Gases for Life

One Messer

Annual Report 2024

Content

The Management Board and the Supervisory Board of Messer Management SE and of Messer SE & Co. KGaA in fiscal year 2024

Messer SE & Co. KGaA itself does not have a Management Board. The management of Messer SE & Co. KGaA is the responsibility of the Management Board of the general partner, Messer Management SE. Since Messer Group GmbH started its activities in 2004, its management has been monitored by a Supervisory Board that assists it in strategic decisions and constantly demands sustainable action in addition to business success. Since the transformation of Messer Group GmbH into Messer SE & Co. KGaA, this has also been true for the general partner Messer Management SE and the Supervisory Board of Messer SE & Co. KGaA as well as the Management Board of Messer Management SE and its Supervisory Board.

The Supervisory Board of Messer SE & Co. KGaA:

Stefan Messer, Chairman
Dr. Johannes Fritz, Deputy Chairman
Dr. Nathalie von Siemens
Heike Niehues
Dr. Werner Breuers
Maureen Messer-Casamayou
Sabine Scheunert-Porth
Geoffrey Wild
Elisabeth Dong

The Supervisory Board of Messer Management SE:

Stefan Messer, Chairman
Marcel Messer, Deputy Chairman
Maureen Messer-Casamayou

The Executive Management Board of Messer Management SE:

Bernd Eulitz, CEO
Helmut Kaschenz, CFO
Dr. Werner Hickel, COO Asia
Virginia Esly, COO Europe
Elena Skvortsova, COO Americas

Report of the Supervisory Board of Messer SE & Co. KGaA

Composition of the Supervisory Board and its committees

The Supervisory Board of Messer SE & Co. KGaA consisted of nine members elected by the Annual General Meeting. In financial year 2024, these were the following members: Stefan Messer (Chairman), Dr. Johannes Fritz (Deputy Chairman), Dr. Werner Breuers, Maureen Messer-Casamayou, Heike Niehues, Sabine Scheunert-Porth, Dr. Nathalie von Siemens, Geoffrey Wild and Elisabeth Dong.

The Supervisory Board has established three committees: the Audit Committee, the Investment Committee as well as the Nomination and Remuneration Committee.

Cooperation between the General Partner and the Supervisory Board

In financial year 2024, the Supervisory Board discharged the duties incumbent upon it in accordance with the law, the Articles of Association and the Rules of Procedure with the necessary care. It supported the General Partner in the management of the company through an extensive exchange of information and advice. In the course of its duties, the Supervisory Board ensured the legality, regularity, expediency and economic efficiency of the company's management at all times. The General Partner consulted the Supervisory Board on all decisions of fundamental importance and provided it with all the information it needed to properly perform its duties in a timely manner. The Supervisory Board was regularly and comprehensively informed regarding the work of the committees by the respective Chairmen. The General Partner also kept the Chairman of the Supervisory Board and the Chairman of the Audit Committee continually informed of important developments between meetings. The Chairman of the Supervisory Board and the General Partner also regularly exchanged information on the current business situation.

The General Partner provided information in written and verbal reports at Supervisory Board meetings as well as between meetings on individual business transactions and events of material importance to the company, the business and financial situation, business development, strategic development and corporate planning as well as the company's risk situation and risk management. At each of its meetings, the Supervisory Board or its committees had the opportunity to conduct in-depth discussions on the reports and draft resolutions submitted by the General Partner. This applies in particular to measures requiring the approval of the Supervisory Board and to transactions that are of material significance for profitability and liquidity. Where the General Partner submitted individual measures to the Supervisory Board for approval, the Supervisory Board consistently examined and discussed the transactions in question in detail. The Supervisory Board had the opportunity at all times to discuss any risks and other effects with the General Partner and passed resolutions on these matters. In addition, the Supervisory Board also discussed other measures and transactions that were of material significance to the company without specific approval requirements in connection with the reports and information submitted by the General Partner.

Meetings and resolutions of the Supervisory Board and key aspects of its work; audit of the annual and consolidated financial statements

The Supervisory Board convened for a total of four meetings in the financial year. These were held both in person and in hybrid form. The Supervisory Board also adopted several circular resolutions.

In addition to reviewing the annual and consolidated financial statements, the work of the Supervisory Board was focused on closely monitoring the implementation of the financing strategy, including the issuance of promissory notes (Schuldscheindarlehen) and of U.S Private Placements issued by Messer Industries USA, Inc., guaranteed by Messer SE & Co. KGaA, and of investment projects with regard to the growth strategy.

The Supervisory Board continuously monitored the current business situation of the company and the Group in financial year 2024 as well as the business plan and budget for 2025.

By way of a resolution passed at the Annual General Meeting on 25 April 2024, KPMG AG Wirtschaftsprüfungsgesellschaft, Frankfurt am Main (KPMG) was appointed auditor for the financial year 2024. The appointment also includes the appointment as auditor of the consolidated financial statements for the financial year ending 31 December 2024.

The annual financial statements and the management reports for Messer SE & Co. KGaA and the Group were prepared in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. KPMG audited the annual financial statements of Messer SE & Co. KGaA, the consolidated financial statements and the management reports for Messer SE & Co. KGaA and the Group for the financial year ending 31 December 2024 and issued unqualified audit opinions.

The annual financial statements, the consolidated financial statements, the management reports for Messer SE & Co. KGaA and the Group as well as the audit reports were made available to all members of the Supervisory Board. All documents were discussed in detail at the meetings of the Audit Committee on 9 April 2025 and the Supervisory Board on the same date. The auditor, KPMG, reported on the key findings of its audit and was available for supplementary questions and information. At the plenary meeting, the Chairman of the Audit Committee also reported in detail on the audit of the annual and consolidated financial statements and the management reports for Messer SE & Co. KGaA and the Group.

The Supervisory Board discussed the annual financial statements, the proposal for the appropriation of earnings, the consolidated financial statements and the management reports for Messer SE & Co. KGaA and the Group. There were no objections to the documents presented. Based on its own review, the Supervisory Board followed the recommendation of the Audit Committee and concurred with the auditor's findings.

By resolution dated 9 April 2025, the Supervisory Board then approved the annual and consolidated financial statements of Messer SE & Co. KGaA for the financial year prepared by the General Partner. In accordance with Section 286 (1) AktG, the adoption of the annual financial statements of Messer SE & Co. KGaA requires the approval of the Annual General Meeting.

The Supervisory Board would like to thank the General Partner and all employees for their commitment and dedication over the course of the past year.

Bad Soden am Taunus, 9 April 2025

Stefan Messer
Chairman of the Supervisory Board

Consolidated Financial Statements of Messer SE & Co. KGaA, Sulzbach (Taunus), as of December 31, 2024

Consolidated Income Statement

of Messer SE & Co. KGaA, Sulzbach (Taunus), for the period from January 1 to December 31, 2024 (in K€)

	Note	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Revenue	4	4,481,355	2,109,018
Cost of sales	5	(2,440,673)	(1,218,512)
Gross profit		**2,040,682**	**890,506**
Selling and distribution expenses	6	(1,175,444)	(410,879)
Impairment on trade receivables	32	(15,658)	(10,411)
General and administrative expenses	7	(364,093)	(259,327)
Other operating income	8	86,903	3,222,240
Other operating expenses	9	(22,864)	(96,319)
Goodwill impairment	14	—	(23,219)
Operating income		**549,526**	**3,312,591**
Income from investments accounted for using the equity method	10, 16	7,465	159,875
Other investment results, net	10	360	27
Finance income	10	48,671	88,974
Finance costs	10	(267,613)	(114,037)
Financial result, net		**(211,117)**	**134,839**
Profit before tax		**338,409**	**3,447,430**
Income / (expense) from income taxes	11	(93,011)	6,237
Consolidated net profit		**245,398**	**3,453,667**
Attributable to:			
Shareholders of the parent company		211,516	3,404,568
Non-controlling interests		33,882	49,099

Consolidated Statement of Comprehensive Income

of Messer SE & Co. KGaA, Sulzbach (Taunus), for the period from January 1 to December 31, 2024 (in K€)

	Note	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Consolidated net profit		**245,398**	**3,453,667**
Items that may be reclassified to profit or loss			
Exchange rate differences			
Exchange differences on translation of foreign subsidiaries	30	(57,536)	(60,019)
Reclassification to profit or loss	16, 30	—	31,656
Exchange differences from companies accounted for using the equity method	16, 30	—	18,808
Result from net investment in a foreign operation	30	(11,727)	7,567
Reclassification to profit or loss	16, 30	—	2,110
Deferred taxes	11	2,744	(1,773)
Result from net investment in a foreign operation from companies accounted for using the equity method	16, 30	—	(1,536)
Derivative financial instruments			
Change in fair value of derivatives used for hedging purposes(1)	32	(12,777)	(49,884)
Reclassification to profit or loss	32	1,895	(23,526)
Deferred taxes	11	3,130	11,672
Share of companies accounted for using the equity method(1)	16, 30	—	(31,480)
		(74,271)	**(96,405)**
Items that will not be reclassified to profit or loss			
FVOCI equity instruments	32	64	42
Remeasurement of net defined benefit obligation for pension plans and other employee benefits			
Change in remeasurement of the net defined obligation for pension plans	25	1,176	(87)
Deferred taxes	11	(526)	(104)
Share of companies accounted for using the equity method	16, 30	—	1,337
		714	**1,188**
Other comprehensive income		**(73,557)**	**(95,217)**
Total comprehensive income		**171,841**	**3,358,450**
Attributable to:			
Shareholders of the parent company		129,278	3,323,679
Non-controlling interests		42,563	34,771

(1) Gains/losses on financial instruments in effective hedges

Consolidated Statement of Financial Position

of Messer SE & Co. KGaA, Sulzbach (Taunus), as of December 31, 2024 (in K€)

ASSETS	Note	Dec. 31, 2024	Dec. 31, 2023
Goodwill	14	4,861,302	4,913,565
Right-of-use assets	14	229,500	202,127
Other intangible assets	14	1,957,402	2,122,855
Property, plant and equipment	15	5,082,644	4,783,811
Investments accounted for using the equity method	16	80,231	59,549
Equity investments and other financial investments	17	8,787	10,869
Deferred tax assets	11	19,609	37,720
Other financial assets	18	47,658	47,958
Non-financial assets	18	5,524	5,846
Non-current assets		**12,292,657**	**12,184,300**
Inventories	19	724,311	309,819
Trade receivables	20	612,910	590,388
Current income tax assets		56,215	103,878
Other current financial assets	22	63,078	93,144
Non-financial assets	22	121,499	105,611
Cash and cash equivalents	23	513,624	612,704
Current assets		**2,091,637**	**1,815,544**
Total assets		**14,384,294**	**13,999,844**

Consolidated Statement of Financial Position

of Messer SE & Co. KGaA, Sulzbach (Taunus), as of December 31, 2024 (in K€)

EQUITY AND LIABILITIES	Note	Dec. 31, 2024	Dec. 31, 2023
Issued capital	30	130,140	129,825
Capital reserves	30	2,113,436	2,089,280
Other reserves	30	(5,151)	(9,020)
Retained earnings	30	5,276,294	5,104,636
Other components of equity	30	(126,723)	(44,097)
Equity attributable to shareholders of the parent company		**7,387,996**	**7,270,624**
Non-controlling interests	30	**228,406**	**258,011**
Equity		**7,616,402**	**7,528,635**
Provisions for employee benefits	25	62,396	61,950
Other provisions	26	93,948	74,720
Non-current financial liabilities	27	3,909,753	1,406,131
Other non-current financial liabilities	28	4,357	396,663
Non-financial liabilities	28	28,794	21,967
Deferred tax liabilities	11	1,032,668	1,113,815
Non-current liabilities		**5,131,916**	**3,075,246**
Other provisions	26	82,378	115,760
Current financial liabilities	27	156,475	2,346,113
Trade payables	32	410,668	388,227
Current income tax liabilities		77,855	83,724
Other current financial liabilities	29	531,598	82,207
Non-financial liabilities	29	377,002	379,932
Current liabilities		**1,635,976**	**3,395,963**
Total equity and liabilities		**14,384,294**	**13,999,844**

Consolidated Statement of Changes in Equity

of Messer SE & Co. KGaA, Sulzbach (Taunus), for fiscal 2024 (in K€)

		Reserves			Other components of equity					
	Issued capital	Capital reserves	Other reserves	Retained earnings	Currency translation	Hedging reserve	Fair value reserve and result from net investment	Equity attributable to shareholders of the parent company	Non-controlling interests	Total equity
As of Jan. 1, 2023	**100,000**	**536,937**	**(7,430)**	**1,779,378**	**(16,731)**	**55,130**	**(417)**	**2,446,867**	**237,214**	**2,684,081**
Consolidated net profit	–	–	–	3,404,568	–	–	–	3,404,568	49,099	3,453,667
Other comprehensive income	–	–	–	1,190	4,729	(93,218)	6,410	(80,889)	(14,328)	(95,217)
Total comprehensive income	**–**	**–**	**–**	**3,405,758**	**4,729**	**(93,218)**	**6,410**	**3,323,679**	**34,771**	**3,358,450**
Dividends	–	–	–	(80,500)	–	–	–	(80,500)	(27,907)	(108,407)
Issue of ordinary shares	29,825	–	–	–	–	–	–	29,825	–	29,825
Deposits, less transaction costs	–	1,552,343	–	–	–	–	–	1,552,343	–	1,552,343
Sale of interests without loss of control	–	–	(1,590)	–	–	–	–	(1,590)	6,442	4,852
Increase in equity investments	–	–	–	–	–	–	–	–	7,490	7,490
Others	–	–	–	–	–	–	–	–	1	1
As of Dec. 31, 2023	**129,825**	**2,089,280**	**(9,020)**	**5,104,636**	**(12,002)**	**(38,088)**	**5,993**	**7,270,624**	**258,011**	**7,528,635**
As of Jan. 1, 2024	**129,825**	**2,089,280**	**(9,020)**	**5,104,636**	**(12,002)**	**(38,088)**	**5,993**	**7,270,624**	**258,011**	**7,528,635**
Consolidated net profit	–	–	–	211,516	–	–	–	211,516	33,882	245,398
Other comprehensive income	–	–	–	388	(65,955)	(7,752)	(8,919)	(82,238)	8,681	(73,557)
Total comprehensive income	**–**	**–**	**–**	**211,904**	**(65,955)**	**(7,752)**	**(8,919)**	**129,278**	**42,563**	**171,841**
Dividends	–	–	–	(40,246)	–	–	–	(40,246)	(45,152)	(85,398)
Issue of ordinary shares	315	–	–	–	–	–	–	315	–	315
Deposits, less transaction costs	–	20,847	3,869	–	–	–	–	24,716	–	24,716
Equity-settled share-based remuneration	–	3,309	–	–	–	–	–	3,309	–	3,309
Increase in equity investments	–	–	–	–	–	–	–	–	(27,017)	(27,017)
Others	–	–	–	–	–	–	–	–	1	1
As of Dec. 31, 2024	**130,140**	**2,113,436**	**(5,151)**	**5,276,294**	**(77,957)**	**(45,840)**	**(2,926)**	**7,387,996**	**228,406**	**7,616,402**

The above consolidated statement of changes in equity should be read in conjunction with the following notes. For further information on equity, please refer to the comments under note 30 “Equity” in the notes to the consolidated financial statements.

Consolidated Statement of Cash Flows

of Messer SE & Co. KGaA, Sulzbach (Taunus), for fiscal 2024 (in K€)

	Note	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Consolidated net profit before taxes		**338,409**	**3,447,430**
Income taxes paid		(117,693)	(90,958)
Depreciation of property, plant and equipment, amortization of intangible assets and impairment	14, 15	846,388	291,948
Income from changes in Group reporting	8, 9	(5,090)	(3,104,694)
Losses / (gains) on the disposal of fixed assets		(5,765)	(2,802)
Changes in investments in associates	16	(7,465)	(159,875)
Net interest result	10	209,067	(16,932)
Other non-cash financial results	10	32,113	44,393
Changes in inventories		(332,023)	(9,005)
Changes in receivables and other assets		(23,131)	3,479
Changes in provisions		3,984	21,073
Changes in trade payables and other liabilities		(80,346)	32,391
Cash flow from operating activities		**858,448**	**456,448**
Investments in property, plant and equipment and intangible assets		(838,924)	(330,193)
Investments in equity investments and other non-current assets		(86)	(581)
Payments for the acquisition of subsidiaries and associates		(11,720)	(3,238,898)
Changes in capital of associated companies		(11,185)	1,000
Proceeds from disposals of property, plant and equipment and intangible assets		14,507	7,144
Proceeds from disposals of subsidiaries and loans		(4)	—
Interest received		28,322	54,884
Cash flow from investing activities		**(819,090)**	**(3,506,644)**
Capital increases of Messer SE & Co. KGaA		21,162	1,980,745
Dividends to the shareholder of Messer SE & Co. KGaA		(40,246)	(80,500)
Proceeds from non-current financial liabilities	27	2,447,000	1,259,819
Proceeds from current financial liabilities	27	55,524	2,336,659
Repayments of non-current financial liabilities	27	(14,140)	(17,537)
Repayments of current financial liabilities	27	(2,300,702)	(1,945,697)
Payments for lease liabilities	27	(43,739)	(12,836)
Distributions to non-controlling interests		(45,152)	(27,907)
(Payments to) / receipts from non-controlling interests		3,959	—
Reduction / (increase) of majority holdings without loss of control and acquisition of non-controlling interests		(26,508)	5,392
Interest paid		(187,132)	(29,634)
Other net finance costs		(7,413)	(54,877)
Cash flow from financing activities		**(137,387)**	**3,413,627**
Changes in cash and cash equivalents		**(98,029)**	**363,431**
Cash and cash equivalents			
at the beginning of the period		**612,704**	**260,454**
Currency translation effect on cash and cash equivalents		(1,051)	(11,181)
at the end of the period		**513,624**	**612,704**

Notes to the consolidated financial statements of Messer SE & Co. KGaA, Sulzbach (Taunus), for fiscal 2024

1. General information

Messer SE & Co. KGaA (the “company”) is a holding company with the business address Messer-Platz 1 65812 Bad Soden am Taunus, that is headquartered in Sulzbach (Taunus), Germany, and registered at the Local Court of Frankfurt am Main under the number HRB 123982. It is the parent company of the Messer Group (the “Group”), which produces and sells industrial gases (in particular oxygen, nitrogen, argon, helium, carbon dioxide, hydrogen and rare and high-purity gases), processes for their use and systems located on the customer’s property (on-site plants) for gas production. The Messer Group’s main customers include major companies from the manufacturing, chemical, steel-producing and pharmaceutical industries, the food industry and waste management.

As of December 31, 2024, Messer Industrie GmbH (“Messer Industrie”), in which the Messer family has bundled its industrial gas activities, is a shareholder of Messer SE & Co. KGaA through its equity interest in Messer Holding GmbH. Messer Industrie GmbH is the ultimate parent company of the Group and is required to prepare consolidated financial statements. Messer SE & Co. KGaA thus prepares sub-group financial statements. The requirements of section 315e(3) of the German Commercial Code (Handelsgesetzbuch – “HGB”) applicable to the preparation of the consolidated financial statements of Messer SE & Co. KGaA in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, have been satisfied.

Messer SE & Co. KGaA (“Messer”) and an investment vehicle of CVC Capital Partners (“CVC”) entered into a purchase agreement on May 30, 2023, for the acquisition of the shares held by CVC and other shareholders in the joint venture Yeti GermanCo 1 GmbH and the shares held by CVC in the joint management investment company Yeti Warehouse GmbH (the “CVC Transaction”). Messer’s operations in the Americas and Western Europe were combined in Yeti GermanCo 1 GmbH (Messer Industries Group).

The CVC transaction was financed with bank loans and an equity investment in Messer by Elbe Investment Pte. Ltd (“Elbe”), an investment vehicle of GIC (Ventures) Pte. Ltd. (“GIC Venture”). To this end, Messer and its former sole shareholder, Messer Holding GmbH, entered into an investment agreement with Elbe on May 26 and 27, 2023, for the acquisition of new shares in Messer in exchange for a non-controlling minority interest held by Elbe in Messer (the “GIC Transaction” and, together with the CVC Transaction, the “Transactions”).

The operations of the Messer Industries Group and the Yeti Warehouse GmbH Group were acquired with effect from November 13, 2023. Due to the initial consolidation during the previous year, a comparison of the figures with those of the previous year is possible only to a limited extent.

The reporting date for Messer SE & Co. KGaA and all the subsidiaries included in the consolidated financial statements is December 31 of the calendar year.

The company's consolidated financial statements for the fiscal year ended December 31, 2024, were approved and submitted to the Supervisory Board of Messer SE & Co. KGaA to review by the general partner, Messer Management SE, on March 24, 2025. It is the responsibility of the Supervisory Board to review the consolidated financial statements. The consolidated financial statements are approved by the Annual General Meeting.

Messer GasPack GmbH, Messer Industriegase GmbH, Messer Industries GmbH, Messer Produktionsgesellschaft mbH Salzgitter, Messer Produktionsgesellschaft mbH Siegen, Messer Produktionsgesellschaft mbH Speyer, Messer Trademark Management GmbH, Messer IP License GmbH and Messer Griesheim China Holding GmbH, all of which are fully consolidated domestic subsidiaries, will make use of the exemption provisions pursuant to section 264(3) HGB, while Messer Trademark GmbH & Co. KG will make use of the exemption provisions pursuant to Section 264b HGB, and they will, therefore, not disclose their annual financial statements for 2024 and, for the most part, will not prepare the (HGB) notes and management report.

2. Accounting policies

Basis of preparation

The consolidated financial statements are prepared in euro. Unless stated otherwise, all amounts are rounded to thousands (K€). Differences may arise due to rounding.

Statement of compliance with IFRS

The 2024 consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and their interpretations issued by the IFRS Interpretations Committee ("IFRS IC"). The accounting policies on which the 2024 consolidated financial statements are based have been applied consistently.

The consolidated financial statements have been prepared on the basis of historical cost, amortized cost and the fair value from market measurement of available-for-sale financial assets and financial liabilities (including derivative financial instruments). Estimates are required in order to prepare the consolidated financial statements in accordance with IFRS and the Interpretations issued by the IFRS Interpretations Committee, as applicable in the EU. Moreover, the application of uniform Group accounting policies requires management to make judgments.

New financial reporting standards and interpretations

The following new or revised standards and interpretations are mandatory for the first time for these consolidated financial statements on January 1, 2025:

- Amendments to IFRS 16 – Lease Liability in a Sale and Leaseback
- Amendments to IAS 1 – Classification of Liabilities as Current or Non-current - Deferral of Effective Date and Non-current Liabilities with Covenants
- Amendments to IAS 7 and IFRS 7 - Supplier Finance Arrangements

Amendments to IFRS 16 – Lease Liability in a Sale and Leaseback

This amendment affects how the lease liability that arises in a sale and leaseback transaction are accounted for and requires that, following a sale, a lessee shall subsequently measure the lease liability in such a way that it does not recognize any amount of the gain or loss that relates to the right of use it retains. Using examples among other things, the new paragraphs that have been added explain different possible approaches, particularly for variable lease payments.

The amendment has no material impact on the current consolidated financial statements of Messer SE & Co. KGaA.

Amendments to IAS 1 – Classification of Liabilities as Current or Non-current - Deferral of Effective Date and Non-current Liabilities with Covenants

The amendments to IAS 1 adopted in January 2020 concern a limited adjustment of the assessment criteria for classifying liabilities as current or non-current.

This clarifies that the classification of liabilities as current depends on the entity's rights as of the reporting date to defer settlement of the liability for at least twelve months after the end of the reporting period: if the entity has such rights, the liability is classified as non-current. The right to defer settlement of the liability must have substance here. If the entity has to comply with certain conditions in order to exercise such a right, these conditions must be met by the reporting date; otherwise, the liability is classified as current.

Whether management intends or expects to actually settle the liability within twelve months of the reporting date is irrelevant for the classification of the liability here. The only decisive factor for the classification is the rights existing on the reporting date to defer settlement of the liability for at least twelve months. This also applies in the event that the liability is settled within the period defined for adjusting events.

The changes were supplemented by a further amendment to the IAS 1 published in October 2022. The new amendment concerns the classification of liabilities subject to covenants. The IASB clarifies here that covenants that must be complied with on or before the reporting date can affect the classification of a liability as current or non-current. However, covenants that have to be complied with only after the reporting date have no influence on the classification. Instead of being taken into account in the classification, covenants of this kind must be disclosed in the notes. This is intended to enable users of financial statements to assess whether non-current liabilities could become repayable within twelve months.

The amendment has no material impact on the current consolidated financial statements of Messer SE & Co. KGaA.

Amendments to IAS 7 and IFRS 7 - Supplier Finance Arrangements

The amendments related to disclosure requirements related to supplier finance arrangements – also known as supply chain finance, trade payables finance or reverse factoring arrangements. The new regulations supplement the requirements already contained in other standards and explicitly require the following disclosures:

- Terms and conditions of supplier finance agreements;
- Amounts of liabilities subject to such agreements, the proportion of these liabilities that suppliers have already received payments from the finance providers and the line item under which these liabilities are reported in the statement of financial position;
- Range of payment due dates;
- Information on liquidity risk.

The amendment has no material impact on the current consolidated financial statements of Messer SE & Co. KGaA.

New financial reporting standards not yet effective:

The following new standards and amendments to standards were not yet mandatory for these consolidated financial statements and were therefore not applied, but have already been endorsed by the EU Commission and will be binding for fiscal years beginning on or after January 1, 2025:

- Amendments to IAS 21 – Lack of Exchangeability

The following new standards and amendments to standards have already been published, but had not yet been endorsed by the EU Commission and were therefore not applied:

- IFRS 18 – Presentation and Disclosures in Financial Statements
- IFRS 19 – Subsidiaries without Public Accountability: Disclosures
- Amendments to IFRS 9 and IFRS 7 – Amendments to the Classification and Measurement of Financial Instruments
- Amendments to IFRS 9 and IFRS 7 – Contracts Referencing Nature-dependent Electricity
- Amendments to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The Group is not planning early adoption of the new or amended standards and interpretations that become effective in subsequent fiscal years. Unless otherwise stated, the impact on the consolidated financial statements of Messer SE & Co. KGaA is currently being examined.

