and compliance, p. 118 onward.

The Supervisory Board, in its function as an oversight body, is updated by the Board of Management and/or the SDC management at least once a year on the Company’s sustainability activities. In addition, in the 2023 reporting year, the Supervisory Board attended a seminar on carbon neutrality in the transport sector and a training session on the topic of sustainability reporting, especially with regard to the **CSRD**, as well as related tasks and responsibilities of the Supervisory Board.

Furthermore, the Chairwoman of the Audit Committee of the Supervisory Board was informed in detail about the status of sustainability-related reporting and the internal implementation of the Corporate Sustainability Reporting Directive.

Materiality analysis

We conducted a questionnaire-based stakeholder survey in 2022 to identify sustainability-related topics of importance to us. [See also the 2022 Non-financial report, p. 97.](#) In 2023, the SDC and the Board of Management once again confirmed the findings of the stakeholder survey. We thus continue to regard certain overarching topics, including the individual topics referenced above, as key to understanding the development, performance, and position of the Group and the impact of our business activities on the non-financial aspects defined in accordance with HGB. These topics are product stewardship, HR management (including occupational health and safety), **corporate governance** and **compliance**, supplier management, and environmental and climate protection. We report on our **corporate citizenship** activities on a voluntary basis in this report.

The content of our non-financial report is also enhanced through ongoing analysis of sustainability-related questionnaires completed by customers and rating agencies, for example. This ensures that any information that is routinely surveyed, but which we have not yet reported, is added to the report, thus continually enhancing the level of transparency in the interests of our stakeholders.

The new **Corporate Sustainability Reporting Directive (CSRD)** came into force at the beginning of 2023, and we at the DEUTZ Group will be implementing it from January 1, 2024, onward. By setting out specific requirements, for example that the materiality analysis must follow the principle of »double materiality«, and introducing the mandatory **European Sustainability Reporting Standards (ESRS)**, the Directive aims to ensure that all stakeholders can understand and compare companies' sustainability activities.

We conducted an external and internal stakeholder survey at the end of 2023 to identify sustainability-related topics of importance to us, in accordance with the new requirements. The results will be published in March 2025 along with our 2024 annual report.

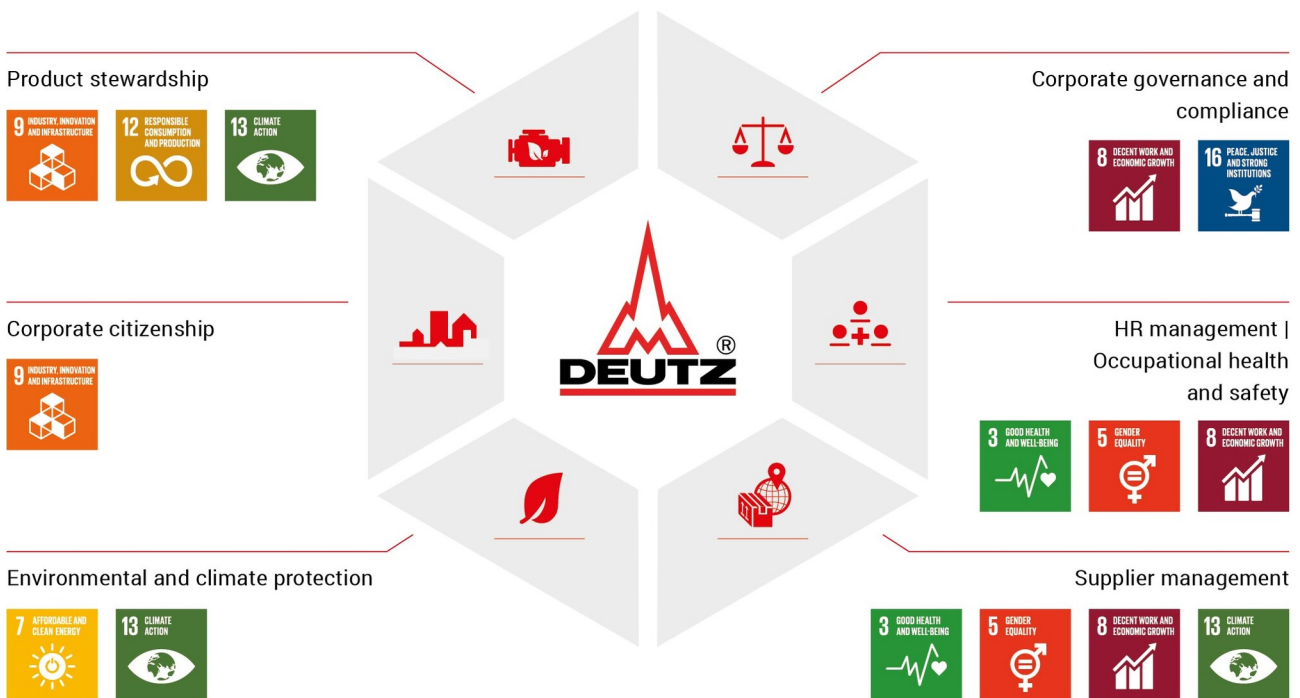
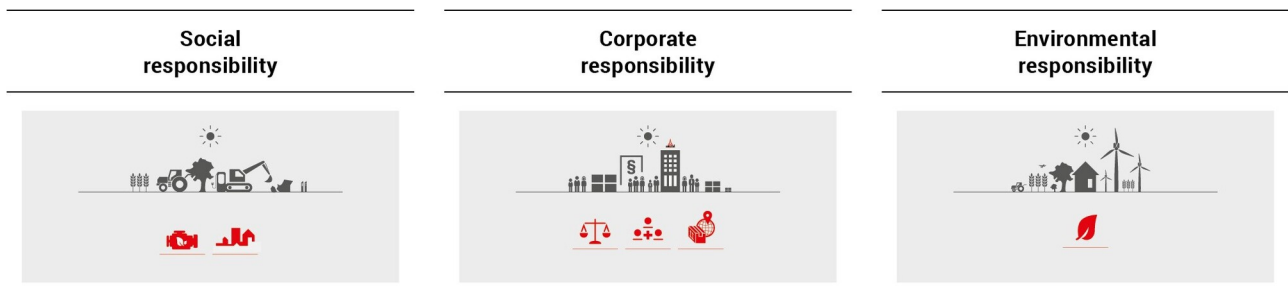
Sustainability strategy and objectives

The name of the groupwide sustainability strategy, »Taking Responsibility«, reflects our ambition of achieving our financial objectives while fulfilling our environmental, social, and corporate governance responsibilities. Consequently, our sustainability activities are divided into three fields of action to which the key topics of relevance to us are assigned. All the quantitative targets we have set ourselves to achieve this are brought together in our Sustainability Vision. [See »DEUTZ Sustainability Vision 2023 and 2026« at a glance, p. 117.](#)

Because we are an integral part of global value chains, the DEUTZ Group has an influence on economic, environmental, and social developments.

We are aware of the responsibility that comes with this, and as a consequence signed up to the **United Nations Global Compact (»UNGC«)** in 2021. As a member of the UNGC, we have voluntarily undertaken – on the basis of ten universally accepted principles – to promote human rights, fair working conditions, environmental protection, and the fight against corruption and to support the achievement of the United Nations’ general objectives, in particular its **17 sustainable development goals (»SDGs«)**. We focus on a total of eight of the 17 SDGs, which are incorporated into the strategic planning of groupwide sustainability activities, with the aim of continually raising our own contribution to their achievement.

«Taking Responsibility» – DEUTZ’s sustainability strategy



Sustainability as a component of Board of Management remuneration In accordance with the **German Corporate Governance Code**, remuneration for the Board of Management must be aligned with the sustainable, long-term growth of the Company and contribute to the delivery of the business strategy. Our sustainability strategy forms an integral part of the overarching corporate strategy, which means that incentives need to be put in place to ensure that it is implemented rigorously. The Board of Management remuneration system includes a sustainability target, for example. The specific performance criteria in this context, which apply not only to all members of the Board of Management but also to other senior managers, are specified on an annual basis by the Supervisory Board.

These criteria currently relate to environmental and climate protection targets, alternative drives, **corporate governance**, occupational health and safety, **diversity**, personnel development, and supply chains. [See also](#) Remuneration report, p. 88 onward.

»**Sustainability Linked Loan**« We restructured the Group’s funding in 2022. In addition to better overall terms and conditions, the new lending arrangements include an **ESG** component derived from our sustainability strategy. A continuous improvement in the **recordable incident rate (RIR)** and a reduction in CO₂ emissions by 2028 were the specific key performance indicators that were agreed.

»DEUTZ Sustainability Vision 2023 and 2026« at a glance

Key topics	Corresponding key figures ¹²⁴	Targets for 2023	Targets for 2026 ¹²⁵	Status in 2023
Corporate governance and compliance	■ Proportion of workforce to have completed compliance training ¹²⁶	> 95 %	> 95 %	97.8
HR management	■ Proportion of women in the workforce ¹²⁷	> 10 %	12 %	13.9
	■ Proportion of women in management positions ¹²⁸	> 20 %	18 % ¹²⁹	14.9
	■ Ratio of trainees to total employees ¹³⁰	2.5–3.0 %	2.5–3.0 %	2.5 %
	■ Engagement ¹³¹	78 %	80 % ¹³²	73 %
	■ Enablement ¹³³	69 %	75 % ¹³⁴	68 %
Occupational health and safety	■ Rate of staff turnover ¹³⁵	5–10 %	5–10 %	8.2 %
	■ Recordable Incident Rate ¹³⁶	8.5	7	6.0
Supplier management	■ Proportion of new production component suppliers to have had their compliance	90 % ¹³⁷	100 % ¹³⁸	73 %
	■ Number of existing suppliers to have had their compliance with the supplier code of conduct verified (cumulative numbers)	55 ¹³⁹	25 ¹⁴⁰	83
	■ Proportion of suppliers assessed against sustainability criteria ¹⁴¹	50 %	80 %	73 %
	■ Proportion of suppliers that have passed business partner compliance checks ¹⁴²	20 %	–	19 %
Environmental and climate protection	■ CO ₂ emissions from production sites (tonnes CO ₂ e) ¹⁴³	‘-61% ¹⁴⁴	‘-66% ¹⁴⁵	‘-73 %
	■ CO ₂ emissions from production sites per manufactured engine (kg CO ₂ e) ¹⁴⁶	‘-66 % ¹⁴⁷	‘-70 % ¹⁴⁸	‘-77 %
	■ Waste for disposal	‘-10 % ¹⁴⁹	‘-15 % ¹⁵⁰	‘-28 %

¹²⁴ The key figures defined as part of our sustainability strategy are not currently part of the internal management system.
¹²⁵ The targets for 2026 were set in the 2022 financial year.
¹²⁶ To be completed by all administrative employees of the DEUTZ Group.
¹²⁷ Including staff on fixed-term contracts but excluding temporary workers.
¹²⁸ Including staff on fixed-term contracts but excluding temporary workers, second level below the Board of Management.
¹²⁹ The reason for this reduction is because even a small number of personnel changes in this narrow field has the potential to disproportionately affect the ratio.
¹³⁰ Number of trainees at the sites in Cologne, Ulm, and Herschbach (Germany) in relation to the number of employees in Germany, including staff on fixed-term contracts but excluding temporary workers, Torqeedo, and Futavis.
¹³¹ Measured using a groupwide employee survey (all employees within the Group including staff on fixed-term contracts but excluding temporary workers).
¹³² Target for 2025, as the Group-wide employee survey is to be conducted every two years from now on.
¹³³ Measured using a groupwide employee survey (all employees within the Group including staff on fixed-term contracts but excluding temporary workers).
¹³⁴ Target for 2025, as the Group-wide employee survey is to be conducted every two years from now on.
¹³⁵ Relates to all employees within the DEUTZ Group, excluding staff on fixed-term contracts and temporary workers. The calculation includes both resignations and dismissals.
¹³⁶ For the production sites in the DEUTZ Group, excluding joint ventures. The recordable incident rate (RIR) is the number of reportable accidents at work per year per one million hours worked. An accident is deemed reportable if it occurs during working hours on the Company’s premises while an insured activity is taking place and results in an absence of more than three calendar days. The day of the accident itself is not counted, but weekends are included if a medical certificate has been issued by an occupational health practitioner. Working hours are defined as the recorded or calculated actual time spent working and/or traveling by the employees. The working hours of permanent employees are counted, as are those of temporary workers, employees with fixed-term contracts, part-time staff, interns, and student workers.
¹³⁷ 90 percent of the production component suppliers brought on board between 2020 and 2023.
¹³⁸ 100 percent of new production component suppliers added between 2024 and 2026.
¹³⁹ 2020 to 2023; existing suppliers as at the end of 2019. Verified by way of on-site audits.
¹⁴⁰ 2024 to 2026; existing suppliers as at the end of 2023. Verified by way of on-site audits.
¹⁴¹ Proportion of the top 150 suppliers as measured by DEUTZ’s purchasing volume in the prior year.
¹⁴² Existing suppliers with which DEUTZ’s purchasing volume for the prior year exceeded €0.5 million.
¹⁴³ CO₂e = carbon dioxide equivalents; CO₂ emissions from the production sites of the DEUTZ Group excluding joint ventures. CO₂ figures are reported in accordance with the Greenhouse Gas Protocol and are determined by multiplying the energy consumed by the relevant emissions factor.
¹⁴⁴ Base year 2017.
¹⁴⁵ Base year 2017.
¹⁴⁶ Excluding joint ventures. CO₂e = carbon dioxide equivalents; CO₂ figures are reported in accordance with the Greenhouse Gas Protocol. The ‘emissions per engine’ figure is calculated by dividing total emissions by the number of engines made. CO₂ reporting covers Scope 1 (CO₂ emissions from diesel, natural gas, LPG, heating oil, CNG, gasoline and hydrogen caused by combustion in our own facilities) and Scope 2 (CO₂ emissions relating to purchased energy (e.g. electricity, district heating)). Only internal combustion engines and electric drives are counted.
¹⁴⁷ Base year 2017.
¹⁴⁸ Base year 2017.
¹⁴⁹ Base year 2019.
¹⁵⁰ Base year 2019.

Corporate responsibility

Corporate governance and compliance

We understand good **corporate governance** and **compliance** to mean acting responsibly and in accordance with the laws of the countries in which DEUTZ operates. We also understand this to mean showing integrity and adopting an ethical and moral approach in day-to-day business conduct toward not only business partners and employees but also investors and other stakeholders of the Company. As this represents the foundations for a sustainable and successful system of corporate governance, the key tasks of our groupwide compliance organization include cementing the importance of integrity and compliance in the mind of every DEUTZ employee, effectively preventing or limiting the manifestation of compliance risks, and taking rigorous action against breaches of the rules. In addition, compliance includes ensuring that any legal requirements that must be made of third parties are also fulfilled.


Compliance organization We have established a groupwide compliance organization to ensure that we as a company and our employees act in accordance with the prescribed rules and regulations. At the heart of the organization is the internal compliance management system (CMS), whose function includes combating corruption and bribery, tackling money laundering, and ensuring compliance with export regulations and antitrust laws. As measures to combat corruption and bribery form an integral part of the CMS, these issues and the topics introduced above are explained together in the following section.

In accordance with the schedule of responsibilities, the Supervisory Board of DEUTZ AG has delegated overall responsibility for the groupwide compliance organization to the Chairman of the Board of Management of DEUTZ AG. He appoints the Chief Compliance Officer, and together they appoint individual compliance coordinators who are responsible for compliance in their respective departments. Twice a year, the coordinators submit a written report to the Chief Compliance Officer, who in turn reports to the Board of Management and the Audit Committee of the Supervisory Board. As well as information on changes to the legal situation, the reports also focus on compliance-relevant matters, possible risks associated with these matters, and the countermeasures in place to mitigate or eliminate the risks. The basic principles of the compliance organization are set forth in a groupwide compliance policy.

The Chief Compliance Officer and compliance coordinators hold regular meetings to plan the compliance activities that need to be initiated. The Compliance department also works closely with the Legal Affairs department, the Data Protection Officer, and Corporate Audit. The latter is involved in a supportive capacity in all key compliance activities and conducts ad hoc investigations, for example to uncover cases of corruption on behalf of the Chief Compliance Officer. It also carries out compliance audits to address other potential **compliance** violations or fraudulent acts. Corporate Audit's plan for these follows a risk-oriented approach that takes into account the Corruption Perceptions Index produced by **Transparency International**. There were no confirmed cases of corruption in the DEUTZ Group in 2023.

DEUTZ code of conduct and human rights code | UNGC 1–10 The successful and sustainable management of a company depends not only on the achievement of targets but also on the manner in which they are achieved. The DEUTZ code of conduct is the primary means of providing our employees with guidance on how to conduct themselves with integrity and in accordance with the law. The code contains mandatory rules for behavior that cover areas such as respect for human rights, working conditions and social responsibility, anti-competitive practices, and data protection. It also sets out our zero-tolerance approach to corruption and bribery. Organizational policies on specific topics supplement the code of conduct. They either summarize or provide more detail on laws and regulations as well as internal rules, and all employees are required to abide by them. Because of our global activities, our employees operate within different legal frameworks and value systems. To ensure that every employee follows standardized rules of behavior in spite of this, the code of conduct is applicable across the Group and available in seven languages.

As a member of the **United Nations Global Compact**, we attach particular importance to respect for human rights. With this in mind and to supplement our general code of conduct, we adopted a groupwide human rights code in 2023. It serves to document the human rights principles that are most relevant to us and underlines our commitment to international conventions and declarations such as the **UN Guiding Principles on Business and Human Rights**, the **UN Universal Declaration of Human Rights**, and the **International Labour Organization's Declaration on Fundamental Principles and Rights at Work**. In particular, we condemn all forms of hatred and anti-Semitism. This is why we joined the solidarity campaign »Never again is now« together with many other German companies during the reporting period.

We view compliance with the rights, obligations, and prohibitions contained in our human rights code as an essential part of our internal and external interactions. The human rights code therefore applies not just to us as a company but also to our employees, suppliers, and other business partners. Our aim is to ensure that human rights are upheld within our own sphere of influence and that we are not indirectly complicit in human rights abuses.  For further information see also Supplier management, p. 129 onward.

The latest versions of our code of conduct and human rights code are available to download for employees on the intranet and for third parties on our website under Compliance.

Compliance training To support our employees in their efforts to avoid breaking the law or breaching regulations, they are required to complete annual compliance training in the form of e-learning courses or classroom-based training. At the start of the year, all of DEUTZ's administrative employees¹⁵¹ are assigned training modules that they are asked to complete by November 30 of that year. The modules are assigned according to the employees' individual areas of responsibility and finish with tests that confirm whether the e-learning course has been completed and the content of the training has been assimilated. Disciplinary action may be taken if an employee fails to participate in the e-learning, and they will still have to complete it the following year but in a shorter period of time.

To take account of recent developments, for example new laws or regulations, the content of the training is regularly reviewed and expanded with new topic areas as needed. In addition to the fixed modules (basic principles of compliance, anti-corruption, antitrust law, export controls and embargoes, health and safety in the office, prevention of money laundering/financing of terrorism, and information security), the training program includes further modules that change on an annual basis. These cover subjects such as data protection for employees, the **German General Equal Treatment Act (AGG)** and non-discrimination, and how to handle trade secrets, and prevent insider trading. In 2023, a new module for dealing with conflicts of interest was rolled out.