Consolidation principles

A complete list of the Group's equity investments can be found in the annex to these notes. Material subsidiaries as of December 31, 2024 are:

Name and registered office of subsidiary	Country	Shareholding in % Dec. 31, 2024	Shareholding in % Dec. 31, 2023
Messer LLC, Delaware	USA	100 %	100 %
Messer Canada Inc., Ontario	Canada	100 %	100 %
Messer Gases Ltda., Sao Paulo	Brazil	100 %	100 %
Messer France S.A.S., Suresnes	France	100 %	100 %
Messer Polska Sp. z o.o., Chorzów	Poland	100 %	100 %
Hunan Xianggang Messer Gas Products Co., Ltd., Xiangtan City, Hunan Province	China	55 %	55 %
Messer Haiphong Industrial Gases Co., Ltd., Hai Phong City	Vietnam	100 %	100 %
Messer Tehnogas AD, Belgrade	Serbia	86 %	82 %
Messer Colombia S.A., Bogotá	Colombia	100 %	100 %
Messer Hungarogáz Kft., Budapest	Hungary	100 %	100 %
Messer Technogas s.r.o., Prague	Czech Republic	100 %	100 %
Messer Industrial Gases GmbH, Sulzbach	Germany	100 %	100 %
Foshan MS Messer Gas Co., Ltd., Foshan City, Guangdong Province	China	85 %	85 %
Messer Ibérica de Gases S.A., Tarragona	Spain	100 %	100 %
Sichuan Pangang Messer Gas Products Co., Ltd., Panzhihua, Sichuan Province	China	60 %	60 %
Messer Tatragas spol.s.r.o, Bratislava	Slovakia	100 %	100 %

The consolidated financial statements comprise the financial statements of Messer SE & Co. KGaA and of its subsidiaries as of December 31, 2024. The financial statements of the subsidiaries are prepared using uniform accounting policies and for the same reporting period as the financial statements of the parent company.

a. Subsidiaries

Messer SE & Co. KGaA and its subsidiaries controlled by Messer SE & Co. KGaA are included in the consolidated financial statements as of December 31, 2024. The parent company controls an entity when it has exposure or rights to variable returns from its involvement with the entity and the ability to utilize its control so as to influence the amount of returns from the entity. Subsidiaries are included in the consolidated financial statements from the date on which control is achieved and until the date on which control ends.

All receivables and liabilities, revenue, income and expenses arising from intragroup transactions are eliminated in the consolidated financial statements. Intragroup transactions are conducted made on the basis of arm's length transfer prices.

Subsidiaries are accounted for using the acquisition method. The cost of the acquisition represents the fair value of the assets transferred, the liabilities incurred or assumed and the equity interests issued by the acquirer at the transaction date. It also includes the fair value of any recognized assets and liabilities resulting from a contingent consideration arrangement. Assets, liabilities and contingent liabilities identifiable in conjunction with a business combination are measured at fair value as of the acquisition date on initial consolidation.

Acquisition-related costs are recognized as expenses in the period in which they are incurred unless they relate to the issue of debt or equity instruments.

Goodwill is measured as the excess of the cost of the acquisition, the amount of any non-controlling interest in the acquiree and the fair value of any previously held equity interest at the date of acquisition over the Group's share of the net assets measured at fair value. The option of accounting for goodwill using the full goodwill method is not exercised. If the cost is less than the fair value of the net assets of the subsidiary acquired, the difference is first reassessed and then recognized directly in profit or loss. The results of the subsidiaries acquired or sold during the fiscal year are included in the consolidated income statement from the time control is achieved or until control is lost.

b. Transactions with non-controlling interests without loss of control
Transactions with non-controlling interests without a loss of control are treated in the same way as transactions with the Group's equity owners. Any difference arising from the acquisition of a non-controlling interest between the consideration paid and the relevant share in the carrying amount of the net assets of the subsidiary is recognized in equity. Gains and losses arising from the disposal of non-controlling interests are also recognized in equity.

c. Disposal of subsidiaries
If the Group loses control of an entity, the Group's remaining interest is remeasured at fair value and the resulting difference recognized in profit or loss. Furthermore, all amounts reported in other comprehensive income relating to this entity are accounted for as if the parent company had directly disposed of the related assets or liabilities. This means that any profit or loss previously recognized in other comprehensive income is reclassified either to profit and loss or to retained earnings.

d. Associates, joint ventures and joint operations
Investments in entities over which the Group has significant influence, but not control or joint control over financial and operating policy, and joint ventures over which the Group has joint control are accounted for using the equity method (equity investments). These are initially measured at cost, including transaction costs. Significant influence is assumed if the Group holds 20 % or more of the voting power but does not control the investee. The Group's share in the earnings of equity investments is shown under "Income from investments accounted for using the equity method". The carrying amounts of equity investments are written down if impaired. The Group's interest in associates and joint ventures includes the goodwill arising on acquisition (net of accumulated impairment losses).

If the ownership interest in an associate or joint venture is reduced but the investment continues to be an associate or joint venture, only the proportionate amount of the gain or loss previously recognized in other comprehensive income is reclassified to profit or loss, if this would also occur on the disposal of the individual assets and liabilities.

The Group's share of the profit or loss of associates or joint ventures is recognized in profit or loss from the acquisition date. Changes in reserves are recognized pro rata in consolidated reserves. Accumulated changes after acquisition are offset against the carrying amount of the investment. If the Group's share of the loss in an associate or joint venture is equal to or exceeds the Group's share in this investee, including other unsecured receivables, the Group does not recognize any further losses unless it has entered into commitments for the associate or joint venture or has made payments for the associate or joint venture.

The Group determines as of the end of each reporting period whether there is any objective evidence that the investment in the associate or joint venture is impaired. If this is the case, the difference between the carrying amount and the recoverable amount is recognized as an impairment loss and reported in the income statement under the income from the investment in the associate or joint venture.

To the extent that a Group entity performs transactions with an associate or joint venture, any resulting unrealized gains or losses are eliminated on the basis of the Group's interest in this entity.

Joint operations are characterized by the fact that the parties that have joint control over the arrangement have rights to the assets and obligations for the liabilities attributable to the arrangement.

The associated assets and liabilities, income and expenses from joint operations are included in the consolidated financial statements according to the economically attributable share.

The Group recognizes its direct rights to the assets, liabilities, revenue and expenses of joint operations and their share of any assets, liabilities, revenue and expenses that are jointly controlled or incurred. These are included in the financial statements under the corresponding line items. Details of joint operations recognized in the financial statements can be found in note 16 "Interests in other entities".

Currency translation

a. Functional currency and reporting currency

The consolidated financial statements are presented in euro, the Group's reporting currency. The functional currency of individual foreign operations is determined by the economic environment in which they operate. The items included in the financial statements of the respective company are measured using this functional currency.

b. Transactions and balances

Foreign currency transactions are initially translated at the spot exchange rate between the foreign currency and the functional currency on the transaction date. Monetary assets and liabilities denominated in a foreign currency are translated into the functional currency at the closing rate. All exchange differences are recognized in profit or loss for the period. This does not include exchange differences from certain intragroup foreign currency borrowings insofar as they are used to hedge net investments in foreign operations. These exchange differences and any deferred taxes arising from them are recognized directly in equity. Non-monetary items that are measured at historical cost in a foreign currency are translated at the exchange rate on the date of the transaction. Non-monetary items measured at fair value in a foreign currency are translated at the exchange rates on the date when the fair value was determined.

Foreign currency gains and losses that essentially result from trade receivables and trade payables denominated in foreign currencies are included in "Other operating income" or "Other operating expenses".

c. Group companies

The functional currency of foreign operations not based within the area of the European Currency Union (ECU) is the respective local currency. As of the end of the reporting period, assets and liabilities of these subsidiaries are translated into the Messer Group's reporting currency using the closing rate. Income and expenses are translated at average rates for the fiscal year. The resulting exchange differences are recognized through other comprehensive income and included in the currency translation reserves within equity unless the currency translation difference is allocated to non-controlling interests. They therefore do not affect profit or loss for the year. When a foreign operation is deconsolidated, the cumulative amount recognized in equity for this foreign operation is reversed to profit or loss.

The following table shows an overview of the exchange rates used for the principal currencies:

		Average rates		Closing rates	
Selected currencies	ISO code	Jan. 1 – Dec. 31, 2024 1 EUR	Jan. 1 – Dec. 31, 2023 1 EUR	Dec. 31, 2024 1 EUR	Dec. 31, 2023 1 EUR
Brazilian real	BRL	5.85	5.41	6.43	5.36
Canadian dollar	CAD	1.48	1.46	1.49	1.46
Chinese renminbi	CNY	7.78	7.66	7.58	7.85
Czech koruna	CZK	25.12	23.98	25.19	24.72
Hungarian forint	HUF	395.97	382.14	411.35	382.80
Polish zloty	PLN	4.30	4.54	4.28	4.34
Serbian dinar	RSD	117.09	117.27	117.07	117.17
US dollar	USD	1.08	1.08	1.04	1.11
Vietnamese dong	VND	27,080.69	25,805.46	26,531.00	26,883.00

Reporting

Messer GasPack GmbH was reported under "Corporate" in the previous year; from this fiscal year onward, it will be reported under the "Europe" region.

The reporting of prior-year disclosures for individual items was adjusted to match the presentation in the fiscal year. This affects note 11 "Income taxes".

Intangible assets and goodwill

The differences between the consideration transferred by the Messer Group for acquirees and the fair value of the assets acquired, liabilities assumed and contingent liabilities are recognized in accordance with IFRS 3.32 et seq. The remaining goodwill is tested for impairment in accordance with IAS 36 at least once a year.

Other intangible assets such as brands, patents, technologies, licenses, customer relationships, software, etc., are initially measured at cost. Technologies/patents (6 to 33 years), licenses (5 to 10 years), customer relationships (1 to 45 years) and other intangible assets (2 to 11 years) are amortized on a straight-line basis over their expected useful lives. The amortization charge on other intangible assets is reported within the related expense item, usually in cost of sales or distribution or selling expenses. The "Messer" brand is established on its market and will continue to be promoted in the future. For this reason, we assume an indefinite useful life for the "Messer" brand. This brand is tested for impairment in accordance with IAS 36 at least once per year. The amortization period and the amortization method for intangible assets with a finite useful life are reviewed at least at the end of each fiscal year.

Property, plant and equipment

Property, plant and equipment are recognized at cost and depreciated on a straight-line basis over their expected useful lives less their estimated residual values. The cost of acquired property, plant and equipment includes all costs directly attributable to their acquisition. The cost of self-constructed items of property, plant and equipment includes all directly attributable direct costs and an appropriate share of overheads, including depreciation, and all costs required to construct the assets are therefore taken into account when these are measured. In the event of a statutory requirement to restore an item to its original condition, the cost also includes the present value of expected future payments for decommissioning and restoration. When each major inspection is performed, its cost is recognized, in accordance with IAS 16.14, in the carrying amount of the item of property, plant and equipment as a replacement if the recognition criteria are satisfied.

Subsequent costs are only recognized as part of the cost of the asset or as a separate asset when it is probable that they will result in future economic benefits for the Group and the costs of the asset can be reliably measured.

Expenditure for repairs and maintenance that do not represent a significant replacement investment is recognized as an expense in the income statement in the fiscal year in which it is incurred.

Gains and losses on disposals of property, plant and equipment are calculated as the difference between the proceeds from disposal and the carrying amounts of the assets and recognized in the consolidated income statement.

Depreciation is recognized on a straight-line basis over the following useful lives:

Buildings	10 to 50 years
Plant and machinery thereof air separation units	5 to 20 years 15 years
Other operating and office equipment	3 to 10 years

The residual carrying amounts and useful lives are reviewed at the end of each reporting period and adjusted as necessary. If the carrying amount of an item of property, plant and equipment exceeds the estimated recoverable amount, it is written down to that recoverable amount.

Borrowing costs are recognized as an expense in the period in which they are incurred, except when they relate to qualifying assets. Within the Messer Group, these chiefly relate to air separation units. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset up to the date when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete. A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

Leases

a. Leases in which the Group is the lessee

The Group leases various offices, warehouses, equipment and vehicles. Leases are generally entered into for fixed periods of 1 to 13 years for movable assets and 1 to 78 years for immovable assets, but may have extension options.

At the inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Group uses the IFRS 16 definition of a lease to assess whether a contract includes the right to control an identifiable asset.

Contracts may contain both lease and non-lease components. The Group allocates the transaction price to these components based on their relative stand-alone prices. However, for leases of real estate for which the Group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. Leased assets may not be used as security for borrowing purposes.

Leases are recognized as right-of-use assets and a corresponding lease liability at the time the leased asset is available for use by the Group. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including de facto fixed payments, less any lease incentives receivable)
- variable lease payments that are based on an index or (interest) rate, initially measured using the index or (interest) rate as of the commencement date
- amounts expected to be payable by the Group under residual value guarantees
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability. Lease payments are discounted using the interest rate implicit in the lease, provided that this can be readily determined. Otherwise, and this is typically the case in the Group, the lessee's respective incremental borrowing rate is used.

To determine the incremental borrowing rate, the Group:

uses recent third-party financing received by the individual lessee as the starting point; lessees are divided into regions according to geographical segments; the financing is divided into groups based on the remaining terms of the contracts (up to 1 year, up to 2 years, up to 3 years, up to 4 years, up to 5 years and longer than 5 years); the calculated average interest rates for each group and region are used when measuring the right-of-use asset and the lease liability.

The lease liability is measured at amortized carrying amount using the effective interest method. The Group is exposed to potential future increases in variable lease payments based on an index or rate. These possible changes in lease payments are not taken into account in the lease liability until they take effect. As soon as changes in an index or interest rate affect the lease payments, the lease liability is adjusted against the right-of-use asset.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of the lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs; and
- estimated costs incurred by the lessee in dismantling or removing the underlying asset, restoring the location where it is to be found or restoring the underlying asset to the condition required in the lease agreement.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Depreciation is recognized on a straight-line basis over the following useful lives:

Land	1 to 70 years
Buildings	1 to 78 years
Plant and machinery	1 to 26 years
Other operating and office equipment	1 to 13 years

Payments associated with short-term leases of plant and machinery, vehicles and leases of low-value assets are recognized as expenses in profit or loss. Short-term leases are defined as leases with a term of twelve months or less. These essentially comprise IT equipment and other equipment.

Extension and termination options are included in a number of property and equipment leases across the Group. These are used to maximize operational flexibility in terms of managing the assets used in the Group's operations. These options are taken into account in the measurement of right-of-use assets and lease liabilities when it is reasonably certain that they will be exercised. The assessments of reasonable certainty are revised only if a significant event or a significant change in circumstances occurs that affects this assessment and that is within the control of the lessee.

b. Leases in which the Group is the lessor

If the Group is the lessor, it classifies each lease as either a finance lease or an operating lease at inception of the lease. At the Messer Group, this particularly includes certain gas supply contracts, primarily those for the gas generation plants rented on a long-term basis.

Leases in which a significant portion of the risks and rewards of ownership transfers to the lessee are classified as finance leases.

In this case, disposal is assumed at the start of the lease term and revenue is recognized in the amount of the present value of the lease payments attributable to the asset. In return, a claim from the customer that is reduced over the term of the contract is recognized. Interest income earned on finance leases is reported as other financial income.

Leases in which a significant portion of the risks and rewards of ownership remain with the lessor are classified as operating leases. Payments made in connection with an operating lease are recognized as revenue from other sources in the income statement on a straight-line basis over the term of the lease.

Impairment and reversal of impairment on goodwill, right-of-use assets, other intangible assets and property, plant and equipment

With the exception of investment property, inventories and deferred tax assets, the carrying amounts of the Group's non-financial assets are reviewed at the end of each reporting date to determine whether there is any indication that an asset may be impaired. If this is the case, the recoverable amount of the asset is estimated. Goodwill and intangible assets with indefinite useful lives are tested for impairment annually.

In accordance with IAS 36, goodwill is allocated to the smallest cash-generating unit for which goodwill is monitored and tested for impairment at this level by comparing the discounted expected future cash flows against the carrying amount of that cash-generating unit. The smallest identifiable group of assets is defined as units that generate cash inflows from continued use that are largely independent of the cash inflows from other assets or other groups of assets (cash-generating unit).

The annual impairment test for goodwill, right-of-use assets, other intangible assets and property, plant and equipment involves comparing the recoverable amount of the asset with its carrying amount to determine whether it must be written down to the recoverable amount. In accordance with IAS 36, goodwill is allocated to the smallest cash-generating unit for which goodwill is monitored by management. The recoverable amount is defined as the higher of the asset's fair value less costs to sell and its value in use. In the event of impairment, existing goodwill is reduced first. If the impairment loss exceeds the carrying amount of goodwill, the difference is generally distributed pro rata among the remaining non-current assets of the cash-generating unit. With the exception of goodwill, impairment losses are reversed when the reasons for the impairment no longer apply. Impairment losses and required reversals are shown together with depreciation and amortization in the statement of changes in assets under additions to cumulative depreciation and amortization and are reported and explained separately in the notes.

Inventories

Inventories are measured at the lower of cost (using the average cost method) or net realizable value at the end of the reporting period. Their production cost includes all directly attributable direct costs, appropriate portions of materials and production overheads and depreciation.

Trade and other receivables

Trade receivables are recognized from the date they arise. Items that do not contain a significant financing component are initially measured at the transaction price. The corresponding impairment loss is measured at an amount equal to lifetime expected credit losses, based on an analysis of historical default data and forecasts of future economic conditions. Expected credit losses are a probability-weighted estimate of credit losses.

Non-current assets and disposal groups held for sale and discontinued operations

In accordance with IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations", the Group classifies non-current assets and disposal groups as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. A sale must be planned and practicable with a high probability within the next 12 months.

Immediately before initial classification, the carrying amounts of the asset are measured in accordance with the applicable IFRS. On reclassification, the asset is reported separately in the statement of financial position and measured at the lower of the carrying amount and fair value less costs to sell. Liabilities in connection with assets held for sale are presented separately in the statement of financial position.

In accordance with IFRS 5, a discontinued operation is recognized as such when it is held for sale or has already been sold.

A discontinued operation is a component of the Group's business where its operations and Cash Flows can be clearly distinguished from the rest of the Group and where it:

- represents a separate major line of business or geographical area of operations;
- is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- is a subsidiary acquired exclusively with a view to resale.

If an operation is classified as a discontinued operation, the relevant assets and liabilities are reported in the statement of financial position under "Assets held for sale" or "Liabilities held for sale". The income statement for the comparison year is restated as if the operation had been discontinued from the start of the comparison year.

A separate amount representing the sum total of the current profit and the gain or loss on remeasurement/ disposal after taxes of the discontinued operation is shown in the income statement. This separate amount must be broken down further and presented, with additional disclosures, in the notes.

In line with standard consolidation procedures, intragroup income is eliminated for the selling/performing operation and the associated expenses are eliminated for the receiving operation. The elimination entries are assigned to the continuing operation in line with the future trade relationships of the company.

Cash and cash equivalents

Cash and cash equivalents include freely available cash on hand and demand deposits. Cash equivalents also include short-term liquid financial assets with a term of up to three months that can be readily converted into cash. This risk of fluctuations in value is immaterial.

Employee benefits

a. Pension obligations
The Group has both defined benefit and defined contribution pension plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate non-Group entity (a fund). The Group does not have any legal or constructive obligation to pay any additional amounts if the fund does not have sufficient assets to meet the pension entitlements of all employees for the current and past fiscal years.

Typically, defined benefit plans set out an amount of pension benefits that employees will receive on retirement and that is typically dependent on one or more factors (such as age, length of service and salary).

The Group's obligations from defined benefit pension plans are calculated separately for each defined benefit plan and in accordance with actuarial principles. The benefits earned by employees in the current and prior periods – in return for their service – are initially estimated. The present value of the defined benefit obligation, the gross pension obligation, is calculated by actuaries using the projected unit credit method. Plan assets are deducted from the gross pension obligation at fair value. This produces the net liability or the net asset value to be recognized.

The Group determines the respective net interest expense (net interest income) from the net liability (net asset value) by multiplying the net liability (net asset value) at the beginning of the period by the interest rate with which the defined benefit gross pension obligation is discounted at the beginning of the period.

The interest rate is determined by reference to market yields at the end of the reporting period on high-quality corporate bonds. The currency and term of the underlying corporate bonds are consistent with the currency and estimated term of the post-employment obligations.

The calculation of the net liability (net asset) is based on an actuarial report prepared by a qualified actuary as of the end of each reporting period.

If the deduction of plan assets from the gross defined benefit pension obligation results in an excess of plan assets, the recognition of the net asset value is limited to the present value of the economic benefits associated with the excess of plan assets, for example in the form of reimbursements from the plan or reduced future contribution payments if the Group has control over these economic benefits. Control is assumed to exist if the Group can realize the economic benefit within the term of the pension plan or on settlement of plan liabilities.

The calculation of the present value of the economic benefits of the excess of plan assets takes into account any minimum funding requirements.

The amounts arising on remeasurement comprise actuarial gains and losses arising on the measurement of the defined gross pension obligation on the one hand and the difference between the actual return on plan assets and the rate of return assumed at the beginning of the reporting period on the other. In the event that there is an excess of plan assets, the amounts arising on remeasurement also include the change from applying an asset ceiling, if this has not been considered as part of the net interest component.

The Group recognizes all amounts arising on remeasurement in other comprehensive income (OCI), while other components of the net pension expense (service cost and net interest component) are recognized in profit or loss. The interest portion of the addition to provisions included in pension expense is reported as interest expense within net finance costs. The cumulative remeasurement effects are reported in retained earnings within equity.

If the present value of a defined benefit obligation changes as a result of a plan amendment or curtailment, the Group recognizes the resulting effect as past service cost in profit or loss. The amounts are recognized when the amendment or curtailment occurs.

Defined benefit plans expose the Group to various risks. In addition to general actuarial risks such as longevity risk and interest rate risk, the Group is exposed to currency risk and capital market/investment risk.

b. Obligations from bonus plans
Obligations for bonus payments are recognized as a liability and as an expense. A provision is recognized in the consolidated financial statements in cases in which there is a contractual obligation or a constructive obligation as a result of past business practices.

Other provisions

Other provisions are recognized for present legal or constructive obligations arising from past events that are likely to result in an outflow of resources embodying economic benefits and the amount of this outflow can be estimated reliably. If the provisions are affected by the time value of money, they are discounted at a pre-tax interest rate that reflects, where appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as interest expense.

Government grants

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs for which it is intended to compensate are expensed. If the grant relates to an asset, it is recognized as deferred income and reversed to profit or loss on a straight-line basis over the expected useful life of the asset.

Financial instruments: principles

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. A distinction is made between derivative and non-derivative financial instruments.

Derivative financial instruments can be embedded in other financial instruments or non-financial instruments. In accordance with IFRS, an embedded derivative must be separated from the host contract and measured separately at its fair value if the economic characteristics of the embedded derivative are not closely related to those of the host contract. The Messer Group had no separable embedded derivatives in the fiscal year. Compound financial instruments issued that contain both an equity and a debt component must be accounted for separately on the basis of the substance of the instruments. The Messer Group was not party to any hybrid or compound financial instruments in the fiscal year. Regular way purchases and sales of financial instruments are typically recognized by the Messer Group as of the settlement date, while derivatives are recognized as of the trade date.

Financial assets and financial liabilities are initially recognized at fair value, including any transaction costs if necessary. The fair value of a financial instrument is the price that would be achieved between market participants on the measurement date for the sale of the financial instrument.

Financial assets are derecognized fully or in part when the contractual rights to receive cash flows have expired or if control over the financial asset and substantially all the risks and rewards of the asset have been transferred to a third party. Financial liabilities are derecognized when the contractual obligations have been settled, canceled or have expired.

The measurement categories to be formed in accordance with IFRS 7 are presented below. Furthermore, receivables and liabilities from leases and hedging derivatives in the context of hedge accounting are included in the measurement categories according to IFRS 7.

Financial assets

Financial assets are classified according to the following IFRS 9 measurement categories:

a. Financial assets at amortized cost (AC)
The Messer Group classifies its financial assets as at amortized cost only if both of the following criteria are met:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- the contractual terms give rise to cash flows that are solely payments of principal and interest.

b. Financial assets at fair value through profit or loss (FVTPL)
The Messer Group classifies the following primary financial assets at fair value through profit or loss:

- debt investments that do not qualify for measurement at either amortized cost or fair value through other comprehensive income;
- equity investments held for trading;
- equity investments for which the entity has not elected to recognize fair value gains and losses through other comprehensive income.

The Group has not designated any primary financial assets at fair value through profit or loss.

c. Financial assets at fair value through other comprehensive income (FVOCI)
Financial assets at fair value through other comprehensive income comprise:

- equity instruments that are not held for trading and that the Messer Group has irrevocably elected at initial recognition to recognize in this category. These are strategic investments and the Group considers this classification to be more relevant.
- debt securities where the contractual cash flows are solely payments of principal and interest on the outstanding amount and that are held within a business model where the objective is achieved by both collecting the contractual cash Flows and selling financial assets.

The results of measuring such investments in equity instruments are reported in other comprehensive income and remain there even in the event of a sale. On disposal of these debt securities, any related balances included in other comprehensive income is reclassified to retained earnings.

Financial liabilities

Financial liabilities are classified according to the following IFRS 9 measurement categories:

a. Financial liabilities at amortized cost (AC)
Financial liabilities at amortized cost are non-derivative financial liabilities that are subsequently measured at amortized cost using the effective interest method. Any difference between the amount received and the amount repayable is recognized as income or expense over the term of the liability. Transaction costs incurred are deducted from the respective financial liabilities and amortized over the term of the underlying liability using the effective interest method. Within the Messer Group, this measurement category includes in particular financial liabilities, trade payables and non-derivative other current and non-current liabilities.

b. Financial liabilities at fair value through profit or loss (FVTPL)
Financial liabilities at fair value are either classified as held for trading or designated at fair value through profit or loss upon initial recognition. Derivative financial instruments with a negative fair value are also measured at fair value through profit or loss.

These financial liabilities are subsequently measured at fair value, with gains and losses from financial instruments in this measurement category recognized directly in net finance costs in the income statement.

Derivative financial instruments and hedging

Derivatives are initially recognized at fair value on the date a derivative contract is entered into, and they are subsequently remeasured to their fair value at the end of each reporting period. The instruments are subsequently measured at the fair value determined at the end of the respective reporting period. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. When entering into a derivative contract, the Messer Group designates it as either

(1) a hedge of the fair value of recognized assets or liabilities (fair value hedges); or
(2) a hedge of a forecast transaction or firm commitment (cash flow hedge).

The Messer Group exclusively uses derivatives for hedging if this is required by the hedged items. This applies, for example, to risks from energy purchases and exchange rate fluctuations. Hedged items are the obligations contractually entered into to achieve the goals of the Messer Group, receivables and anticipatory transactions. Derivative instruments are thus exclusively used to safeguard the Messer Group's business performance to the extent stipulated in its Articles or Association. Macro hedging, i.e., the consolidation of individual positions in order to merely hedge the net amount, is not practiced.

Most of the transactions for which this type of hedging could be applied are hedged in full in terms of scope or amount using a variety of financial instruments. The selection of the individual instruments is always a management decision that is made in line with the risk profile, i.e., the opportunity for return that is associated with the risk in question.

Certain financial derivatives that have been entered into in conjunction with the Group's risk management to hedge risks do not, however, fully satisfy the formal requirements, and are therefore not included in hedge accounting, but are instead recognized as stand-alone derivatives in the IFRS 9 "Financial assets and liabilities at fair value through profit or loss" category.

When entering into the transaction, the Group documents the relationship between the hedging instrument and the hedged item in addition to the objective of its risk management and its underlying strategy. Moreover, the Group documents at the inception of the hedge and on an ongoing basis its assessment of whether the derivatives used in the hedge are highly effective at compensating for the changes in the fair value or cash flow. Hedge accounting is maintained only for as long as its effectiveness can be proven. Evidence of this effectiveness is determined by comparing the contract specifics, maturities and volumes ("critical term match") and by means of a regression analysis.

For those hedges for which hedge accounting is applied, the gain or loss on remeasurement is broken down into an effective and an ineffective portion. The effective portion is the portion of the gain or loss on remeasurement that represents an effective hedge against the risk. For cash flow hedges, this is recognized in a separate equity item in other comprehensive income. The ineffective portion, where material, is recognized immediately in the consolidated income statement.

Derivative financial instruments that are not subject to hedge accounting also have to be measured at fair value through profit or loss.

The fair value of financial instruments is determined in accordance with the provisions of IFRS 13. The fair value is derived from financial instruments quoted on an active market or calculated from current market prices using standard measurement models (discounted cash flow method). If necessary, the market value provided by a bank can also be used.

a. Cash flow hedges
Changes in the fair value of derivatives classified as cash flow hedges that are closely matched to the hedged item are recognized in other comprehensive income. If the forecast transaction or firm commitment results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously deferred in other comprehensive income are removed from other comprehensive income and included in the measurement of the cost of the asset or liability. Otherwise, amounts deferred in other comprehensive income are transferred to profit or loss and recognized as revenue or expense in the same reporting period in which the hedged firm commitment or the forecast transaction is recognized in profit or loss.

Income and operating cash flow are essentially unaffected by market interest rates, as the Group does not hold any significant interest-bearing assets. Variable interest rate loans are partially hedged using interest rate swaps (cash flow hedge for future interest payments). This effectively converts loans with floating interest rates into loans with fixed interest rates.

When a hedging instrument expires or is sold or when a hedge no longer meets the criteria for hedge accounting in accordance with IFRS 9, any cumulative gains or losses recognized in other comprehensive income at that time remain there and are not removed until the firm commitment or forecast transaction is finally recognized in profit or loss. If the firm commitment or planned transaction is no longer expected to occur, however, the cumulative gain or loss that had been recognized in other comprehensive income is recognized directly in profit or loss.

b. Fair value hedges
Changes in the fair value of derivatives that are designated as fair value hedges and are closely matched with the hedged item are recognized in profit or loss together with the changes in the fair value of the hedged assets or liabilities attributable to the hedged risk.

The fair values of the various derivative financial instruments are listed under note 32 “Other financial instrument disclosures”.

Only cash flow hedges were in place as of the end of the reporting period on December 31, 2024.

Management of financial risks

In the course of its operating activities, the Messer Group is exposed to various financial risks, in particular default, liquidity, interest rate, electricity price and currency risk, which are described in more detail in note 32 “Other financial instrument disclosures”. The Group’s risk management system takes into account the fact that financial market developments are not foreseeable and aims to minimize any potentially negative impact on the Group’s financial position. The Group uses derivative financial instruments to hedge against specific risks.

Risk management is essentially handled by Group Treasury in compliance with the guidelines approved by management. Group Treasury identifies, assesses and hedges financial risks. The guidelines contain general principles for risk management and detailed rules for specific areas, such as currency and interest rate risks, the use of derivative financial instruments and the investment of surplus cash.

Please refer to our comments in section 32 “Other financial instrument disclosures” for information on the Messer Group’s approach to calculating expected credit losses.

Use of assumptions, estimates and judgments

The preparation of IFRS financial statements requires management to make certain estimates, assumptions and judgments that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at of the end of the reporting period and the reported amounts of revenue and expenses for the fiscal year. The estimates and assumptions concern the future. Actual results may, therefore, differ from these estimates.

Estimates and their underlying assumptions are examined on an ongoing basis. Revisions of estimates are recognized prospectively. If a change in an accounting estimate gives rise to changes in assets or liabilities or relates to an item of equity, the changes in estimates are recognized by adjusting the carrying amounts of the relevant assets, liabilities or item of equity.

Judgments and assumptions concerning the future and sources of estimation uncertainty that could potentially have the greatest impact on these consolidated financial statements were required in particular for:

a. Income taxes (note 11)
Covering current and deferred tax assets or liabilities, IFRIC 23 clarifies how to apply the recognition and measurement requirements set out in IAS 12 when there is uncertainty about income tax treatments. According to IFRIC 23, uncertain tax treatments can be considered separately or together with one or more other uncertain tax treatments. The approach that better predicts the resolution of the uncertainty is to be chosen here. In making the assessment, it must be assumed that a taxation authority will examine all amounts it has a right to examine and have full knowledge of all related information when making those examinations. If it is considered unlikely that a taxation authority will accept an uncertain tax treatment, either the most likely amount or the expected value is to be applied to each uncertain tax treatment in order to account for the effect of the uncertainty, depending on which approach better predicts the resolution of the uncertainty.

The Group companies are subject to income tax in a large number of countries worldwide. When assessing global income tax assets and liabilities, the interpretation of tax provisions may be subject to particular uncertainty. It cannot be ruled out that the relevant tax authorities will take a different view of the correct interpretation of tax standards. Changes to the assumptions underlying the correct interpretation of tax standards, for examples as a result of changes in case law, affect the accounting treatment of uncertain income tax assets and liabilities in the fiscal year in question.

The OECD published technical guidance on its 15 % global minimum tax in March 2022. This guidance explains the application and operation of the Global Anti-Base Erosion (GloBE) rules that were agreed and published in December 2021. They provide for a coordinated system to ensure that multinational companies with revenue of more than € 750 million pay tax of at least 15 % on the income generated in each country in which they operate.

The Bundesrat, the upper house of Germany’s parliament, passed the “Mindestbesteuerungsrichtlinie-Umsetzungsgesetz” (Minimum Tax Directive Implementation Act) on December 15, 2023, which will lead to the statutory implementation of the globally agreed minimum taxation rules in Germany and will apply to the Group with effect from fiscal 2024.

Taking into account the temporary safe harbor rules, the Group expects to be subject to the minimum tax with respect to its operations in Bosnia and Herzegovina and North Macedonia, where the statutory tax rate is 10 %, and with respect to Puerto Rico, where the subsidiaries receive government support in the form of additional tax deductions that reduce their effective tax rate to below 15 %.

The Group has applied the temporary, mandatory exemption for the recognition of deferred taxes resulting from the introduction of the global minimum tax and recognizes these as current tax expense/income as they arise. Consequently, the profits (IFRS / before taxes and excluding dividends) from the Group's activities in Bosnia, North Macedonia and Puerto Rico totaling K€ 16,420 less a substance-based income exclusion of K€ 4,091 are subject to the minimum tax, whereby the average effective tax rate applicable to these profits was 9.2 % in 2024. Accordingly, a minimum tax of K€ 705 results, which is recognized as an income tax expense.

b. Goodwill impairment testing (note 14)
The impairment tests conducted within the meaning of IAS 36 on the basis of the recoverable amount are based on calculations of the respective fair value less costs of disposal for the groups of cash-generating units over the medium-term planning of the next five years. Judgments are also required to derive capitalization rates. A change in the factors used when testing goodwill and other intangible assets or property, plant and equipment for impairment may lead to higher, lower or no impairment.

c. Determination of useful lives of property, plant and equipment and when assessing which cost components can be capitalized (note 15)
Group-wide uniform useful lives for items of property, plant and equipment are determined on the basis of past experience and regularly reviewed. As part of the process of assessing whether an item is eligible for recognition as an asset and which components of cost should be taken into account, we make assumptions regarding the expected future usability of the asset.

d. Assessment of the need for and measurement of allowances for doubtful debts (notes 18 20 32)
When recognizing allowance for doubtful debts, estimates are made regarding the creditworthiness of individual customers and market segments and regarding general economic forecasts in the various countries and the history of our bad debts.

e. Measurement of pension obligations (note 25)
Obligations from defined benefit pension commitments are calculated on the basis of actuarial assumptions. These are mainly the discount rate, life expectancy and pension and salary trends. The discount rate is determined on the basis of yields achieved for high-quality fixed-rate corporate bonds on the market as of the end of the reporting period. Sensitivity analyses on the discount rate can be found in the notes.

f. Recognition and measurement of other provisions (note 26)
Other provisions are recognized and measured on the basis of an assessment of the probability of a future outflow of benefits using values based on experience and circumstances known as of the end of the reporting period. The actual outflow of economic resources at a later date could be lower or higher than the amount recognized as a provision. The nature of estimates and judgments used differs for the various categories of provisions.

The recognition and measurement of provisions for legal disputes requires a high degree of judgment as to whether a current obligation exists and whether a future outflow of economic resources is probable and can be reliably estimated. We obtain assessments from in-house and external attorneys to assess these matters. Changes in circumstances may result in adjustments to provisions.

Income taxes

The tax expense comprises current and deferred taxes. Current and deferred taxes are recognized in profit or loss, except to the extent that they are associated with a business combination or with an item recognized directly in equity or other comprehensive income.

The Group has determined that interest and penalties on income taxes, including uncertain tax items, do not meet the definition of income taxes and are therefore accounted for in accordance with IAS 37.

a. Current taxes
Current taxes are the expected tax liability or tax receivable on the taxable income or loss for the fiscal year based on tax rates that are enacted or substantively enacted at the end of the reporting period, plus any adjustments to tax liability for prior years. The amount of the expected tax liability or tax receivable reflects the amount that is the best estimate, taking into account tax uncertainty, if any. Current tax liabilities also include all tax liabilities that arise as a result of dividends being determined. Current tax assets and liabilities are only netted under certain conditions.

b. Deferred taxes
Deferred taxes are recognized, in accordance with the asset and liability method, for all temporary differences at the end of the reporting period between the carrying amounts of assets and liabilities in the statement of financial position and their corresponding tax bases and for the tax loss and for tax loss carryforwards. In accordance with IAS 12.15 in conjunction with IAS 12.21B, temporary differences arising on the initial recognition of goodwill are not included in the calculation of deferred taxes. Deferred taxes are calculated using currently enacted or substantially enacted tax rates that will apply when the temporary differences are expected to reverse. Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the unused tax loss carryforwards or asset-side differences between the carrying amounts and the corresponding tax bases can be utilized.

Deferred tax assets and liabilities are offset only if they relate to income taxes levied by the same tax authority and the company has a legally enforceable right to offset the tax assets and liabilities.

Income taxes relating to items recognized directly in other comprehensive income are also recognized in other comprehensive income and not in profit or loss. Deferred taxes are recognized in other comprehensive income if the underlying transaction is also recognized in other comprehensive income.

Revenue recognition

Revenue includes sales of products (essentially industrial gases) and services as well as rental income, less trade discounts and rebates. Our payment terms vary by contract and typically include payments within a specified period of time after delivery or performance of the service. The transaction price is allocated to separate performance obligations based on the specific circumstances of each contract.

a. Revenue from on-site plant and pipeline sales
Customers requiring large volumes of industrial gases (typically oxygen, nitrogen and hydrogen) and with a relatively constant demand are typically supplied by plants located on or adjacent to their facilities, the capacity of which frequently also covers a portion of the liquefied gas requirements of the surrounding market. These plants are legally owned and operated by the Messer Group. The product supply contracts typically have terms of 10 to 15 years and generally include agreements on minimum purchase volumes or minimum prices and price escalation clauses. Revenue is recognized when the gas is delivered to the customer, which is the date on which control of the industrial gases is transferred. If the minimum purchase

volume is not reached, revenue is recognized in the amount of the contractual minimum purchase. The same conditions and accounting policies apply to sales via pipelines; the sole difference is that customers are supplied via a pipeline.

Gas supply contracts, in particular for the gas generation plants rented on a long-term basis that these include, must be examined in accordance with IFRS 16 to determine whether they constitute a finance lease and, if necessary, classified as such. If there is a finance lease in accordance with IFRS 16, disposal is assumed at the start of the lease term and revenue is recognized in the amount of the present value of the lease payments attributable to the asset. The interest income earned on finance leases is reported as other financial income.

b. Revenue from liquefied gases

Liquid products are typically stored in the Group's own tanks, which are rented to customers on their premises. The gases are delivered to customers in tankers, tank trailers or rail cars from which the gases are transferred to the leased tanks. The agreements customarily used in the liquefied products business typically have a term of three to five years. Revenue from liquefied products is recognized on delivery to the tank. Income from the rental of tanks is recognized according to the terms of the lease agreements in accordance with IFRS 16.

c. Revenue from cylinder gases

Customers who require small quantities of gas (especially in the case of most special gases) receive the products in cylinders, which are typically owned by the Group and rented to the customers. Cylinder gases are generally sold by individual purchase orders or by contracts. Revenue from gas sales is realized on delivery to the customers. Income from the rental of cylinders is recognized according to the terms of the lease agreements in accordance with IFRS 16.

d. Construction contracts

Depending on the type of contractual arrangement, revenue from long-term construction contracts in the Engineering division is recognized either at a point in time or over a period of time. The Messer Group uses the input method.

In accordance with IFRS 15, revenue from engineering projects is recognized over a period of time if they satisfy the criteria of IFRS 15.35. In the Messer Group this typically applies only to customer-specific air separation units. For other engineering projects that do not meet the specified criteria, revenue is recognized in accordance with IFRS 15 when the project is completed.

3. Consolidated companies

The consolidated group of Messer SE & Co. KGaA developed as follows:

2024	Germany	Other countries	Total
Consolidated	14	94	108
Equity method	2	7	9
Proportionately consolidated	—	2	2
As of Jan. 1	**16**	**103**	119
Additions			
Acquisitions	1	2	3
Companies founded	2	5	7
Reclassifications	—	2	2
Disposals			
Mergers	(4)	—	(4)
Reclassifications	—	2	2
As of Dec. 31	**15**	**110**	125
Consolidated	12	101	113
Equity method	3	7	10
Proportionately consolidated	—	2	2

Initial consolidation

Companies founded

The following companies were founded in the past fiscal year and commenced operations:

- Chengdu Gaotou Messer Gas Products Co., Ltd., China, 70 %
- Messer Gas Products (Nantong) Co., Ltd., China, 100 %
- SympH2ony GmbH (formerly: Messer Hydrogen Mobility Services GmbH), Germany, 100 %
- Messer IP License GmbH, Germany, 100 %
- Messer Helium Cliffside LLC, USA, 100 %
- Red Cerrada Knife, SLU, Spain, 100 %
- Yangjiang Xianggang Messer Gas Co., Ltd., China, 55 %

Acquisition of EKU Elektronik GmbH

Messer SE & Co. KGaA acquired 100 % of the shares in the German company EKU Elektronik GmbH ("EKU") for a purchase price of K€ 2,244 on June 4, 2024. The acquisition has no material impact on the consolidated financial statements and resulted in goodwill of K€ 222.

EKU specializes in the development and production of electronic products in the fields of ventilation, anesthesia, gas therapy and medical measurement technology. The acquisition of EKU supports Messer's goal of becoming an independent provider of complete solutions in the field of nitric oxide (NO) therapy.

Increases in equity investments

In May 2024, Messer Griesheim (China) Investment Co. Ltd., China, increased its majority interests in Shaoxing Messer Gas Products Co. Ltd. (“Shaoxing”), China, and Messer Sunshine (Ningbo) Gas Products Co. Ltd. (“Ningbo”), China, to 100%.

In June 2024, Messer SE & Co. KGaA acquired the minority interests in Universal Industrial Gas Sdn. Bhd. (“UIG”), Malaysia, and now holds 100 % of the shares. In October 2024 Messer SE & Co. KGaA also increased its majority interests in ASCO Kohlensäure AG, Switzerland, to 100 % and in Messer Tehnogas AD Serbia, to 85.88 %.

Messer Austria GmbH, Austria, increased its majority interest in Messer Croatia Plin d.o.o, Croatia, to 99.999 % in August 2024.

In December 2024, Messer Griesheim (China) Investment Co. Ltd., China, also increased its majority interest in Yunnan Dianzhong Messer Gas Products Co., Ltd., China, to 100 %.

In June and December 2024, Messer LLC, USA, increased its interests in the former associates Cliffside Helium LLC, USA, and Cliffside Refiners LP, USA, to a total of 66 % and 65.34 %, respectively. With the acquisition of the additional shares, Messer gained control of the two companies, which is why they have been fully consolidated since December 23, 2024. The initial consolidation of the two companies has no material impact on the consolidated financial statements and resulted in goodwill of K€ 1,634 and K€ 12,725, respectively. The remeasurement of the existing interests totaling 30 % in Cliffside Helium LLC, USA, and 29.7 % in Cliffside Refiners LP, USA, to fair value resulted in a gain of K€ 5,090 (K€ 8,006 less the carrying amounts of K€ 2,916 of the companies accounted for using the equity method at the acquisition date). This amount is shown in other operating income.

Acquisition of shares in associated companies

On July 15, 2024, Messer Belgium N.V., Belgium, signed a purchase agreement for the acquisition of 33.33 % of the shares in Hyoffwind Infrastructure NV, Belgium. The purchase price was K€ 4,021.

In November 2024, Messer SE & Co. KGaA acquired 25.1 % of the shares in Resity Technologies d.o.o., Serbia, for a purchase price of K€ 769.

The equity interests acquired are included in the scope of consolidation as associates.

Sale of shares with loss of control

On March 22, 2024, Messer SE & Co. KGaA sold 50 % of the shares in Messer Hydrogen Mobility Services GmbH to Toyota Tsusho Europe SA. After the sale was registered, Messer Hydrogen Mobility Services GmbH was renamed SympH2ony GmbH. The company is included in the consolidated financial statements as an associate.

Others

The companies Yeti GermanCo 2 GmbH, Yeti GermanCo 3 GmbH and Yeti Management Verwaltungs GmbH were merged with Messer SE & Co. KGaA with retroactive effect from January 1, 2024. Messer GasPack 2 GmbH was also merged with Messer GasPack GmbH in July 2024. The mergers have no impact on the consolidated financial statements.

In October 2024, Plin Sarajevo d.d., Bosnia and Herzegovina, which was previously reported under “Equity investments and other financial investments”, was merged into the fully consolidated Messer Tehnoplin d.o.o, Bosnia and Herzegovina. As a result of the merger, Messer Tehnoplin d.o.o. became a wholly owned subsidiary of the Group. Regarding the impacts on the consolidated financial statements, please refer to our comments in note 30 “Equity”.

Notes to the consolidated income statement

4. Revenue

	Jan. 1 – Dec. 31, 2024		Jan. 1 – Dec. 31, 2023	
From contracts with customers	4,073,089	91 %	1,975,283	94 %
From other revenue sources	408,266	9 %	133,735	6 %
Total	**4,481,355**	**100 %**	**2,109,018**	**100 %**

Revenue is mainly generated by the sale of liquefied products, cylinder gases and on-site and pipeline sales.

Revenue breaks down by individual sales channels as follows:

	Jan. 1 – Dec. 31, 2024		Jan. 1 – Dec. 31, 2023	
Liquefied gases	2,332,518	52 %	931,904	44 %
Pipeline / on-site	813,096	18 %	574,144	27 %
Cylinder gases	721,231	16 %	355,071	17 %
Hardware / other	206,244	5 %	114,164	6 %
From contracts with customers	**4,073,089**	**91 %**	**1,975,283**	**94 %**
From other revenue sources	408,266	9 %	133,735	6 %
Total	**4,481,355**	**100 %**	**2,109,018**	**100 %**

Revenue breaks down by individual regions as follows:

	Jan. 1 – Dec. 31, 2024		Jan. 1 – Dec. 31, 2023	
Americas	2,356,174	52 %	363,369	17 %
Europe	1,287,540	29 %	866,667	42 %
Asia	810,034	18 %	811,221	38 %
Corporate	27,607	1 %	67,761	3 %
Total	**4,481,355**	**100 %**	**2,109,018**	**100 %**

5. Cost of sales

In addition to directly attributable costs such as materials purchased, energy and personnel expenses, the cost of sales includes overheads attributable to the production process, including depreciation on air separation units and the update of the purchase price allocation.

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Goods purchased	167,191	177,207
Production costs		
Energy	865,772	569,037
Raw materials and supplies	509,561	84,153
Depreciation and amortization	451,446	163,082
Personnel expenses	218,053	98,735
Maintenance	61,926	29,994
Others		
Services	43,283	16,888
Hardware	35,415	37,648
Taxes and other fees	25,619	9,852
Security and insurance	12,903	6,353
Other	49,504	25,563
Total	**2,440,673**	**1,218,512**

6. Selling and distribution expenses

In addition to the costs of the sales departments, the selling and distribution expenses also include the costs of logistics activities and the roll-forward of the purchase price allocation.

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Personnel expenses	365,676	118,127
Depreciation and amortization	361,861	93,007
Transportation costs	287,979	121,837
Maintenance	56,644	20,376
Warehousing costs	19,718	11,773
Advertising	5,937	3,020
Insurance	4,729	1,857
Other	72,900	40,882
Total	**1,175,444**	**410,879**

7. General and administrative expenses

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Personnel expenses	200,968	150,916
IT services	37,738	13,510
Depreciation and amortization	35,002	12,353
Insurance and assurance services	25,946	6,970
Legal and consulting expenses	25,503	15,571
Administrative expenses of related parties	10,270	15,983
Rent	2,819	1,959
Other	25,847	42,065
Total	**364,093**	**259,327**

8. Other operating income

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Other reimbursements	31,736	3,431
Exchange rate gains from operating activities	9,803	4,676
Gains on the disposal of non-current assets	7,925	5,081
Subsidies	5,683	4,089
Income from changes in Group reporting	5,090	3,186,140
Other prior-period income	2,615	968
Change in the fair value of derivatives through profit or loss	2,166	388
Insurance claims	1,769	1,761
Income from related parties	992	3,788
Other	19,124	11,918
Total	**86,903**	**3,222,240**

The position “Other reimbursements” includes a compensation payment for the relocation of an air separation unit.

Please refer to note 3 “Consolidated companies” for more details on the income from changes in Group reporting in the fiscal year. The previous year’s figure consists of the profit of K€ 3,186,140 that arose from “Transactions”. Please refer to note 1 “General Information” for more details.

9. Other operating expenses

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Exchange rate losses from operating activities	8,008	5,538
Other taxes	2,213	104
Losses on the disposal of non-current assets	2,134	1,558
Other legal and consulting expenses	791	82
Related party expenses	201	1,345
Loss due to changes in Group reporting	—	81,446
Other	9,517	6,246
Total	**22,864**	**96,319**

The loss from changes in Group reporting in the previous year includes the settlement loss of K€ 81,446 that was incurred in connection with “Transactions”. Please refer to note 1 “General Information” for more details.

10. Financial result, net

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Income from investments accounted for using the equity method	**7,465**	**159,875**
Other investment results, net	**360**	**27**
Finance income	**48,671**	**88,974**
Interest income from		
Bank balances	6,215	59,235
Leases	163	231
Income from the interest effect of provisions	—	20
Other	14,835	2,529
Foreign currency gains	25,674	26,412
Gain or loss from the measurement of derivatives	188	527
Other finance income	1,596	20
Finance costs	**(267,613)**	**(114,037)**
Interest expense from		
Liabilities to banks	(211,661)	(37,542)
Leases	(8,738)	(2,002)
Expenses from the interest effect of provisions	(7,491)	(2,488)
Capitalized borrowing costs	15,412	3,077
Others	(17,802)	(6,128)
Foreign currency losses	(21,137)	(59,356)
Gain or loss from the measurement of derivatives	(1,253)	(4,493)
Other finance costs	(14,943)	(5,105)
Total	**(211,117)**	**134,839**

For more information on interest expenses for our bank financing and derivatives, please refer to note 27 “Financial liabilities” and note 32 “Other financial instrument disclosures”.

11. Income taxes

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Current income taxes	(158,273)	(31,790)
Deferred income taxes	65,262	38,027
Total	**(93,011)**	**6,237**

Current taxes include tax income for previous years amounting to K€ 1,781.

Deferred income taxes relating to items charged or credited directly to other comprehensive income:

	Dec. 31, 2024	Dec. 31, 2023
Deferred taxes related to gains or losses from the remeasurement of hedges	14,802	11,672
Deferred income taxes on net investments in foreign operations	971	(1,773)
Deferred taxes on results of financial assets held for sale	(22)	(22)
Deferred taxes relating to the remeasurement of net defined benefit obligations	3,089	3,615
Deferred taxes relating to the initial application of IFRS	89	89
Deferred tax assets / (liabilities) recognized in other comprehensive income	**18,929**	**13,581**

The following reconciliation summarizes the individual calculations of deferred taxes for specific companies using the respective tax rates specific to their countries and taking consolidation adjustments into account. The expected tax expense is reconciled to the effective reported tax expense. To calculate the expected tax expense, the income tax rate for the Group in the 2024 fiscal year, based on the tax rate for the parent company of 30 % (previous year: 30 %), is multiplied by the profit before tax.

	Jan. 1 - Dec. 31, 2024	Jan. 1 - Dec. 31, 2023
Tax rate	30.00 %	30.00 %
Profit before tax	**338,409**	**3,447,430**
Expected income tax expense	(101,523)	(1,034,229)
Goodwill impairment	—	(3,483)
(Write-down) / reversal of write-down of deferred taxes on temporary differences (previous years)	(6,199)	1,440
Write-down of deferred taxes on temporary differences (current year)	(3,570)	(222)
Impairment loss / non-recognition of deferred taxes on current losses	(3,799)	(797)
Change in impairment loss/non-recognition of tax loss carryforwards	778	27,172
Effect of tax credits	5,045	2,938
Non-deductible interest expenses	(21,930)	(2,202)
Non-deductible withholding tax/other taxes	(21,107)	4,588
Effect of changes in tax rates	21,628	179
Tax (expense) / income for previous years	1,781	(9,507)
Tax-free income	6,533	15,644
Non-deductible expenses for tax purposes	(20,274)	(3,172)
Tax rate differences at Group companies	45,346	33,399
Associates accounted for using the equity method	1,947	49,209
Effects from changes in Group reporting	—	925,121
Others	2,333	159
Effective tax income / (expense) from operating activities	**(93,011)**	**6,237**
Effective tax rate	**27.48 %**	**(0.18 %)**

The position “Other taxes” includes the state tax in the US in the amount of K€ -10,169 (previous year: K€ 7,958) and tax expenses in the amount of K€ 705 (previous year: K€ –) for Pillar II.