In 2023, a total of 3,649 (97.8 percent) of all administrative employees within the Group successfully completed their e-learning. We therefore achieved or rather exceeded our target of increasing the proportion of the workforce to have successfully completed compliance training to more than 95 percent by 2023.

DEUTZ Group: Proportion of workforce to have completed compliance training¹⁵²

%	2023	2022	2021	2020	2019
Proportion of workforce to have completed compliance training	97.8	97.4	99.1	97.3	98.1

Whistleblowing system To identify, at the earliest possible stage, behavior that violates laws or regulations and to immediately put a stop to any proven misconduct, we have established a publicly accessible whistleblowing system for the purposes of reporting suspected compliance violations. Every suspected violation is documented in a uniform way and treated in accordance with the groupwide compliance policy.

The whistleblowing system is available to employees and to third parties, such as suppliers, on the Company website under Compliance. Strict secrecy and confidentiality are guaranteed both for whistleblowers and for the individuals involved. This is maintained during the course of any investigation that is launched if, following a careful review of the evidence, there are concrete indications that a law or regulation has been violated. People can also report actual or suspected compliance violations, anonymously if they so wish, by email, post, or fax. All reports are treated in accordance with Group policy.

No confirmed human rights abuses were reported via the whistleblowing system in 2023.

Business partner compliance tool | UNGC 10 We expect not only our employees to act in compliance with the law but also our business partners. We have implemented an IT-based business partner compliance tool that enables us to respond appropriately and at an early stage to matters such as suspected money laundering, anti-competitive practices, corruption, or bribery on the part of our business partners. The tool provides a web-based self-declaration form that business partners are asked to fill out and then checks both the company itself and the members of its governing and supervisory bodies as well as the beneficial owners against up-to-date sanctions lists. On the basis of the information obtained, the business partners are classified using an internal DEUTZ risk model and, if required, action is taken to minimize risks.

Since the end of 2020, the business partner compliance tool has been used at our sites in Germany to conduct compliance checks on new business partners of DEUTZ AG. At the same time, work began on progressively applying these checks to existing business partners as well. The tool is set to be rolled out to DEUTZ companies based outside Germany soon. In 2023, the first rollouts took place at the Benelux companies and the French subsidiary.

In 2023, the business partner compliance tool was used to conduct checks on a total of 557 (2022: 348) business partners of DEUTZ AG. In two cases, this resulted in the end of an existing business relationship.

Risk management Dealing responsibly with risks is an important part of good corporate governance. The Board of Management holds primary responsibility for groupwide risk management. With the help of DEUTZ's internal risk management system, it is able to proactively identify groupwide risks so that it can respond rapidly to potentially relevant changes in the risk profile. Because all the departments are integrated into the risk management system, the monitoring of risks can be said to be comprehensive and it includes those that may arise in relation to corruption and bribery. Corporate Audit evaluates the system at regular intervals to verify whether it is functioning effectively.

¹⁵¹ Here, the term administrative employees includes all individuals who are employed by the DEUTZ Group, including its foreign affiliates, as at November 30 of any given year and who can connect to the Group's IT infrastructure and have access to a PC. It excludes employees who left the Company during the year, were on parental leave, or were absent for more than 50 percent of the year due to long-term sick leave. The service companies of the Diesel Motor Nordic Group acquired in the 2023 reporting year and the engine dealer Mauricio Hochschule Ingenieria y Servicios S.A. were not yet integrated into the DEUTZ Group's IT infrastructure as at the reporting date.
¹⁵² Only includes administrative employees.

The DEUTZ Group generally conducts risk inventories four times a year. The Treasury department is responsible for identifying, assessing, and hedging financial risks as part of this. [See also the risk report in the combined management report, p. 74 onward.](#) The identification and assessment of sustainability-related risks arising from the company's own business activities, business relationships and/or products and services that could have a negative impact on the non-financial aspects defined under the German Commercial Code (HGB) is carried out as part of a manual examination by the management of the Sustainable Development Committee (SDC) and should have been integrated into the Group's regular, system-based risk inventory in 2023. In view of the far-reaching changes in the course of CSRD implementation, including with regard to sustainability-related risk management, integration is now planned for 2024. Risks with regard to the achievement of sustainability-related key figures will continue to be examined manually for the time being and regularly reported to the Board of Management.

High-priority human rights risks and environmental risks in our own area of business As part of our implementation of the German Supply Chain Due Diligence Act (LkSG), we carried out extensive analysis to identify human rights risks and environmental risks in our own area of business in 2023. This involved reviewing our subsidiaries using a tool that is established within DEUTZ and identifies any reports pertaining to relevant risks, for example in connection with human rights issues or labor practices. The tool draws on publicly accessible information and predefined data sources. Based on the due diligence obligations set forth in section 3 LkSG, we also created a questionnaire, which we used to assess specific risks. In addition to DEUTZ AG, selected foreign subsidiaries were taken into account. With a view to 2024, we intend to extend the questionnaire-based risk analysis to all subsidiaries.

The results of the risk analysis and the remedial measures have been published in our declaration of principles regarding the Supply Chain Due Diligence Act, which is publicly accessible on our website under »Compliance«. [For further information see Supplier management, p. 129 onward.](#)

German Corporate Governance Code In addition to laws, regulations, and internal policies, the regulatory framework in which we operate encompasses other standards and guidelines such as the **German Corporate Governance Code**. [For further information see p. 20 onward for the corporate governance declaration for DEUTZ AG and the Group and the corporate governance report.](#) The declaration of conformity issued by the Board of Management and Supervisory Board is published on the Company website under Corporate Governance.

Stakeholder engagement and dialogue For us, a stakeholder is any person, organization, or company with which we maintain relations or are in dialogue or that has an interest in us and seeks dialogue with us. Our shareholders are an important stakeholder group. They routinely exercise their rights of membership and rights of codetermination at the Annual General Meeting, with each share granting one vote at the Annual General Meeting. The Annual General Meeting decides on matters such as the appropriation of profit and the formal approval of the actions of the Board of Management and Supervisory Board. It also elects the auditor as well as the shareholder representatives to the Supervisory Board. [For further information see Composition of the Supervisory Board, p. 17.](#) In addition, the Annual General Meeting rules on matters pertaining to the legal basis of the Company, such as amendments to the Statutes or corporate actions. It also passes advisory resolutions for the approval of the remuneration system for the Board of Management submitted by the Supervisory Board and for the details of the Supervisory Board's remuneration, and recommendatory resolutions for the approval of the remuneration report for the previous year.

With regard to general capital market communications, we undertake to comply with the transparency guidelines in the **German Corporate Governance Code**, always communicating with private shareholders, investors, financial analysts, and all other interested capital market players comprehensively, promptly, and openly. Each quarter, for example, a conference call for investors, analysts, and journalists is held to coincide with the publication of the Company's latest financial results. The Board of Management and the Investor Relations management team are also available for talks with interested parties from the capital markets at conferences, roadshows, and private meetings. In 2023, a Capital Markets Day was also held at the headquarters in Cologne. We communicate other current developments and significant events by means of press releases. We also proactively seek to engage in ad hoc dialogue with proxies, for example, in order to discuss matters such as their expectations or the business decisions that have been made and to jointly reflect on the underlying reasons. In addition, our Supervisory Board chairman as well as the Board of Management make themselves available to answer questions to properly registered investors and shareholders at the abovementioned Annual General Meeting at the very least.

Data protection

The collection, processing, and storage of data is essential for the day-to-day running of the business. In addition to data relating to machinery, processes, and other applications, it includes the personal data of employees, suppliers, customers, etc. As an engine manufacturer, DEUTZ operates in a business-to-business market. This means that while the processing of personal data is not a core focus, it is still necessary for certain activities.

Data breaches and the misuse of personal data have the potential to significantly damage relationships with employees or business partners. All stakeholders rely on us to protect their data against misuse. This is also why we believe that upholding data protection rights forms part of our corporate responsibility. It is therefore critical for us, not just from a legal perspective but also in our own interests, to handle data responsibly and to comply with the relevant laws and regulations. The DEUTZ code of conduct therefore also covers data protection.

Data protection organization The Data Protection department bears overall responsibility for the implementation of data protection laws, the monitoring of compliance with them, and ongoing improvements to the data protection organization. DEUTZ has appointed a Data Protection Officer (DPO), who is not bound by instructions from the Company's management and reports directly to the Chief Financial Officer of DEUTZ AG on matters such as audits, complaints, and progress in implementing the data protection measures. In addition to handling data protection matters, the DPO is also responsible for communicating with the regulatory body.

At operational level, each organizational unit within the DEUTZ Group appoints a Data Protection Manager (DPM). The DPM's job is to ensure that any processes in place in their department involving the processing of personal data are documented and evaluated. [📄 See also](#) Documentation and evaluation processes, p. 122.

The subsidiaries of the DEUTZ Group generally bear individual responsibility for compliance with local data protection laws and internal requirements. However, DEUTZ AG's data protection organization provides support if necessary.

To give the departments the best possible support, the DPO is supported by a data protection coordinator (DPC). The primary task of the DPC is to train the DPMs in the proper use of the data protection software and to advise on the implementation of processes relevant to data protection law.

Data protection policy Any personal data collected and stored by DEUTZ is processed solely for the intended purpose, in a verifiable manner, carefully, and in accordance with the applicable data protection laws. An overarching organizational policy covering data protection ('data protection policy') summarizes the basic rules for handling the personal data of employees and third parties. It is based on the provisions of the European General Data Protection Regulation (GDPR) and describes how to collect, process, and use personal data in compliance with the law, as well as the tasks and responsibilities of the Data Protection Officer. The policy is mandatory for all employees of the DEUTZ Group. Specific data protection matters, such as the protocol for erasure and archiving, are detailed in supplementary organizational policies.

At the end of 2022, we extended our data protection policy, for example regarding the rights of data subjects and responsibilities. In 2023, we held global training sessions on our data protection policy.

For 2024, we plan to adopt a data protection code to supplement our internal data protection policy. The code is intended to provide all our stakeholders with guidance on how to conduct themselves in accordance with data protection law, define what we expect from our business partners in terms of data protection, and set out in greater detail the data protection aspects in our general DEUTZ code of conduct.

Data protection training To ensure as far as possible that employees handle data in compliance with the law and relevant policies, all administrative employees in the DEUTZ Group are required to regularly complete data protection training as part of the **compliance** e-learning program. [For further information](#) see Corporate governance and compliance, p. 118 onward. Employees of DEUTZ AG can also access various documents on the intranet, including practical guides and self-learning materials, that provide further information.

Violations of the organizational policies or of existing laws may result in disciplinary action, contractual measures, or consequences under criminal law. The procedure for reporting known or suspected breaches of data protection is described in the data protection policy. Employees can also submit reports using a form available on the intranet. The data protection team investigates all data protection reports and notifies the relevant regulatory body if necessary. There were no incidents in 2023 that needed to be reported to the regulatory body.

With the aim of establishing a continuous improvement process, certain data protection KPIs were defined in 2023 in order to measure the effectiveness of implemented data protection measures for internal purposes. In addition, the structure and functioning of the data protection organization were audited by Corporate Audit. The potential for improvement identified in that process also serves as a starting point for strategically enhancing our data protection organization.

Documentation and evaluation processes We use web-based data protection software with the aim of simplifying and standardizing our documentation and evaluation processes related to data protection. The software enables data processing activities to be comprehensively documented and evaluated at the same time, providing a basis for developing and initiating any necessary risk-mitigating measures.

In 2023, the focus on using the software to document new and existing data processing activities within the Group was maintained.

Assessment of data protection risk with regard to third parties

The day-to-day running of the business requires us to work with various external partners, including customers and suppliers as well as companies to which certain processes and services are outsourced. The sharing and/or processing of personal data forms a routine part of this work. For us to fulfill all our responsibilities with regard to data protection, we must not only monitor our own data processing activities but also ensure that third parties ('processors') have adequate technical and organizational measures in place to protect personal data. In pursuit of this aim, we conduct **vendor risk assessments (VRAs)** on any supplier where necessary.

HR management

At the end of 2023, we employed a total of 5,283 people.¹⁵³ They are based in around 20 countries and therefore subject to different local conditions, requirements, and legal systems. Our human resources organization is essentially decentralized. This gives the subsidiaries the strategic and organizational freedom they need to tailor their HR management activities to their specific needs and thus respond flexibly to local circumstances.

Number of employees by region¹⁵⁴

	2023	2022	2021
Europe	4,449	4,281	4,123
thereof Germany	3,568	3,434	3,273
Americas	452	398	339
Brazil	26	25	24
Australia	21	20	19
Asia-Pacific	29	30	37
India	7	6	0
Japan	6	5	0
Morocco	74	70	69
China	133	140	140
Total	5,283	4,975	4,751

Under our sustainability strategy, we have set various targets for HR management that relate to the entire DEUTZ Group, despite the largely decentralized organizational structure. We also strive to centralize and, at the same time, digitalize HR management wherever it makes sense to do so.

In 2023, we introduced various meeting formats in order to facilitate dialogue at global level in HR and to create a transparent organizational environment together with all those responsible for HR locally. The formats focused, for example, on the development of a common mission and vision, the standardization of performance management, and the implementation of a uniform, groupwide bonus structure for all employees who are not covered by collective pay agreements or who are on international assignments.


On the digitalization front, we began a process back in 2019 to introduce an SAP-based IT landscape for HR that would allow us to standardize the format of our employee master data, among other things. In the years since, the DEUTZ AG sites, the site in the USA, and the Spanish subsidiary DEUTZ Spain have been migrated to the new system and the medium-term objective is to bring the sites in China on board.

Representation of interests and codetermination | UNGC 3, 6

Pay-scale employees in Germany, who make up the majority (around 91 percent¹⁵⁵) of the DEUTZ AG workforce, are subject to the collective pay agreement of the metalworking and electrical engineering industry. Their interests are represented by the works councils at the individual sites. A key task for these works councils is to monitor whether DEUTZ AG is fulfilling its responsibility to society as an employer. To enable them to perform this task, they are afforded the right to be informed about certain decisions and actions of the employer and to participate and have a say in them. HR matters such as working hours, pay, and occupational health and safety are among the key issues that are subject to this codetermination process. The works councils of DEUTZ AG therefore get involved in all employee-related matters regarding recruitment, remuneration, reassignment, and dismissal. Their primary objective is to agree mutually acceptable rules and arrangements for the matters at hand. The rights and obligations of the works councils in Germany are derived from the German Works Constitution Act (BetrVG). A dedicated works council represents the interests of the Spanish employees at the site in Zafra.

The particular interests of employees with disabilities or equivalent status are additionally monitored and protected by the disabled persons' representative and an inclusion officer. Performing a similar role to that of the works council, the disabled persons' representative ensures that DEUTZ AG adheres to the laws, collective pay agreements, and works agreements that are in place for disabled employees. In 2023, to the best of our knowledge, we employed a total of 128 people with disabilities or equivalent status.

An elected Senior Staff Committee represents the interests of our senior managers. Both the works council and senior managers also appoint representatives to the Supervisory Board, thereby exercising their right of codetermination.

Corporate culture and internal communications »Dual+« is the new strategy we formulated at the beginning of 2023 that clearly sets out the operational course for the Green and Classic segments and for the related service business. We are implementing this strategy in all regions and functions through our Powering Progress transformation program.  See also Strategy and objectives, p. 37 onward. Part of this implementation involves a structural change in how we work together and changes to our corporate culture. In 2022, we therefore began working on our 5 Ts. Standing for trust, transparency, truth, team, and tenacity, they define how we want to work with each other, how we lead, and how we measure leadership. In 2023, an initial employee survey was conducted that explored questions such as how successfully the 5 Ts were being put into practice in day-to-day work. Numerous workshops were also held in which around half of our employees familiarized themselves with the new strategy and the associated way of working. Team members from different functions and departments, at various locations, and across

¹⁵³ Full-time equivalents (FTEs); including Torqueedo, excluding temporary workers.
¹⁵⁴ Full-time equivalents (FTEs); including Torqueedo, excluding temporary workers.
¹⁵⁵ Full-time equivalents (FTEs); including Torqueedo, excluding temporary workers.

hierarchies discussed what Dual+ and our 5 Ts mean in practice for their work and what the best way is for them to incorporate the transformation-related content into their role. This resulted in a multitude of ideas and suggestions for improvement that were fed back to the Board of Management.

In 2022, to reinforce the perception of the Company being one team and to encourage a more open and more modern corporate culture, the DEUTZ Board of Management had given the entire workforce the option of addressing them by their first names.

We use various communication channels to keep our workforce up to date to the fullest possible extent. They include letters to staff, the Company intranet, Board of Management video updates, and our DEUTZ Mobile app, which can currently be downloaded by all employees of DEUTZ AG and our Spanish subsidiary DEUTZ Spain on their personal or work smartphones and/or tablets. The app provides access to a wide range of information on or related to DEUTZ and is continually being improved and added to. In 2023, for example, we introduced a new »Ask the Board of Management« section, which gives any employee the opportunity to anonymously yet openly put questions directly to the members of the DEUTZ Board of Management. The »Like« button can be used by employees to indicate their agreement and at regular intervals – at least once a month – responses to the most liked questions are provided in the form of comments. The plan in the medium term is to make the DEUTZ Mobile app available at other sites as well.

Analog formats are also used. For example, a works meeting is held at the DEUTZ AG sites at least once a year, at which the Board of Management and works council inform employees of current developments.

The DEUTZ code of conduct is the primary means of providing employees with guidance on how to conduct themselves with integrity in their day-to-day work. It contains mandatory rules for behavior, whose aims include creating a working environment that is free of discrimination, bullying, and harassment. The code of conduct applies across the Group and must be adhered to by all employees. [See also](#) Corporate governance and compliance, p. 118 onward.

Diversity and equal opportunities | **UNGC 1, 3–6** Diversity in society, influenced by globalization and by demographic and societal shifts, is also reflected in the world of work. We firmly believe that having a diverse set of employees with different skills and talents opens up opportunities for innovative and creative solutions. This is one reason why we strive to ensure a respectful, non-discriminatory, and prejudice-free working environment for all employees – regardless of their age, ethnicity, nationality, gender, gender identity, physical and mental capabilities, religious beliefs and worldview, sexual orientation, or social background. The groupwide DEUTZ code of conduct and our human rights code are key tools for providing employees with guidance not only on compliance with laws and regulations but also on how to conduct themselves with integrity in their day-to-day work. Applicable to all employees, they contain mandatory rules for behavior aimed at creating a working environment that is free of discrimination,

bullying, and harassment. In the event of confirmed violations of the provisions of our codes, we take appropriate legal and/or disciplinary measures in accordance with internal rules. [See also](#) Corporate governance and compliance, p. 118 onward.

In 2021, to lend weight to our efforts to establish an equality-friendly management culture, we signed up to the Diversity Charter and thus pledged our commitment to cultivating an organizational culture characterized by mutual respect and appreciation. In 2023, this saw us take part in Germany's **Diversity Day** again and we raised rainbow flags, a symbol of tolerance and respect for diversity, at our headquarters from late May to late June.