The “Effects of changes in tax rates” are primarily due to changes in tax rates in the US.

In the previous year, the item “Change in impairment loss / non-recognition of tax loss carryforwards” included deferred tax income of K€ 25,476 in connection with the initial recognition of deferred tax assets on domestic loss carryforwards.

As of December 31, 2024, the Messer Group had tax loss carryforwards of € 379 million (previous year: €433 million) and credits for offsetting in the form of interest carryforwards totaling K€ 125,325 (previous year: K€ 53,623).

The Group's loss carryforwards will expire as follows:

Expiring within	Dec. 31, 2024	Dec. 31, 2023
1 year	6,787	3,068
2 years	5,923	4,713
3 years	7,169	5,560
Indefinite	359,080	419,914
Total	**378,959**	**433,255**

For Group companies that had losses in the current or previous period, a deferred tax asset of K€ 4,008 (previous year: K€ 2,118) was capitalized, the realization of which is dependent on future taxable profits that are higher than the effects of the reversal of existing taxable temporary differences. This mainly relates to two Chinese companies where the delay of a major project and interest rate effects led to short-term losses. A positive financial performance is expected in the future, which means that the realization of the recognized deferred tax asset is considered probable.

Deferred taxes were not recognized for tax loss carryforwards and interest carryforwards totaling K€ 344,269 (previous year: K€ 260,633), unused tax credits amounting to K€ 3,826 (previous year: K€ 1,657) and temporary differences of K€ 58,707 (previous year: K€ 35,206), as it is assumed - on the basis of planning for tax purposes - that it will not be possible to utilize the tax loss carryforwards or temporary differences.

While the interest carryforwards of K€ 125,325 without deferred tax assets and temporary differences of K€ 58,707 can be regarded as indefinite, the loss carryforwards without deferred tax assets will expire as follows:

Expiring within	Dec. 31, 2024	Dec. 31, 2023
1 year	6,523	2,652
2 years	5,923	4,449
3 years	7,169	5,560
Indefinite	199,329	194,349
Total	**218,944**	**207,010**

In accordance with IAS 12.39, deferred taxes on the difference between the pro rata equity of a subsidiary recognized in the consolidated statement of financial position and the carrying amount of the investment in that subsidiary must be included in the parent company's tax accounts (outside basis differences) if they are expected to be realized. These differences essentially relate to the retained earnings of German and foreign subsidiaries. Deferred taxes are not recognized for these retained earnings as they are re-invested indefinitely or are not subject to corresponding taxation. Distributions by subsidiaries would be subject to dividend taxation. Distributions from abroad could also trigger withholding tax. As of December 31, 2024, deferred tax liabilities for outside basis differences were not taken into account for planned dividend payments as their realization is not planned.

Deferred taxes are attributable to the following statement of financial position items as of December 31, 2024:

	Dec. 31, 2024	Dec. 31, 2023	Recognized in the income statement (1)	Recognized in equity
Deferred tax assets				
Tax loss carryforwards and tax credits	46,174	70,843	(24,669)	—
Intangible assets and property, plant and equipment	11,034	13,095	(2,061)	—
Inventories	3,797	2,202	1,595	—
Trade receivables	4,397	4,865	(468)	—
Provisions for employee benefits	9,488	8,767	1,247	(526)
Non-current financial liabilities	1,055	315	740	—
Non-current lease liabilities	36,202	33,358	2,844	—
Current provisions	5,056	6,533	(1,477)	—
Current lease liabilities	4,898	4,504	394	—
Other current liabilities	36,523	27,352	9,171	—
Miscellaneous	38,823	28,765	7,314	2,744
Total	**197,447**	**200,599**	**(5,370)**	**2,218**
Offsetting	**(177,838)**	**(162,879)**		
Deferred tax assets, net	**19,609**	**37,720**		
Deferred tax liabilities				
Right-of-use assets	(40,863)	(39,024)	(1,839)	—
Intangible assets	(458,991)	(515,689)	56,698	—
Property, plant and equipment	(667,706)	(673,126)	5,420	—
Other non-current receivables and assets	(4,997)	(1,493)	(3,504)	—
Inventories	(16,695)	(22,906)	6,211	—
Other current receivables and assets	(2,968)	(2,731)	(3,367)	3,130
Non-current and current financial liabilities	(3,170)	(5,084)	1,914	—
Current provisions	(2,864)	(2,700)	(164)	—
Miscellaneous	(12,252)	(13,941)	1,689	—
Total	**(1,210,506)**	**(1,276,694)**	**63,058**	**3,130**
Offsetting	**177,838**	**162,879**		
Deferred tax liabilities, net	**(1,032,668)**	**(1,113,815)**		
Total deferred taxes, net	**(1,013,059)**	**(1,076,095)**	**57,688**	**5,348**

(1) Of which exchange rate changes recognized in other comprehensive income (K€ 7,574)

Deferred tax assets and liabilities, after offsetting at the individual companies, break down as follows:

Deferred taxes	Dec. 31, 2024	Dec. 31, 2023
Deferred tax assets	19,609	37,720
Deferred tax liabilities	(1,032,668)	(1,113,815)
Deferred tax liabilities, net	**(1,013,059)**	**(1,076,095)**

Deferred tax assets and liabilities in the statement of financial position and deferred taxes in the income statement are reconciled as follows:

	Dec. 31, 2024	Dec. 31, 2023
Change in deferred tax assets in the statement of financial position	(18,111)	20,454
Change in deferred tax liabilities in the statement of financial position	81,147	(1,092,304)
Difference	63,036	(1,071,850)
of which:		
Through profit and loss	65,262	38,027
Change in Group reporting	—	(1,145,785)
Offset against other comprehensive income	5,348	9,795
Offsett against capital reserves	—	2,890
Exchange rate changes	(7,574)	23,223

12. Personnel expenses

Personnel expenses consist of wages and salaries, social security contributions and other employee benefits (e.g. pensions).

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Personnel expenses	758,091	366,541

The above amount includes wages and salaries totaling K€ 606,932 (previous year: K€ 304,128), expenses for pensions and support amounting to K€ 6,468 (previous year: K€ 3,324) and social security contributions of K€ 144,691 (previous year: K€ 59,089). The expenses for defined contribution plans, which essentially relate to statutory pension insurance in Germany, totaled K€ 4,067 for fiscal 2024 (previous year: K€ 2,436). An amount of K€ 15,803 (previous year: K€ –) is attributable to performance-based remuneration components.

13. Number of employees (annual average)

The average number of employees breaks down as follows:

By region	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Americas	5,240	866
Asia	3,108	2,994
Europe	3,008	2,245
Corporate	345	281
Total number of employees	**11,701**	**6,386**

Notes to the consolidated statement of financial position

14. Intangible assets

Goodwill

	2024	2023
Cost		
As of Jan. 1	**5,022,610**	**359,226**
Additions	14,581	—
Change in Group reporting	—	4,629,077
Exchange rate changes	(65,630)	34,307
As of Dec. 31	**4,971,561**	**5,022,610**
Cumulative impairments		
As of Jan. 1	**(109,045)**	**(87,222)**
Additions	—	(23,219)
Exchange rate changes	(1,214)	1,396
As of Dec. 31	**(110,259)**	**(109,045)**
Net carrying amount as of Jan. 1	**4,913,565**	**272,004**
Net carrying amount as of Dec. 31	**4,861,302**	**4,913,565**

Goodwill is tested for impairment as of December 31 each year. The regions of the Messer Group have been identified as groups of cash-generating units for which goodwill is monitored.

During fiscal 2024, goodwill was reallocated from the level of country-specific cash-generating units to the level of the regions.

The reallocation at the regional level reflects the strategic orientation and the change in approach to the operational management of the Group, where the regions act as key management and reporting variables. This adjustment enables a consistent and economically sensible allocation of goodwill to the units that will benefit most from the expected synergies and economic benefits of a business combination. Moreover, the allocation was made at the regional level to ensure that the impairment of goodwill can be tested in accordance with the relevant accounting standards. These standards require that goodwill is tested at the lowest level at which monitoring will take place, but not at a higher level than the operating segments.

The following table shows the breakdown of goodwill as of December 31, 2024:

	Dec. 31, 2024	Dec. 31, 2023
Group of cash-generating units Americas	3,242,891	—
Group of cash-generating units Europe	1,342,598	—
Group of cash-generating units Asia	275,813	—
Hunan Xianggang Messer Gas Products Co., Ltd., China	—	45,912
Messer Hungarogáz Kft., Hungary	—	44,078
Czechia cash-generating unit	—	41,390
Poland cash-generating unit	—	26,857
Messer Tatragas spol.s.r.o, Slovakia	—	22,516
Serbia cash-generating unit	—	19,444
Messer Austria GmbH, Austria	—	9,782
Foshan, China, cash-generating unit	—	9,345
Messer Croatia Plin d.o.o., Croatia	—	9,025
Messer Romania Gaz SRL, Romania	—	6,543
Specialty Gases cash-generating unit	—	6,216
Messer Slovnaft s.r.o., Slovakia	—	3,200
Ningbo cash-generating unit	—	1,882
Messer Mostar Plin d.o.o., Bosnia and Herzegovina	—	345
Universal Industrial Gas. Sdn. Bhd., Malaysia	—	196
Allocated goodwill	**4,861,302**	**246,731**
Unallocated goodwill	—	4,666,834
	4,861,302	**4,913,565**

The recoverable amount for each region is based on calculations of its respective fair value less costs of disposal. Fair value is defined as the price that would be received for selling an asset in an orderly transaction. The cash flow forecast is based on the most recent financial plans of the relevant group of cash-generating units that have been approved by management.

Starting with the analysis of past results, the fair values were transferred on the basis of the forecast of long-term cash flows in the medium-term planning for the next five years. The key assumptions used to determine the cash flows did not deviate from past results. The fair values are classified in hierarchy level 3. They are measured using a discounted calculation model. Key unobservable inputs are sales growth, EBITDA margin development and growth rate. The cash flow for the periods after the end of the medium-term planning period is initially derived from a technical transition period comprising five periods, in which the revenue growth rate and the investment rate of the last medium-term planning period are reconciled on a linear basis to the long-term growth rate and investment rate respectively. The margin assumptions of the last medium-term planning period are used as a basis here. After the transition period, the final period of the transition period is permanently updated according to the perpetual annuity model.

The forecast cash flows were discounted to the measurement date using an appropriate and region-specific capitalization rate. The capitalization rate is calculated using the capital asset pricing model (CAPM) after first being broken down into the components of basic interest rate and risk premium. An inflation differential and a country risk premium are additionally taken into account. The risk-free basic interest rate was derived from yields on long-term German government bonds. The risk premium was obtained by multiplying the market risk premium by the beta factor that reflects the relative risk of a given stock compared to the market as a whole. The beta factor was calculated on the basis of an analysis of a peer group of listed companies for the Messer Group.

The capitalization rates after tax for the group of cash-generating units are as follows:

	Dec. 31, 2024	Dec. 31, 2023
Americas	7.87 %	–
Europe	8.57 %	–
Asia	8.55 %	–
Bosnia and Herzegovina	–	13.77 %
Romania	–	10.85 %
Serbia	–	10.76 %
Hungary	–	10.13 %
Poland	–	9.06 %
Croatia	–	8.88 %
Malaysia	–	8.25 %
Slovenia	–	8.19 %
Slovakia	–	8.08 %
China	–	7.86 %
Austria	–	7.77 %
Czech Republic	–	7.70 %

The five-year medium-term planning used to calculate the fair values of the group of cash-generating units is based primarily on the key assumptions regarding revenue growth, the development of the EBITDA margin and the long-term growth rate after the medium-term planning period.

These assumptions for the group of cash-generating units are as follows:

Cash-generating unit	Carrying amount Dec. 31, 2024		Key planning assumptions 2024		
			Revenue growth (CAGR)	Trend in EBITDA margin (1)	Growth rate (2)
Group of cash-generating units Americas	3,242,891	66 %	Significant increase	Moderate increase	1.5 %
Group of cash-generating units Europe	1,342,598	28 %	Significant increase	Slight decrease	1.5 %
Group of cash-generating units Asia	275,813	6 %	Significant increase	Significant decrease	1.5 %
Messer Group	**4,861,302**	**100 %**			

(1) End of the medium-term planning period compared to the current fiscal year
(2) Growth after the medium-term planning period

Cash-generating unit	Carrying amount Dec. 31, 2023		Key planning assumptions 2023		
			Revenue growth (CAGR)	Trend in EBITDA margin (1)	Growth rate (2)
Hunan Xianggang Messer Gas Products Co., Ltd., China	45,912	18 %	Moderate increase	Significant decrease	1.5 %
Messer Hungarogáz Kft., Hungary	44,078	18 %	Moderate increase	Moderate increase	1.5 %
Cash-generating unit Czech Republic	41,390	17 %	Moderate increase	Significant increase	1.5 %
Cash-generating unit Poland	26,857	11 %	Moderate increase	Significant increase	1.5 %
Messer Tatragas spol.s.r.o, Slovakia	22,516	9 %	Moderate increase	Significant increase	1.5 %
Cash-generating unit Serbia	19,444	8 %	Moderate increase	Significant increase	1.5 %
Miscellaneous companies	46.534	19 %			
Messer Group	**246,731**	**100 %**			

(1) End of the medium-term planning period compared to the current fiscal year
(2) Growth after the medium-term planning period

The growth rate for extrapolating Cash Flows beyond the planning period is uniformly 1.5 % (previous year: 1.5 %).

The impairment test presented above did not result in any impairment requirement at any of the groups of cash-generating units in 2024.

The scenarios considered to be possible were simulated as part of a sensitivity analysis. In the group of cash-generating units Americas, the recoverable amount exceeded the carrying amount by K€ 532,068. An increase in the capitalization rate by 0.3 percentage points, a reduction in the long-term growth rate by 0.5 percentage points, a reduction in revenue growth (CAGR) in the detailed planning period from 5.5 % to 4.6 % and an adjustment of the development of the EBITDA margin in the detailed planning period from 1.9 % to 0.6 % would lead to an impairment requirement in this group of cash-generating units.

No goodwill impairment is required for the groups of cash-generating units in Europe and Asia in any scenario considered to be possible.

Right-of-use assets

Right-of-use assets relate to assets capitalized in conjunction with leases in accordance with IFRS 16. These consist of the following:

2024	Land and buildings	Plant and machinery	Other operating and office equipment	Total
Cost				
As of Jan. 1, 2024	**149,091**	**86,093**	**521**	**235,705**
Additions	26,715	35,473	45	62,233
Reclassifications	9.648	—	—	9,648
Disposals	(7,874)	(7,240)	(307)	(15,421)
Exchange rate changes	4,370	3,944	(10)	8,304
As of Dec. 31, 2024	**181,950**	**118,270**	**249**	**300,469**
Cumulative depreciation				
As of Jan. 1, 2024	**(23,669)**	**(9,642)**	**(267)**	**(33,578)**
Additions	(21,767)	(21,935)	(167)	(43,869)
Disposals	3,270	4,074	310	7,654
Exchange rate changes	(751)	(427)	2	(1,176)
As of Dec. 31, 2024	**(42,917)**	**(27,930)**	**(122)**	**(70,969)**
Net carrying amounts as of Jan. 1, 2024	**125,422**	**76,451**	**254**	**202,127**
Net carrying amounts as of Dec. 31, 2024	**139,033**	**90,340**	**127**	**229,500**

2023	Land and buildings	Plant and machinery	Other operating and office equipment	Total
Cost				
As of Jan. 1, 2023	**69,980**	**11,592**	**278**	**81,850**
Additions	81,790	77,404	237	159,431
Reclassifications	2,380	—	—	2,380
Disposals	(1,183)	(1,550)	1.	(2,734)
Exchange rate changes	(3,876)	(1,353)	7	(5,222)
As of Dec. 31, 2023	**149,091**	**86,093**	**521**	**235,705**
Cumulative depreciation				
As of Jan. 1, 2023	**(18,861)**	**(5,346)**	**(187)**	**(24,394)**
Additions	(6,510)	(5,723)	(84)	(12,317)
Reclassifications	(83)	—	—	(83)
Disposals	1,134	1,322	1	2,457
Exchange rate changes	651	105	3	759
As of Dec. 31, 2023	**(23,669)**	**(9,642)**	**(267)**	**(33,578)**
Net carrying amounts as of Jan. 1, 2023	**51,119**	**6,246**	**91**	**57,456**
Net carrying amounts as of Dec. 31, 2023	**125,422**	**76,451**	**254**	**202,127**

Interest expenses in the amount of K€ 8,738 (previous year: K€ 2,002) were recognized in connection with leases. Furthermore, the following expenses were recognized that were not taken into account in the measurement of right-of-use assets and the corresponding liability:

	2024	2023
Expenses for leases for low-value assets	8	96
Expenses for short-term leases	4,171	895
Expenses for variable lease payments	568	533
Total	**4,747**	**1,524**

In total, leases resulted in cash outflows of K€ 48,885 (previous year: K€ 14,736) in the fiscal year. The Messer Group estimates that potential future lease payments, if extension options are exercised, would result in an increase in the lease liability of K€ 8,150 (previous year: K€ 7,083).

Other intangible assets

2024	Customer relationships	Technologies/ patents	Licenses	Miscellaneous intangible assets	Total
Cost					
As of Jan. 1, 2024	**1,758,745**	**166,729**	**215,241**	**128,096**	**2,268,811**
Additions	85	—	—	17,283	17,368
Reclassifications	—	—	—	2,869	2,869
Disposals	(538)	—	—	(2,210)	(2,748)
Exchange rate changes	(8,765)	10,607	(282)	1,076	2,636
As of Dec. 31, 2024	**1,749,527**	**177,336**	**214,959**	**147,114**	**2,288,936**
Cumulative amortization					
As of Jan. 1, 2024	**(102,020)**	**(1,786)**	**(8,426)**	**(33,724)**	**(145,956)**
Additions	(121,034)	(10,935)	(36,557)	(19,046)	(187,572)
Disposals	538	—	—	1,298	1,836
Exchange rate changes	678	(574)	118	(64)	158
As of Dec. 31, 2024	**(221,838)**	**(13,295)**	**(44,865)**	**(51,536)**	**(331,534)**
Net carrying amounts as of Jan. 1, 2024	**1,656,725**	**164,943**	**206,815**	**94,372**	**2,122,855**
Net carrying amounts as of Dec. 31, 2024	**1,527,689**	**164,041**	**170,094**	**95,578**	**1,957,402**

2023	Customer relationships	Technologies/ patents	Licenses	Miscellaneous intangible assets	Total
Cost					
As of Jan. 1, 2023	**95,956**	**—**	**56,324**	**34,520**	**186,800**
Additions	—	—	—	5,713	5,713
Change in Group reporting	1,694,644	173,495	158,489	89,263	2,115,891
Reclassifications	—	—	—	991	991
Disposals	220	—	—	(943)	(723)
Exchange rate changes	(32,075)	(6,766)	428	(1,448)	(39,861)
As of Dec. 31, 2023	**1,758,745**	**166,729**	**215,241**	**128,096**	**2,268,811**
Cumulative amortization					
As of Jan. 1, 2023	**(77,470)**	**—**	**(7,991)**	**(30,357)**	**(115,818)**
Additions	(23,856)	(1,825)	(31)	(4,423)	(30,135)
Disposals	(220)	—	—	944	724
Exchange rate changes	(474)	39	(404)	112	(727)
As of Dec. 31, 2023	**(102,020)**	**(1,786)**	**(8,426)**	**(33,724)**	**(145,956)**
Net carrying amounts as of Jan. 1, 2023	**18,486**	**—**	**48,333**	**4,163**	**70,982**
Net carrying amounts as of Dec. 31, 2023	**1,656,725**	**164,943**	**206,815**	**94,372**	**2,122,855**

The customer relationships predominantly result from the purchase price allocation carried out as of November 13, 2023, in the course of the acquisition of the Messer Industries Group. The useful life of the customer relationships is not more than 45 years. The useful lives are longer than the original maximum contract term of 15 years, as the respective renewal options are highly likely to be exercised by customers. The amortization expense for the fiscal year is recognized in the selling and distribution expenses.

Technologies mainly include patents in software, oil and gas, energy, food and healthcare. The net carrying amounts of the patents as of December 31, 2024, total K€ 164,041 (previous year: K€ 164,943).

The licenses include the rights to the “Messer – Gases for Life” brand, including the reacquired right to use the brand (K€ 167,798, previous year: K€ 204.157), and the “REMEO” brand (K€ 2,296, previous year: K€ 2,658).

The “Messer – Gases for Life” and “REMEO” brands are intangible assets with an indefinite useful life within the meaning of IAS 38; they are not amortized but tested for impairment at least once a year in accordance with IAS 36. The impairment test is carried out using the relief from royalty method. The impairment test for the “Messer – Gases for Life” brand is based on an asset-specific capitalization rate of 7.21 % (previous year: 7.82 %). An impairment test was not carried out for the “REMEO” brand for materiality reasons. The write-ups resulting from the purchase price allocation, including the reacquired right to use the “Messer – Gases for Life” brand, will be amortized on a straight-line basis over a period of five years.

For all companies in the Group, the value in use determined in accordance with the principles described above was higher than the net fixed assets of the cash-generating units. There were, therefore, no impairment requirements for other intangible assets in fiscal 2024.

15. Property, plant and equipment

2024	Land and buildings	Plant and machinery	Other operating and office equipment	Construction in progress	Total
Cost					
As of Jan. 1, 2024	**554,456**	**4,977,071**	**523,000**	**507,878**	**6,562,405**
Additions	12,441	150,874	18,888	648,315	830,518
Change in Group reporting	2,162	883	377	—	3,422
Reclassifications	35,882	529,310	89,925	(667,634)	(12,517)
Disposals	(6,545)	(52,353)	(14,929)	(497)	(74,324)
Exchange rate changes	3,086	105,696	14,793	9,209	132,784
As of Dec. 31, 2024	**601,482**	**5,711,481**	**632,054**	**497,271**	**7,442,288**
Cumulative depreciation					
As of Jan. 1, 2024	**(142,914)**	**(1,426,076)**	**(207,908)**	**(1,696)**	**(1,778,594)**
Additions	(31,565)	(513,603)	(69,193)	(586)	(614,947)
Change in Group reporting	(376)	(506)	(4)	—	(886)
Reclassifications	20	237	(257)	—	—
Disposals	6,062	45,739	13,299	12	65,112
Exchange rate changes	(1,739)	(24,805)	(3,713)	(72)	(30,329)
As of Dec. 31, 2024	**(170,512)**	**(1,919,014)**	**(267,776)**	**(2,342)**	**(2,359,644)**
Net carrying amounts as of Jan. 1, 2024	**411,542**	**3,550,995**	**315,092**	**506,182**	**4,783,811**
Net carrying amounts as of Dec. 31, 2024	**430,970**	**3,792,467**	**364,278**	**494,929**	**5,082,644**

The changes in group reporting include the addition of the assets of EKU Elektronik GmbH, Plin Sarajevo dd, Bosnia and Herzegovina, and Cliffside Refiners LP, USA. Please refer to our comments in note 3 “Consolidated companies” in this regard.

2023	Land and buildings	Plant and machinery	Other operating and office equipment	Construction in progress	Total
Cost					
As of Jan. 1, 2023	**304,158**	**2,041,856**	**330,350**	**233,615**	**2,909,979**
Additions	6,447	44,701	13,856	257,132	322,136
Change in Group reporting	239,849	2,740,538	216,462	316,965	3,513,814
Reclassifications	21,078	253,198	4,167	(281,814)	(3,371)
Reclassifications	—	10,134	(9,579)	(229)	326
Disposals	(7,876)	2,704	(18,401)	(206)	(23,779)
Exchange rate changes	(9,200)	(116,060)	(13,855)	(17,585)	(156,700)
As of Dec. 31, 2023	**554,456**	**4,977,071**	**523,000**	**507,878**	**6,562,405**
Cumulative depreciation					
As of Jan. 1, 2023	**(138,066)**	**(1,236,679)**	**(230,946)**	**(1,742)**	**(1,607,433)**
Additions	(14,937)	(186,077)	(25,186)	(77)	(226,277)
Reclassifications	49	(18,236)	18,270	—	83
Reclassifications	—	(7,886)	7,741	—	(145)
Disposals	7,292	(6,179)	18,135	18	19,266
Exchange rate changes	2,748	28,981	4,078	105	35,912
As of Dec. 31, 2023	**(142,914)**	**(1,426,076)**	**(207,908)**	**(1,696)**	**(1,778,594)**
Net carrying amounts as of Jan. 1, 2023	**166,092**	**805,177**	**99,404**	**231,873**	**1,302,546**
Net carrying amounts as of Dec. 31, 2023	**411,542**	**3,550,995**	**315,092**	**506,182**	**4,783,811**

Borrowing costs of K€ 15,412 (previous year: K€ 3,077) were capitalized for qualifying assets in the fiscal year. The average interest rate was 8.0 % (previous year: 6.6 %).

Impairments of K€ 30,606 were recognized on an air separation unit in the Czech Republic in fiscal 2024 after the main customer ceased production in the course of insolvency proceedings and the gas supply contract was prematurely terminated. Furthermore, impairments on property, plant and equipment in the Czech Republic were recognized as a result of water damage totaling K€ 1,921. The impairments are included in the additions to the depreciation on “Land and buildings” (K€ 6,608) and “Plant and machinery” (K€ 25,919) for the fiscal year. The impairments are reported under “Cost of sales” in the income statement.

The additions to plant and machinery include a net amount of K€ 4,290 (previous year: K€ 108) that was capitalized in accordance with IFRIC 1 on the basis of measurement changes in the existing restoration obligations.

In addition, property, plant and equipment includes technical equipment, including tanks and gas cylinders, from operating leases in which the Messer Group acts as the lessor.

The lease payments to be received from customers from such operating leases in the future break down as follows:

	Dec. 31, 2024	Dec. 31, 2023
Due within 1 year	103,604	105,264
Due between 1 and 5 years	230,226	228,358
Due after more than 5 years	84,369	90,789
	418,199	**424,411**

Income of K€ 159 (previous year: K€ 125) from variable lease payments from operating leases was recognized in the reporting period.

16. Interests in other entities

Investments accounted for using the equity method

As of December 31, 2024, the following interests in associates and joint ventures were recognized at the value of the proportionate equity held in the relevant entity:

Name and registered office of the company	Shareholding (%)		Carrying amount	
	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2024	Dec. 31, 2023
Non-significant companies				
Elme Messer Gaas A.S, Tallinn/Estonia	50.00	50.00	44,913	39,990
Limes SAS, Saint-Herblain/France	50.00	50.00	5,807	5,807
HyDN GmbH, Jülich/Germany	50.00	50.00	7,035	3,320
Sichuan Meifeng Messer Gas Products Co., Ltd., Mianyang City/China	50.00	50.00	3,380	3,269
SympH2ony GmbH, Bad Soden am Taunus/Germany	50.00	—	292	—
Messer Medica LLC, Obiliq/Kosovo	49.00	49.00	969	967
GreenCO2 NV, Zwijndrecht/Belgium	34.95	34.95	1,443	1,491
Hyoffwind Infrastructure NV, Halle/Belgium	33.33	—	12,763	—
Resity Technologies d.o.o./Serbia	25.10	—	775	—
Mahler AGS GmbH, Stuttgart/Germany	25.00	25.00	2,854	2,854
Cliffside Helium LLC, Delaware/USA	66.00	26.00	—	34
Cliffside Refiners LP, Delaware/USA	65.34	25.74	—	1,817
			80,231	59,549

Elme Messer Gaas A.S, Estonia, is the parent company of our equity investments in the Baltic States, Ukraine and Russia. The group produces and sells industrial gases in these regions and has its own production facilities.

After the interests in Cliffside Helium LLC, USA, and Cliffside Refiners LP, USA, were increased, these companies are now included in the Group as fully consolidated companies. Please see note 3 “Consolidated companies” for more details.

Interests in associates and joint ventures developed as follows:

	2024	2023
Cost		
As of Jan. 1	**59,549**	**1,095,069**
Additions	17,752	12,452
Pro rata results	7,465	159,875
Reclassifications	(2,591)	(1,193,085)
Dividends	(1,873)	(1,000)
Pro rata changes in statement of comprehensive income	—	(12,871)
Exchange rate changes	(71)	(891)
As of Dec. 31	**80,231**	**59,549**
Cumulative impairments		
As of Jan. 1	**—**	**—**
Reversals of write-downs	—	—
Disposals	—	—
As of Dec. 31	**—**	**—**
Net carrying amount as of Jan. 1	**59,549**	**1,095,069**
Net carrying amount as of Dec. 31	**80,231**	**59,549**

Pro rata gains of K€ 190 from our equity investments in Ukraine were not recognized in the previous year, as the pro rata remaining loss exceeded the carrying amount of the equity investments.

The table below shows the combined pro rata financial data of the individually immaterial associates and joint ventures:

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Net profit for the year	7,557	4,987
Other comprehensive income	(119)	(826)
Total comprehensive income	**7,438**	**4,161**

Joint operations

Messer LLC, USA, holds a 50 % interest in each of the joint arrangements named East Coast Nitrogen Company LLC, Delaware, USA, and East Coast Oxygen Company LLC, Delaware, USA, which were formed as partnerships together with Air Products, USA, to produce liquid nitrogen, oxygen and argon for selected partners of the joint arrangements.

The associated assets and liabilities, income and expenses from joint operations are included in the consolidated financial statements according to the economically attributable share.

The following table shows the summarized pro rata financial data of the individually immaterial joint arrangements:

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Net profit for the year	(4,180)	(479)
Other comprehensive income	2,213	(1,212)
Total comprehensive income	**(1,967)**	**(1,691)**

17. Equity investments and other financial investments

This item comprises equity investments in various companies that are neither consolidated nor accounted for using the equity method. The decline in the item is essentially due to the merger of Plin Sarajevo d.d., Bosnia and Herzegovina. Please refer to our comments in note 3 “Consolidated companies” in this regard.

The item additionally includes investment securities; for information on their measurement, please refer to note 32 “Other financial instrument disclosures”.

Furthermore, a loan granted to the non-consolidated Messer Hellas SA i.L., Greece, is reported here; it has been written down in full.

18. Other non-current receivables and assets

	Dec. 31, 2024	Dec. 31, 2023
Other receivables	45,103	44,264
Finance lease receivables	1,984	3,417
Trade receivables	551	267
Miscellaneous financial assets	20	10
Financial assets	**47,658**	**47,958**
Miscellaneous non-financial assets	5,524	5,846
Non-financial assets	**5,524**	**5,846**
Total	**53,182**	**53,804**

Other receivables mainly relate to deposits amounting to K€ 33,625 that are deposited by a Brazilian company in a court escrow account and used to offset court fees or, in the event of a lawsuit that goes against Messer, for payments to the opposing party.

The finance lease receivables relate to the long-term letting of gas generation plants, which are recognized at the present value of the future lease payments.

The present value of the lease payments is derived from the lease agreements and is shown in the following table:

	Dec. 31, 2024	Dec. 31, 2023
Gross investment	**3,561**	**5,213**
Due within 1 year	1,511	1,623
Due between 1 and 5 years	2,030	3,482
Due after more than 5 years	20	108
Unearned finance income	(171)	(337)
Net investment	**3,390**	**4,876**
Due within 1 year	1,406	1,459
Due between 1 and 5 years	1,964	3,312
Due after more than 5 years	20	105

19. Inventories

	Dec. 31, 2024	Dec. 31, 2023
Raw materials and supplies	65,414	58,796
Work in progress	39,524	28,886
Finished goods and goods for resale	619,373	222,137
Total	**724,311**	**309,819**

Finished goods and goods for resale include helium inventories totaling K€ 450,963 that were acquired from an American company in the fiscal year. We do not expect these inventories to be realized within the coming fiscal year.

Of the inventories recognized as of December 31, 2024, K€ 34,895 (previous year: K€ 33,356) were measured at their net realizable value. There are impairment losses of K€ 24,452 (previous year: K€ 22,004) on the net realizable value. The impairment losses were recognized in the cost of sales. The amount of inventories recognized as an expense in the reporting period is K€ 933,686 (previous year: K€ 372,368).

20. Trade receivables

	Dec. 31, 2024	Dec. 31, 2023
Trade receivables	677,803	641,011
Write-downs on receivables	(64,893)	(50,623)
Total	**612,910**	**590,388**

Please refer to the comments under note 32 “Other financial instrument disclosures” regarding write-downs on receivables.

21. Contract balances

All work relating to engineering contracts was billed in fiscal 2024 and 2023 and the corresponding amounts were reported in trade receivables.

Performance obligations from contracts with customers

The following table shows the performance obligations from long-term gas supply contracts with customers:

	Dec. 31, 2024	Dec. 31, 2023
Due in 1st year	538,886	526,853
Due in 2nd year	457,949	532,933
Due in 3rd year	462,546	550,289
Due after more than 3 years	3,026,177	2,575,177
Total	**4,485,558**	**4,185,252**

The amounts shown above essentially relate to contractually agreed fixed payments, known as take-or-pay installments. Variable obligations were not taken into account. Revenue is recognized on delivery of the gases.

22. Other current financial and non-financial assets

	Dec. 31, 2024	Dec. 31, 2023
Other receivables from operating activities	16,096	13,429
Derivatives in an effective hedge	10,993	12,658
Financial receivables from related parties	6,487	8,044
Deposits and guarantees	5,565	6,128
Derivatives without an effective hedge	3,552	712
Lease receivables	1,406	1,459
Receivables from employees	777	908
Miscellaneous	18,202	49,806
Financial assets	**63,078**	**93,144**
Other tax receivables	82,873	77,161
Deferred expenses	26,147	21,440
Prepayments	12,280	6,819
Non-financial receivables from related parties	199	191
Non-financial assets	**121,499**	**105,611**
Total	**184,577**	**198,755**

Please refer to note 32 “Other financial instrument disclosures” for more details on derivatives.

The “Miscellaneous” item under financial assets mainly includes a US company’s receivables from insurance companies in connection with legal disputes. Please refer to note 31 “Contingent liabilities” for more details.

At K€ 44,034, the largest portion of the other tax receivables results from claims brought by a Brazilian company against the local authorities that are still pending a final court decision.

Deferred expenses consist of deferrals of IT costs, rent and various other items.

23. Cash and cash equivalents

	Dec. 31, 2024	Dec. 31, 2023
Cash, bank balances and checks	513,595	612,669
Cash equivalents	29	35
Cash and cash equivalents	**513,624**	**612,704**

As of December 31, 2024, the Group holds cash and cash equivalents of K€ 513,624 (previous year: K€ 612,704). Where possible, cash and cash equivalents are invested with banks and financial institutions with an investment grade rating or better. The ratings are based on Moody’s or a comparable rating from another reputable rating agency.

Based on the external ratings for the banks and financial institutions, it is assumed that cash and cash equivalents have a low risk of default.

No impairments were recorded in the fiscal year or in the previous year.

24. Share-based payment arrangements

On May 1, 2024, a selected group of executives (hereinafter referred to as the “participants”) was offered the opportunity to participate in a share-based remuneration program (Value Creation Bonus, VCB). The participants additionally have the opportunity to take an equity interest in the company (“co-investment”) through an employee shareholding company in the form of a GmbH & Co. KG (“Manager KG”).

The co-investment is made at the fair value of the shares and is not subject to any further conditions. The fair value is derived from the most recent company valuation. When a participant leaves the company, they may sell the acquired shares at the then current market value to one of the limited partners of the Manager KG held by the remaining shareholders of the company (“Warehouse”). Alternatively, the Warehouse acquires the shares of the participant who is leaving. The transaction is carried out through the exercise of mutual call and put options. A benefit that would have to be recognized as personnel expenses in accordance with IFRS 2 does not arise for the participants either from the acquisition or from the reassignment of the shares at fair value.

The Value Creation Bonus (VCB) is linked to the company’s performance and requires certain performance targets in the form of increases in enterprise value (milestones with different annual compounding rates) to be achieved. The VCB becomes due in the following cases:

1. disbursement events defined at specified times occur;
2. an initial public offering (IPO) is conducted;
3. shares are sold by the previous majority shareholders.

For the purposes of the presentation in the financial statements, it is assumed that neither a sale of the shares nor an IPO will take place before the specified maturity date for the disbursement events. The disbursement events are therefore considered to be the only realistic case for the accounting for the VCB.

In the first disbursement event, which occurs at the end of 2027, 28 % of the VCB will essentially fall due for disbursement (not applicable for participants in the US). At least 20 % of this amount must be reinvested at the then current fair value within the framework of the co-investment. Alternatively, participants may choose not to exercise the “Early Partial Payment Option” and thus to defer the disbursement until the second disbursement event occurs.

The remaining 72 % of the VCB falls due in the second disbursement event, which occurs at the end of 2030. The full 100 % will fall due for disbursement if the “Early Partial Payment Option” has not been exercised and also for participants in the US. The amount due in the second disbursement event must be reinvested pro rata (40 % or 50 % depending on the group of participants) at the then current fair value within the framework of the co-investment.

The amounts that do not have to be reinvested must be settled by payment of the corresponding sums, which is classified as “settled in cash” according to IFRS 2. The amounts that are reinvested are settled by issuing equity instruments of the entity, which leads to their classification as “equity-settled” in accordance with IFRS 2.

The fair value of the equity-settled portion is determined at the grant date and recognized as an expense over the service period with an offsetting entry in equity. The service period for the first 80 % ends after 48 months from the grant date. For the remaining 20 %, the service period ends at the end of the 2030 calendar year.

For the cash-settled portion, the fair value is recalculated at the end of each reporting period based on the current value ratios. Expenses are recognized in the same way as the equity-settled portion over the respective service periods while a corresponding provision is recognized.

If the reinvestment is increased on a voluntary basis, the equity-settled portion will subsequently be increased and the cash-settled portion will be reduced accordingly. In this case, the provision recognized at this time is reclassified directly to equity through profit or loss.

Special rules apply to employees who leave the company before a disbursement event occurs. A distinction is made between “good leavers” and “bad leavers”. “Good Leavers” receive their VCB pro rata in line with their length of service, while “bad leavers” are not entitled to any disbursement. For accounting purposes, it is currently assumed that the Leaver regulations do not apply. If the assessment changes, the amounts recognized will be adjusted retrospectively on a cumulative basis.

The parameters used for the valuation using a Black Scholes option pricing model are as follows:

2024	Disbursement event 1	Disbursement event 2	Equity-settled (1)	Cash-settled	Members of management in key positions	Senior employees
Fair value at grant date	**15,453**	**9,954**	**10,415**	**14,992**	**16,438**	**8,969**
Current price per share	0.07	0.07	—	—	—	—
Exercise price	0.13	0.17	—	—	—	—
Volatility	25 %	25 %	—	25 %	—	—
Term in years	6.67	6.67	—	6.00	—	—
Risk-free interest rate	3 %	3 %	—	2 %	—	—
Fair value as of Dec. 31, 2024	**—**	**—**	**—**	**30,887**	**26,358**	**14,944**

(1) The fair value of the equity-settled portion was calculated once at the grant date

The expense in the fiscal year amounts to K€ 12,906 (previous year: K€ –) and is included in general and administrative expenses. An amount of K€ 9,374 (previous year: K€ –) is attributable to members of the management in key positions within the Group. A provision of K€ 9,760 (previous year: K€ –) was recognized for the portion settled in cash.

25. Provisions for employee benefits

	Dec. 31, 2024	Dec. 31, 2023
Pension provisions	55,862	58,137
Provisions for other employee benefits	6,534	3,813
Provisions for employee benefits	**62,396**	**61,950**

Pension provisions

Pension benefits are provided for workers and employees in a number of countries in the form of both defined benefit and defined contribution pension plans. The benefits vary according to the legal, fiscal and economic circumstances of each country. Plan benefits are based on years of service and the level of employee compensation. Some of the obligations under defined benefit pension plans are covered by plan assets held in independent trust funds. The net assets of these funds are predominantly invested in real estate, fixed-income securities and negotiable equities.

The amount recognized in the statement of financial position is derived as follows:

	Dec. 31, 2024	Dec. 31, 2023
Present value of pension benefits funded by provisions	51,630	51,181
Present value of funded pension benefits	107,613	106,530
Present value of all pension benefits	**159,243**	**157,711**
Fair value of plan assets of all funds	(103,381)	(99,574)
Net liability recognized	**55,862**	**58,137**

The present value of the pension commitments financed by provisions is attributable to pension plans of Messer SE & Co. KGaA in the amount of K€ 34,574 (previous year: K€ 33,735). The present value of funded pension commitments includes pension plans of Messer Canada Inc., Canada, amounting to K€ 60,904 (previous year: K€ 64,221).

Messer SE & Co. KGaA operates defined benefit plans designed to pay beneficiaries an annual pension of 42 % of the total contributions paid in at the end of the employment relationship. The defined benefit pension plan consists of a basic pension and an additional pension. The basic pension includes the employee’s regular remuneration up to the income threshold in the statutory pension scheme. The additional pension is granted for the portion of regular remuneration that exceeds the income threshold and is provided by the company. Both are paid as a retirement pension once the employee retires after reaching the age of 60. The plans are available to all employees who were employed by Messer SE & Co. KGaA on May 7, 2004, and previously had a valid employment contract with Messer Griesheim GmbH.

Messer Canada Inc., Canada, operates a funded pension plan that grants members benefits in the form of a guaranteed lifetime pension. The amount of this pension is based on average income and is linked to age and length of service. In Canada, the defined benefit component of the plan has been closed to new entrants since January 1, 2005. Newcomers join a defined contribution plan. In the defined benefit pension plan, future service recognition was discontinued for the remaining employees, with final recognition ending on June 30, 2022.

The Canadian pension plan is managed by a pension committee and its assets are held in a pension fund that is legally independent of the company. The assets cannot be used for any purpose other than the payment of pension benefits and related administrative fees.

The minimum funding requirements in Canada require the company to make special payments to amortize any shortfalls in plan assets in relation to the relevant funding objectives. Instead of these special payments, collateral in the form of letters of credit up to a maximum of 15 % of the actuarial liability used to determine the funding objective is permitted. The company does not currently use any letters of credit.

In accordance with the legal provisions applicable in Canada, any remainder after accrued benefits have been provided to plan members and after the plan has ended may be returned to the company. Pension legislation in Canada may require the company to submit a proposal to members and beneficiaries regarding the allocation of excess assets. Part of this surplus can be used by the company to reduce future contributions or to pay refundable administrative expenses.

The company also offers a limited number of active employees and retirees employer-paid life insurance and post-retirement health plans. The post-retirement benefit plan is not funded.

An excess of plan assets amounting to K€ 1,811 resulted from the Canadian pension plans in fiscal 2024. This is recognized as a reduction in the provisions for pensions.

The defined benefit plans are managed by a mutual insurance pension fund that is legally independent of the Group. Defined benefit plans expose the Group to various risks. In addition to general actuarial risks such as longevity risk and interest rate risk, the Group is exposed to currency risk and capital market/investment risk. The risk exposures from the respective plans are not materially different.

The following table shows the reconciliation of the funding of the defined benefit plans to the amounts recognized in the consolidated financial statements as of December 31, 2024 / 2023:

	2024		2023	
Change in the present value of the defined benefit pension plans	**Pension commitments funded by provisions**	**Pension commitments funded by funds**	**Pension commitments funded by provisions**	**Pension commitments funded by funds**
Present value of all pension benefits as of Jan. 1	**51,181**	**106,530**	**38,502**	**9,767**
Current service cost	636	1,451	287	240
Past service cost	314	—	361	—
Interest expense on obligations	2,371	3,908	1,622	842
Employee contributions	—	939	—	237
Actuarial losses / (gains)	1,027	4,307	(2,411)	8,350
Pension payments	(2,561)	(7,797)	(1,214)	(1,320)
Exchange rate changes	(1,338)	(1,630)	39	1,397
Change in Group reporting	—	—	13,995	87,057
Others	—	(95)	—	(40)
Present value of all pension benefits as of Dec. 31	**51,630**	**107,613**	**51,181**	**106,530**
Change in plan assets of all funds				
Fair value of plan assets of all funds as of Jan. 1	**—**	**99,574**	**—**	**8,684**
Interest income / (losses)	—	3,736	—	831
Income / (losses) (not including interest income / losses)	—	6,510	—	5,852
Contributions paid in – employer	—	2,080	—	399
Contributions paid in - employees	—	939	—	237
Pension payments	—	(7,815)	—	(1,339)
Unrecognized excess of plan assets	—	—	—	—
Exchange rate changes	—	(1,619)	—	1,230
Change in Group reporting	—	—	—	83,697
Others	—	(24)	—	(17)
Fair value of plan assets of all funds as of Dec. 31	**—**	**103,381**	**—**	**99,574**

The fair value of plan assets breaks down among the individual asset classes as follows. The amounts shown are weighted averages:

	Dec. 31, 2024 Market value		Quoted on an active market	Not quoted on an active market	Dec. 31, 2023 Market value		Quoted on an active market	Not quoted on an active market
Equity instruments / funds	41,297	40 %	8,092	33,205	43,464	44 %	5,763	37,701
Bonds	40,135	39 %	8,258	31,877	34,339	34 %	7,778	26,561
Qualifying insurance policies	7,868	7 %	—	7,868	7,265	7 %	—	7,265
Real estate	6,063	6 %	1,559	4,504	6,485	7 %	1,375	5,110
Cash funds	955	1 %	955	—	926	1 %	926	—
Other assets	7,063	7 %	2,365	4,698	7,095	7 %	1,050	6,045
Total	**103,381**	**100 %**	**21,229**	**82,152**	**99,574**	**100 %**	**16,892**	**82,682**

Plan assets are held exclusively to fulfill defined benefit obligations. The provision of financial resources to support this obligation represents a precautionary measure for future cash outflows, which in some countries is required by law and in others on a voluntary basis. Given the diversity of pension benefits within the Group, the interest rate is not hedged using financial instruments. Following guidelines stipulated by local management, the bodies responsible for the various pension funds decide on the best possible investment strategy commensurate with the age of beneficiaries and the timing of future payments, in accordance with applicable legislation. Most of the plans are not intended to maximize profit, but rather to ensure optimal provision for the companies and employees concerned. Our biggest fund in Switzerland adheres to the principle of sustainability. The capital entrusted to it is invested in accordance with ESG criteria. Funds held to pay future benefits are invested responsibly.

Actuarial losses / (gains) arising on the remeasurement of the present value of pension benefits comprise the following:

	Jan. 1 – Dec. 31, 2024		Jan. 1 – Dec. 31, 2023	
	Pension commitments funded by provisions	Pension commitments funded by funds	Pension commitments funded by provisions	Pension commitments funded by funds
Experience adjustments	1,608	1,625	(3,553)	(122)
Change in financial assumptions	(601)	2,695	1,142	8,472
Change in biometric assumptions	20	(13)	—	—
Actuarial losses / (gains) arising on the remeasurement of the present value of pension benefits	**1,027**	**4,307**	**(2,411)**	**8,350**

The following items were recognized in profit or loss in the reporting period:

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Current service cost	(2,087)	(527)
Past service cost	(314)	(361)
Interest expense on obligations	(6,279)	(2,464)
Expected return on plan assets	3,736	831
Others	71	57
Total amounts recognized in profit and loss	**(4,873)**	**(2,464)**

The calculation of obligations and, in certain cases, the related plan assets is based on the following actuarial parameters (reported as a weighted average):

	Dec. 31, 2024 %	Dec. 31, 2023 %
Discount rate	3.73	4.15
Expected rate of salary increases	2.59	2.74
Expected return on plan assets	1.50	4.38
Expected rate of pension increases	1.10	1.11

The mortality tables 2018 G of Professor Dr. Klaus Heubeck were used to measure the pension obligations for the German group companies. The pension obligation in Switzerland was measured using the BVG 2020 GT mortality tables. The CPM 2014-Tafeln were used to measure the pension obligations in Canada. Mortality tables specific to each company were used to measure the pension obligations for other Group companies.

The present value of the defined benefit obligation relates to the following groups of beneficiaries:

	Dec. 31, 2024		Dec. 31, 2023	
Active beneficiaries	91,113	57 %	88,766	56 %
Beneficiaries who have left the company	13,804	9 %	13,430	9 %
Retired employees	54,326	34 %	55,515	35 %
Total	**159,243**	**100 %**	**157,711**	**100 %**

The weighted average term of the defined benefit obligation as of December 31, 2024, is 11.3 years (previous year: 10.1 years).

An increase or decrease in the discount rate by 50 basis points would have the following effect on the present value of pension obligations as of December 31, 2024:

Change in discount rate in basis points	- 50	-/+ 0	+ 50
Present value of all pension benefits	169,280	159,243	150,335

The sensitivity calculations are based on the average term of the pension obligations calculated as of December 31, 2024. The calculation was made for the discount rate, the actuarial parameter that is classified as material. As the sensitivity analysis is based on the average duration of the expected pension obligations and, therefore, the expected payment dates are not taken into account, it only produces approximate information or trend statements.

The Group anticipates contributions to the defined benefit plans of K€ 11,747 in 2025.

Provisions for other employee benefits

The provisions for other employee benefits mainly relate to benefits from long-term bonus systems that reflect the company's added value (K€ 2,950, previous year: K€ –) as well as company or statutory severance payments and early retirement benefits (K€ 3,584, previous year: K€ 3,813).

26. Other provisions

2024	Litigation	Restoration obligations	Environmental risks	Personnel	Miscellaneous	Total
As of Jan. 1, 2024	**58,704**	**35,475**	**18,705**	**47,912**	**29,684**	**190,480**
Additions	13,300	7,795	1,245	38,106	12,600	73,046
Utilization	(36,851)	(524)	(1,241)	(31,509)	(12,480)	(82,605)
Unused amounts reversed	(2,591)	(3,274)	—	(5,023)	(3,225)	(14,113)
Interest effect	—	2,629	2,136	183	—	4,948
Change in Group reporting	—	—	—	28	121	149
Currency translation	771	2,087	1,224	800	(461)	4,421
As of Dec. 31, 2024	**33,333**	**44,188**	**22,069**	**50,497**	**26,239**	**176,326**
Non-current	**13,765**	**44,188**	**17,775**	**16,972**	**1,248**	**93,948**
Current	**19,568**	**—**	**4,294**	**33,525**	**24,991**	**82,378**

Contracts for which provisions have been recognized essentially have a broad range of remaining terms of between one and 10 years.

The provisions for litigation essentially relate to the areas of antitrust, HR and civil litigation. Please refer to note 31 “Contingent liabilities” for more information on two provisions for litigation risks in the US and Spain.

The provisions for contractually agreed restoration obligations for existing plants essentially relate to the US. The additions to the restoration obligations include an amount of K€ 4,499, which was recognized in the additions to plant and machinery in the same amount in accordance with IFRIC 1 on the basis of measurement changes in the existing restoration obligations.

The majority of provisions for environmental risks relate to a US company and were recognized for long-term plant cleaning obligations.

The long-term provisions for staff as of December 31, 2024, primarily comprise anniversary obligations. The short-term provisions for staff predominantly relate to bonus payments and outstanding vacation.

Current “miscellaneous” provisions essentially include amounts for repairs to air separation units, transportation and diesel costs as well as follow-up costs for customer orders. The item also includes a provision for onerous contracts from the acquisition of a gas contract as well as a provision for a tax penalty and the associated interest in Colombia. The item additionally includes a provision for a non-consolidated affiliate in the amount of K€ 3,300.

27. Financial liabilities

We concluded a syndicated multi-currency term, revolving and bridge facilities agreement (RFA I) on May 27, 2023, to acquire CVC’s shares in Yeti German Co 1 GmbH. UniCredit Bank GmbH (formerly: UniCredit Bank AG) is acting as the agent. The RFA I consists of five lines, where the EUR bridge facility and the USD bridge facility were fully repaid in the course of 2024.

- EUR Term Loan Facility (Term Facility 1) for € 600 million maturing on November 13, 2028; the interest rate is EURIBOR (Euro Inter Bank Offered Rate) plus the margin. This is dependent on the ratio of net debt to EBITDA.
- USD Term Loan Facility (Term Facility 2) for USD 700 million maturing on November 13, 2028; the interest rate is Term SOFR (Secured Overnight Financing Rate) plus the margin. This is dependent on the ratio of net debt to EBITDA. The margin is increased by a premium depending on the term of the interest period.
- Revolving Facility of € 600 million maturing on November 13, 2028, and an option to extend by one or two years subject to the consent of the lenders. The interest rate for the revolving facility is based on Term SOFR or EURIBOR in the currency in which the facility is drawn plus a margin. This is dependent on the ratio of net debt to EBITDA.
- The EUR Bridge Term Loan Facility (EUR Bridge Facility) of € 1,450 million originally maturing on November 13, 2024, was successively refinanced in the course of 2024 and fully repaid at the end of the original term.
- The USD Bridge Term Loan Facility (USD Bridge Facility) of USD 900 million originally maturing on November 13, 2024, was fully repaid on March 28, 2024.

The company must comply with a financial covenant in connection with RFA I. The ratio of net debt to operating earnings before interest, taxes, depreciation and amortization of intangible assets and property, plant and equipment (EBITDA) may not exceed a defined level.

Messer Industries USA Inc., USA, (guaranteed by Messer SE & Co. KGaA) issued a US private placement (USPP) of USD 1,100 million to several investors in three tranches with maturities of seven, ten and twelve years on March 25, 2024. The proceeds from the USPP were used to fully repay the USD Bridge Facility and to finance general corporate purposes of the Messer Group.