We also attach a high priority to increasing the proportion of women in our Company. Recruitment decisions should therefore be made solely on the basis of the candidate's professional suitability and there should be equal pay for women and men. This means that an employee's remuneration is essentially determined by their personal and professional qualifications and by the responsibilities assigned to them. For the approximately 95 percent of DEUTZ AG employees covered by a binding collective pay agreement, gender-specific differences in salaries for equal tasks are excluded from the outset.

We regularly participate in a cross-mentoring program that is run specifically to help female management trainees advance in their careers. Under the scheme, the mentee works in tandem with a mentor from a different company in order to gain insight into the structures and processes that are in place at another organization. In addition, our female employees had the opportunity to strengthen their internal women's network at the »Meet & Eat with Petra« sessions, which were held on multiple dates in 2023. During these lunches, attended by member of the Board of Management Dr. Petra Mayer and other female colleagues, they were able to share ideas and experiences and make new contacts – regardless of which department or role they worked in or where they were in their career.

Back in 2019, as part of our sustainability strategy, we had undertaken to increase the proportion of women in the workforce as a whole and in management positions to more than 10 and more than 20 percent respectively by the end of 2023. At the beginning of 2022, we then set ourselves an increased target of 12 percent for the proportion of women in the workforce as a whole and a lower target of 18 percent for the proportion of women in management positions, in both cases to be achieved by 2026. The reason for the reduction was because it had already become clear by that point that the target for 2023 would not be achieved as even a small number of personnel changes in this narrow field has the potential to disproportionately affect the percentage share.

DEUTZ Group: Proportion of women

%	2023	2022	2021	2020	2019
Proportion of women in the workforce ¹⁵⁶	13.8	12.9	13.0	12.1	11.4
Proportion of women in management positions ¹⁵⁷	15.3	15.4	11.4	11.4	12.4

In 2023, women made up 13.8 percent of the total workforce, so the target for 2023 and the medium-term target for 2026 were both exceeded. At 15.3 percent, the percentage of women in management positions was, as expected, below the figure that had been targeted for 2023. It was also lower than in the prior year, despite the absolute number of women in management positions rising by around 30 percent. This was because the overall number of managers increased much more sharply, in part due to the addition of consolidated entities

Employee motivation and empowerment A company's success and capacity for innovation depends to a large extent on its employees' motivation and satisfaction (engagement) and empowerment (enablement), and not just on their ability to do their job. We endeavor to provide our employees with a working environment that motivates and empowers them at every stage of their working life. Some of the measures offered by DEUTZ AG in this context are as follows: fair pay, the agreement of individual targets, paid vacation, flexible working time models for balancing work with family life, the option of working remotely, a children's day care center at the headquarters in Cologne, a wide variety of healthcare and sports programs, an equality-friendly management culture, a bonus-driven ideas management scheme, and a comprehensive training and development program.

The bonus-driven ideas management scheme allows any employee at DEUTZ AG to put forward ideas for discussion, such as how to improve product quality, enhance the portfolio of drive systems and services, make the working environment more efficient, and optimize existing processes. Not only does this help to foster a culture of innovation in the Company, but it can also increase employees' motivation and give them a greater sense of empowerment, for example because they can suggest ways to improve their working conditions. Our employees submitted a total of 695 ideas in 2023.

We introduced two new formats to our internal training and development program in 2023. They were TALENTS@DEUTZ and a mentoring scheme that is designed for the entire workforce, unlike the cross-mentoring program, which is only for female management trainees. The mentoring scheme sees DEUTZ managers act as mentors and share their work and career-related knowledge, networks, and expertise with young employees, the mentees, over a period of twelve months. Regular tandem meetings allow mentors and mentees to compare notes in person, and they can shadow each other in their day-to-day work. We designed TALENTS@DEUTZ specifically for aspiring individuals looking to take on their first management role or a management role with greater responsibility, for employees who have gained initial managerial experience and want to advance to a more senior position in the long term, and for employees who are targeting a specialist career as an expert in their field. The program is divided into three phases. The first is the nomination phase, in which an employee is either nominated by their manager or proactively applies themselves. In the second phase, the candidates go through a selection process in which they are assessed against certain performance criteria and metrics to identify those with the most talent and potential. The third and final phase is the two-year development program. Tailored to particular target groups and individuals, it aims to build on the participants' existing strengths and leverage their potential, expand their internal and external networks, broaden their knowledge, and encourage them to share their experiences. The nomination phase was completed at the beginning of 2024 and the development phase will start in the second quarter of the year once we have identified and selected the first participants.

Employee survey In 2019, in order to be able to measure the engagement (motivation) and enablement (empowerment) of our workforce, we carried out a groupwide employee survey for the first time and set ourselves the target of keeping the results of the survey at the same level or better until 2023. In 2023, we shortened the frequency of the survey from every three to every two years, adjusted the definitions of engagement and enablement that underpin the results, and revised the format and content of the survey to provide greater anonymity and a higher number of more in-depth questions. Not only did this help us achieve a higher participation rate, but it now also allows us to benchmark ourselves externally. However, this does mean that comparison between the results from the 2019 and 2023 surveys is no longer possible.

¹⁵⁶ Including staff on fixed-term contracts but excluding temporary workers.

¹⁵⁷ Including staff on fixed-term contracts but excluding temporary workers. The second level below the Board of Management, i.e. all female managers who report directly to a manager in the top level of senior management and have managerial responsibility.

The employee survey carried out in 2023¹⁵⁸ found that 73 percent of our employees were motivated (engagement) and 68 percent felt empowered to do their work (enablement). 84 percent of the participating employees were proud to work at DEUTZ and 79 percent would recommend us to others as a good employer.

Our results are higher than the average achieved by other companies. However, we are determined to do even better and have set ourselves the target of achieving an engagement score of 80 percent and an enablement score of 75 percent in the next employee survey in 2025. We will use the insights gained from the most recent survey as a starting point for devising initiatives to help us on our way. Initial workshops for the development of specific measures have already taken place.

Training We attach great importance to training, and our success in this area is regularly confirmed by external organizations. In 2023, for example, the Cologne Chamber of Industry and Commerce recognized the training center at our headquarters in Cologne, the Factory for Talents, for its outstanding achievements in vocational training for the 13th year in succession. Meanwhile, the German Chamber of Industry and Commerce honored a DEUTZ apprentice for achieving the best final exam results in their field. The University of Konstanz also recognized us as a »Training provider committed to integration« last year. We have been part of its »Integration@Work: skills shortage & integration of apprentices in the workplace« research project since 2022. As part of the project, regular surveys are conducted among selected apprentices over the three years of their apprenticeship. The aim is to understand when integration in the workplace – and thus the apprenticeship – is successful, and what obstacles there are, particularly for apprentices who are recent immigrants.

DEUTZ AG: Ratio of trainees to total employees¹⁵⁹

	2023	2022	2021	2020	2019
Ratio of trainees to total employees	2.5	2.4	2.7	3.2	2.6

In 2023, a total of 34 apprentices embarked on careers at DEUTZ AG and the ratio of trainees to total employees at the end of 2023 was 2.5 percent. This kept us on track to achieve our target of maintaining the ratio of trainees to total employees at between 2.5 percent and 3.0 percent in each year up to 2026.

Staff turnover We believe that a certain degree of staff turnover is beneficial to the Company's culture. Although efforts should of course be made to retain the services of experienced workers, new employees bring with them new perspectives that can help a business to develop and improve its ability to innovate. Our HR activities are therefore aimed at ensuring the groupwide rate of staff turnover remains within a range of 5 to 10 percent up to 2026.

DEUTZ Group: Rate of staff turnover¹⁶⁰

	2023	2022	2021	2020
Rate of staff turnover	8.2	9.6	10.5	6.3

In 2023, the rate of staff turnover for the DEUTZ Group was 8.2 percent and therefore within the targeted range.

¹⁵⁸ 3,206 employees participated in the survey (participation rate: 67 percent), including staff on fixed-term contracts but excluding temporary workers.

¹⁵⁹ Number of trainees at the sites in Cologne, Ulm, and Herschbach (Germany) in relation to the number of employees in Germany, including staff on fixed-term contracts but excluding temporary workers, Torqeedo, and Futavis.

¹⁶⁰ Relates to all employees within the DEUTZ Group, excluding staff on fixed-term contracts and temporary workers; number of employees calculated as full-time equivalents (FTEs). The calculation includes both resignations and dismissals.

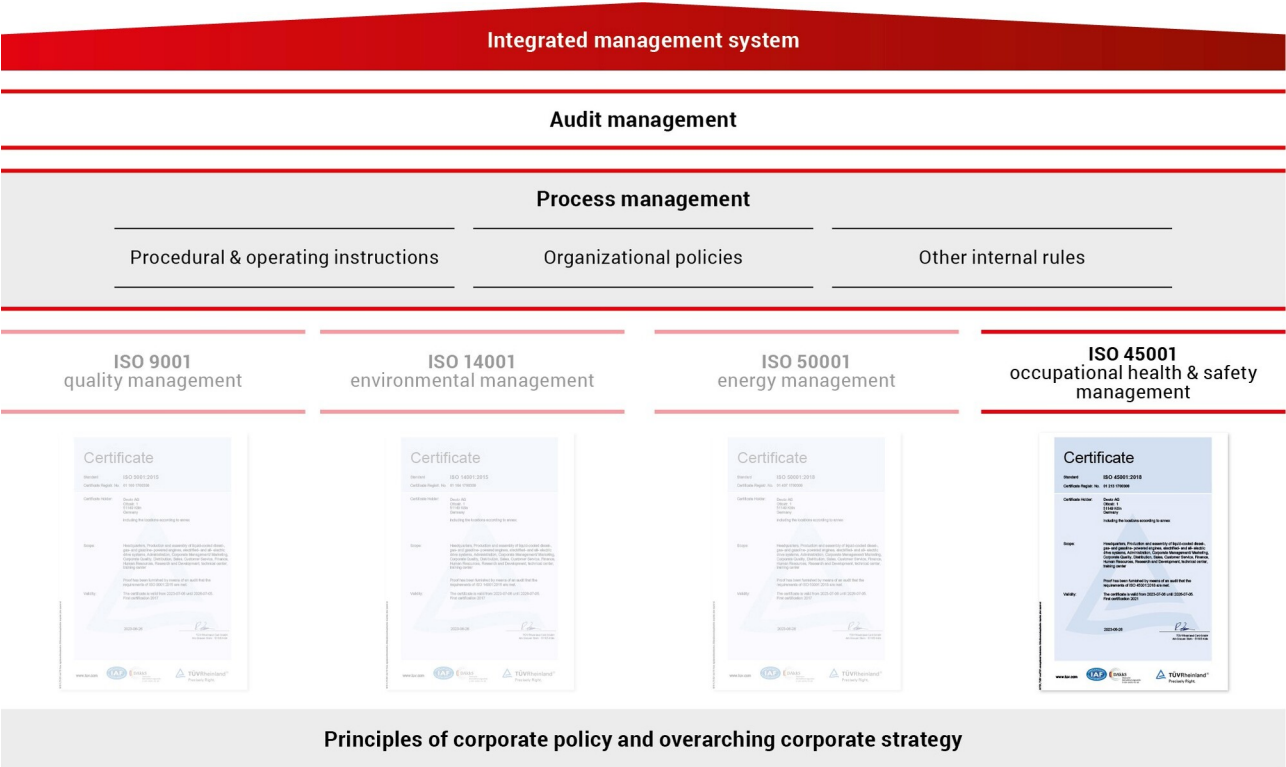
Occupational health and safety

Financial considerations must never be allowed to compromise the health and safety of staff, because every individual has the fundamental right to health and physical well-being. We recognize that providing a safe working environment that is conducive to health is part of our responsibility as an employer. Across the Group, we therefore comply with the statutory requirements on occupational health and safety that apply from country to country and implement measures based on local circumstances.

At present, occupational health and safety within the DEUTZ Group is still largely managed at local level. This means that, unless indicated otherwise, the following information essentially relates to the sites of DEUTZ AG, where the majority of the Group's workforce – around 63 percent¹⁶¹ – is based. However, we aim to set up a centralized organization and implement standardized health and safety measures on a groupwide basis. In pursuit of this aim, we put together a global safety board in 2023 comprising the occupational health and safety representatives of the German and non-German Group companies¹⁶². Their common objective is, in the medium term, to define minimum global standards for occupational health and safety and to establish standardized best practice processes. In 2023, the global safety board's discussions focused on the current accident situation and on tracking departmental KPIs and the achievement of related targets.


ISO 45001 certification | UNGC 1 In 2021, the **integrated management system (IMS)** that had been established in Germany was extended to cover occupational health and safety. [See also](#) Product quality, p. 135 onward, for further information on the IMS. This entailed a matrix certification process, in accordance with the global ISO 45001 standard, that started with the Cologne sites. ISO 45001 sets out the requirements for an effective system for managing occupational health and safety. After the German sites in Ulm and Herschbach were assessed by the certification auditors in 2022, a recertification process took place at the headquarters in Cologne in 2023. The production site in Zafra, Spain, has held ISO 45001 certification since 2019. Based on the number of people employed at production sites across the Group, the ISO 45001 certification covered around 73 percent of the Group's workforce as at December 31, 2023.¹⁶³

The management of occupational health and safety at DEUTZ AG is organized by DEUTZ SICHERHEIT Gesellschaft für Industrieservice mbH as part of general safety management. This company's overarching objective is to protect the health of employees over the long term while ensuring, as a consequence, that they can continue to perform to the required level.



¹⁶¹ Percentage calculated on the basis of full-time equivalents (FTEs); including Torqeedo, excluding temporary workers.
¹⁶² Excluding joint ventures.
¹⁶³ Percentage calculated on the basis of full-time equivalents (FTEs); including Torqeedo, excluding temporary workers.

In addition to general preventive measures, for example those initiated as a result of accidents, its main tasks include the ongoing analysis and evaluation of potential hazards and the specification of suitable countermeasures to minimize risk. Regular training is provided to the key players in occupational health and safety to ensure that their knowledge is up to date and in keeping with the times.

In order to raise awareness of occupational health and safety among our workforce, all managers must provide their staff with relevant annual training. Furthermore, all of DEUTZ's administrative employees are required to complete a training module on health and safety in the office as part of their annual **compliance** e-learning courses.¹⁶⁴  For further information see Corporate governance and compliance, p. 118 onward, for further information on the e-learning courses.

Risk assessments and health and safety inspections | UNGC 1

Internal risk assessments and subsequent inspections play an integral role in how workplace safety is managed at DEUTZ AG and our Spanish subsidiary, DEUTZ Spain. The frequency with which these take place depends on the extent and type of the risk presented by the machinery or workspace. Any issues identified are documented in action plans that specify a timeframe for remedial measures to be taken. In addition to internal **audits**, the employers' liability insurance association carries out health and safety inspections at regular intervals at our DEUTZ sites in Germany.

The occupational safety measures at our foreign production sites that do not have a certified occupational health and safety management system are designed in accordance with local requirements.

Management of hazardous substances | UNGC 1 We use hazardous substances in our engine production that could cause harm to people and the environment if they are not handled properly. DEUTZ AG manages hazardous substances in such a way that the related hazards are either avoided entirely through the use of substitutes or reduced to a minimum as a result of technical and organizational measures. These include training courses and manuals that provide employees with guidance on how to handle hazardous substances safely. Whereas the priority with regard to hazardous substances had previously been on systematic documentation and the establishment of approval processes, the focus since 2022 has primarily been on purchasing. The aim is to ensure, across the Group, that only approved hazardous substances are able to be purchased.

Occupational healthcare center and cooperating company doctors

Measures to protect employees' health are managed and offered centrally by the occupational healthcare center at the headquarters in Cologne and the company doctors at the Ulm site that cooperate with the center. In addition to regular consultation times, the offering includes mandatory check-ups and medicals, advice on nutrition, ergonomics, and addiction, a range of vaccinations, and a managed process of returning to work after illness or injury that is run in conjunction with the HR department. Furthermore, a Health Day was held at the headquarters in Cologne and at the Ulm site in 2023.

Recordable incident rate The **recordable incident rate (RIR)**¹⁶⁵ is one of the means of measuring and monitoring the effectiveness of the measures described above.

DEUTZ Group: Recordable incident rate (RIR)

	2023	2022	2021	2020	2019
RIR	6.0	8.8	9.4	7.4	11.2

As part of our Sustainability Vision for 2023, we set ourselves the target of improving the RIR to 8.5 by the end of 2023 and, in the medium term, to 7 by 2026.

The DEUTZ Group's RIR improved year on year from 8.8 to 6.0 in 2023, thus reaching the target we had set ourselves. This positive trend is proof that the preventive measures and the regular provision of training is gradually paying off.

As in the previous years, there were no fatal accidents in 2023.

¹⁶⁴ Here, the term administrative employees includes all individuals who are employed by the DEUTZ Group, including its foreign affiliates, as at November 30 of any given year and who can connect to the Group's IT infrastructure and have access to a PC. It excludes employees who left the Company during the year, were on parental leave, or were absent for more than 50 percent of the year due to long-term sick leave. The service companies of the Diesel Motor Nordic Group acquired in 2023 and the engine dealer Mauricio Hochschild Ingenieria y Servicios S.A. were not yet integrated into the DEUTZ Group's IT infrastructure as at the reporting date.

¹⁶⁵ For the production sites in the DEUTZ Group, excluding joint ventures. The recordable incident rate (RIR) is the number of reportable accidents at work per year per one million hours worked. An accident is deemed reportable if it occurs during working hours on the Company's premises while an insured activity is taking place and results in an absence of more than three calendar days. The day of the accident itself is not counted, but weekends are included if a medical certificate has been issued by an occupational health practitioner. Working hours are defined as the recorded or calculated actual time spent working and/or traveling by the employees. The working hours of permanent employees are counted, as are those of temporary workers, employees with fixed-term contracts, part-time staff, interns, and student workers.

Supplier management

DEUTZ maintains business relationships with around 5,600 suppliers in more than 60 countries. With a purchasing volume of nearly €1.3 billion worldwide, our supply chain makes a significant contribution to our value creation process. As our subsidiaries are mainly sales companies, overall responsibility for supplier management¹⁶⁶, including the approval of production component suppliers, lies predominantly with DEUTZ AG as the executive parent company. Despite this, the purchasing-related targets we have set ourselves as part of our sustainability strategy apply not only to DEUTZ AG but to the DEUTZ Group as a whole.

Standardization of Group purchasing We intend to gradually centralize Group purchasing so that, in the medium term and as far as is reasonably practical, all subsidiaries will be subject to the same principles as apply at DEUTZ AG. In 2021, as a first step, we set up a groupwide organizational structure for purchasing and established the Purchasing Excellence department, which assumed global responsibility for the purchasing function's strategy, governance, processes, methods, and tools. We also set up a platform that is able to provide a transparent overview of our global supplier base. Our companies in China and Morocco were integrated into this platform in 2022, with the remaining affiliated companies integrated during the reporting period. Furthermore, we adopted a groupwide purchasing guideline in 2023 to ensure that purchasing activities across the Group follow agreed standards. We also introduced a new meeting format for international dialogue in 2023 with the aim of facilitating collaboration across our multi-site purchasing organization. In addition to operational topics, all projects aimed at sustainable procurement are also presented. One of the most important building blocks here is the Supply Chain Due Diligence Act, which requires global cooperation. However, the importance of sustainable procurement is growing independently of the law and the fundamental embedding of available information on sustainability aspects in decision-making processes must take place gradually and across all departments.