Messer SE & Co. KGaA (guaranteed by Messer Industries USA Inc., USA) received cash inflows from promissory note loans with a volume of € 850 million on July 24, 2024. The transaction consisted of a total of six tranches with variable and fixed interest rates and maturities of three, five and seven years. All proceeds were used to partially repay the outstanding EUR Bridge Facility of € 1,450 billion at the end of July. Messer SE & Co. KGaA received cash inflows from variable-interest promissory note loans with a total volume of € 100 million and the same maturities on August 16, 2024. The proceeds from these promissory note loans were also used to partially repay the EUR Bridge Facility in August.

Messer SE & Co. KGaA (guaranteed by Messer Industries USA Inc., USA) placed a EUR private placement (EURPP) with a total volume of € 272 million on November 6, 2024. The transaction consists of two tranches each of € 136 million that mature in November 2034 and November 2036.

Messer SE & Co. KGaA (guaranteed by Messer Industries USA Inc., USA) received cash inflows from promissory note loans with a total volume of € 200 million on November 7, 2024. The transaction consisted of two tranches with variable interest rates and is divided into € 125 million maturing in November 2027 and € 75 million maturing in November 2029.

The proceeds from the two transactions were used on November 13, 2024, together with available liquidity to fully repay the remaining EUR Bridge Facility amounting to € 500 million.

The unutilized credit facilities amount to € 497.9 million (previous year: € 508.2 million) as of December 31, 2024.

The loan balances and maturities as of December 31, 2024, and December 31, 2023, are as follows:

2024	Interest rate p.a.	Credit facility	Utilization	Due date
€ 409.0 million, SSD[(1)]	4.546 %	409,000	409,000	July 26, 2027
€ 412.0 million, SSD[(1)]	4.638 %	412,000	412,000	July 24, 2029
€ 129.0 million, SSD[(1)]	4.673 %	129,000	129,000	July 24, 2031
€ 125.0 million, SSD	3.973 %	125,000	125,000	November 8, 2027
€ 75.0 million, SSD	4.173 %	75,000	75,000	November 7, 2029
€ 136.0 million, EURPP	4.180 %	136,000	136,000	November 6, 2034
€ 136.0 million, EURPP	4.260 %	136,000	136,000	November 6, 2036
$ 300.0 million, USPP[(2)]	5.490 %	288,767	288,767	March 25, 2031
$ 400.0 million, USPP[(2)]	5.640 %	385,023	385,023	March 25, 2034
$ 400.0 million, USPP[(2)]	5.740 %	385,023	385,023	March 25, 2036
€ 600.0 million, RFA I - Term Facility 1	4.445 %	600,000	600,000	November 13, 2028
$ 700.0 million, RFA I - Term Facility 2[(2)]	6.237 %	673,790	673,790	November 13, 2028
€ 600.0 million, RFA I Revolving Facility[(3)]	5.831 %	600,000	10,532	November 13, 2028
Other local loans[(1)]	2.450 %	137,190	137,190	Various
lease liabilities[(1)]	4.929 %	n/a	182,179	Various
		4,491,793	**4,084,504**	
Transaction costs			(18,276)	
		4,491,793	**4,066,228**	

(1) Weighted interest rate as of December 31, 2024; foreign currencies were translated using the rate as of December 31, 2024
(2) Foreign currencies were translated using the rate as of December 31, 2024
(3) Of which K€ 231,772 as ancillary facilities
(4) K€ 9,537 was additionally utilized as a guarantee, foreign currencies were translated using the rate as of December 31, 2024

2023	Interest rate p.a.	Credit facility	Utilization	Due date
€ 600.0 million, RFA I - Term Facility 1	5.532 %	600,000	600,000	November 13, 2028
€ 1,450.0 million, RFA I - EUR Bridge Facility	4.607 %	1,450,000	1,450,000	November 13, 2024
$ 700.0 million, RFA I - Term Facility[(1)]	7.478 %	633,484	633,484	November 13, 2028
$ 900.0 million, RFA I - USD Bridge Facility[(1)]	6.208 %	814,480	814,480	November 13, 2024
€ 600.0 million, RFA I Revolving Facility[(2)]	6.855 %	600,000	12,688	November 13, 2028
Other local loans[(4)]	5.188 %	98,960	98,960	Various
lease liabilities[(4)]	4.708 %	n/a	164,384	Various
		4,196,924	**3,773,996**	
Transaction costs			(21,752)	
			3,752,244	

(1) Foreign currencies were translated using the rate as of December 31, 2023
(2) Thereof K€ 152,646 as ancillary facilities
(3) K€ 79,125 was additionally utilized as a guarantee, foreign currencies were translated using the rate as of December 31, 2023
(4) Weighted interest rate as of 31 December 2023; foreign currencies were translated using the exchange rate as of December 31, 2023

Transaction costs relate to the arrangement fees paid to the financing banks and various legal and advisory costs directly attributable to the new financing. These costs are recognized as an expense over the terms of the liabilities using the effective interest method in accordance with IFRS 9.

The following table provides an overview of the Group's financial liabilities:

	Dec. 31, 2024	Dec. 31, 2023
Non-current		
Liabilities to banks / insurance companies	3,775,250	1,280,878
Lease liabilities	147,393	133,934
Miscellaneous	1,581	1,435
Less transaction costs	(14,471)	(10,116)
	3,909,753	**1,406,131**
Current		
Liabilities to banks / insurance companies	125,491	2,324,295
Lease liabilities	34,786	30,450
Miscellaneous	3	3,004
Less transaction costs	(3,805)	(11,636)
	156,475	**2,346,113**
Total financial liabilities, net	**4,066,228**	**3,752,244**
Liabilities with a fixed interest rate	1,871,870	210,223
Liabilities with variable interest rates (hedged)	695,000	—
Liabilities with variable interest rates (not hedged)	1,517,634	3,563,773
Total financial liabilities, gross	**4,084,504**	**3,773,996**
Weighted average nominal interest rates for liabilities:		
To banks / insurance companies including interest rate hedges	5.07 % p.a.	5.67 % p.a.
Leases	4.93 % p.a.	4.71 % p.a.
Other loans	3.69 % p.a.	3.09 % p.a.

The average interest rate on existing financial liabilities was 5.07 % p.a. as of December 31, 2024 (previous year: 5.62 %, including interest rate swap agreement).

Financial liabilities (not including transaction costs) are due as follows:

2025	160,280
2026	36,176
2027	565,818
2028	1,298,172
2029	506,711
After 2029	1,517,347
	4,084,504

	2024	2023
Non-current financial liabilities as of Jan. 1	**1,406,131**	**162,338**
Cash changes		
New debt raised	2,447,000	1,259,819
Payments of principal	(14,140)	(17,537)
Non-cash changes		
Net change in lease liabilities	52,920	136,420
Changes in maturities	(66,431)	(113,084)
Currency translation	4,848	(3,525)
Exchange rate changes	83,433	(14,055)
Change in Group reporting	—	5,929
Transaction costs	(4,008)	(10,174)
Non-current financial liabilities as of Dec. 31	**3,909,753**	**1,406,131**

	2024	2023
Current financial liabilities as of Jan. 1	**2,346,113**	**154,282**
Cash changes		
New debt raised	55,524	2,336,659
Payments of principal	(2,344,441)	(1,958,533)
Non-cash changes		
Net change in lease liabilities	2,957	18,307
Changes in maturities	66,431	113,084
Currency translation	2,207	62
Exchange rate changes	19,717	(45,014)
Change in Group reporting	—	1,738,525
Transaction costs	7,967	(11,259)
Current financial liabilities as of Dec. 31	**156,475**	**2,346,113**

28. Other non-current liabilities

	Dec. 31, 2024	Dec. 31, 2023
Miscellaneous liabilities	4,357	4,734
Obligations in connection with the issue of equity investments	—	391,929
Financial liabilities	**4,357**	**396,663**
Investment grants	27,619	20,629
Government grants	1,175	1,338
Non-financial liabilities	**28,794**	**21,967**
Total	**33,151**	**418,630**

The obligation relating to the settlement of the earn-out provision in connection with the capital increase ("GIC transaction") has been reclassified to "Other current liabilities", see note 29.

Investment grants mainly include rights of customers to obtain a product from Messer Industriegase GmbH (K€ 15,000) and the Speyer production site (K€ 11,213).

Government grants are reversed to Other operating income in the income statement.

29. Other current liabilities

	Dec. 31, 2024	Dec. 31, 2023
Interest payable	37,614	10,749
Derivatives in an effective hedge	10,533	3,767
Deposits received for hardware	5,892	5,332
Other liabilities to customers	4,786	4,296
Liabilities to related companies	3,782	8,349
Derivatives without an effective hedge	2,809	1,139
Miscellaneous liabilities	466,182	48,575
Financial liabilities	**531,598**	**82,207**
Deferred income and other deferred liabilities	165,492	177,738
Payroll liabilities	89,192	84,292
Other tax liabilities	48,347	45,726
Liabilities to social security providers	31,034	29,683
Advance payments received on orders	29,870	27,555
Prepayments received from related parties	3,601	1,800
Other financial obligations	9,466	13,138
Non-financial liabilities	**377,002**	**379,932**
Total	**908,600**	**462,139**

Interest payable amounting to K€ 37,614 results mainly from bank financing. Please refer to note 27 "Financial liabilities" for more details in this connection.

Liabilities to Messer Holding GmbH totaling K€ 2,095 (previous year: K€ 6,485) make up the largest share of liabilities to related parties.

Please refer to note 32 "Other financial instrument disclosures" for more details on derivatives.

Miscellaneous financial liabilities include an obligation of K€ 405,384 relating to the settlement of the earn-out provision in connection with the capital increase ("GIC transaction"). The obligation was reclassified from non-current to current financial liabilities during the fiscal year. Settlement is made through a non-cash transaction.

This item also includes K€ 51,978 for the purchase of helium stocks.

Deferred income and other deferred liabilities include liabilities for outstanding invoices amounting to K€ 121,777 (previous year: K€ 125,638). The remainder is attributable to deferred revenue of K€ 8,821 (previous year: K€ 11,903), deferred rental income for gas cylinders amounting to K€ 11,779 (previous year: K€ 11,150), government grants of K€ 834 (previous year: K€ 278) and other deferrals totaling K€ 22,281 (previous year: K€ 28,769).

Other non-financial obligations relate to contingent liabilities of Messer Gases Ltda.,Brazil that were recognized as part of the purchase price allocation.

30. Equity

Issued capital

The issued capital was increased by 315,590 no-par value shares (0.24 %) amounting to K€ 315 based on a resolution to increase the capital that was notarized on April 26, 2024. The capital increase was entered in the commercial register on May 14, 2024. Issued capital amounts to K€ 130,140 as of December 31, 2024.

Capital reserves

The capital reserves contain the contributions from the shareholders and were increased by K€ 20,847 by a resolution of May 15, 2024. The capital reserves amount to K€ 2,113,436 as of December 31, 2024.

Other reserves

Other reserves include the notional differences from successive share acquisitions without loss of control and from a merger.

In May 2024, Messer Griesheim (China) Investment Co. Ltd., China, increased its majority interests in Shaoxing Messer Gas Products Co., Ltd. (“Shaoxing”), China, and Messer Sunshine (Ningbo) Gas Products Co., Ltd., (“Ningbo”), China, to 100 %. In June 2024, Messer SE & Co. KGaA acquired a majority interest in Universal Industrial Gas Sdn. Bhd. (“UIG”), Malaysia, and now holds 100 % of its shares. As part of the increase in the majority interests, a positive notional difference of K€ 3,733 resulted for Shaoxing, a positive notional difference of K€ 3,559 resulted for Ningbo and a positive notional difference of K€ 654 resulted for UIG, which were offset against the Group’s reserves in other comprehensive income.

In addition, Messer Austria GmbH, Austria, increased its majority interest in Messer Croatia Plin d.o.o, Croatia, to 99.999 % in August 2024, which resulted in a negative notional difference of K€ 8.

In October, Messer SE & Co. KGaA increased its majority interest in ASCO Kohlensäure AG, Switzerland, to 100 %, resulting in a positive notional difference of K€ 2,419. In addition, the interests in Messer Tehnogas AD, Serbia, were increased to 85.88 % resulting in a positive notional difference of K€ 823. In this context, the indirect minority interests of the subsidiaries of Messer Tehnogas AD were also adjusted, which resulted in a positive notional difference amounting to K€ 3,867.

Also in October 2024, Plin Sarajevo d.d., Bosnia and Herzegovina, which was previously reported in “Equity investments and other financial investments”, was merged with the fully consolidated Messer Tehnoplin d.o.o, Bosnia and Herzegovina. This resulted in a negative notional difference of K€ 11,239.

In December 2024, Messer Griesheim (China) Investment Co. Ltd, China, also increased its majority interest in Yunnan Dianzhong Messer Gas Products Co., Ltd., China, to 100 %, resulting in a positive notional difference of K€ 57.

Retained earnings

Retained earnings comprise the undistributed past earnings of consolidated companies and the effects of the remeasurement of the net defined benefit pension liability, net of deferred taxes. In accordance with Section 150(2) AktG, K€ 32 (previous year: K€ 2,982) of the parent company's net income for the year (HGB) was transferred to the legal reserve. The legal reserve totaling K€ 13,014 is shown in the consolidated financial statements as a component of retained earnings.

Other components of equity

This item is used to report changes in equity in other comprehensive income, to the extent that such changes do not relate to equity transactions with shareholders (e.g. capital increases or distributions). It includes the difference in currency translation (through other comprehensive income) of K€ -77,957 (previous year: K€ -12,002), changes in the fair value measurement of derivatives used for hedging purposes in the amount of K€ -45,840 (previous year: K€ -38,088), the result of net investments in foreign operations totaling K€ -3,189 (previous year: K€ -5,794) and the results of measuring financial investments in equity instruments amounting to K€ 263 (previous year: K€ 199).

Non-controlling interests

This item comprises the shares held by other shareholders in the equity of consolidated subsidiaries. Key non-controlling interests are held by minority shareholders in China.

In addition to the distributions of prior-year results, the dividend payments to other shareholders include payments to other shareholders under company law in proportion to their interests.

The following companies have material non-controlling interests:

Name and registered office of subsidiary	Country	Interest	
		Dec. 31, 2024	Dec. 31, 2023
Hunan Xianggang Messer Gas Products Co., Ltd., Xiangtan City, Hunan Province - subgroup	China	45 %	45 %
Sichuan Pangang Messer Gas Products Co., Ltd., Panzhihua, Sichuan Province - subgroup	China	40 %	40 %

The following table shows the summarized financial data of the significant subsidiaries with material non-controlling interests:

	Hunan Xianggang Messer Gas Products Co., Ltd. - subgroup		Sichuan Pangang Messer Gas Products Co., Ltd. - subgroup	
	2024	2023	2024	2023
Revenue	**215,443**	**220,786**	**138,944**	**144,681**
Net profit for the year	34,998	42,672	101,563	43,344
thereof attributable to non-controlling interests	16,985	19,419	15,839	18,253
Other comprehensive income	9,835	(17,009)	6,339	(11,693)
Total comprehensive income	**44,833**	**25,663**	**107,902**	**31,651**
thereof attributable to non-controlling interests	20,917	12,702	18,376	13,575
Non-current assets	254,993	206,863	66,223	67,604
Current assets	167,329	146,891	193,047	160,687
Non-current liabilities	3,708	3,211	2,631	2,075
Current liabilities	64,744	43,789	53,690	27,304
Net assets	**353,870**	**306,754**	**202,949**	**198,912**
thereof attributable to non-controlling interests	91,721	83,608	57,113	56,878
Distributions to non-controlling interests	**(9,255)**	**(7,051)**	**(15,837)**	**(13,057)**
Cash flow from operating activities	61,180	32,296	102,249	37,859
Cash flow from investing activities	(56,029)	(30,945)	(2,984)	(5,564)
Cash flow from financing activities	2,013	(7,643)	(104,195)	(32,974)
Changes in cash and cash equivalents	**7,164**	**(6,292)**	**(4,930)**	**(679)**

Proposal for the appropriation of profits by the parent company

The Management Board proposes to distribute K€ 40,344 from net income for the year to the shareholders and to carry the remaining amount forward to new account.

Capital management

A strong capital base is a key requirement for Messer SE & Co. KGaA for ensuring the continued existence of the company and the Messer Group as a going concern. The items reported in the statement of financial position are considered equity. Other items with the legal status of equity or other instruments similar in nature to equity are not used.

The owners, the Management Board and the Supervisory Board ensure that the trust of the lending banks and insurance companies, creditors and the market in general in the Messer Group is maintained by a strong capital base. The new loan agreements no longer include an obligation to maintain minimum capital. Equity, including non-controlling interests, amounts to K€ 7,616,402 (previous year: K€ 7,528,635) as of December 31, 2024.

The Management Board and the Supervisory Board regularly review compliance with the targets set out in the loan agreements and report on this to the lending banks/insurance companies.

31. Contingent liabilities

Guarantees

Obligations from issuing guarantees were as follows:

	Dec. 31, 2024		Dec. 31, 2023	
€ million	Maximum potential obligation	Amount reported as a liability	Maximum potential obligation	Amount reported as a liability
Guarantees	199.9	—	175.1	—

Financial guarantees essentially relate to commitments to cover the contractual obligations of the respective principal debtors. Pledges given to secure the liabilities of Group companies were eliminated in consolidation and are thus not included in the above table.

Other financial obligations

The Group has undertaken to invest in the acquisition, construction and maintenance of various production facilities. Obligations of this kind relate to the future purchase of plant and equipment at market prices. There are also long-term contracts that give rise to obligations. The commitments from orders, investment projects and long-term contracts amounted to K€ 1,853,818 as of December 31, 2024 (previous year: K€ 759,237).

Litigation

The Group recognizes provisions for legal disputes for court proceedings to the extent that the Group determines that an unfavorable outcome is probable and the amount of the loss can be reasonably estimated. For the other legal disputes, the Group considers the occurrence of a loss to be unlikely and/or cannot reasonably estimate the loss or the scope of the potential loss at the current time. The outcome of legal disputes is always difficult to predict and results can differ from the current assessment.

On December 1, 2020, two employees of Golden West Food Group ("GWFG") in Vernon, California, USA, suffocated while they were working in a cold storage room containing a Cryowave freezer. The freezer in question had been installed at GWFG in 2014 and, according to the underlying contract, GWFG was responsible for operating and maintaining the freezer. The surviving relatives of the two deceased employees initially took legal action against the employer, GWFG, and extended this to Messer a few months later. The two wrongful death cases have been consolidated and are progressing slowly. Messer is challenging these lawsuits and denies any liability.

In November 2022, an employee of a cleaning company that provided cleaning services to GWFG filed a complaint against Messer asserting claims for damages for personal injury allegedly suffered as a result of the accident. Messer is also challenging this lawsuit and denies any liability.

Evidence is still being taken in the case. Messer has recognized provisions for the two wrongful death lawsuits. No provision has yet been recognized for the most recent claim by an employee that was not involved, because the assessment of the claim depends on the evidence taken in the wrongful death claims and would, therefore, be premature. Disclosing the exact amount recognized as a provision for the wrongful death claims could jeopardize Messer's position in the pending legal proceedings. For this reason, Messer is not disclosing this information.

Legal and settlement costs are covered by insurance. The insurance company in question is actively involved in the defense and has paid all related legal costs that exceed the deductible. Messer is therefore convinced that the insurance company will continue to pay or reimburse all legal and settlement costs and has recognized corresponding claims to repayment in its statement of financial position. Disclosure of the exact amount recognized as a claim for repayment could seriously and negatively impact Messer's position in the pending court case. For this reason, Messer is not disclosing this information.

A search was conducted at Messer Ibérica de Gases SA, Spain, in November 2017. In this connection, documents relating to permits to build and operate our air separation units and to a donation for the renovation of a city hall were confiscated. A decision on whether an action will be filed is still pending.

It is currently assumed that the probability of a criminal conviction is low. We consider it possible that fines will be imposed in another legal dispute in connection with administrative proceedings that have also been initiated in Spain. The company has recognized a provision of € 5 million for this purpose in accordance with IFRS.

After the Spanish regulator issued a payment order to the Spanish energy supplier Endesa for its grid usage fee, Endesa billed the same amount of € 35.6 million to Messer Ibérica de Gases SA as an additional charge for allegedly underpaying its grid usage fee in the period from 2008 to February 2021. Endesa subsequently adjusted the additional charge to € 36.76 million after taking electricity taxes into account. In the opinion of our local Spanish attorneys, both Endesa and Messer Ibérica de Gases SA have strong arguments for successfully defending the claim for payment made by the Spanish regulator in its initial notice in the course of an appeal, with Messer Ibérica de Gases SA thus also having a strong case against the payment claim asserted against it by Endesa.

Even if a claim to payment were assumed, our local attorneys believe there are good arguments for reducing the amount claimed to less than € 10 million on the basis of the statute of limitations and because Messer Ibérica de Gases SA utilized only part of the electricity itself.

Messer Ibérica de Gases SA has recognized a provision of € 5.4 million for any fines for applications that were not submitted in accordance with the formal legal requirements and for any permits that are not formally in place as a result.

A third investigation is pending. The investigative files have not yet been disclosed, hence the subject and the target of the investigation are still not yet known.

The proceedings are expected to take up to five years.

Other legal matters

Companies of the Messer Group are party to or involved in court and arbitration proceedings in various countries. Appropriate risk provisions have been recognized for these proceedings, provided that the obligation is reasonably certain.

32. Other financial instrument disclosures

The following table shows the carrying amounts and fair values of individual financial assets and financial liabilities for each class of financial instruments as of December 31, 2024. It does not contain any information on the fair value of financial assets and financial liabilities not measured at fair value when the carrying amount is a reasonable approximation of the fair value.

	Measurement category according to IFRS 9	Carrying amount as of Dec. 31, 2024	Measurement in accordance with IFRS 9			Measurement in accordance with IFRS 16	Fair value as of Dec. 31, 2024
			Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss		
Financial assets							
Miscellaneous financial investments	FVOCI	461	—	461	—	—	461(1)
Other non-current receivables and assets	AC	45,674	45,674	—	—	—	45,556(1)
Non-current lease receivables	n/a	1,984	—	—	—	1,984	2,957(1)
Trade receivables	AC	612,910	612,910	—	—	—	
Other current receivables and assets	AC	47,127	47,127	—	—	—	
Current lease receivables	n/a	1,406	—	—	—	1,406	
Derivative financial assets							
Derivatives without an effective hedge	FVTPL	3,552	—	—	3,552	—	3,552(1)
Derivatives in an effective hedge	n/a	10,993	—	—	—	—	10,993(1)
Cash and cash equivalents	AC	513,624	513,624	—	—	—	

(1) Hierarchy level 2

	Measurement category according to IFRS 9	Carrying amount as of Dec. 31, 2024	Measurement in accordance with IFRS 9			Measurement in accordance with IFRS 16	Fair value as of Dec. 31, 2024
			Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss		
Financial liabilities							
Non-current financial liabilities	**AC**	**3,762,360**	3,762,360	—	—	—	**3,737,341(1)**
Non-current lease liabilities	**n/a**	**147,393**	—	—	—	147,393	
Other non-current liabilities	**AC**	**4,357**	4,357	—	—	—	**4,357**
Current financial liabilities	**AC**	**121,689**	121,689	—	—	—	
Current lease liabilities	**n/a**	**34,786**	—	—	—	34,786	
Trade payables	**AC**	**410,668**	410,668	—	—	—	
Other current liabilities	**AC**	**112,872**	112,872	—	—	—	
Derivative financial liabilities							
Derivatives without an effective hedge	**FVTPL**	**2,809**	—	—	2,809	—	**2,809(1)**
Derivatives in an effective hedge	**n/a**	**10,533**	—	—	—	—	**10,533(1)**
Financial obligation in connection with the settlement of the earn-out provision	**FVTPL**	**405,384**	—	—	405,384	—	**405,384(2)**

(1) Hierarchy level 2
(2) Hierarchy level 3

The following table shows the carrying amounts and fair values for each class of financial instruments as of December 31, 2023, in accordance with IFRS 9:

	Measurement category according to IFRS 9	Carrying amount as of Dec. 31, 2023	Measurement in accordance with IFRS 9			Measurement in accordance with IFRS 16	Fair value as of Dec.31, 2023
			Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss		
Financial assets							
Non-current loan receivables	**AC**	**1**	1	—	—	—	**1**[(1)]
Miscellaneous financial investments	**FVOCI**	**376**	—	376	—	—	**376**[(1)]
Other non-current receivables and assets	**AC**	**44,541**	44,541	—	—	—	**44,464**[(1)]
Non-current lease receivables	**n/a**	**3,417**	—	—	—	3,417	**5,549**[(1)]
Trade receivables	**AC**	**590,388**	590,388	—	—	—	
Other current receivables and assets	**AC**	**78,315**	78,315	—	—	—	
Current lease receivables	**n/a**	**1,459**	—	—	—	1,459	
Derivative financial assets							
Derivatives without an effective hedge	**FVTPL**	**712**	—	—	712	—	**712**[(1)]
Derivatives in an effective hedge	**n/a**	**12,658**	—	—	—	—	**12,658**[(1)]
Cash and cash equivalents	**AC**	**612,704**	612,704	—	—	—	

(1) Hierarchy level 2

	Measurement category according to IFRS 9	Carrying amount as of Dec. 31, 2023	Measurement in accordance with IFRS 9			Measurement in accordance with IFRS 16	Fair value as of Dec.31, 2023
			Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss		
Financial liabilities							
Non-current financial liabilities	**AC**	**1,272,197**	1,272,197	—	—	—	**1,413,718(1)**
Non-current lease liabilities	**n/a**	**133,934**	—	—	—	133,934	
Other non-current liabilities	**AC**	**4,734**	4,734	—	—	—	**4,734(1)**
Current financial liabilities	**AC**	**2,315,663**	2,315,663	—	—	—	
Current lease liabilities	**n/a**	**30,450**	—	—	—	30,450	
Trade payables	**AC**	**388,227**	388,227	—	—	—	
Other current liabilities	**AC**	**77,301**	77,301	—	—	—	
Derivative financial liabilities							
Derivatives without an effective hedge	**FVTPL**	**1,139**	—	—	1,139	—	**1,139(1)**
Derivatives in an effective hedge	**n/a**	**3,767**	—	—	—	—	**3,767(1)**
Financial obligation in connection with the settlement of the earn-out provision	**FVTPL**	**391,929**	—	—	391,929	—	**391,929(2)**

(1) Hierarchy level 2
(2) Hierarchy level 3

The Messer Group uses the following hierarchy of inputs to measure fair value:

- Level 1: Prices quoted in active markets accessible to the entity for identical assets or liabilities on the measurement date

- Level 2: Inputs other than the quoted prices listed in Level 1 that can be observed either directly or indirectly for the asset or liability

- Level 3: Unobservable inputs for the asset or liability

The financial obligation related to the earn-out provision is measured using a discounted calculation model. The key unobservable input parameter is the discounted capitalization rate. A sensitivity analysis was not performed for reasons of immateriality. Interest expenses of K€ 13,454 were recognized in profit or loss in fiscal 2024.