Implementation of the Supply Chain Due Diligence Act The **Supply Chain Due Diligence Act (LkSG)** entered into force in Germany on January 1, 2023. It is intended to prevent, minimize, or eliminate risks relating to human rights and the environment. Under the direction of the purchasing department, we established a cross-departmental task force in 2021 that has since been working on implementing the resulting requirements. These requirements include conducting regular risk analyses to identify risks, particularly those related to human rights and the environment, and developing and implementing preventive and remedial measures aimed at minimizing risk. There is also a legal requirement to publish a declaration of principles. It must outline how we meet our duty of care and contain the findings of the aforementioned risk analysis conducted across our business and our supply chain. [See also](#) Corporate governance and compliance, p. 118 onward for further information on the results of the risk analysis. We made our first declaration at the end of 2023, which included the expectations,

based on the findings of the risk analysis, we place on our suppliers. The declaration has been published on our website and will be updated at least once a year in the future.

Code of conduct for suppliers | UNGC 2–6, 10 The DEUTZ code of conduct for suppliers (Supplier Code) is a key instrument in our efforts to communicate sustainability aspects to our supply chain. The code sets out mandatory groupwide requirements, for example with regard to ensuring compliance with occupational health and safety standards and environmental standards as well as respecting human rights. Among other objectives, the code thus helps to ensure that we do not make ourselves complicit in human rights abuses as defined in the second principle of the **UN Global Compact**. It also expresses our expectation that suppliers should impose the same requirements on their supply chain that we impose on them.

We comprehensively revised our Supplier Code at the end of 2022. The expectations that the code sets out were expanded and formulated in greater detail in line with national and international laws and guidelines, such as Germany's Supply Chain Due Diligence Act (LkSG), the **Universal Declaration of Human Rights**, the **UN Guiding Principles on Business and Human Rights**, and the Organisation for Economic Co-operation and Development (**OECD**) **Guidelines** for Multinational Enterprises. Moreover, content that had previously taken the form of recommendations was turned into mandatory requirements that a supplier has to fulfill in order to work with DEUTZ. The new Supplier Code was published at the beginning of 2023.

In order to ensure and monitor the effectiveness of the Supplier Code to the greatest possible extent, we conduct **site audits** of both existing and new suppliers to assess their compliance with the requirements set out in the code. The Supplier Code, which is referenced in all standard supplier contracts and in the general purchasing conditions, specifies that we reserve the right to conduct such audits.

In the sustainability strategy we adopted in 2019, we set ourselves the target of conducting **site audits** of a total of 55 existing suppliers between 2020 and the end of 2023 regarding their compliance with the Supplier Code, as well as of 90 percent of all new production component suppliers taken on during this period. By 2026, the target is to have audited a further 25 existing suppliers and for 100 percent of newly added production component suppliers to have been audited. In 2023, site audits were conducted at a total of 40 existing suppliers. This brings the number of existing suppliers that have undergone site audits in the period from 2020 to the end of 2023 to 83. We have therefore achieved our target of 55. The proportion of new suppliers that were audited in 2023 was 100 percent. The cumulative total of new suppliers that have been audited came to 73 percent and was therefore well below the 90 percent target. The failure to meet the target is due to the fact that the majority of the new suppliers added can be considered insignificant in terms of revenue. For reasons of proportionality, we therefore refrained

¹⁶⁶ The information in this section relates to direct suppliers that have a contractual relationship with DEUTZ.

from conducting a comprehensive sustainability audit and only carried out the general compliance and risk checks. [See also](#) Business partner compliance, S. 130.

DEUTZ Group: Number of suppliers to have undergone site audits regarding their compliance with the Supplier Code

	2023	2022	2021	2020
Number of suppliers audited	40	23	16	4

DEUTZ Group: Proportion of new production component suppliers audited regarding their compliance with the Supplier Code

%	2023	2022	2021	2020
Proportion of new suppliers audited	25	0	83	0

Suspected violations of the Supplier Code can be reported at any time via a publicly accessible whistleblowing system. [See also](#) Corporate governance and compliance, p. 118 onward.

Monitoring and assessing the sustainability performance of suppliers | UNGC 2-7, 10 We have created a tool that draws on publicly accessible information to ensure that potential sustainability risks in our supply chain are monitored on an ongoing basis. Using predefined data sources, such as those provided by the **World Health Organization (WHO)**, the tool identifies any reports that pertain to relevant risks, for example in connection with human rights issues or labor practices, selects them, and automatically forwards them to the appropriate employees in the purchasing department. These reports are also incorporated into the system-based assessment of the general risk of working with that supplier.

Furthermore, we use EcoVadis, a web-based assessment platform for global supply chains, in order to gain a rounded picture of the sustainability performance of our biggest suppliers by revenue. The assessment criteria cover environmental and ethical topics, labor rights, human rights, and sustainable sourcing. We added a second web-based assessment platform in 2023 in order to maximize the coverage.

We set ourselves the target of having audited the sustainability performance of 50 percent of our top 150 suppliers – as measured by our purchasing volume in the prior year – by the end of 2023 and 80 percent of them by 2026. At the end of 2023, the corresponding proportion of audited suppliers was 73 percent, considerably above our target of 50 percent.

DEUTZ Group: Proportion of suppliers audited against sustainability criteria

%	2023	2022	2021	2020
Proportion of suppliers audited	73	62	55	31

In the next step, we plan to establish a process that will make it possible to systematically capture and document the assessment findings and any weaknesses identified. This documentation will then be used as a starting point for the definition of remedial measures in collaboration with the suppliers. [See also](#) Supplier management system, p. 131.

Business partner compliance | UNGC 1-6, 10 As part of a preventive risk management approach, business partners are audited in respect of their sustainability performance using the aforementioned assessment platforms. We introduced a business partner compliance tool at the end of 2020 that is used to audit our business partners for potential misconduct – e.g. in connection with money laundering, unfair competitive practices, corruption and bribery. [See also](#) Corporate governance and compliance, p. 118 onward.

Our original target for 2023 was to have used – or be using – the business partner compliance tool to conduct checks on 90 percent of all existing suppliers with which our purchasing volume for the prior year exceeded €0.5 million. At the beginning of 2023, we tightened up this KPI to only include suppliers that had undergone and actually completed the business partner compliance checks and are therefore no longer going through the audit process. The target for 2023 was adjusted to 20 percent as a result.

As at December 31, 2023, 62 percent of our existing major suppliers¹⁶⁷ were undergoing business partner compliance checks and 19 percent of our existing suppliers had already undergone and completed such checks. We therefore fell only slightly short of our 2023 target of 20 percent.

DEUTZ AG: Proportion of suppliers that have undergone and completed business partner compliance checks¹⁶⁸

in %	2023	2022	2021	2020
Share of suppliers audited	19	2	11	0

Materials Compliance | UNGC 7-8 We purchase components and raw materials for use in engine production that contain an extensive range of compounds, substances, and minerals. As a result, we are subject to international regulations including the regulation pertaining to the registration, evaluation, authorization, and restriction of chemicals (**REACH**), the directive restricting the use of certain hazardous substances in electrical and electronic equipment (**RoHS**), and provisions governing the use of **conflict minerals**.

The **Materials Compliance** function is tasked with ensuring compliance with the aforementioned regulations. Its main responsibilities include continually monitoring developments at regulatory and policy level and determining whether the engines that we produce fulfill the criteria of all the many environmental laws and regulations. The function is also responsible for optimizing processes with regard to the materials and substances that are used. This includes introducing conformity checks in the product development process and in the purchased parts approval process. To achieve these aims, it works closely with Component Purchasing for Series Production and the Supplier Quality department and stipulates the criteria for the selection of production component suppliers with regard to materials compliance. We use an online database for materials declarations with the aim of monitoring supplier compliance with these criteria and improving the management of processes.

As we do not procure minerals directly, we can only assume this responsibility together with our business partners. In order to avoid minerals from conflict-affected and high-risk areas in the supply chain and counteract illegal or unethical procurement practices, we have put in place a corporate policy on conflict minerals as a supplement to the Supplier Code. Among other sources, this policy reflects the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. Since 2022, it has been mandatory for the corporate policy on conflict minerals to be included in all new supplier contracts. We carry out surveys on the use of conflict minerals at regular intervals to ensure compliance with this policy to the greatest possible extent. These surveys use the Conflict Minerals Reporting Template, which was developed by the **Responsible Minerals Initiative (RMI)** to support companies in their efforts to provide their customers with accurate information on the countries of provenance of certain minerals and the smelting plants and refineries they use.

Supplier management system We systematically manage our suppliers using a »supplier cockpit« that enables us to monitor the performance of key suppliers primarily – for now – from a purchasing, logistics, and quality perspective. Combining the two assessment platforms we previously used separately into the »supplier cockpit« will allow us to take the results of the aforementioned assessment platform, the business partner compliance tool, and the risk analyses under the Supply Chain Due Diligence Act (LkSG) into account in our supplier assessments. We launched a medium-term digitalization process in 2021 to facilitate this. One of its aims is to ensure that, from the outset, the assessment of suppliers takes particular account of aspects such as respect for human rights, measures to combat corruption and bribery, and compliance with certain environmental and social standards. In 2024, we plan to provide specialist training for employees in the purchasing department which should enable them to give sufficient consideration to this information when selecting suppliers while also utilizing it in their purchasing negotiations. The first preparatory information events already took place in 2023.

¹⁶⁷ Existing suppliers with which our purchasing volume for the prior year exceeded €0.5 million.
¹⁶⁸ Existing suppliers with which our purchasing volume for the prior year exceeded €0.5 million.

Social responsibility


Product stewardship

An ever-growing global population, finite natural resources, and the steady march of climate change as a result of global warming present fundamental challenges for the future of mobility, and not just in the **on-road** sector. The 2015 **Paris Agreement** aims to limit global warming to well under 2 degrees Celsius compared with pre-industrial levels. The German government is among those that has toughened its climate-related targets as a result, amending the Federal Climate Change Act in 2023. The aim now is for Germany to have cut its greenhouse gas emissions by 65 percent by 2030 (compared to 1990), for it to be greenhouse gas neutral by 2045, and for it to actually have a net negative greenhouse gas footprint by 2050.

The **off-highway** sector also needs to play its part in the achievement of these targets by reducing, as far as possible, the amount of harmful CO₂ emissions that it produces. As a leading manufacturer of engines for off-highway applications, we at DEUTZ believe we have a responsibility to society to make products that proactively move us toward a carbon-neutral future in the off-highway sector, thereby contributing to the achievement of the Paris climate goals. This is why one of the targets in our Dual+ strategy is to offer a climate-neutral portfolio of products and technologies by no later than 2050.

In addition to our own ambition to play an active role in the transition to more sustainable drive systems, the ongoing development of our drive portfolio is also influenced by other legislation aimed at reducing emissions and limiting noise pollution. To establish whether an engine meets the legal requirements, it has to undergo mandatory certification processes. These are carried out by bodies such as Germany's Federal Motor Transport Authority or equivalent foreign authorities like the US Environmental Protection Agency. With regard to conventional diesel-powered internal combustion engines, DEUTZ continually assesses older engine series that are coming to the **end of their lifecycle**, particularly if they cannot be converted to meet future emissions standards. This means that engines that do not comply with current standards or cannot be upgraded to achieve compliance will be progressively withdrawn from the portfolio.

Open to new technologies Different applications with varying power requirements call for a range of drive solutions. Construction equipment and agricultural machinery, for example, need a great deal more power and energy than forklift trucks or lifting platforms. For this reason, we are pursuing various technological approaches in the further development of our engine portfolio. These range from innovations in internal combustion technology, including the use of sustainable fuels such as hydrogen, **HVO** and **eFuels**, right through to drive electrification.

With effect from January 1, 2022, in order to provide transparency around how we are working toward green mobility, we put a new reporting structure in place with the introduction of the Green and Classic segments. All activities connected with the development and production of our non-diesel drives have since been assigned to the Green segment. In 2023, this included hydrogen-powered drives and gensets, electric drive systems, and the related service business, the battery management service provider Futavis, and the DEUTZ subsidiary Torqeedo, which focuses on electric boat drives.  **See also** Business model and segments, p. 36 onward, and Strategy and objectives, p. 37 onward.

DEUTZ Green In mid-2023, we commenced a series of organizational changes to the Green segment that are aimed at grouping together the development and sales activities relating to alternative drives in order to maintain an even sharper focus on the needs of the market and customers. The strategic realignment also affects the investment in the Torqeedo Group, the sale of which to Yamaha Motor Co., Ltd. was announced in January 2024.¹⁶⁹  **See** Events after the reporting period, p. 224, for more information on the sale of Torqeedo.

When introducing the new segment reporting structure, we had raised the prospect of the proportion of consolidated revenue generated by our Green segment reaching between 5 and 10 percent by 2025. We currently no longer consider this KPI to be suitable for measuring our progress in building a green portfolio, which is why it is no longer reported as part of our sustainability strategy. This is partly due to the aforementioned sale of the Torqeedo Group, whose revenue accounted for around 89 percent of total segment revenue in 2023 as a whole, and partly due to the fact that demand for alternative drive solutions is taking longer than anticipated to ramp up.

Hydrogen-powered drive solutions | UNGC 7-9 We firmly believe that the internal combustion engine will continue to have a dominant role in various mobile machinery applications in the years ahead. Indeed, it will need to do so to help facilitate a smooth transition to more sustainable drive systems. For this reason, our development activities are also being directed toward developing more climate-friendly internal combustion engines that can be run on alternative, sustainable energy sources. One such energy source is hydrogen.

Our hydrogen engine, which meets current emissions thresholds for zero-emission heavy commercial vehicles, is due to go into production as scheduled at the end of 2024.

At first, our TCG 7.8 H2 hydrogen engine will be used in stationary applications such as generators. We received our first large order, for 100 hydrogen-powered **gensets** (H2 gensets), from China at the end of 2023. This order represents a major strategic milestone in many regards, as it shows that we can fulfill market requirements with our full range of products, and not just with our conventional drive portfolio, and will allow us, and our customers, to gain invaluable experience with this technology. The H2 gensets will initially be powered by gray hydrogen, which is a by-

¹⁶⁹ Subject to the customary regulatory approvals.

product of industrial processes. This can reduce carbon emissions per generator by up to 800 tonnes per year compared with conventional electricity generation. The installation of these generators represents a first step toward the creation of the necessary hydrogen technology infrastructure, which can be switched to climate-neutral green hydrogen at a later point in time.

In principle, the hydrogen engine is a viable option for all current DEUTZ applications, including mobile applications, and our intention is for it to deliver on this promise. We are collaborating, for example, with several railway technology providers on the development of a production-ready hydrogen engine for locomotives.

With regard to the commercial vehicle sector, we joined the Hydrogen Combustion Engine Trucks (HyCET) research project consortium in 2022. This four-year project, funded by the Federal Ministry for Digital and Transport, aims to demonstrate the sustainability potential of trucks with hydrogen combustion engines in transportation logistics. As part of the multi-partner project led by the BMW Group, two 18-tonne trucks will be developed and fitted with our TCG 7.8 H2 hydrogen engines. Following successful trials on our test rigs, we delivered the hydrogen engines to our consortium partners in 2023 as planned. The next step, in 2024, is to put the converted trucks through their paces in real life conditions. In addition to environmental benefits, the hydrogen engine also offers economic benefits for freight forwarders and logistics firms. This is partly because of the CO₂ toll introduced for certain diesel-powered trucks at the end of 2023, which will see a surcharge of €200 per tonne of CO₂ emissions levied on top of the existing road toll for heavy goods vehicles. Heavy commercial vehicles classed as zero-emission will initially remain exempt from the surcharge and their operating costs should be comparatively lower as a result.

Another pilot project is scheduled to start this year at the DEUTZ site in Zafrá, Spain, which entails the development of a proprietary ecosystem for the supply of hydrogen and its conversion back into electricity, with the aim of offering it to customers in the medium term.

Electric drive systems | UNGC 7–9 The E-DEUTZ strategy, initiated back in 2017, is to continue playing an instrumental role in the development of green off-highway drive solutions. It aims to create a scalable product portfolio of electric drive systems that are classed as climate-neutral.

In 2023, we successfully brought our 360-volt drive system – developed in accordance with the leading safety standard ISO 26262 – to production readiness and continued with the pilot projects that we had launched with our customers in previous years. These projects focused, for example, on the development of electric versions of concrete pumps, tracked dumpers, crawler cranes, and mini excavators.

In addition, the second generation of our scalable battery system saw us add further variants with a range of capacities to our portfolio of battery products, which we updated from a technical standpoint in particular with regard to their power output and energy density. In 2024, several prototypes of our improved E-DEUTZ high-voltage batteries are scheduled for delivery to our customer Kärcher for use in sweepers.

When machines or vehicles no longer meet the required technical or legal standards after many years of use, the question often arises as to whether they should be replaced or whether it makes more sense to have them modernized by means of a retrofit. Conversion of diesel-powered aircraft tugs to carbon-neutral electric operation is an example of the work that we do with customers in this area. This not only extends the lifecycle of the vehicle and provides an environmentally friendly alternative to purchasing a new vehicle, but also lowers the subsequent operating costs. Testing of these electric vehicles is scheduled to begin in the first half of 2024.

In 2023, our subsidiary Futavis collaborated with a major logistics customer to develop a further high-volt battery for use in temperature-controlled transportation and bring it to production readiness. The battery can be used to power air conditioning units to cool trailers, for example. Production commenced in early 2024 following intensive field testing in 2023, in which the battery traveled for around 400,000 kilometers.

Over the coming years, the multi-site E-DEUTZ development team will focus on continually refining the production-ready 360-volt drive system for customer applications with low to medium power requirements. This means regularly enhancing or adding to its functionality and therefore versatility in line with the latest technological advances – for example, by using more powerful electric motors, a split drive (a drive comprising multiple motors), or batteries with higher energy densities.

Mobile rapid charging station | UNGC 7–9 Electric drive systems are restricted in their autonomy and take longer to »refuel« (recharge) than conventional internal combustion engines. But help is at hand in the form of the DEUTZ PowerTree, a mobile rapid charging station for electric construction vehicles. Built into a ten-foot container, the PowerTree's integrated battery storage system means that machines can be charged on site even when there is no access to mains power. Downtime is reduced to a minimum thanks to a rapid-charge function that is capable of delivering up to 150 kW.

eFuels | UNGC 7-9 Commercial vehicles, tractors, and construction equipment are used for heavy-duty applications and for extended operating periods, so they need a fuel with a high energy density and short refueling times. eFuels may be the answer. They are **synthetic fuels** that are made on a renewable basis using electricity, water, and carbon dioxide (CO₂). If the electricity used to make them is produced entirely from renewable sources and the necessary CO₂ is taken from the atmosphere or from biomass, they can power an internal combustion engine on a fully carbon-neutral basis and thus offer an opportunity for decarbonization. Compared to electrified solutions, eFuels also have the advantage that they can be refueled quickly via an existing global infrastructure.

With the aim of promoting the production of eFuels as an alternative fuel and increasing their acceptance, we joined the eFuel Alliance in 2021, an interest group of companies committed to the industrial production of synthetic fuels from renewable energy sources. We also actively support research projects for the industrial production of eFuels, which are to be tested on non-electrifiable work machines and generators.

Our entire diesel engine range was already approved for the use of eFuels in mid-2021.

HVO | UNGC 7-9 In addition to the use of eFuels, operating combustion engines with hydrotreated vegetable oil (HVO) is a more environmentally friendly alternative to conventional diesel engines. HVO is an advanced biofuel that consists of 100 percent renewable raw materials. The majority of these come from waste materials such as used cooking oil, animal fats and residues from vegetable oil processing, which is why HVO production does not compete with food production. Another advantage is that HVO is available in large quantities and is compatible with all modern diesel engines.

At the end of 2022, we approved our entire TCD engine range for the use of alternative diesel fuels. This means that all DEUTZ engines that meet the **EU Stage V emissions standard** are approved for HVO operation, which makes a direct contribution to climate protection, as its use improves the carbon footprint of our engines by up to 90 percent. Compared to fossil diesel, there is also a significant reduction in the emission of other pollutants such as particulates or nitrogen oxides and, due to its higher purity, significantly less contamination in the engine.

At the beginning of 2024, we opened an HVO filling station on the factory premises at our headquarters in Cologne-Porz to refuel our diesel-powered vehicles. Our gensets, which are used in emergency power generators at our plant, for example, also run on this alternative fuel. By switching to HVO, we are providing further proof that diesel engines can also make a contribution to climate protection in the short term and without great effort.¹⁷⁰

Innovative diesel engines | UNGC 7-9 The TCD 5.2 is another example of how the environmental aspect is always a priority in the development of our drive portfolio. This diesel engine with four cylinders and a displacement of 5.2 liters was developed to production readiness as planned in 2023 and, looking ahead, is intended to replace larger six-cylinder engines. Its most notable feature is that it does not use exhaust gas recirculation and is instead equipped with an efficient nitrogen oxide (NO_x) aftertreatment system and a catalytic soot filter for reducing particulate emissions. The absence of exhaust gas recirculation means the engine can be made more powerful, which allows its capacity and thus also fuel consumption to be reduced. Combustion efficiency is improved as well, reducing fuel consumption even further. The TCD 5.2 can be run on alternative fuels such as biodiesel and is also primed for hybrid-electric operation thanks to the 48-volt electric drive option. [📖 See also](#) Research and development, p. 42 onward, for more information on the development of the diesel engine portfolio.

Environmentally friendly and resource-efficient services | UNGC 7-9 We are playing our part in mitigating climate change by continually reducing the fuel consumption and emissions of our engines and developing carbon-neutral drive solutions. But we go further than that. We also offer our customers a variety of services that help to reduce pollution and conserve resources. One example is the provision of reconditioned engines and spare parts under our DEUTZ **Xchange** program. Old engines are professionally reconditioned and wearing parts are replaced with genuine DEUTZ components. At the end of the process, the engines are as good as new and identical to the original ones in every respect. This extends the lifecycle of engines and provides, as with the retrofits described above, a cost-effective and, above all, environmentally friendly alternative to purchasing a brand-new engine.

Digital solutions are a priority for us in the expansion of our service portfolio, as they can provide an eco-friendly alternative to analog-only formats. These digital services include S-DEUTZ Telematics, which allows the customer to plan service events with greater efficiency thanks to digital engine condition checks with integrated diagnostics and fault interpretation. The technician at the service outlet is able to use the digitally collected data to plan ahead and make sure that the parts and tools needed to fix a fault are available at the right time. In addition, it allows for planned maintenance and unplanned repairs to be combined, reducing the number of visits to the service outlet.

¹⁷⁰ In Germany, HVO is currently only approved and available for commercial vehicles.

Product quality

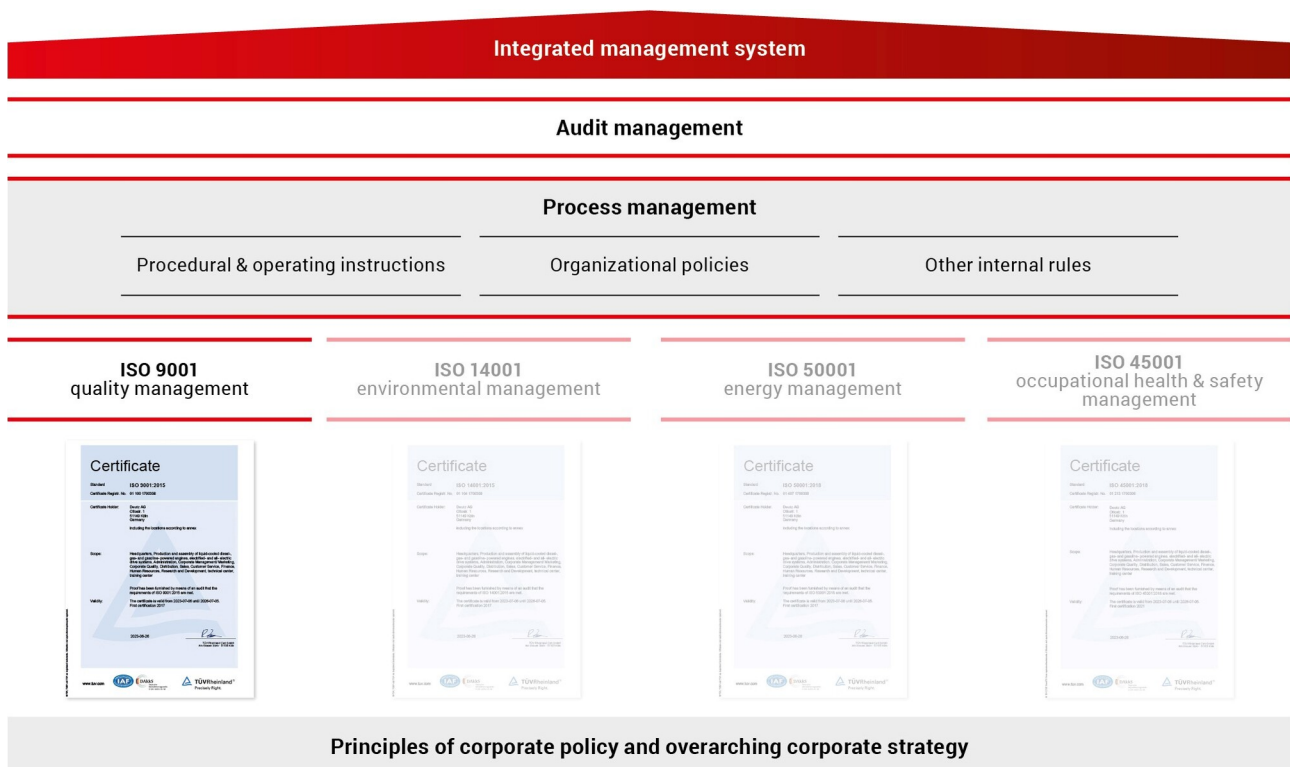
The success of a company depends to a large extent on the satisfaction of its customers. After all, this is crucial if these relationships are to continue or be stepped up. Customer satisfaction is, of course, directly influenced by having an innovative product offering that is firmly focused on customers' needs and expectations. However, the quality of the products and/or services is equally important.

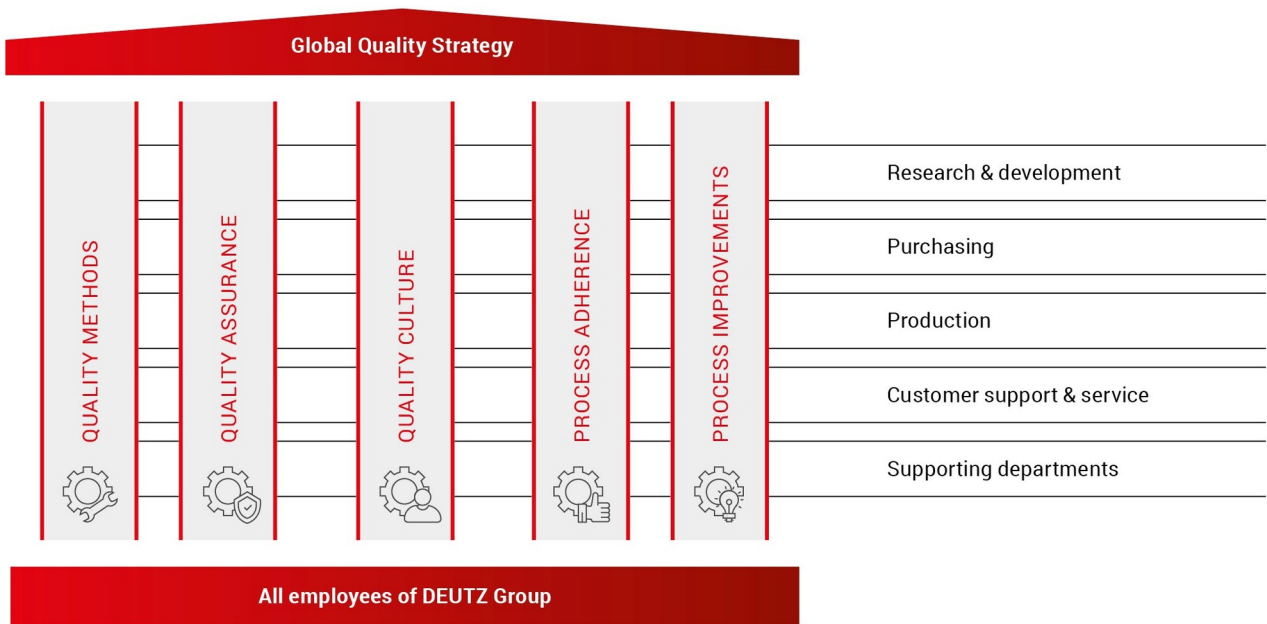
We act as a strategic partner for our customers and play a key role in their value chains. This means that defective products, for example, may result in production delays at the installation stage for customers or even cause end customers to experience malfunctions while subsequently using the application in the field. At the same time, quality defects and the resulting complaints may lead to additional financial costs and investments in resources for us as well. Consequently, a high standard of product and service quality ensures not only that our customers can remain competitive and well positioned in their markets but also that we can maintain our long-term position.

Quality management as part of the integrated management system DEUTZ AG's integrated management system (IMS) specifies the rules and processes for certain organization-wide functions and thus provides the basis for collaboration between all employees. The IMS is grounded in the general principles of the corporate policy as well as the overarching corporate objectives. Its functioning is subject to regular review by means of internal system and process audits.

Quality management forms part of the integrated management system and sets out a central strategy covering the entire DEUTZ Group. It is designed to ensure that all processes, from the development to the delivery of our engines, adhere to strict quality guidelines. The Corporate Quality Department bears overall responsibility for the continuous improvement of quality management. This is achieved, for example, through harmonization of processes and methods and through permanent, standardized monitoring of all quality management processes. The ongoing analysis and internal audits that this involves are aimed at identifying potential for improvement so that appropriate measures can be devised to enhance quality across the Group on a continual basis.

The Corporate Quality Department is led by the Head of Quality, Safety, Health, and Environment, who reports directly to the Chairman of the Board of Management.





ISO 9001 certification The central plank for quality management systems is the DIN EN ISO 9001 international standard for quality management systems. An independent auditor conducts regular reviews to verify whether the relevant quality requirements are being met. As at the end of 2023, all DEUTZ Group production sites had been certified either independently or as part of the Group certification. For 2023, a recertification audit conducted by the TÜV product standards regulator confirmed that we continue to meet the requirements of DIN EN ISO 9001.

Quality strategy Across all units, we pursue the overarching objective of preventing defects from occurring in the first place. This is preferable to having to rectify them further down the line, which can tie up resources and be expensive. For this reason, we have a wide-ranging quality and process management system in place to address the risks resulting from quality defects. The system covers everything from development, purchasing, and production to aftersales care and the handling of complaints. There is also a particular focus on the ongoing optimization of process efficiency.

The assessment of product quality requires the use of quality targets that can be further broken down into quality criteria and quality specifications. Product-related quality targets may cover, for example, durability, delivery quality, quality in the field, delivery reliability, and the length of time taken to rectify defects. Various key figures are identified and calculated throughout the value chain so that the achievement of these targets can be measured. As well as the **zero-hour defect rate** and **rate of defects in the field**, these include metrics for measuring the performance of our suppliers, such as adherence to delivery schedules and supply quality.

To monitor the quality situation, we have established a quality dashboard that provides round-the-clock access to all relevant key figures and to which all relevant Group companies are connected.

• **Quality in development** The basis for high-quality products is to a large extent created during the development stage. In order to meet customers' expectations of reliable products that offer high performance and durability in the field, we make use of both preventive and reactive methods. Examples of the preventive development methods include clearly setting out the product specifications in a document at the beginning of each project and using failure mode and effects analysis (FMEA). The latter is a systematic, prevention-focused form of analysis that identifies and evaluates risks and/or sources of risk in technical systems so that measures to minimize the risks can then be taken. The reactive methods include reliability projections, analysis of data from the field to ensure any design errors made in the past are not repeated, and the identification of the most important zero-hour defects and field defects. We use various quality tools for these purposes, one of which is the cause-and-effect diagram. This provides a means of systematically tracking down the potential causes of a problem that has occurred or may occur and visualizing the interrelationships. The root cause of the defect, e.g. the material, the machine, the method, or the manpower, can then be identified, investigated, and resolved in a targeted manner.

- Quality in purchasing** Component defects not only have the potential to cause issues at the assembly stage of the production process but can also lead to malfunctions further down the line. A single engine contains well over 300 individual parts, more than 90 percent of which we source from external suppliers. The quality of an engine therefore depends to a large extent on the quality of the supplied components.

We use a supplier cockpit to evaluate and categorize the performance of our suppliers. The evaluation covers four areas – purchasing, logistics, quality, and development – although we are working toward assessing and taking account of sustainability criteria to a greater extent as well in the future. Currently, the evaluation draws on various key figures such as delivery reliability, defect rate, sample quality, and complaints about manufacturing. The information obtained is used as the basis for continuous supplier development. In order to ensure that suppliers comply with our quality requirements, we regularly conduct **on-site audits**, which already cover certain sustainability-related aspects. [See also](#) Supplier management, p. 129 onward.

- Quality in production** Quality management in the production units of the DEUTZ Group is largely organized at local level. For example, each of our production sites, including those outside Germany, has its own quality department, and there are also quality departments for the different areas, such as assembly and production.

Various quality assurance methods and tools are used to ensure that our products have a high level of maturity. These include the **lean management system** [See also](#) Production and logistics in the combined management report, p. 44 onward. and the use of quality gates. The latter are checkpoints in the production process that require predefined and measurable quality criteria to be met before approval can be given to proceed to the next phase of production. This means that if there is a documented failure to meet the predefined quality criteria, it will not be possible to commence the subsequent assembly phase.

In addition, we use statistical process control (SPC) as a prevention-based tool to maintain process stability in mechanical fabrication at the shaft center and at the production facility in Zafra, Spain. SPC involves the real-time measurement or monitoring of production and/or process parameters. If statistically preselected warning and intervention limits are exceeded, a decision as to whether to intervene in the process is made on the basis of statistical probabilities. The objective in doing so is to improve product quality.

In order to continually improve production processes, data from production and assembly processes is analyzed on an ongoing basis, internal **audits** are conducted to identify potential for improvement, and quality control loops are put in place. These loops, with the aid of certain indicators, serve to combine the processes of target definition, measurement of target achievement, and formulation of appropriate measures for improvement.

- Complaints management** In the event of product complaints or defects, we endeavor to resolve them swiftly and effectively and, at the same time, to take action that will permanently remedy the issues identified so that repeat occurrences are avoided. Cross-functional teams handle product complaints using the 8D problem resolution method. This eight-stage process begins with a description of what caused the problem and runs through various other steps before immediate measures are taken to rectify the fault. It also targets a continuous process of improvement. The aforementioned cause-and-effect diagram is used to identify the cause of the defect. [See also](#) Quality in development, p. 136.

Quality awareness Quality management is an ongoing process that is seen as a core task for the Company and needs to be put into practice every day by every employee. Cross-departmental workshops are held regularly as a means of strengthening quality awareness and the Company's zero-error culture. The focus here is on imparting knowledge and establishing a 'lessons learned' culture that is geared toward continuous improvement. In addition, all employees have the opportunity to participate in training on the application of the tools and methods used in quality assurance.

Corporate citizenship

In our Powering Progress program, we focus on more than simply improving our commercial performance. [See also](#) Sustainability strategy and objectives, p. 116 onward. We also endeavor to make a positive and sustainable contribution to society, particularly in the regions in which our operations are located. A groupwide donation and sponsorship strategy and an accompanying organizational policy provide a mandatory framework for our activities in these areas. As well as defining responsibilities and decision-making processes, they set out the principles for our corporate citizenship activities and aim to ensure their effectiveness and legal integrity – particularly with regard to potential conflicts of interest and measures to combat corruption and bribery – by laying down binding rules.

As part of the »Passion« area of action under our Powering Progress program, we held a cross-departmental workshop in 2022 to examine the question of how the DEUTZ Group can build on its engagement as a corporate citizen in a targeted way. We used the findings from the workshop to update our donation and sponsorship strategy in 2023, broadening the focus from the promotion of education, innovation, and environmental projects to also include sport and cultural activities.

In 2023, DEUTZ AG and DEUTZ Spain donated a total of around €70,000. This money was distributed to a variety of organizations, such as the German Sports Aid Foundation, which supports competitive sport in Germany, an association in Cologne, where our headquarters are located, whose work focuses on education and youth support, and – prompted by the earthquake in Turkey and Syria – the relief organization Malteser Hilfsdienst e.V. We also made in-kind donations, for example to a charity that offers after-school care for children and young people, including cultural, creative, and sports activities, homework supervision, tuition, and preparation for the world of work. Another in-kind donation was a **genset** supplied by our Moroccan subsidiary Magideutz to an earthquake-hit region of Turkey. Furthermore, we and our employees play an active role in local sports events and support local sports clubs by sponsoring them.

Nicolaus August Otto Award We regard innovation and a pioneering spirit as the driving force behind progress of any kind, and nowhere is this reflected more than in the corporate values that we put into practice across the Group. In addition, we aim to support advances in wider society by promoting innovative ideas in fields such as alternative drives, mobility, and pioneering spirit. That is why, in 2019, we established the Nicolaus August Otto Award, named for the founder of DEUTZ AG and co-inventor of the four-stroke engine. The award is presented annually and endowed with prize money of €30,000.

In 2023, the Nicolaus August Otto Award was bestowed on Professor Wan Gang, who formerly headed up the New Energy Automobile Engineering Center and later became Minister for Science and Technology of the People’s Republic of China. He was given the award in recognition of his research and other pioneering work, including at Clausthal University of Technology and at Audi AG.

Nurturing young people We regard education as the foundation of a sustainable society. This is why our subsidiary DEUTZ Spain started work on the DEUTZ Business School (DBS) at its site in Zafra in 2017. The objective was, and still is, to support economic development in a region where educational institutions such as the business school are rare. The DBS aims to equip young people with the knowledge and skills they need to meet current and future requirements of business and of the labor market. In addition to university lecturers, the teaching is also provided by managers from DEUTZ Spain who are certified lecturers. The programs on offer are geared toward the needs of companies in all sectors. They focus on dual vocational training, university courses in lean management, and language courses with official certification. Around 1,000 students gained a certificate after completing DBS courses in 2023.