Non-current receivables, non-current lease receivables, other non-current assets, non-current financial liabilities and trade payables are discounted to present value. For these purposes, the measurement model is based on interest rate curves and exchange rates for the respective maturities applicable as of the end of the reporting period.

Given their short remaining terms, the carrying amounts of current receivables, trade payables and cash funds are approximately their fair value.

The fair value of forward foreign exchange contracts is determined by considering the default risk, applying quoted forward prices as of the end of the reporting period and calculations of net present value based on yield curves with high ratings in relevant currencies. The fair value is the difference between the forward rate as of the end of the reporting period and the rate quoted at the time of purchase.

For interest rate swaps, the fair value is calculated as the present value of the estimated future Cash Flows. Estimates of future cash flows from variable interest payments are based on quoted swap rates and interbank interest rates. The estimated cash flows are discounted using a yield curve constructed from a similar source that reflects the relevant benchmark interbank interest rate as used by market participants when pricing interest rate swaps. The estimate of the fair value is adjusted for the default risk that reflects the default risk of the Group and the counterparty. This is calculated on the basis of credit spreads derived from credit default swap prices or bond prices.

For energy swaps the fair value is calculated on the basis of the forward electricity prices quoted on the electricity exchange. The market value results from the difference between the exchange price as of the closing date and the price quoted at the time of purchase.

Net gains and losses on financial instruments include the effects on earnings of financial instruments. These essentially include gains or losses on remeasurement from currency translation, adjustments to fair value, impairment losses and their reversals.

The following table shows the effects on earnings of financial instruments by IFRS 9 measurement category in 2024:

2024	From interest	Net gains and net losses			
		At fair value	Currency translation	Reversal of impairment/ (impairment)	From disposals
Financial assets and financial liabilities at fair value through profit or loss	2,045	1,101	(2,274)	—	—
Financial liabilities at amortized cost	(227,471)	—	(3,273)	—	1,141
Financial assets at amortized cost	12,611	160	11,964	(15,685)	(1)

The following table shows the effects on earnings of financial instruments by IFRS 9 measurement category in 2023:

2023	From interest	Net gains and net losses			
		At fair value	Currency translation	Reversal of impairment/ (impairment)	From disposals
Financial assets and financial liabilities at fair value through profit or loss	(69)	(3,552)	43	—	—
Financial liabilities at amortized cost	(3,457)	—	3,155	—	313
Financial assets at amortized cost	2,807	—	(5,351)	(10,411)	—
Financial assets at fair value through OCI	20,436	—	—	—	—

Derivative financial instruments

The Messer Group essentially uses derivative financial instruments to hedge currency and commodity exposures and variable interest payments in order to reduce the related risks. Foreign currency risks from posted transactions are extensively hedged. The exposure for commodity and currency hedges is derived from the production requirements planning and the resulting future purchases required over the hedged period, which are highly probable. Interest payments hedges are based on a loan with a floating interest rate. The risk and its assessment are continuously monitored. The Messer Group currently uses standard currency foreign exchange forwards, non-deliverable forwards (NDFs), interest rate derivatives and electricity swaps as hedging instruments.

Cash flows in the currencies USD and CZK are hedged outside of hedge accounting primarily using FX forwards and cross-currency interest rate swaps.

The Group currently uses derivative financial instruments to hedge future payments for electricity purchases, currency hedges and future variable interest payments. The average hedge rate for electricity purchases is USD 45.07 (EUR 43.38) per megawatt hour, for currency hedges USD 1.38 / CAD and for hedging variable interest payments the average hedging rate is 3.43 %. The Group designates all components.

Hedges are entered into only with business partners of good credit standing. If they are material, any potential ineffectiveness resulting from them would be reported separately in profit or loss.

The Group currently does not hold any derivative financial instruments that qualify as fair value hedges or hedges of net investments in foreign operations (net investment hedges).

Hedges are also entered into that are not accounted for in accordance with hedge accounting rules. These hedges nevertheless comply with the principles of risk management from an economic perspective.

Financial derivatives	Assets			
	Dec. 31, 2024		Dec. 31, 2023	
	Fair value (carrying amount)	Nominal amount	Fair value (carrying amount)	Nominal amount
Currency forwards				
non hedge accouting	**3,552**	**60,072**	712	70,939
cash flow hedge accounting	**363**	**13,584**	9	3,757
Energy swaps				
cash flow hedge accounting	**10,630**	**67,566**	12,649	58,333
	14,545	**141,222**	13,370	133,029

Financial derivatives	Equity and liabilities			
	Dec. 31, 2024		Dec. 31, 2023	
	Fair value (carrying amount)	Nominal amount	Fair value (carrying amount)	Nominal amount
Currency forwards				
non hedge accounting	**(2,724)**	**128,183**	(1,013)	73,346
cash flow hedge accounting	**—**	**—**	(126)	8,271
Energy swaps				
cash flow hedge accounting	**(4,692)**	**70,424**	(3,641)	33,080
Interest rate derivatives				
non hedge accounting	**(85)**	**11,537**	(126)	15,087
cash flow hedge accounting	**(5,840)**	**695,000**	—	—
Other transactions				
non hedge accounting	**(405,384)**	**405,384**	(391,929)	391,929
	(418,725)	**1,310,528**	(396,835)	521,713

Other transactions include the obligation relating to the settlement of the earn-out provision in connection with the capital increase (“GIC Transaction”).

The nominal volume of derivative financial instruments consists of the total nominal amounts of the individual contracts. The nominal amount of the electricity swaps is 3,180,984 MWh (previous year: 2,621,808 MWh). In contrast, the fair value is calculated from the measurement of all contracts at the prices on the measurement date. It shows how the result would have changed if the derivative contracts had been closed immediately as of the end of the reporting date.

OTC derivatives with a positive market value are subject to a credit risk. This risk is minimized by only entering into derivatives exclusively with international financial institutions with an investment-grade rating.

The effective portion of the changes in the value of derivative financial instruments, which was recognized before taxes in the OCI in the reporting period, is K€ -12,777 (previous year: K€ -90,387). The amount that was reclassified from equity to the income statement in the course of hedge accounting during the period is K€ 1,895 (previous year: K€ -380) and is essentially shown in cost of sales. The ineffective portion of the change in fair value is recognized directly in profit or loss.

No significant ineffective portions of the change in the fair value of the hedging instruments that needed to be accounted for were identified in the fiscal year.

The following table shows when the cash flows from cash flow hedges occur and how the fair value affects the income statement.

	Fair value (carrying amount) Dec. 31, 2024	Nominal amount	up to 1 year	1 to 5 years	over 5 years
Currency forwards					
Assets	363	13,584	13,584	—	—
Energy swaps					
Assets	10,630	67,566	22,946	44,620	—
Equity and liabilities	(4,692)	70,424	20,424	50,000	—
Interest rate derivatives					
Equity and liabilities	(5,840)	695,000	2,191	(9,024)	(399)

	Fair value (carrying amount) Dec. 31, 2023	Nominal amount	up to 1 year	1 to 5 years	over 5 years
Currency forwards					
Assets	9	3,757	3,757	—	—
Equity and liabilities	(126)	8,271	8,271	—	—
Energy swaps					
Assets	12,649	58,333	19,157	39,176	—
Equity and liabilities	(3,641)	33,080	9,880	23,200	—

The Messer Group uses derivatives in accordance with the International Swaps and Derivative Association (ISDA) Agreement. This agreement does not meet the criteria for offsetting in the consolidated statement of financial position, as it only provides for offsetting rights for future events, such as default or insolvency of the Group or counterparty.

The following table shows the potential financial impact of offsetting the agreement described, regardless of whether the items are offset in the consolidated statement of financial position in accordance with IAS 32.42.

	Dec. 31, 2024			Dec. 31, 2023		
	Gross amounts of derivatives in the consolidated statement of financial position	Amounts from netting agreements	Net amounts	Gross amounts of derivatives in the consolidated statement of financial position	Amounts from netting agreements	Net amounts
Derivative assets	14,545	(3,274)	**11,271**	13,370	(536)	**12,834**
Derivative liabilities	(13,342)	3,274	**(10,068)**	(4,906)	536	**(4,370)**

Management of financial risks

The Messer Group is exposed to various financial risks in the course of its operating activities, in particular default, liquidity, interest rate, currency and electricity price risks, which are described in more detail below. The risk management system manages the unpredictability of developments in the financial markets and aims to minimize any potentially negative impact on the Group's financial position. The Group uses derivative financial instruments to hedge against specific risks.

Risk management is generally carried out by the Group's central finance department Corporate Finance & Treasury, but also in some individual cases on a decentralized basis in the subsidiaries using the guidelines that have been defined by management. Corporate Finance & Treasury and, where appropriate, the relevant subsidiaries identify, assess and hedge financial risks. The guidelines contain general principles for risk management and detailed rules for specific areas, such as currency and interest rate risks, the use of derivative financial instruments and the investment of surplus cash. Further information on risk management can be found in the risk report section of the Group management report.

Credit risk

Credit risk is the risk of financial losses if a customer or the counterparty to a financial instrument fail to meet their contractual obligations.

There are no impairment losses for other financial assets and financial investments such as bank balances, securities and derivatives that are assets, as the credit risk is classified as remote. Such risks are limited by Corporate Finance & Treasury by selecting counterparties with strong credit ratings and by limiting the investment amounts.

Credit risk in the Messer Group mainly arises from trade receivables.

The corresponding impairment loss is measured at an amount equal to lifetime expected credit losses, based on an analysis of historical default data and forecasts of future economic conditions. Expected credit losses are a probability-weighted estimate of credit losses.

Credit risk in the Messer Group is primarily influenced by customers' individual characteristics.

For risk management purposes, the credit rating of each customer is first analyzed individually before the respective Group company offers its standardized delivery and payment terms. Where available, the analysis comprises annual financial statements, information from credit agencies, sector information and, in some cases, credit reports from banks. Specific limits are generally set individually for each customer. These represent the maximum outstanding amount. The limits are reviewed at least once a quarter.

Due regard is also given to whether the customer is a natural person or a legal entity. Other factors taken into account are geographical location, market sector, the aging structure of receivables and the occurrence and duration of payment problems.

The expected credit loss over the total term of the receivables in question is taken into account when they are measured. The Messer Group uses the simplified impairment model for this.

To assess the expected credit risk, receivables are grouped on the basis of the existing credit risk and the relevant maturity structure. Customers are also divided into groups to monitor the risk of default. The groups of customers with comparable credit risks to be taken into account here at the Messer Group are derived from the business areas and location of the registered office of the customers in question.

If there is objective evidence that the forecast future inflows are impaired, a receivable is classified as impaired. Examples of such evidence include impending insolvency or breach of contract due to default. Default occurs if it is unlikely that a debtor will be able to settle its liabilities in full.

Therefore, each company in the Messer Group performs an analysis to determine whether there is objective evidence of impairment for customers whose receivables are past due by a certain number of days, which would indicate an increased credit risk. The analysis takes into account information about past events, current conditions and forecasts of future economic conditions. There is an increased credit risk at the latest when the amount of the receivable past due is higher than the average turnover. This is usually 90 days, but can go up to 270 days for some companies.

The following table provides information on the estimated credit risk and the expected credit losses for trade receivables as of December 31, 2024, calculated according to the default event:

2024	Receivables	Default rate	Expected credit loss
Impairment due to expected credit losses based on current conditions	271,602	17.9 %	48,738
Collectively impaired in accordance with default event			
Days past due			
not past due	301,777	1.6 %	4,925
between 1 and 30 days	62,563	5.0 %	3,159
between 31 and 60 days	18,065	9.1 %	1,642
between 61 and 90 days	7,637	13.2 %	1,008
between 91 and 120 days	4,298	34.8 %	1,496
between 121 and 180 days	4,066	42.7 %	1,738
between 181 and 270 days	2,748	10.3 %	283
more than 271 days	5,598	34.0 %	1,904
	678,354		**64,893**

Impairment losses on non-current and current trade receivables developed as follows:

	2024	2023
As of Jan. 1	**50,623**	**40,738**
Net change in impairment recognized in profit or loss	15,658	10,411
Amounts written off as uncollectible in the fiscal year	(1,729)	(362)
Exchange rate changes	341	(164)
As of Dec. 31	**64,893**	**50,623**

The impairment loss relates to trade receivables and was calculated exclusively on the basis of lifetime expected credit losses.

The following table provides information on the estimated credit risk and the expected credit losses for trade receivables as of December 31, 2023:

2023	Receivables	Default rate	Expected credit loss
Impairment due to expected credit losses based on current conditions	259,441	17.0 %	43,985
Collectively impaired in accordance with default event			
Days past due			
not past due	292,240	0.4 %	1,297
between 1 and 30 days	62,352	1.9 %	1,195
between 31 and 60 days	14,903	5.7 %	853
between 61 and 90 days	3,602	14.4 %	517
between 91 and 120 days	1,629	31.1 %	507
between 121 and 180 days	2,042	26.4 %	540
between 181 and 270 days	2,406	17.7 %	427
more than 271 days	2,663	48.9 %	1,302
	641,278		**50,623**

Liquidity risk

Liquidity risk, i.e., the risk that the Messer Group cannot meet its financial obligations, is limited both by creating the necessary financial flexibility and by implementing effective cash management. In addition to cash funds, the Messer Group also has access to long-term, freely available credit facilities to safeguard its liquidity. There are no indications that any of the credit facilities granted are not fully available. Liquidity risks are regularly monitored and reported to management.

Trade payables and other current liabilities have remaining terms of less than one year. Please refer to note 27 “Financial liabilities” for information on the maturities of financial liabilities. Other non-current liabilities have remaining terms of between one and five years.

The following table shows the expected cash flows for financial liabilities:

Description	Carrying amount as of Dec. 31, 2024	Expected Cash Flow	Cash Flows 2025	Cash Flows 2026 - 2029	Cash Flows from 2030
Financial liabilities at amortized cost	**4,817,330**	**(6,018,875)**	**(1,212,243)**	**(3,004,505)**	**(1,802,127)**
Financial liabilities(1)	3,884,049	(5,085,594)	(283,319)	(3,003,456)	(1,798,819)
thereof interest		(1,183,269)	(157,825)	(688,706)	(336,738)
Other non-current liabilities	4,357	(4,357)	—	(1,049)	(3,308)
Trade payables	410,668	(410,668)	(410,668)	—	—
Other current liabilities	518,256	(518,256)	(518,256)	—	—
Financial liabilities at fair value through profit or loss	**13,341**	**(14,917)**	**(464)**	**(14,054)**	**(399)**
Currency forwards	2,724	(2,724)	(1,148)	(1,576)	—
Interest rate swaps	5,925	(7,501)	2,137	(9,239)	(399)
Electricity swaps	4,692	(4,692)	(1,453)	(3,239)	—
Lease liabilities	**182,179**	**(242,899)**	**(48,534)**	**(126,969)**	**(67,396)**
thereof interest		(60,720)	(13,748)	(35,754)	(11,218)

(1) The transaction costs for the financing were already reported as cash outflows and are therefore not a component of future cash flows.

This includes all instruments that were in the portfolio on December 31, 2024, and for which payments were already contractually agreed. Forecast figures for future new liabilities are not included. Foreign currency amounts were translated using the rate as of December 31, 2024. The net interest payments for the interest rate swap cash flow were calculated on the basis of the yield curves provided by the banks.

Description	Carrying amount as of Dec. 31, 2023	Expected Cash Flow	Cash Flows 2024	Cash Flows 2025 - 2028	Cash Flows from 2029
Financial liabilities at amortized cost	**4,058,122**	**(4,624,056)**	**(3,012,947)**	**(1,604,529)**	**(6,580)**
Financial liabilities(1)	3,587,860	(4,150,528)	(2,547,419)	(1,599,795)	(3,314)
thereof interest		(540,917)	(220,006)	(320,176)	(735)
Other non-current liabilities	4,734	(8,000)	—	(4,734)	(3,266)
Trade payables	388,227	(388,227)	(388,227)	—	—
Other current liabilities	77,301	(77,301)	(77,301)	—	—
Financial liabilities at fair value through profit or loss	**4,906**	**(4,906)**	**(2,801)**	**(2,105)**	**—**
Currency forwards	1,139	(1,139)	(1,139)	—	—
Interest rate swaps	126	(126)	—	(126)	—
Electricity swaps	3,641	(3,641)	(1,662)	(1,979)	—
Lease liabilities	**164,384**	**(194,647)**	**(36,812)**	**(97,837)**	**(59,998)**
thereof interest		(30,263)	(6,362)	(15,422)	(8,479)

(1) The transaction costs for the financing were already reported as cash outflows and are therefore not a component of future cash flows.

Interest rate risk

Interest rate risk can arise when interest-bearing liabilities are not hedged in terms of maturity or amount by either corresponding assets or derivative instruments. The objective is to optimize the net interest result and minimize interest risks. The Messer Group has currently hedged 63 % (previous year: 6 %) of its total financial liabilities against interest rate changes through fixed interest rate agreements and derivatives.

Variable financial instruments are subject to a cash flow risk with regard to the uncertainty of future interest payments. The cash flow risk is measured using a sensitivity analysis. The sensitivity analysis assumes a shift in the yield curves for all currencies by +/- 100 basis points as of December 31, 2024.

For variable-interest instruments, an increase or decrease in interest rates of 100 basis points as of the end of the reporting period would have produced a result that was K€ 12,229 (previous year: K€ 29,236) lower or K€ 12,234 (previous year: K€ 29,250) higher.

For the interest rate swaps included in hedge accounting, an increase or decrease in interest rates of 100 basis points as of the end of the reporting period due to the change in market values would have increased or reduced equity by K€ 23,954 (previous year: K€ –) or K€ 23,747 (previous year: K€ –).

The exposure to interest rate risk was K€ 1,293,943 as of December 31, 2024 (previous year: K€ 2,951,067).

Currency risk

Currency risk for the Messer Group arises from both financing and operating activities in an international environment. Foreign currency risks are hedged to the extent that they have a significant influence on the Group's cash flows.

Foreign currency risks relating to financing activities result from foreign currency financial liabilities and loans that are used to finance group companies or that are raised to finance the group as a whole. If these foreign currency risks are not covered by deposits in the same currency, Corporate Finance & Treasury hedges these risks. Currency derivatives are used to convert financial obligations and intragroup loans denominated in foreign currencies into the functional currency of the Group companies.

As far as operating activities are concerned, the individual Group companies predominantly conduct their business in their own functional currency. The Messer Group's currency risk from operating activities is therefore considered remote overall. However, a number of Group companies are exposed to foreign currency risks in connection with operational transactions not denominated in their own functional currency. These mainly relate to payments in connection with a long-term supply agreement and payments in conjunction with investments. The Messer Group also uses currency derivatives to hedge these risks.

Currency risks as referred to by IFRS 7 result from financial instruments that are denominated in a currency other than the functional currency and that are monetary in nature; exchange rate differences arising from the translation of financial statements into the Group currency are not taken into account.

Currency risk is measured on the basis of sensitivity analyses. The currency analysis assumes an appreciation (depreciation) of all currencies by 10 % compared to the euro.

If the euro appreciates (depreciates) by 10 % against the major currencies, this would produce a hypothetical result that is K€ 10,258 lower (higher) (previous year: K€ 32,574).

The net currency risk from the most significant statement of financial position exposures is as follows:

K€ as of Dec. 31, 2024	CNY	CZK	HUF	RSD	USD	VND	CAD
Underlying risk exposure	(1,935)	32,256	(12,708)	(164,615)	28,498	4,115	11,809
Change in foreign currency exposures as a result of a 10 % appreciation of the euro	193	(3,226)	1,271	16,462	(2,850)	(411)	(1,181)

Electricity price risk

Electricity price risk represents the uncertainty arising from potential changes in the price of electricity. It is mainly caused by the volatility of electricity prices in energy markets, which are influenced by various factors such as supply and demand, political decisions, weather conditions, market regulations and geopolitical events.

Electricity price contracts are entered into to hedge the risk of fluctuations due to changes in electricity prices. Electricity price derivatives are used as hedges.

Electricity price risk is measured on the basis of a sensitivity analysis. The sensitivity analysis assumes a change in market value of +/- 10 %.

A 10 % change in market values is reflected in equity. Equity would have been K€ 594 higher (lower) as of December 31, 2024 (previous year: K€ 901).

33. Related parties

Transactions with the following entities and individuals are treated as related party transactions.

Related companies

The ultimate controlling company is Messer Industrie GmbH. The ultimate controlling party is the Messer family. Associated companies, joint ventures and non-consolidated subsidiaries classified as related parties are shown in the list of shareholdings.

- Messer Holding GmbH
  Messer Holding GmbH is the parent company of Messer SE & Co. KGaA and held 77.03 % of the shares in Messer SE & Co. KGaA directly until May 13, 2024. It has directly held 76.84 % the shares in Messer SE & Co. KGaA since May 14, 2024.

The following companies are considered related parties:

- Elbe Investment Pte., Ltd.
  Elbe Investments Pte., Ltd. held 22.97 % of the shares in Messer SE & Co. KGaA from November 13, 2023 to May 13, 2024. It has held 22.92 % of the shares in Messer SE & Co. KGaA since May 14, 2024.

- GIC (Ventures) Pte., Ltd.
  GIC (Ventures) Pte. Ltd. holds 100 % of the shares in Elbe Investment Pte., Ltd.

- GIC Pte., Ltd.
  GIC Pte. Ltd. holds 100 % of the shares in GIC (Ventures) Pte., Ltd.

- Atlas Co. Investment GmbH & Co. KG
  Atlas Co. Investment GmbH & Co. KG has held 0.24 % of the shares in Messer SE & Co. KGaA since May 14, 2024.

- Messer Management SE
  Messer Management SE is the general partner (SE) of Messer SE & Co. KGaA.

- Cultro GmbH
  Cultro GmbH, founded in 2022, is a subsidiary of Messer Industrie GmbH.

- MIG Holding GmbH and Messer Cutting Systems Group
  MIG Holding GmbH is an affiliate of Messer Industrie GmbH with the same ownership structure and holds 100 % of the shares in Messer Cutting Systems GmbH through Messer Investment Holding GmbH. This is the parent company of the Messer Cutting Systems Group.

- Messer Medical Home Care Holding GmbH (Home Care Group)
  The Messer Group has spun off its home care activities into an independent group. The parent company of this group, Messer Medical Home Care Holding GmbH, is a wholly owned subsidiary of Messer Investment Holding GmbH, the shares of which are held by MIG Holding GmbH.

- Stefan Messer GmbH
  Stefan Messer, managing director and co-shareholder of Messer Industrie GmbH, is also a managing director and co-shareholder of Stefan Messer GmbH.

- Hardtberg Grundstücks GmbH
  Stefan Messer is the sole shareholder of Hardtberg Grundstücks GmbH. Messer SE & Co. KGaA rents its head office in Bad Soden am Taunus from Hardtberg Grundstücks GmbH. The existing rental agreement satisfies the lease criteria of IFRS 16 and is reported as a right of use asset in the consolidated statement of financial position. The lease liability for the remaining lease term of two years amounts to K€ 1,439 as of December 31, 2024.
  Messer SE & Co. KGaA and Messer Investment Holding GmbH are fractional owners of the investments made in the facilities at the head office in Bad Soden.

The following transactions were performed with related companies:

	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Revenue and services provided		
Ultimate controlling company	36	31
Parent company	92	101
Associates / joint ventures	6,654	47,706
Non-consolidated subsidiaries	336	624
Other related parties	3,386	2,713
	10,504	**51,175**
Purchased goods and services		
Ultimate controlling company	—	64
Parent company	4,051	7,843
Associates / joint ventures	5,788	5,413
Other related parties	8,633	9,444
	18,472	**22,764**

	Dec. 31, 2024	Dec. 31, 2023
Trade receivables		
Ultimate controlling company	3	—
Parent company	5	—
Associates / joint ventures	778	913
Non-consolidated subsidiaries	100	1,007
Other related parties	460	600
	1,346	**2,520**
Other financial and non-financial assets		
Associates/joint ventures	6,487	7,183
Non-consolidated subsidiaries	199	354
	6,686	**7,537**
Trade payables		
Ultimate controlling company	11	—
Associates / joint ventures	513	597
Other related parties	688	401
	1,212	**998**
Other financial and non-financial liabilities		
Associates / joint ventures	—	804
Other related parties	—	316
	—	**1,120**

The receivables from related parties result from service agreements and sales transactions with varying maturities. The receivables are not secured by collateral and do not bear interest.

There were no impairment losses on receivables from related parties (previous year: K€ –) and no uncollectible receivables from related parties were recognized as an expense for the period (previous year: K€ –).

	Dec. 31, 2024	Dec. 31, 2023
Loans granted to		
Non-consolidated subsidiaries	—	698
	—	**698**
Loans received from		
Associates/joint ventures	—	804
Other related parties (interest rate 0.01 % p.a.)	—	316
	—	**1,120**

Related persons

Members of management in key positions

Management Board

The following individuals were members of the Management Board of the general partner of Messer SE & Co. KGaA, Messer Management SE, during the fiscal year:

- Bernd Eulitz, Chief Executive Officer, Munich
- Helmut Kaschenz, Chief Financial Officer, Frankfurt am Main
- Virginia Esly, Chief Operating Officer Europe, Pöcking
- Dr. Werner Hickel, Chief Operating Officer Asia, Shanghai
- Elena Skvortsova, Chief Operating Officer Americas, Moorpark

The total remuneration of the Management Board pursuant to section 314 HGB and IAS 24 consists of a basic salary and share-based remuneration. The basic remuneration in the fiscal year amounted to K€ 8,166 (previous year: K€ 8,118).

Of this, fixed remuneration including benefits in kind and other fringe benefits amounted to K€ 3,713 (previous year: K€ 4,990). The total amount of variable short-term remuneration was K€ 4,399 (previous year: K€ 3,099) and is linked to the achievement of certain key performance indicators. Post-employment benefits for members of management in key positions amounted to K€ 54 in the current fiscal year (previous year: K€ 29).

Pension provisions of K€ 8,346 (previous year: K€ 8,600) and post-employment benefits of K€ 409 (previous year: K€ 273) paid out during in the fiscal year are attributable to former members of management in key positions.

For share-based remuneration, please refer to note 24 “Share-based payment arrangements” containing the disclosures for members of the management in key positions in relation to the fair value at the grant date (HGB) and the expense for the financial year (IAS 24).