Our training center at the headquarters in Cologne also engages in corporate citizenship activities. [See also](#) HR management, p. 123 onward. For more than 20 years, we have been working with the charity IN VIA to provide training and labor market integration support at the center. The participants are young people who have difficulties finding a job after leaving school. Over a period of ten months, they are prepared for working life and receive basic training in metalwork and warehouse logistics.

In addition, we open our doors to even younger visitors each year as part of our involvement in the Germany-wide Girls’ Day and Boys’ Day initiatives.

Environmental responsibility

Environmental and climate protection

We believe that we have a responsibility to society to play our part in protecting the environment and mitigating climate change around the world by developing innovative drive solutions for our customers. Furthermore, we strive to fulfill our responsibility in this area by continuously optimizing the processes and activities associated with our own business operations with regard to their impact on the environment and society.

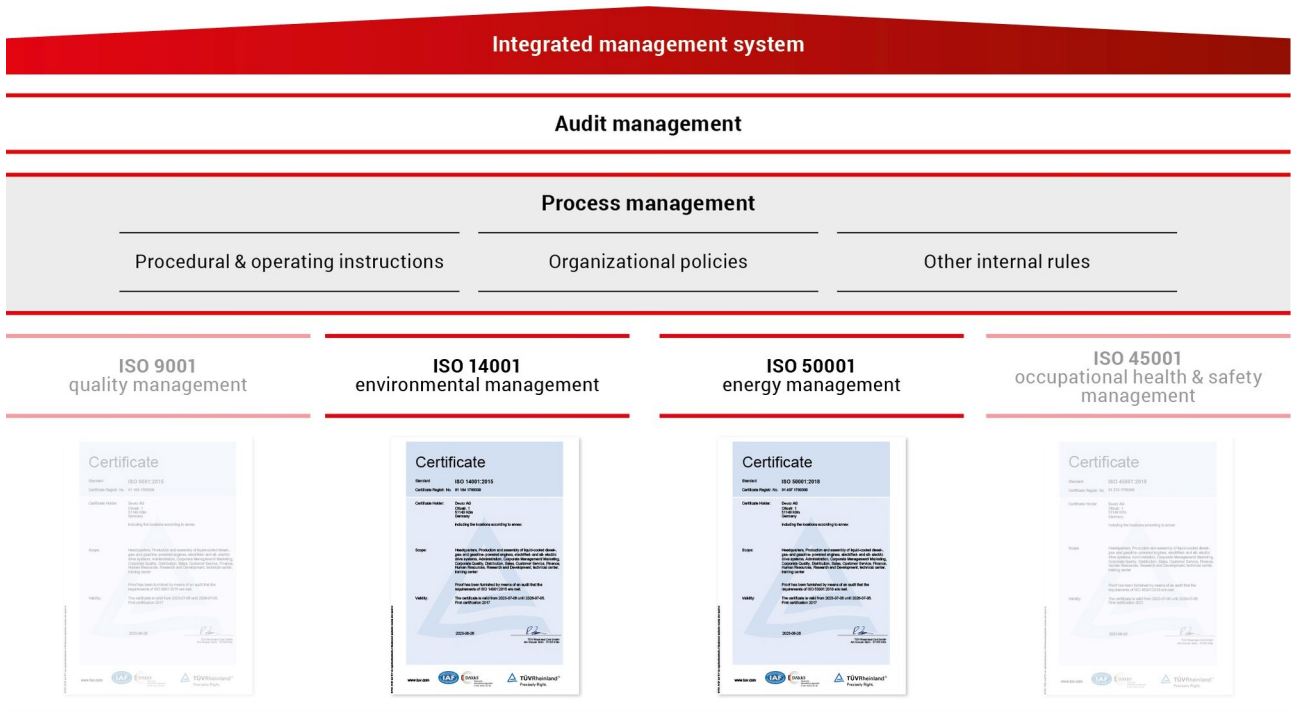
Our production sites across the Group are largely managed at local level due to differing circumstances at each location, which is why the following remarks refer in the main to the DEUTZ AG network of production sites. Despite our decentralized organizational structure, we have set a number of targets as part of our sustainability strategy that – unless otherwise specified – relate to the production sites¹⁷¹ of the Group as a whole.

Our activities in connection with implementing the **Corporate Sustainability Reporting Directive (CSRD)**, which we are required to apply from January 1, 2024, include drawing up a groupwide climate strategy and bringing our existing environmental KPIs and related objectives into line with specific requirements on environmental, social, and corporate governance issues in accordance with the **European Sustainability Reporting Standards (ESRS)**.

ISO 14001 and ISO 50001-certification The integrated management system (**IMS**) used by DEUTZ AG and our Spanish subsidiary DEUTZ Spain covers areas such as environmental protection and energy. See also Product quality, p. 135 onward, for further information on the IMS.

The environmental management system, which is intended to help to continually improve our overall environmental performance, meets the criteria of the international standard DIN EN ISO 14001:2015. The energy management system, meanwhile, meets the requirements of the energy management standard DIN EN ISO 50001:2018. It enables the continuous monitoring of consumption and energy flows, which in turn facilitates the effective planning and implementation of optimization measures. The conformity of the IMS with regard to the various scopes is reviewed annually by an independent certification body and was recertified in the reporting year. All ISO certificates can be viewed on our website.

The ISO 14001:2015 and ISO 50001:2018 certifications cover around 80 percent of the DEUTZ Group’s 2023 sales volume.¹⁷²



¹⁷¹ Excluding joint ventures.
¹⁷² Including Torqueedo.

Controls and legal conformity | UNGC 7 The activities of certain operational areas of the business, such as research and development, mechanical metalworking, the assembly line, and the paintshop, carry a risk of having harmful effects on the environment. An internal team of specialists together with external experts and certification bodies inspect these areas regularly to enable possible hazards and potential for improvement to be identified at an early stage. The inspections focus on verifying compliance with our own objectives and specifications and with statutory requirements. An approval procedure ensures that the use of hazardous substances in production that could be detrimental to the safety of employees, or harmful to the environment if they are improperly handled, is minimized wherever possible. [See p. 129 onward, Supplier management](#), for further information on materials compliance.

Measures to reduce energy consumption | UNGC 7-9 In 2023, with the aim of progressively optimizing energy consumption, we continued to focus on increasing the energy efficiency of existing buildings and facilities and on the optimization of existing systems. This included measures to improve the heating network at our head office in Cologne-Porz and the compressed air system at the Cologne-Kalk plant. In addition, we are continuing to gradually expand the use of **cold tests** for testing certain diesel engines. Unlike in conventional hot testing, cold testing involves running diagnostic programs with hardly any fuel being used. Both hot and cold tests replicate the real-life operation of an engine to check whether it is functioning properly. Furthermore, 2023 saw the continuation of the phased replacement of conventional lighting with LED lighting and the optimization of switch-off management, which involves machinery being turned off automatically when not in use.

A progressive reduction of electricity consumption is not all that we are striving to achieve, however. We also intend to promote the generation of power from alternative or renewable energy sources, which is why all of DEUTZ AG's German production sites only purchase green electricity. Having brought a number of photovoltaic systems on stream at various sites in 2022, for example on parking lot roofs at the site in Zafra (Spain), and at our subsidiary Magideutz in Sapino (Morocco), we made preparations in 2023 to install a further system in Cologne-Porz. The new system is scheduled to start up in 2024.

DEUTZ Group: Energy consumption at the production sites¹⁷³

MWh	2023	2022	2021	2020	2019
Electricity	83,895	86,838	85,629	72,678	87,334
Natural gas	22,142	28,169	33,558	29,158	35,989
District heating	9,395	9,825	13,984	11,262	10,969
Heating oil ¹⁷⁴	12,734	2,563	2,954	2,317	2,685
Diesel fuel ¹⁷⁵	17,423	23,606	22,590	18,951	20,764
CNG ¹⁷⁶	0	0	0	108	72
LPG ¹⁷⁷	404	137	160	245	390
Gasoline ¹⁷⁸	367	667	50	0	0
Hydrogen ¹⁷⁹	632	133	41	0	0
Total	146,992¹⁸⁰	151,938¹⁸¹	158,966	134,720	158,205

In 2023, overall energy consumption at the DEUTZ Group production sites decreased by 3.3 percent year on year to 146,992 megawatt hours. This fall is mainly attributable to the significant reduction in the consumption of electricity, natural gas, and diesel, which went down for various reasons, including cost-cutting measures and the mild weather.

¹⁷³ Excluding joint ventures.

¹⁷⁴ At 10.5 kWh/liter (mean).

¹⁷⁵ At 9.85 kWh/liter (mean).

¹⁷⁶ At 10.0 kWh/m³ for CNG (H) (mean) and 8.2 kWh/m³ for CNG (L) (mean).

¹⁷⁷ At 12.8 kWh/kg (mean).

¹⁷⁸ At 8.55 kWh/liter (mean).

¹⁷⁹ At 33.3 kWh/kg und 3 kWh/Nm³.

¹⁸⁰ As a result of differing accounting periods, the total for 2023 includes an extrapolated figure for the Atlanta production site for December 2023.

¹⁸¹ Due to differing of accounting periods, the total published in the 2022 non-financial report included an extrapolated figure for the Atlanta production site for December 2022. The total figure for 2022 was retrospectively adjusted in line with actual consumption.

CO₂ emissions | UNGC 7–9 The majority of the scope 1 emissions¹⁸² from our production sites across the Group are generated in connection with testing in the area of research and development and as part of production quality controls. This testing involves using rigs to replicate the real-life operation of engines, which of course produces emissions. The majority of the scope 2 emissions¹⁸³ are generated in connection with production processes and other business operations. To reduce the emissions, existing systems and processes (e.g. quality control processes) are being progressively optimized. One example of this is the aforementioned **cold test**.

DEUTZ Group: CO₂ emissions from production sites¹⁸⁴

Tonnes CO ₂ e ¹⁸⁵	2023	2022	2021	2020	2019
CO ₂ emissions (scope 1) ¹⁸⁶	12,680	12,845	13,590	11,565	13,590
CO ₂ emissions (scope 2) ¹⁸⁷	1,196	6,413	6,467	33,159	38,828
Total CO₂ emissions	13,876¹⁸⁸	19,259	20,057	44,724	52,418

DEUTZ Group: CO₂ emissions from production sites per manufactured engine¹⁸⁹

CO ₂ e (kg) ¹⁹⁰	2023	2022	2021	2020	2019
Emissions per engine	70.4¹⁹¹	95.7	104	331	250

Reflecting the decrease in overall energy consumption and successfully implemented savings measures, CO₂ emissions from our production sites fell by -28 percent in 2023 compared with 2022. Over the same period, CO₂ emissions per manufactured engine went down by -26.4 percent.

Under our sustainability strategy, we set ourselves the target for 2023 of reducing the CO₂ emissions of our production sites and per manufactured engine¹⁹² by 61 percent and 66 percent, respectively. The equivalent targets for 2026 are for reductions of 66 percent and 70 percent respectively.¹⁹³

In the 2023 reporting year, the production sites' CO₂ emissions fell by -72.9 percent and the CO₂ emissions per manufactured engine by -76.5 percent compared with 2017. This means that we significantly exceeded our targets for 2023 and would have already achieved our targets for 2026 too.

¹⁸² CO₂ emissions from the production sites of the DEUTZ Group, including Torqeedo, excluding joint ventures. Scope 1 and scope 2 emissions are calculated in accordance with the Greenhouse Gas Protocol using the BAFA emissions factors and emissions factors of local energy providers (market-based method pursuant to the Greenhouse Gas Protocol's scope 2 guidance); scope 1: CO₂ emissions from diesel, natural gas, LPG, heating oil, CNG, gasoline, and hydrogen caused by burning these fuels in our own facilities; scope 2: CO₂ emissions relating to purchased energy, for example electricity and district heating.

¹⁸³ CO₂ emissions from the production sites of the DEUTZ Group, including Torqeedo, excluding joint ventures; scope 1 and scope 2 emissions are calculated in accordance with the Greenhouse Gas Protocol using the BAFA emissions factors and emissions factors of local energy providers (market-based method pursuant to the Greenhouse Gas Protocol's scope 2 guidance); scope 1: CO₂ emissions from diesel, natural gas, LPG, heating oil, CNG, gasoline, and hydrogen caused by burning these fuels in our own facilities; scope 2: CO₂ emissions relating to purchased energy, for example electricity and district heating.

¹⁸⁴ CO₂ emissions from the production sites of the DEUTZ Group, including Torqeedo, excluding joint ventures; scope 1 and scope 2 emissions are calculated in accordance with the Greenhouse Gas Protocol using the BAFA emissions factors and emissions factors of local energy providers (market-based method pursuant to the Greenhouse Gas Protocol's scope 2 guidance).

¹⁸⁵ CO₂e=carbon dioxide equivalents.

¹⁸⁶ Scope 1: CO₂ emissions from diesel, natural gas, LPG, heating oil, CNG, gasoline, and hydrogen caused by burning these fuels in our own facilities.

¹⁸⁷ Scope 2: CO₂ emissions relating to purchased energy, for example electricity and district heating.

¹⁸⁸ The guarantees of origin for electricity from renewable sources are cancelled in the German register of guarantees of origins (HKNR). The guarantees for electricity used in 2023 will be cancelled in the first half of 2024.

¹⁸⁹ Including Torqeedo, excluding joint ventures. The key figure »emissions per manufactured engine« is calculated by dividing total emissions by the number of engines made. CO₂ reporting covers scope 1 (CO₂ emissions from diesel, natural gas, LPG, heating oil, CNG, gasoline, and hydrogen caused by burning these fuels in our own facilities) and scope 2 (CO₂ emissions relating to purchased energy (e.g. electricity and district heating)). Only internal combustion engines and electric motors are counted as products, i.e. no other components such as batteries, gear wheels, or conrods for non-DEUTZ engines. Scope 1 and scope 2 emissions are calculated in accordance with the Greenhouse Gas Protocol using the BAFA emissions factors and emissions factors of local energy providers (market-based method pursuant to the Greenhouse Gas Protocol's scope 2 guidance).

¹⁹⁰ The guarantees of origin for electricity from renewable sources are cancelled in the German register of guarantees of origins (HKNR). The guarantees for electricity used in 2023 will be cancelled in the first half of 2024.

¹⁹¹ The guarantees of origin for electricity from renewable sources are cancelled in the German register of guarantees of origins (HKNR). The guarantees for electricity used in 2023 will be cancelled in the first half of 2024.

¹⁹² Including Torqeedo, excluding joint ventures.

¹⁹³ The targets for 2026 were set at the beginning of 2022.

Calculation of scope 3 emissions and product carbon footprint In 2022, we calculated our scope 3 emissions internally for the first time on the basis of data from 2021, which accounted for 99.9% of our total emissions according to the calculation at that time. We had originally planned to disclose the scope 3 emissions for 2023 in this report. However, we have postponed our carbon accounting, including the recalculation of our scope 3 emissions, to 2024 as part of the preparations for the project to implement **CSRD**. We will therefore only will publish our scope 3 emissions when we publish our CSRD-compliant sustainability report for 2024. In this report, we will also set out our climate strategy, which we will develop on the basis of the results of carbon accounting and the emissions hotspots that we identify in this process.

In 2023, we carried out a **product carbon footprint (PCF)** review for our TCD 6.1 engine in collaboration with a customer, having already carried out PCF reviews for our TCD 2.9 engine and for the 360-volt system from the E-DEUTZ program in 2022.

Becoming climate neutral by 2026 | UNGC 7–9 Our primary objective is to proactively push ahead with the use of alternative, carbon-neutral drive systems in the **off-highway** sector. This raises the prospect of significantly reducing the carbon footprint of the applications in which they are deployed. We are also playing our part in lowering emissions and achieving the Paris climate goals by endeavoring to continually optimize our processes. That is why we have set the target in our Dual+ strategy to make our business climate-neutral along the entire process chain and to offer a completely climate-neutral portfolio of products and technologies by no later than 2050. We intend to achieve this by carrying out various initiatives. [See also](#) Product stewardship, p. 132 onward, and Strategy and objectives, p. 37 onward.

Waste | UNGC 7–9 The majority of the waste produced at our production sites is directly related to the manufacturing of engines and metal products as well as to their painting and subsequent shipping. The types of waste that occur therefore comprise recyclable metal fragments and bits of wood, plastic, and paper, plus liquids that are used to treat, clean, and cool the metal surfaces of engine components. Because these liquids contain oil, they mainly constitute waste for disposal.

In order to reduce the amount of waste for disposal, old machinery is replaced on an ongoing basis, which tends to automatically lead to a reduction in the volume of waste that occurs. We also continually strive to reduce the volume of packaging material used in our internal logistics.

DEUTZ Group: Volume of waste from the production sites¹⁹⁴

Tonnes	2023	2022	2021	2020	2019
Waste for disposal	4,551	4,926	5,061	4,312	6,337
Waste for recycling	16,399	17,328	17,366	11,892	14,160
Total waste	20,949	22,254	22,427	16,204	20,498

We were able to reduce the amount of waste generated at our production sites by a total of 5.9 percent in 2023 compared to 2022; the volume of waste sent for disposal declined by -7.6 percent. The corresponding decrease compared to 2019 amounted to 28.2 percent. By 2023, we aimed to have reduced waste for disposal from our production sites¹⁹⁵ by 10 percent compared with 2019. We thus exceeded this target. Our target for 2026¹⁹⁶ is a reduction of 15 percent compared with 2019, although we would have already achieved this target in the reporting year.

¹⁹⁴ Volume of waste from the DEUTZ Group's production sites, excluding joint ventures.
¹⁹⁵ Excluding joint ventures.
¹⁹⁶ The targets for 2026 were set at the beginning of 2022.

Information on Regulation (EU) 2020/852 – Taxonomy Regulation

Global warming means that sustainability is becoming ever more important and this can now increasingly be seen in the financial sector too, not least since the European Commission introduced its **Sustainable Finance Action Plan**. Both the **Paris Agreement** and the European **Green Deal**, which aims to make Europe the first climate-neutral continent by 2050, to protect, maintain, and improve the European Union's natural capital, and to protect people's health and wellbeing against environmental risks and impacts, place particular emphasis on sustainable investment. This is because capital markets can play a key supporting role in achieving environmental objectives by channeling private financial resources into sustainability-oriented investments (sustainable finance). If these goals are to be achieved, it is critically important to harness the full potential of the internal market. One of a number of packages of measures in this area, Regulation (EU) 2020/852 (EU Taxonomy Regulation) came into force in July 2020. It provides a classification system that is designed to establish a common understanding of the sustainability of economic activities and will be refined on an ongoing basis.

The EU Taxonomy Regulation is primarily focused on environmental objectives. These objectives are (1) climate change mitigation, (2) climate change adaptation, (3) the sustainable use and protection of water and marine resources, (4) transition to a circular economy, (5) pollution prevention and control, and (6) the protection and restoration of biodiversity and ecosystems.

Disclosures on the taxonomy alignment and taxonomy eligibility of economic activities related to the first two of these environmental objectives are required for the 2023 reporting year. Regarding the additions to the EU Taxonomy Regulation made in 2023, both in respect of environmental objectives (1) and (2) and in respect of all economic activities listed in the EU Taxonomy Regulation for environmental objectives (3) to (6), only disclosures on taxonomy eligibility are required for the 2023 reporting year. [See](#) Key performance indicators, calculation rules, and technical screening criteria, p. 143 onward, for further information on taxonomy eligibility and taxonomy alignment.

KEY PERFORMANCE INDICATORS, CALCULATION RULES, AND TECHNICAL SCREENING CRITERIA

Pursuant to Article 8 of the EU Taxonomy Regulation and Article 10 (4) of the Delegated Act (Commission Delegated Regulation (EU) 2021/2178), the key performance indicators to be disclosed for 2023 are the proportions of consolidated revenue, capital expenditure (CapEx), and operating expenses (OpEx) that we have generated from taxonomy-eligible and taxonomy-aligned economic activities.


The definition of a taxonomy-aligned economic activity is still an economic activity that is described in the climate legislation or in environmental legislation supplementing the EU Taxonomy Regulation. It must also meet certain technical screening criteria and must be carried out in accordance with the criteria for the minimum safeguards pursuant to Article 18 of the EU Taxonomy Regulation. The following rules apply with regard to taxonomy alignment:

1. The economic activity makes a substantial contribution to one or more of the six environmental objectives. With regard to climate change mitigation, for example, an economic activity makes a substantial contribution if
 - the activity itself is associated with very low or no greenhouse gas emissions;
 - the activity supports the transition to a climate-neutral economy by 2050 and there is no alternative to it;
 - the activity enables another economic activity to protect the climate.
2. The economic activity does not significantly harm any of the other environmental objectives («do no significant harm» (DNSH), pursuant to Article 17 of the EU Taxonomy Regulation and the Delegated Act).
3. The minimum safeguards have been implemented.

The aforementioned minimum safeguards relate to human rights (including labor rights), bribery and corruption, taxation, and fair competition. The underlying frameworks are the **OECD Guidelines**, the **fundamental conventions of the International Labour Organization (ILO)**, the **International Bill of Human Rights**, and the **UN Guiding Principles on Business and Human Rights**.

In order to meet the minimum protection criteria, the following six requirements regarding human rights due diligence must, among other things, be implemented in the company:

1. A responsible approach to business is firmly enshrined in the management systems, policies, and strategies.
2. The negative effects of a company's own business activities, supply chains, and business relationships are identified and evaluated.
3. Negative and/or disadvantageous effects are stopped, avoided, or reduced.
4. The implementation of measures, and the outcomes, are tracked.
5. The way in which negative effects are dealt with is communicated.
6. Where appropriate, remedial action is initiated or supported.

Revenue-related KPI¹⁹⁷ The proportion of total revenue generated from taxonomy-eligible/taxonomy-aligned economic activities is the amount of consolidated revenue – pursuant to point 1.1.1 of Annex I of Article 8 of the EU Taxonomy Regulation – that is derived from products and services associated with taxonomy-eligible and taxonomy-aligned economic activities, divided by consolidated revenue for 2023 pursuant to IAS 1.82(a). As in the previous year, revenue consist of contracts with customers.  See also the consolidated financial statements, p. 159 onward.

KPI related to capital expenditure (CapEx-KPI) The taxonomy-eligible/taxonomy-aligned CapEx KPI is calculated by dividing taxonomy-eligible/taxonomy-aligned capital expenditure by total CapEx. This encompasses additions to property, plant and equipment and intangible assets during the reporting period before depreciation, amortization, and any remeasurements, including those resulting from remeasurements and impairment for the year concerned and excluding fair value changes. The CapEx KPI also encompasses the acquisition of property, plant and equipment pursuant to IAS 16, paragraph 73, letter e), (i) and (iii), including right-of-use assets in accordance with IFRS 16 Leases, paragraph 53, letter (h), and additions to intangible assets pursuant to IAS 38, paragraph 118, letter e), (i). Goodwill is not included in the CapEx KPI because it is not defined as an intangible asset pursuant to IAS 38.¹⁹⁸ The deviation from the statement of changes in non-current assets results from the fact that the transaction data in the statement of changes in non-current assets for the Group includes discontinued operations.¹⁹⁹

Capital expenditure is taxonomy-aligned if it can be assigned to the following three categories a), b), or c):

- a) Capital expenditure related to assets or processes that are associated with taxonomy-aligned economic activities.
- b) Capital expenditure that is part of a capital expenditure plan to expand taxonomy-aligned economic activities or to allow taxonomy-eligible economic activities to become taxonomy-aligned (not currently applicable to DEUTZ).
- c) Capital expenditure that is related to the purchase of output from taxonomy-aligned economic activities and individual measures pursuant to the EU Taxonomy Regulation that enable certain target activities to become low-carbon or that lead to greenhouse gas reductions. Capital expenditure is also deemed taxonomy-aligned if the products purchased or the individual measures correspond to the description of the particular economic activity and the technical screening criteria and adhere to the minimum safeguards.

KPI related to operating expenses (OpEx-KPI) The taxonomy-eligible/taxonomy-aligned OpEx KPI is defined as the OpEx KPI associated with taxonomy-eligible/taxonomy-aligned economic activities divided by total OpEx. This covers direct, non-capitalized costs that relate to research and development, building renovation measures, short-term leases, maintenance and repair, and any other direct expenditure relating to the day-to-day maintenance and repair of property, plant and equipment. The taxonomy-eligible/aligned OpEx KPI also covers operating expenses that are part of a capital expenditure plan (CapEx plan) to expand taxonomy-aligned economic activities or to transform taxonomy-eligible economic activities into taxonomy-aligned economic activities. Expenditure related to day-to-day operations is not included.

¹⁹⁷ Key Performance Indicator.

¹⁹⁸ See p. 165 onward for further details of the accounting standards


¹⁹⁹ See Statement of changes in non-current assets in the notes to the consolidated financial statements, p. 188 ff.

The OpEx KPI consists of the following items:

- Research and development expenditure that is recognized as an expense during the reporting period; in accordance with IAS 38.126, all non-capitalized expenses and amortization and impairment on development expenditure already capitalized that can be directly assigned to the research and development activities.
- The volume of non-capitalized leases was determined in accordance with IFRS 16 and includes expenses for short-term leases.²⁰⁰
- Maintenance and repair costs relating to ongoing maintenance of property, plant and equipment were determined on the basis of the maintenance and repair costs allocated to the internal cost centers. The relevant cost items are included in various line items in the income statement. Building renovation work that helps to reduce carbon emissions is also included here. As a rule, the cost items are staff costs, costs for services, the cost of materials for maintenance, and costs for regular and unscheduled maintenance and repair work.

To ensure that nothing was counted more than once for the purposes of the OpEx and CapEx KPIs, we first determined all capital expenditure and operating expenses in category c) and then determined the remaining capital expenditure and operating expenses in category a). Any unassigned capital expenditure is non-taxonomy-eligible. Our capital expenditure and operating expenses can be assigned to categories a) and c) only. Revenue is recorded at the level of the individual companies to ensure that it is not counted more than once.

TAXONOMY-ELIGIBLE AND TAXONOMY-ALIGNED ECONOMIC ACTIVITIES IN THE DEUTZ GROUP

Business model Our core competencies are primarily the development and production of drive systems for off-highway applications. The main applications include construction equipment, agricultural machinery, **material handling** equipment such as forklift trucks and lifting platforms, commercial vehicles, and rail vehicles. Our operating activities are divided into the Classic and Green segments. The Classic segment encompasses all activities related to the development, production, distribution, and maintenance of diesel and gas engines as well as the related service business. The Green segment consists of all activities related to new drives.  See also Business model and segments, p. 36.

In view of our business model, the economic activities that are taxonomy-eligible and taxonomy-aligned are essentially those relating to alternative drive solutions. Examples are the DEUTZ hydrogen engine, which is being used in applications such as stationary equipment for the generation of electricity, and the activities relating to the electrification of our engine portfolio under the E-DEUTZ name. The latter include the manufacture of electric drive systems (e.g. for use in construction-site vehicles and ground support equipment), the manufacture of modular battery systems, the manufacture of battery management systems and components by the DEUTZ subsidiary Futavis, and, for now, the manufacture of batteries and electric drives for boats by the DEUTZ subsidiary Torqeedo. In addition to these activities from which we generate external revenue, we also identified investing activities that exclusively result in taxonomy-eligible and taxonomy-aligned CapEx. These activities relate to interdisciplinary topics and individual measures in connection with optimizing energy and heat efficiency within operations.

Identification of taxonomy-eligible and taxonomy-aligned economic activities in the DEUTZ Group As the first step in identifying taxonomy-eligible and taxonomy-aligned economic activities, we assessed which of our business activities might potentially be relevant. We did this by referring to Annexes I and II of Delegated Act 2021/2139 (in its current version) supplementing the EU Taxonomy Regulation. In addition, we analyzed and compared Delegated Acts 2023/2485 and 2023/2486 supplementing the EU Taxonomy Regulation, which were published in November 2023.

²⁰⁰ See also Leases, Note 27, p. 210 onward.

The following table shows the taxonomy-eligible economic activities – pursuant to Annex I of Delegated Act 2021/2139, including the amendments and additions from November 2023 – in the DEUTZ Group that can be assigned to the environmental objective of (1) climate change mitigation and the environmental objective (4) transition to a circular economy. The analysis of economic activities does not reveal any activities for us that take into account the environmental objective (2) climate change adaptation.

Overview and classification of the taxonomy-eligible activities of the DEUTZ Group

Activity	Economic activity at DEUTZ
CCM 3.2. Manufacture of equipment for the production and use of hydrogen	Manufacture of hydrogen engines that produce electricity in combination with a generator in stationary equipment Manufacture of hydrogen engines used to power rail vehicles Manufacture of hydrogen engines used to power boats. Further development with external partners of hydrogen engines for other future applications Test rig operation with hydrogen engines in the development unit at the Cologne-Porz site Preparation for test rig operation with hydrogen engines in the assembly unit at the Cologne-Porz site
CCM 3.4. Manufacture of batteries	Futavis subsidiary: manufacture of battery management systems and Torqeedo subsidiary: manufacture of battery modules, battery management systems, and battery casings in collaboration with supplier Manufacture of the E-DEUTZ battery system for off-highway applications
CCM 3.6. Manufacture of other low carbon technologies	Manufacture of electric drive systems, e.g. for use in construction-site vehicles and ground support equipment Torqeedo subsidiary: manufacture of electric boat drives
CCM 6.5. Transport by motorbikes, passenger cars and light	Use (including leasing) of company cars with an electric, hybrid, or hydrogen
CCM 7.2. Renovation of existing buildings	Renovation of existing buildings in order to reduce energy demand at the DEUTZ Spain site in Zafra (Spain)
CE 3.2. Renovation of existing buildings	Renovation of a new logistics center
CCM 7.3. Installation, maintenance and repair of energy efficiency equipment	Replacement of conventional lighting with LED lighting at the sites in Cologne-Porz and Zafra (Spain) Energy-related optimization of building elements such as windows and doors
CCM 7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	Installation and operation of electric charging stations (PowerTree rapid charging station) at the Cologne-Porz site Installation of electric charging stations at the site in Zafra (Spain)
CCM 7.5. Installation, maintenance and repair of instruments and devices for measuring, regulating and controlling energy performance of buildings	Maintenance and expansion of the energy monitoring system to include new electricity meter points at the Cologne and Ulm sites in order to measure consumption and energy flows at additional points
CCM 7.6. Installation, maintenance and repair of renewable energy technologies	Installation of a photovoltaic system on top of a factory building at the Cologne-Porz site
CCM 9.1. Close to market research, development and innovation	Use of HVO in internal combustion engines Operation of internal combustion engines on test rigs where the brakes are linked to an electric drive that generates electricity Approval of a development test area for the use of HVO in internal combustion engines Construction of an inhouse HVO filling station at the Cologne-Porz site

The dynamic development of the EU Taxonomy Regulations may lead to adjustments in economic activities in the future.

The second step was to analyze the economic activities identified as taxonomy-eligible (listed above) to assess their taxonomy alignment. [See](#) Key performance indicators, calculation rules, and technical screening criteria, p. 143 onward, for details of the requirements for taxonomy alignment

1. Substantial contribution

Substantial contribution In an in-depth analysis, we identified a substantial contribution to at least one of the six environmental objectives and, specifically, to the environmental objective of (1) climate change mitigation.

On the basis of the data recorded for 2021, we calculated a greenhouse gas footprint (scopes 1, 2, and 3) and a product carbon footprint for our electric 360-volt drive system and, for comparison purposes, for our TCD 2.9 diesel engine in 2022 in order to provide evidence of the substantial contribution of the core activities 3.2/3.4 and 3.6 to climate change mitigation. In 2023, a **product carbon footprint** was also calculated for the DEUTZ TCD 6.1 diesel engine. The table »Overview and assignment of taxonomy-eligible economic activities in the DEUTZ Group« indicates the extent and nature of the substantial contributions. A substantial contribution from economic activity 7.2 results from the extensive renovation of existing building infrastructure. Furthermore, a substantial contribution from economic activity 7.3 is achieved through optimization of the thermal and energy performance of the glazing of production buildings and replacement of conventional lighting with LED lighting. The substantial contribution from economic activity 7.4 is achieved through the installation and operation of electric vehicle charging stations, while economic activity 7.6's substantial contribution results from the installation of photovoltaic systems.

2. Adherence to the DNSH criteria We believe that we have a responsibility to society to play our part in protecting the environment and mitigating climate change around the world by developing innovative drive solutions for our customers. Furthermore, we strive to fulfill our responsibility in this area by continuously optimizing the processes and activities associated with our own business operations with regard to their negative impact on the environment and by continuously improving our management of resources. To this end, we have also established an environmental management system certified in accordance with the international DIN EN ISO 14001:2015 standard. [See also](#) Environmental and climate protection, p. 139 onward.

To assess whether the economic activities assigned to environmental objective (1) do no significant harm to the other environmental targets, a review was conducted pursuant to the current version and scope of Commission Delegated Regulation (EU) 2021/2139, appendices A to D, as well as on the basis of the specific requirements for each economic activity.

2.1. Adherence to the DNSH principle for environmental objective (2) adaption to climate change We conducted a climate risk analysis with the assistance of an external consultancy and a climatologist in order to identify the physical climate risks that are

material to our taxonomy-eligible economic activities. The analysis covered the following sites, reflecting the location of our taxonomy-eligible economic activities: Cologne, Ulm, Aachen, Wessling (all Germany) and Zafra (Spain). Future climate-related risks in the categories temperature, wind, water, and solid matter were evaluated for these sites. We took into account both chronic climate risks, i.e. those that persist over a long period of time, and acute (short-term) but severe climate risks. Four different emissions scenarios were used for the future climate outcomes: RCP2.6, RCP4.5, RCP6.0, and RCP8.5. The analysis was carried out for the current and future climate. The necessary data was taken either from the ERAS reanalysis (weather maps) or official climate models from the Intergovernmental Panel on Climate Change (IPCC) or it was compiled and processed using external hazard and risk data sets. In addition, we consider potential risks at our direct supplier locations in order, for example, to adequately take supply risks into account when selecting and evaluating suppliers. No material physical climate risks impacting on the economic activities identified as taxonomy-eligible were ascertained.

2.2. Adherence to the DNSH principle for environmental objective (3) sustainable use and protection of water and marine resources To identify risks in connection with preserving water quality, avoiding water stress, achieving a good environmental status for watercourses and bodies of water, and avoiding the deterioration of the water status, we developed an evaluation form that sites can use to conduct a self-assessment relating to water pollution control, water supply, water disposal, and water consumption. The content of the evaluation form was based on the mandatory environmental impact assessment in accordance with the German Environmental Impact Assessment Act (UVPG). No negative impact resulting from the economic activities was ascertained.

2.3. Adherence to the DNSH principle environmental objective (4) transition to a circular economy The vast majority of the components that we use in our production processes are designed to last for a very long time and to be capable of being refurbished/overhauled, thereby extending their useful life. The components are recyclable and still have significant value at the end of their useful life because they contain materials such as steel, aluminum, or copper. After being recycled by a third party, the recovered materials can be used as a secondary resource in the production of new goods. For example, old batteries are added to a register of old electrical goods maintained by Stiftung Elektro-Altgeräte-Register before important raw materials are recovered from them using efficient metallurgical, chemical, and mechanical recycling processes.

Sustainable waste management is a key component of our environmental management system. Our waste, such as metal, wood, paper, cardboard, cardboard packaging, and plastic, is sold on our behalf to third parties so that it can be recycled and reused.

2.4 Adherence to the DNSH principle for environmental objective

(5) pollution prevention and control We purchase components and raw materials for use in engine production that contain an extensive range of pure substances and minerals and that could cause harm to people and the environment if they are not handled properly. Some of these substances and minerals are subject to international regulations, including the regulation pertaining to the registration, evaluation, authorization, and restriction of chemicals (REACH) and the directive restricting the use of certain hazardous substances in electrical and electronic equipment (RoHS).

An engine has an average of well over 300 parts, and a variety of different substances are contained in these parts or are used in their manufacturing process. The Materials Compliance function makes sure that the engines produced are continually assessed for compliance with the many environmental laws and regulations and that processes are incrementally optimized with regard to the materials and substances used. This includes introducing conformity checks in the product development process. In addition, we define materials compliance criteria to be applied when selecting production component suppliers. In 2020, we introduced an online database for materials declarations with the aim of monitoring supplier compliance with these criteria and improving the management of processes. Over time, all the materials that we process and use will be recorded in the database. This means it will include the full range of substances and minerals, and not just those that are subject to the regulation pertaining to the registration, evaluation, authorization, and restriction of chemicals (REACH) and to the directive restricting the use of certain hazardous substances in electrical and electronic equipment (RoHS).

We intend to use the information on materials declarations held in our database not only to ensure compliance with the law and relevant policies but also to take steps that will help to avoid pollution caused by the use of chemicals and their placement in the market. [See also](#) Supplier management, p. 129 onward. We manage hazardous substances in such a way that the related hazards are either avoided entirely through the use of substitutes or reduced to a minimum as a result of technical and organizational measures. [See also](#) Occupational health and safety, p. 127 onward.

2.5 Adherence to the DNSH principle for environmental objective

(6) protection and restoration of biodiversity and ecosystems The evaluation form referred to in 2.2. based on the Environmental Impact Assessment Act (UVP/G) also forms the basis for the analysis here and, in addition to criteria for assessing the sustainable use of water resources, also includes those that concern the protection of ecosystems and the preservation of biodiversity. No significant adverse effects on the protection of ecosystems and biodiversity resulting from the economic activities were ascertained. None of the sites evaluated that are relevant to our taxonomy-eligible economic activities are near to areas with fragile biodiversity.

3. Adherence to the minimum safeguards A responsible approach to business, including in relation to human rights, bribery and corruption, taxation, and fair competition, is a high priority for us and therefore firmly enshrined in our management systems, policies, and strategies. This is also reflected in the content of various internal organizational policies and our groupwide codes of conduct for employees, suppliers, and other business partners. The codes are based on the German Supply Chain Due Diligence Act (LkSG), the UN Universal Declaration of Human Rights, the ILO's fundamental conventions, the **OECD-Guidelines** for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights, the ten principles of the **United Global Compact** (UNGC) and other sources.

Regular classroom-based courses and annual compliance training are provided to ensure that our employees understand the content of the code of conduct and that they act in accordance with pertinent laws and regulations. The various modules include anti-corruption, antitrust law, health and safety in the office, and the German General Equal Treatment Act (AGG) and non-discrimination. [See also](#) Corporate governance and compliance, p. 118 onward. With regard to taxation, we have established a system for managing tax compliance that is designed to ensure lawful conduct in relation to tax matters and to minimize and avoid financial risk, reputational risk, and consequences under criminal law that could arise in the event of unlawful behavior.

As a member of the United Nations Global Compact, we attach particular importance to respect for human rights and measures to combat corruption. We have adopted a human rights code in order to emphasize our zero-tolerance approach to human rights abuses. The code applies to our employees, suppliers, and business partners alike. [See also](#) Corporate governance and compliance, p. 118 onward, and Supplier management, p. 129.

To identify, as far as possible, any behavior that violates laws or regulations and to immediately put a stop to any proven misconduct, we have provided a publicly accessible whistleblowing system on our website for the purposes of reporting suspected violations of our codes of conduct. Every suspected violation is documented in a uniform way and treated in accordance with the groupwide compliance-policy. [See also](#) Corporate governance and compliance, p. 118.

We have various instruments at our disposal that allow us to identify and evaluate any negative effects on our business activities, supply chains, and business relationships. For example, we conduct quarterly risk inventories for our business activities that also cover risks relating to human rights, bribery and corruption, taxation, and fair competition. With regard to our business partners, we have established a business partner compliance tool with which we check for aspects such as potential misconduct, e.g. in connection with money laundering, unfair competitive practices, and corruption and bribery. [See also](#)

Corporate governance and compliance, p. 118 onward. In addition, we use a tool that draws on publicly accessible information so that we can monitor suppliers on an ongoing basis. Compliance with our supplier code of conduct is also checked during on-site audits.

[See also](#) Supplier management, p. 129.

If any negative or detrimental effects were to be identified, e.g. regarding human rights, bribery and corruption, taxation, and fair competition, we would take action to stop or reduce them and to avoid them in the future. Implementation of the measures above, and the outcomes, would be tracked. Using a suitable channel, we would also communicate the way in which negative effects are dealt with and, where appropriate, would initiate or support remedial action for confirmed violations, including those relating to human rights, bribery, and corruption. In relation to negative effects attributable to our suppliers, we published our first declaration of principles pursuant to LkSG at the end of 2023. Going forward, we will publish an updated declaration on our website at least once a year. The declaration includes a description of how we fulfill our due diligence obligations regarding human rights and the environment, the results of the regular risk analyses, and the implementation of preventive and remedial measures aimed at minimizing risk. [See also](#) Supplier

management, p. 129.

Based on the information in this section, we conclude that we satisfy the criteria for the minimum safeguards. Moreover, we have not identified any violations relating to the aforementioned topics in connection with our business activities. Consequently, there have been no convictions in court in respect of such violations.

Our taxonomy-aligned economic activities encompass those taxonomy-eligible economic activities that verifiably satisfy all criteria in Article 3 of the EU Taxonomy Regulation. [See also](#) Key performance indicators, calculation rules, and technical screening criteria, p. 143.

The following tables show our proportion of total revenue, total CapEx, and total OpEx associated with the economic activities that are taxonomy-eligible pursuant to the EU Taxonomy Regulation and, based on the analysis and checking process described above, can be considered taxonomy-aligned.

We do not engage in any economic activities related to nuclear power and the use of natural gas, and therefore does not disclose information using the relevant reporting forms.

Proportion of revenue in 2023 attributable to goods or services that are associated with taxonomy-aligned economic activities

2023 financial year	Year		Substantial contribution criteria							DNSH criteria (do no significant harm)							Taxonomy-aligned (A.1.) or taxonomy-eligible proportion of revenue (A.2.), 2022	Enabling activity category	Transitional activity category	
	Code ²⁰¹	Revenue	Proportion of revenue, 2023	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Bio-diversity	Minimum safeguards				
Economic activities		Currency €	%	Y; N; N/EL ²⁰²	Y; N; N/EL ²⁰³	Y; N; N/EL ²⁰⁴	Y; N; N/EL ²⁰⁵	Y; N; N/EL ²⁰⁶	Y; N; N/EL ²⁰⁷	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T	
A. TAXONOMY-ELIGIBLE ACTIVITIES																				
A.1. Environmentally sustainable activities (taxonomy-aligned)																				
Manufacture off batteries	CCM 3.4	2,208,425	11.00	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.73	E		
E-charging station installation	CCM 7.4	1,859,300	9.00	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	-	E		
Revenue from environmentally sustainable activities (taxonomy-aligned) (A.1)		4,067,725.0	20.00	100%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	73.00			
Of which: enabling			100.00 %	100%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	10000.00	E		
Of which: transitional			0.00 %	0%						Y	Y	Y	Y	Y	Y	Y	0.00		T	
A.2. Taxonomy-eligible, but not environmentally sustainable activities (not taxonomy-aligned activities)				EL; N/EL ²⁰⁸	EL;N/EL ²⁰⁹	EL;N/EL ²¹⁰	EL;N/EL ²¹¹	EL;N/EL ²¹²	EL;N/EL ²¹³											
Manufacture of other low-carbon technologies	CCM 3.6	218,500.00	1.00	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.16			
Revenue from taxonomy-eligible, but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)		218,500.00	1.00	100%	0%	0%	0%	0%	0%								2.55			
A. Revenue from taxonomy-eligible activities (A.1 + A.2)		4,286,225.0	21.00	0%	0%	0%	0%	0%	0%								2.55			
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																				
Revenue from taxonomy-non-eligible activities		2,063,237,828.7	9979.00																	
TOTAL		2,063,237,828.7	10000.00																	

²⁰¹ Abbreviation for the relevant objective to which the economic activity can make a substantial contribution (CCM = climate change mitigation).
²⁰² N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²⁰³ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²⁰⁴ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²⁰⁵ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²⁰⁶ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²⁰⁷ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²⁰⁸ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²⁰⁹ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²¹⁰ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²¹¹ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²¹² EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²¹³ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.

Proportion of revenue / total revenue		
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
	%	%
CCM	0.2	0.01
CCA	0	0
WTR	0	0
CE	0	0
PPC	0	0
BIO	0	0

Proportion of CapEx in 2023 attributable to goods or services that are associated with taxonomy aligned economic activities

2023 financial year	Year	Substantial contribution criteria								DNSH criteria (do no significant harm)								Taxonomy-aligned (A.1.) or taxonomy-eligible proportion	Enabling activity category	Transitional activity category
		Economic activities	code ²¹⁴	CapEx Currency €	Proportion of CapEx, 2023 %	Climate change mitigation Y; N; N/EL ²¹⁵	Climate change adaptation Y; N; N/EL ²¹⁶	Water Y; N; N/EL ²¹⁷	Pollution Y; N; N/EL ²¹⁸	Circular economy Y; N; N/EL ²¹⁹	Biodiversity Y; N; N/EL ²²⁰	Climate change mitigation Y/N	Climate change adaptation Y/N	Water Y/N	Pollution Y/N	Circular economy Y/N	Biodiversity Y/N			
A. TAXONOMY-ELIGIBLE ACTIVITIES																				
A.1. Environmentally sustainable activities (taxonomy-aligned)																				
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	1,091,538.00	0.92	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.19	E		
Manufacture of batteries ²²¹	CCM 3.4	689,474.51	0.58	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2.15	E		
Lighting with LED lamps, thermal optimization of buildings	CCM 7.3	1,548,642.00	1.30	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.40	E		
E-charging station installation	CCM 7.4	59,985.00	0.05	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.01	E		
Maintenance and expansion of the energy monitoring system (electricity meter) to determine consumption	CCM 7.5	9,549.00	0.01	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.01	E		
Installation of a photovoltaic system	CCM 7.6	724,731.00	0.61	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.19	E		
Close to market research, development and innovation	CCM 9.1	4,242.00	0.00	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.05	E		
CapEx from environmentally sustainable activities (taxonomy-aligned) (A1)		4,128,161.51	3.47	100%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	3.00			
Of which: enabling			100.00%	100%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	100.00	E		
Of which: transitional			0.00%	0%						Y	Y	Y	Y	Y	Y	Y	0.00		T	
A.2. Taxonomy-eligible, but not environmentally sustainable activities (not taxonomy-aligned activities)																				
				EL;N/EL ²²²	EL;N/EL ²²³	EL;N/EL ²²⁴	EL;N/EL ²²⁵	EL;N/EL ²²⁶	EL;N/EL ²²⁷											
Manufacture of other low-carbon technologies ²²⁸	CCM 3.6	1,816,062.33	1.52	EL	N/EL	N/EL	N/EL	N/EL	N/EL								8.01			
Use of company cars with an electric, hybrid, or hydrogen drive	CCM 6.5	218,444.00	0.18	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.16			
Renovation of existing buildings	CCM 7.2 CE 3.2	896,073.00	0.75	EL	N/EL	N/EL	N/EL	EL	N/EL								-			
CapEx from taxonomy-eligible, but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)		2,930,579.33	2.45	100%	0%	0%	0%	0%	0%								11.94			
A CapEx from taxonomy-eligible activities (A.1 + A.2)		7,058,740.84	5.92	100%	0%	0%	0%	0%	0%								14.94			
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																				
CapEx from taxonomy-non-eligible activities		112,207,207.84	94.08																	
TOTAL		119,265,948.68	100.00																	

²¹⁴ Abbreviation for the relevant objective to which the economic activity can make a substantial contribution (CCM = climate change mitigation; CE = circular economy).
²¹⁵ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²¹⁶ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²¹⁷ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²¹⁸ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²¹⁹ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²²⁰ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.
²²¹ The allocation of Torqeedo's CapEx figures to the economic activities 3.4 (20 percent) and 3.6 (80 percent) were calculated on the basis of its reported revenue.
²²² EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²²³ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²²⁴ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²²⁵ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²²⁶ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²²⁷ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.
²²⁸ The allocation of Torqeedo's CapEx figures to the economic activities 3.4 (20 percent) and 3.6 (80 percent) were calculated on the basis of its reported revenue.

Proportion of CapEx / total CapEx

	Taxonomy-aligned per objective	Taxonomy-eligible per objective
	%	%
CCM	3.47	2.45
CCA	0	0
WTR	0	0
CE	0	0.75
PPC	0	0
BIO	0	0

Proportion of OpEx in 2023 attributable to goods or services that are associated with taxonomy aligned economic activities

2023 financial year	Year	Substantial contribution criteria								DNSH criteria (do no significant harm)							Taxonomy-aligned (A.1.) or taxonomy-eligible proportion of revenue (A.2.), 2022	Enabling activity category	Transitional activity category
		Code ²²⁹	OpEx	Proportion of OpEx, 2023	Climate change mitigation	Climate change adaption	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaption	Water	Pollution	Circular economy	Biodiversity			
Economic activities		Currency €	%	Y; N; N/EL ²³⁰	Y; N; N/EL ²³¹	Y; N; N/EL ²³²	Y; N; N/EL ²³³	Y; N; N/EL ²³⁴	Y; N; N/EL ²³⁵	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	17,331,535.00	11.59	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	6.13	E	
Manufacture of batteries ²³⁶	CCM 3.4	9,808,440.92	6.56	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2.73	E	
E-charging station installation	CCM 7.4	319,455.00	0.21	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.00	E	
OpEx from environmentally sustainable activities (taxonomy-aligned) (A1)		27,459,430.92	18.36	100%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	8.86		
Of which: enabling			100.00	100%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	100.00	E	
Of which: transitional			0.00	0%						Y	Y	Y	Y	Y	Y	Y	0.00		T
A.2. Taxonomy-eligible, but not environmentally sustainable activities (not taxonomy-aligned activities)																			
				EL;N/EL ²³⁷	EL;N/EL ²³⁸	EL;N/EL ²³⁹	EL;N/EL ²⁴⁰	EL;N/EL ²⁴¹	EL;N/EL ²⁴²										
Manufacture of equipment for the production and use of hydrogen	CCM 3.6	14,208,091.70	9.50	EL	N/EL	N/EL	N/EL	N/EL	N/EL								17.45		
Use of company cars with an electric, hybrid, or hydrogen drive	CCM 6.5	38,031.48	0.03	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.03		
Renovation of existing buildings	CCM 7.2 CE 3.2	6,663,704.07	4.46	EL	N/EL	N/EL	N/EL	EL	N/EL								0.00		
OpEx from taxonomy-eligible, but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)		20,909,827.25	13.99	100%	0%	0%	0%	0%	0%								17.48		
A. OpEx from taxonomy-eligible activities (A.1 + A.2)		48,369,258.17	32.35	100%	0%	0%	0%	0%	0%								26.34		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx from taxonomy-non-eligible activities		101,139,965.81	67.65																
TOTAL		149,509,223.98	100.00																

²²⁹ Abbreviation for the relevant objective to which the economic activity can make a substantial contribution (CCM = climate change mitigation; CE = circular economy).

²³⁰ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.

²³¹ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.

²³² N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.

²³³ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.

²³⁴ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.

²³⁵ N/EL = not eligible; activity that is taxonomy-non-eligible in respect of the relevant environmental objective.

²³⁶ The allocation of Torqeedo's OpEx figures to the economic activities 3.4 (20 percent) and 3.6 (80 percent) were calculated on the basis of its reported revenue.

²³⁷ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.

²³⁸ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.

²³⁹ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.

²⁴⁰ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.

²⁴¹ EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.

²⁴² EL = eligible; activity that is taxonomy-eligible in respect of the relevant objective.

Proportion of OpEx / total OpEx		
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
	%	%
CCM	18.36	13.99
CCA	0	0
WTR	0	0
CE	0	4.46
PPC	0	0
BIO	0	0

Quantitative breakdown of CapEx (€)

Delegated Act 2021/2178		Annex I Art. 1.2.3.2. a		
Economic activity	Additions to property, plant and equipment	Additions to property, plant and equipment	Additions through right-of-use assets	
3.2	1,091,538.00	0.00	0.00	
3.4	642,246.78	0.00	47,227.80	
3.6	1,627,151.40	0.00	188,911.20	
6.5	218,444.00	0.00	0.00	
7.2	896,073.00	0.00	0.00	
7.3	1,548,642.00	0.00	0.00	
7.4	59,985.00	0.00	0.00	
7.5	9,549.00	0.00	0.00	
7.6	724,731.00	0.00	0.00	
9.1	4,242.00	0.00	0.00	
Total	6,822,602.18	0.00	236,139.00	

Quantitative breakdown of OpEx (€)

Delegated Act 2021/2178		Annex I Art. 1.2.3.3. a
R&D costs	39,930,467.67	
Building renovation measures	6,663,704.07	
Non-capitalized leases	104,361.63	
Maintenance and repair	1,670,724.80	
Total	48,369,258.17	

Independent practitioner's report*

To DEUTZ AG, Köln

We have performed a limited assurance engagement on the combined separate non-financial report of DEUTZ AG, Köln, (hereinafter the "Company") for the period from 1 January 2023 to 31 December 2023 (hereinafter the "Combined Separate Non-financial Report").

Not subject to our assurance engagement are the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report.

RESPONSIBILITY OF THE EXECUTIVE DIRECTORS

The executive directors of the Company are responsible for the preparation of the Combined Separate Non-financial Report in accordance with §§ (Articles) 315 c in conjunction with 289 c to 289 e HGB ("Handelsgesetzbuch": "German Commercial Code") and Article 8 of REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18. June 2020 on establishing a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (hereinafter the "EU Taxonomy Regulation") and the Delegated Acts adopted thereunder, as well as for making their own interpretation of the wording and terms contained in the EU Taxonomy Regulation and the Delegated Acts adopted thereunder, as set out in section "Information on Regulation (EU)2020/852 - Taxonomy Regulation" of the Combined Separate Non-financial Report.

This responsibility includes the selection and application of appropriate non-financial reporting methods and making assumptions and estimates about individual non-financial disclosures of the Group that are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as the executive directors consider necessary to enable the preparation of a Combined Separate Non-financial Report that is free from material misstatement whether due to fraud or error.

The EU Taxonomy Regulation and the Delegated Acts issued thereunder contain wording and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. Therefore, the executive directors have disclosed their interpretation of the EU Taxonomy Regulation and the Delegated Acts adopted thereunder in section "Information on Regulation (EU)2020/852 - Taxonomy Regulation" of the Combined Separate Non-financial Report. They are responsible for the defensibility of this interpretation. Due to the immanent risk that indeterminate legal terms may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties.

* PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the combined separate non-financial report and issued an independent practitioner's report in German language, which is authoritative. The following text is a translation of the independent practitioner's report.

AUDIT FIRM'S INDEPENDENCE AND QUALITY MANAGEMENT

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Management 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality management for audit firms (IDW Qualitätsmanagementstandard 1: Anforderungen an das Qualitätsmanagement in der Wirtschaftsprüferpraxis - IDW QMS 1 (09.2022)), which requires the audit firm to design, implement and operate a system of quality management that complies with the applicable legal requirements and professional standards.

RESPONSIBILITY OF THE ASSURANCE PRACTITIONER

Our responsibility is to express a conclusion with limited assurance on the Combined Separate Non-financial Report based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the Company's Combined Separate Non-financial Report, other than the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report, is not prepared, in all material respects, in accordance with §§ 315 c in conjunction with 289 c to 289 e HGB and the EU Taxonomy Regulation and the delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section "Information on Regulation (EU)2020/852 - Taxonomy Regulation" of the Combined Separate Non-financial Report. In a limited assurance engagement the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgement of the assurance practitioner.

In the course of our assurance engagement, we have, amongst other things, performed the following assurance procedures and other activities:

Im Rahmen unserer Prüfung haben wir u.a. folgende Prüfungshandlungen und sonstige Tätigkeiten durchgeführt:

- Gain an understanding of the structure of the Group's sustainability organisation and stakeholder engagement
- Inquiries of the executive directors and relevant employees involved in the preparation of the Combined Separate Non-financial Report about the preparation process, about the internal control system relating to this process and about disclosures in the Combined Separate Non-financial Report
- Identification of likely risks of material misstatement in the Combined Separate Non-financial Report
- Analytical procedures on selected disclosures in the Combined Separate Non-financial Report
- Reconciliation of selected disclosures with the corresponding data in the consolidated financial statements and group management report
- Evaluation of the presentation of the Combined Separate Non-financial Report
- Evaluation of the process to identify taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the Combined Separate Non-financial Report

In determining the disclosures in accordance with Article 8 of the EU Taxonomy Regulation, the executive directors are required to interpret undefined legal terms. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of their interpretation and, accordingly, our assurance engagement thereon are subject to uncertainties.

ASSURANCE OPINION

Based on the assurance procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Combined Separate Non-financial Report of the Company for the period from 1 January 2023 to 31 December 2023 is not prepared, in all material respects, in accordance with §§ 315 c in conjunction with 289 c to 289 e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section "Information on Regulation (EU)2020/852 - Taxonomy Regulation" of the Combined Separate Non-financial Report.

We do not express an assurance opinion on the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report.

RESTRICTION OF USE

We draw attention to the fact that the assurance engagement was conducted for the Company's purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. Consequently, it may not be suitable for any other purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it. Our responsibility is to the Company. We do not accept any responsibility to third parties. Our assurance opinion is not modified in this respect.

Frankfurt, den 13. März 2023

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Nicolette Behncke
Wirtschaftsprüferin
[German public auditor]

ppa. Benjamin Wolf