Supervisory Board

The following individuals were members of the Supervisory Board of Messer SE & Co. KGaA in the fiscal 2024:

- Stefan Messer, Chair, entrepreneur
- Dr. Johannes Fritz, Deputy Chair, management consultant
- Dr. Werner Breuers, chemist, managing partner of ICB Deutschland GmbH
- Dr. Nathalie von Siemens, philosophy graduate, member of the supervisory board of Siemens AG
- Heike Niehues, business administration graduate, member of the management board of Webasto Thermo & Comfort SE
- Maureen Messer-Casamayou, teacher
- Sabine Scheunert-Porth, CIO and business administration graduate (university of applied sciences), managing director of Dassault Systèmes (Eurocentral)
- Geoffrey Wild, CEO (retired)
- Elisabeth Dong, Head of Industrial and Services, Private Equity Europe GIC

The Supervisory Board received total remuneration of K€ 866 for the fiscal year (previous year: K€ 574).

The members of the Supervisory Board of Messer Management SE in the fiscal year were:

- Stefan Messer, Chair, entrepreneur
- Maureen Messer-Casamayou, teacher
- Marcel Messer, managing director of Messer Investment Holding GmbH, Messer Industrie GmbH and Messer Holding GmbH

Audit Committee

The following individuals were members of the Audit Committee in fiscal 2024:

- Dr. Johannes Fritz, Chair, management consultant
- Heike Niehues, business administration graduate, member of the management board of Webasto Thermo & Comfort SE
- Stefan Messer, entrepreneur
- Geoffrey Wild, CEO (retired)

The Audit Committee received total remuneration of K€ 100 for the fiscal year (previous year: K€ 70).

Investment Committee

The following individuals were members of the Investment Committee in fiscal 2024:

- Stefan Messer, Chair, entrepreneur
- Geoffrey Wild, CEO (retired)
- Dr. Johannes Fritz, entrepreneur
- Elisabeth Dong, Head of Industrial and Services, Private Equity Europe GIC
- Sabine Scheunert-Porth, CIO and business administration graduate (university of applied sciences), managing director of Dassault Systèmes (Eurocentral)

The Investment Committee received total remuneration of K€ 22 (previous year: K€ 3).

Nominations and Remuneration Committee

The members of the Nominations and Remuneration Committee in fiscal 2024 were:

- Elisabeth Dong, Chair, Head of Industrial and Services, Private Equity Europe GIC
- Stefan Messer, entrepreneur
- Dr. Nathalie von Siemens, philosophy graduate, member of the supervisory board of Siemens AG

The Nomination and Remuneration Committee received total remuneration of K€ 14 for the fiscal year (previous year: K€ 2).

34. Events after the reporting period

No reportable events of material significance for the Group’s assets, liabilities, financial position and financial performance occurred after December 31, 2024.

35. Prior-year financial statements

The Annual General Meeting approved the consolidated financial statements of Messer SE & Co. KGaA as of December 31, 2023, on April 25, 2024.

36. Auditors' fees

The fee for the auditor of the German Messer companies broke down as follows (in K€):

	2024	2023
Audits of financial statements	1,209	926
Other services	78	2,939
	1,287	**3,865**

Bad Soden am Taunus, March 24, 2025

Messer SE & Co. KGaA,
represented by: Messer Management SE, the general partner with unlimited liability

Bernd Eulitz Helmut Kaschenz

Dr. Werner Hickel Virginia Esly Elena Skvortsova

List of shareholdings

of Messer SE & Co. KGaA, Sulzbach (Taunus), as of December 31, 2024 (section 313 HGB)

Country	Name	Registered office	Equity (in K€)	Direct / indirect	Share-holding in %	Net result after tax (in K€)
Affiliated companies included in the consolidated financial statements						
Albania	Messer Albagaz SH.P.K	Korça	6,331	I	85.88	394
Algeria	Messer Algérie SPA	Alger	3,727	I	59.86	2,152
Belgium	bECO2 B.V.B.A.	Zwijndrecht	100	I	69.89	(27)
	Messer Air Gases Belgium NV	Zwijndrecht	(556)	I	99.84	(588)
	Messer Belgium N.V.	Zwijndrecht	49,255	I	99.84	6,638
Bosnia and Herzegovina	Messer Tehnoplin d.o.o.	Sarajevo	11,944	I	100.00	2,453
	Messer BH Gas d.o.o.	Sarajevo	26,009	I	85.88	4,130
	Messer Mostar Plin d.o.o.	Mostar	4,242	D	100.00	377
Brazil	Messer Gases Ltda.	Sao Paulo	167,033	I	100.00	57,167
	Messer Indústria de Gases Ltda	Sao Paulo	9,528	I	100.00	1,204
Bulgaria	Messer Bulgaria EOOD	Sofia	9,939	D	100.00	259
Chile	Messer Chile Limitada	Santiago	30,331	I	100.00	5,090
China	Changde Xianggang Messer Gas Products Co., Ltd.	Changde City, Hunan Province	2,637	I	55.00	-
	Changsha Xianggang Messer Gas Products Co., Ltd.	Changsha, Hunan Province	2,128	I	55.00	(304)
	Chengdu Chenggang Messer Gas Products Co., Ltd.	Chengdu City, Sichuan Province	823	I	60.00	450
	Chengdu Gaotou Messer Gas Products Co., Ltd.	Chengdu City, Sichuan Province	13,186	I	70.00	-
	Chongqing Messer Gas Products Co., Ltd.	Chongqing, Sichuan Province	12,506	I	100.00	(4,506)
	Chuzhou Messer Gas Co., Ltd.	Chuzhou, Anhui Province	4,036	I	100.00	-
	Dongguan Moral Strength Messer Gas Co., Ltd.	Dongguan, Guangdong Province	20,731	I	60.00	4,876
	Foshan MS Messer Gas Co., Ltd.	Foshan City, Guangdong Province	110,068	I	85.00	5,054
	Foshan Sanshui MS Messer Gas Co., Ltd.	Suzhou, Jiangsu Province	4,090	I	85.00	378
	Foshan Shunde MS Messer Gas Products Co., Ltd.	Foshan City, Guangdong Province	42,443	I	60.00	3,699
	Hangzhou Messer Gas Products Co., Ltd.	Hangzhou, Zhejiang Province	28,138	I	100.00	-
	Hengyang Xianggang Messer Gas Products Co., Ltd.	Suzhou, Jiangsu Province	8,529	I	55.00	1,372
	Hunan Xianggang Messer Gas Products Co., Ltd.	Xiangtan City, Hunan Province	236,874	I	55.00	37,014
	Kunming Anning Messer Gas Products Co., Ltd.	Anning, Yunnan Province	10,657	I	100.00	433
	Kunming Messer Gas Products Co., Ltd.	Kunming, Yunnan Province	(2,554)	I	77.16	(44)
	Liuyang Xianggang Messer Gas Products Co., Ltd.	Liuyang City, Hunan Province	3,277	I	55.00	127
	Messer (Wuhu) Gas Products Co., Ltd.	Wuhu City, Anhui Province	9,778	I	100.00	-
	Messer Gas Products (Chengdu) Co., Ltd.	Chengdu City, Sichuan Province	16,807	I	100.00	-
	Messer Gas Products (Nanjing) Co., Ltd.	Nanjing, Jiangsu Province	19,651	I	100.00	680
	Messer Gas Products (Nantong) Co., Ltd.	Nantong City, Jiangsu Province	1,912	I	100.00	-
	Messer Gas Products (Zhangjiagang) Co., Ltd.	Zhangjiagang City, Jiangsu Province	74,389	I	100.00	3,457
	Messer Gas Products (Zigong) Co., Ltd.	Zigong, Sichuan Province	9,758	I	100.00	-
	Messer Griesheim (China) Investment Co., Ltd.	Shanghai	316,782	I	100.00	77,415
	Messer Griesheim (Kunming) Gas Products Co., Ltd.	Kunming, Yunnan Province	13,048	I	100.00	1,839
	Messer Management Consulting (Shanghai) Co., Ltd.	Shanghai	24,372	I	100.00	704

Country	Name	Registered office	Equity (in K€)	Direct / indirect	Share-holding in %	Net result after tax (in K€)
Affiliated companies included in the consolidated financial statements						
China	Messer Specialty Gases (Chuzhou) Co., Ltd.	Chuzhou, Anhui Province	6,617	I	100.00	(501)
	Messer Specialty Gases (Meishan) Co., Ltd.	Mianyang City, Sichuan Province	4,663	I	100.00	(1,322)
	Messer Specialty Gases (Suzhou) Co., Ltd.	Suzhou, Jiangsu Province	16,123	I	100.00	4,347
	Messer Sunshine (Ningbo) Gas Products Co., Ltd.	Ningbo, Zhejiang Province	36,310	I	100.00	12,117
	Mianyang Messer Gas Products Co., Ltd.	Mianyang	5,487	I	100.00	1,143
	Ningxiang Xianggang Messer Gas Products Co., Ltd.	Ningxiang, Hunan Province	18,799	I	55.00	3,283
	Shaoxing Messer Gas Products Co., Ltd.	Shaoxing City, Zhejiang Province	8,345	I	100.00	1,404
	Sichuan Messer Gas Products Co., Ltd.	Chengdu	76,576	I	100.00	6,926
	Sichuan Pangang Messer Gas Products Co., Ltd.	Panzhihua, Sichuan Province	179,124	I	60.00	37,974
	Wujiang Messer Industrial Gas Co., Ltd.	Wujiang, Jiangsu Province	3,438	I	100.00	970
	Xiangtan Xianggang Messer Gas Products Co., Ltd.	Xiangtan, Hunan Province	9,231	I	55.00	-
	Xichang Pangang Messer Gas Products Co., Ltd.	Xichang City	85,374	I	60.00	17,965
	Yangjiang Xianggang Messer Gas Co., Ltd.	Yangjiang City, Guangdong Province	24,260	I	55.00	3,821
	Yunnan Dianzhong Messer Gas Products Co., Ltd.	Suzhou, Jiangsu Province	3,963	I	100.00	(297)
	Yunnan Messer Gas Products Co., Ltd.	Kunming, Yunnan Province	34,791	I	100.00	7,614
	Zhuzhou Xianggang Messer Gas Products Co., Ltd.	Zhuzhou City, Hunan Province	3,873	I	55.00	(466)
Germany	EKU Elektronik GmbH	Leiningen	1,729	D	100.00	(293)
	Messer GasPack GmbH	Sulzbach	126,821	D	100.00	-
	Messer Griesheim China Holding GmbH	Sulzbach	178,322	D	100.00	-
	Messer Industriegase GmbH	Sulzbach	68,662	I	100.00	(278)
	Messer Industries GmbH	Sulzbach	1,083,361	D	100.00	-
	Messer IP Licence GmbH	Sulzbach	25	I	100.00	-
	Messer Produktionsgesellschaft mbH Salzgitter	Sulzbach	8,536	I	100.00	3
	Messer Produktionsgesellschaft mbH Siegen	Sulzbach	9,223	I	100.00	(1)
	Messer Produktionsgesellschaft mbH Speyer	Bad Soden am Taunus	15,530	I	100.00	-
	Messer Trademark GmbH & Co. KG	Sulzbach	16	D	100.00	6,763
	Messer Trademark Management GmbH	Sulzbach	25	D	100.00	-
France	Messer France S.A.S.	Suresnes	162,608	I	100.00	18,126
Canada	Messer Canada Inc.	Ontario	176,895	I	100.00	39,875
Colombia	Messer Energy S.A.S. E.S.P.	Bogotá	591	I	100.00	79
	Messer Colombia S.A.	Bogotá	65,301	I	100.00	15,124
	REMEO Medical Services S.A.S.	Bogotá	2,095	I	100.00	548
Croatia	Messer Croatia Plin d.o.o.	Zapresic	26,779	I	100.00	5,582
Malaysia	Universal Industrial Gas Sdn. Bhd.	Senai	3,534	D	100.00	(19)
The Netherlands	Messer B.V.	Moerdijk	18,833	I	100.00	2,627
	Messer Industries B.V.	Moerdijk	107,676	I	100.00	51,377
North Macedonia	Messer Vardar Tehnogas d.o.o.	Skopje	12,501	D	100.00	2,105
Austria	Messer Austria GmbH	Gumpoldskirchen	119,213	D	100.00	13,604
Poland	Eloros Sp. z o.o.	Chorzów	10,179	I	99.97	2,357
	Messer Polska Sp. z o.o.	Chorzów	71,963	D	99.97	13,374
	MP Production Sp. z o.o.	Chorzów	11,979	I	99.97	2,737

Country	Name	Registered office	Equity (in K€)	Direct / indirect	Share-holding in %	Net result after tax (in K€)
Affiliated companies included in the consolidated financial statements						
Portugal	MesserGas Distribuicao des Gases Industriais, Unip	Lisbon	2,556	I	100.00	827
Puerto Rico	Messer Gas Puerto Rico Inc.	San Juan	18,232	I	100.00	6,310
Romania	Messer Romania Gaz S.R.L.	Bukarest	23,888	I	100.00	7,840
Switzerland	ASCO Kohlensäure AG	Romanshorn	3,634	D	100.00	732
	Messer Schweiz AG	Lenzburg	35,593	I	100.00	7,031
Serbia	Messer Tehnogas AD	Belgrad	246,338	D	85.88	32,865
Slovakia	Messer Slovnaft s.r.o.	Bratislava	4,035	D	51.00	653
	Messer Tatragas spol.s.r.o.	Bratislava	28,261	D	100.00	10,483
Slovenia	Messer Slovenija d.o.o.	Ruse	57,989	I	85.13	4,947
Spain	Adamite Investments S.L.	Tarragona	6,353	I	100.00	872
	Leteira Investments S.L.	Tarragona	126,738	I	100.00	61,540
	Litadas Investments S.L.	Tarragona	13	I	100.00	(14)
	Messer Ibérica de Gases S.A.	Tarragona	41,610	I	100.00	7,414
	MG Industries Iberica S.L.	Tarragona	114,218	I	100.00	14,239
	Red Cerrada Messer, S.L.U.	Tarragona	(2)	I	100.00	(5)
	Toubkal Investments S.L.	Tarragona	9,040	I	100.00	(20)
Thailand	Messer (Thailand) Co., Ltd	Bangkok	11,140	D	100.00	13
Czech Republic	Messer Technogas s.r.o.	Prag	77,736	D	100.00	21,094
	MG Odra Gas spol.s.r.o.	Vratimov	31,682	D	70.00	1,754
Hungary	Messer Hungarogáz Kft.	Budapest	121,992	D	100.00	44,476
USA	ASCO Carbon Dioxide Inc.	Jacksonville	711	I	100.00	102
	Cliffside Helium LLC	Delaware	200	I	66.00	42
	Cliffside Refiners LP	Delaware	4,984	I	65.34	3,256
	General Gases of the V.I. Inc.	St. Croix	10,615	I	100.00	604
	Messer Energy Services Inc.	Delaware	(6,287)	I	100.00	(1,626)
	Messer Helium Cliffside LLC	Delaware	67,933	I	100.00	(137)
	Messer Industries USA Inc.	Delaware	127,542	I	100.00	(104,694)
	Messer LLC	Delaware	2,958,261	I	100.00	420,993
	Messer Merchant Production LLC	Delaware	3,361	I	100.00	(882)
	Messer North America Inc.	Delaware	(183,319)	I	100.00	(126,110)
Vietnam	Messer Binh Phuoc Industrial Gases Co., Ltd.	Binh Phuoc Province	3,160	D	100.00	363
	Messer Haiphong Industrial Gases Co., Ltd.	Hai Phong City	136,228	D	100.00	13,794
	Messer Quang Ngai Industrial Gases Co., Ltd.	Quang Ngai Province	26,955	D	100.00	(2,048)
	Messer Vietnam Industrial Gases Co., Ltd.	Binh Duong	8,448	D	100.00	(1,279)

Country	Name	Registered office	Equity (in K€)	Direct / indirect	Share-holding in %	Net result after tax (in K€)
Companies accounted for using the proportional consolidation						
USA	East Coast Nitrogen Company LLC	Delaware	47,544	I	50.00	(5,316)
	East Coast Oxygen Company LLC	Delaware	4,984	I	50.00	(687)
Companies accounted for using the equity method						
Belgium	GreenCO2 N.V.	Zwijndrecht	(242)	I	34.95	(143)
	Hyoffwind Infrastructure NV	Halle	38,028	I	33.28	(173)
China	Sichuan Meifeng Messer Gas Products Co., Ltd.	Mianyang City, Sichuan Province	5,438	I	50.00	329
Germany	HyDN GmbH	Jülich	13,703	I	50.00	(69)
	Mahler AGS	Stuttgart	4,198	D	25.00	1,332
	SympH2ony GmbH	Sulzbach	587	D	50.00	(28)
Estonia	Elme Messer Gaas A.S.	Tallinn	55,376	D	50.00	10,086
France	Limes S.A.S.	Saint-Herblain	4,910	I	50.00	3
Kosovo	Messer Medica LLC	Obiliq	1,986	I	49.00	90
Serbia	Resity Technologies d.o.o.	Belgrad	116	D	25.10	22
Affiliated companies not included in the consolidated financial statements						
France	Lida S.A.S (1)	St.Quentin Fallavier	-	I	21.50	-
	Soprogaz S.N.C. (1)	Beauvais	-	I	50.00	-
Gibraltar	Messer Primeco FZE Limited (Gibraltar) (1)	Gibraltar	-	D	51.00	-
Greece	Messer Hellas S.A. i.L. (1)	Athens	-	D	100.00	-
	Tehnogas-Hellas Ltd. (1)	Athens	-	I	42.94	-
Kosovo	Messer GTM LLC (1)	Kosovska Mitrovica	415	I	85.88	(16)
Croatia	Spectrum Solutions d.o.o. (1)	Zagreb	-	I	25.10	-
Malaysia	Excel Gas Solutions Sdn. Bhd. (1)	Kuala Lumpur	-	I	25.80	-

(1) Affiliated companies not included in the consolidated financial statements owing to immateriality for the net assets, financial position and result of operations.

Combined Management Report of Messer SE & Co. KGaA, Sulzbach (Taunus), for the fiscal year 2024

General Information on the Group

Overview of the Messer Group

Messer SE & Co. KGaA ("Company") is an industrial gas manufacturer headquartered in Sulzbach (Taunus) near Frankfurt am Main, with its registered office in Bad Soden am Taunus. It operates as a management holding company and, together with its subsidiaries, associates and joint ventures, forms the Messer Group (the "Group").

The company was founded in 1898 and is majority-owned by the Messer family.

Messer is the world's largest privately owned specialist in industrial, medical and specialty gases. Under the brand name "Messer – Gases for Life", the company offers gases and services in Asia, Europe and America.

Messer's "Gases for Life" are used in industry, environmental protection, medicine, the food industry, electronics industry, welding and cutting technology, 3D printing, construction, as well as in research and science. Messer offers a wide range of products on the market and develops application technologies for gases in modern competence centers.

Messer is also a pharmaceutical company that provides medical and pharmaceutical gases, complete solutions, and other essential products.

Messer SE & Co. KGaA ("Messer") and an investment vehicle of CVC Capital Partners ("CVC") entered into a purchase agreement on May 30, 2023, to acquire the shares in the joint venture Yeti GermanCo 1 GmbH held by CVC and other shareholders, as well as the shares in the joint management investment company Yeti Warehouse GmbH held by CVC (the "CVC Transaction"). At that time, Messer's activities in America and Western Europe were consolidated in Yeti GermanCo 1 GmbH ("Messer Industries Group").

The CVC transaction was financed with bank loans and a capital investment in Messer by Elbe Investment Pte. Ltd. (“Elbe”), an investment company of GIC (Ventures) Pte. Ltd. (“GIC Venture”). To this end, on May 26 and 27, 2023, Messer and its former sole shareholder, Messer Holding GmbH, entered into an investment agreement with Elbe regarding the acquisition of new shares in Messer in exchange for a non-controlling minority stake in Messer by Elbe (the “GIC Transaction” and, together with the CVC Transaction, the “Transactions”).

The Group’s key management and reporting metrics are aligned with the regions Americas, Asia, and Europe. These reflect the strategic direction and operational management of the Group.

The activities of the Messer Industries Group and the Yeti Warehouse GmbH were taken over with effect from November 13, 2023. The fiscal year 2024 includes the operational activities in full for the first time. Therefore, a comparison of the figures with those of the previous year is only possible to a limited extent.

Research and Development

One of the main focuses of our research and development activities is on new application technologies for the use of gases. All research activities in this area concern the development and optimization of customer processes in order to maintain and increase our competitiveness. Customer-specific solutions are developed for this purpose in our competence centers. The second focus is on the field of engineering. This department is responsible, primarily in Europe, for the development as well as the construction or modification of plants for the production of technical and medical gases. The extensive experience gained from the construction and operation of existing systems is used to continuously improve the efficiency of our systems and to use technically high-quality, durable and energy-efficient components. Research and development, therefore, play an important role. Costs are not recorded separately and development costs are not capitalized.

Application technologies

The Messer Group develops application technologies for the use of gases in almost all industrial sectors in its own competence centers. Messer bundles its application technology expertise at individual locations and, to this end, operates its own competence centers worldwide. These are used to test technologies for the application of gases in the fields of food, industrial cryogenic applications, metallurgy, welding and cutting, as well as chemistry and the environment. The focus is on a future-oriented approach to our application technologies, tailored to the needs of our customers, as well as the optimization of customer processes in collaboration with partners such as universities and institutes, or directly with our customers. Most projects have a duration of more than one year. The focus of many projects is on decarbonizing processes.

Corporate Engineering

The Corporate Engineering division acts as Messer’s internal plant manufacturer for the construction of air separation units and is represented at the German locations in Krefeld and Bad Hönningen, as well as in Belgrade, Serbia, and in Shanghai, China. The employees in the engineering department are centrally responsible for the planning and construction of plants for the production of air gases (oxygen, nitrogen, argon) and higher noble gases, as well as plants for the production of hydrogen and the recovery of CO_2. This is done in close coordination with the national subsidiaries. Furthermore, filling plants for filling the gases into cylinders are also designed.

Changes to the consolidation group in the fiscal year 2024

As the parent company of the Messer Group, Messer SE & Co. KGaA acts as a management holding company. It holds, directly or indirectly, the shares of the companies belonging to the Messer Group. Including Messer SE & Co. KGaA, 113 companies are fully consolidated in the consolidated financial statements. We recognize two joint operations proportionally and account for 10 companies using the equity method.

For further details on the changes to the consolidation scope, please refer to note 3 “Consolidated companies” in the notes to the consolidated financial statements.

Financial performance indicators

The Messer Group uses control parameters derived from operating performance indicators to manage its business. The most important indicators are revenue, EBITDA, as well as the key figures for investments and net debt. Further explanations and a breakdown of indicators can be found in the sections on financial performance and financial position.

For Messer SE & Co. KGaA, in its role as a management holding company, the annual profit represents the most significant performance indicator.

Non-financial performance indicators[1]

Throughout 2024, Messer has progressed on its commitments to sound environment, social and good corporate governance practices. As a large undertaking, Messer is preparing for transition of its Corporate Social Responsibility reporting to comply with the EU’s Corporate Sustainability Reporting Directive (CSRD).

In April 2024, Messer created the global position of Chief Sustainability Officer reporting to the CEO. In this role, the Chief Sustainability Officer focuses on working closely with regional (Asia, Europe, and Americas) and corporate functions to further progress our Environment, Social, and Governance (ESG) programs, building on what we have accomplished to date, facilitating the process of ESG reporting and establishing a program that will solidify our commitment to responsibly operate our business.

As in prior years, Messer’s top priorities continue to include health and safety and environmental protection.

Occupational health and safety

Globally, Messer participates in relevant associations to drive safe practices throughout the industrial gas industry. Messer is, among other local associations, an active member of the European Industrial Gases Association (“EIGA”), the International Oxygen Manufacturers Association (“IOMA”), the Asia Industrial Gases Association (“AIGA”) and the Compressed Gas Association (“CGA”). Messer’s commitment to safety is demonstrated through improvements in several metrics, including the number of working accidents with lost days, the lost time accident rate (number of lost time accidents per million working hours) and the accident severity rate (lost days per million working hours).

[1] The content of this section is voluntary and unaudited but has been read critically by the auditor.

In 2023 Messer reported three health and safety Key Performance Indicators (KPIs): 24 of working accidents with lost days; 1.4 lost time accidents rate; and 83.4 accident severity rate. The number of working accidents with lost days included two months of Messer Industries Group. The rates included twelve months of Messer Industries Group. With two months of Messer Industries Group, the accident rate is 1.92 and the accident severity rate is 78.11.

In 2024 the total number of working accidents was 40, compared to 54 in 2023, both considering twelve months of Messer Industries Group. Likewise, the accident rate was 1.69, compared to 1.4 in 2023; and the accident severity rate reduced to 30.95, compared to 83.4 in 2023. The improved indicators were driven in part by significant reduction in total accidents in Canada and Europe.

Transport safety

The transportation of gases and equipment by road and customer deliveries are activities that are associated with considerable risk potential in the gas industry. Therefore, Messer pays special attention to the area of transport safety. The total number of reported incidents increased to 282 from 54 in the previous year, due to the inclusion of twelve months of the Messer Industries Group and an increased focus on reporting all avoidable transport incidents (with and without injury or lost days).

Messer has programs in all regions to continuously improve transport safety through close supplier management, training on defensive driving and load safety, and monitoring of safety practices through locally acceptable means (e.g., inward-and outward-facing cameras). The safety measures Messer has developed for logistics at national and international levels combine the experience of logistics and safety personnel with the aim of further improving transport safety. Our own drivers and those from external companies driving for Messer are provided with legally required training which is supplemented by additional Messer safety and technical training. Drivers are supported by on-board computer systems that record safety-relevant driving data in compliance with the applicable data protection laws.

Programs in Asia, Europe, and the Americas go beyond compliance with legal regulations to bolster Messer's commitment to the safety of its drivers and vehicle fleet. In the Americas in 2024 Messer hosted six driver "Safety Roadeos" that provided opportunities for drivers to showcase their skills and knowledge in handling their daily hazardous situations. Workshops under the Safer Together program involved employees and their families in Colombia and Chile to strengthen the commitment to safety. The logistics team in Europe hosts local workshops focusing on transport safety with the aim of developing potential improvements for logistics safety in a cooperative environment and to improve performance. Messer in Europe also participates on the European Road Safety Charter, which is led by the European Union and is the largest civil society platform on road safety. In Asia Messer implemented a fleet management platform that uses AI to track vehicles, drivers, and cargo to monitor and improve driver efficiency and safety in real time.

Environmental management

Messer is committed to taking actions to help protect the planet. The production of industrial gases is an energy-intensive process. Therefore, Messer closely monitors its own production and distribution processes to ensure the appropriate sources and efficient use of energy, which is an important part of our operating costs and a major contributor to our greenhouse gas emissions.

Messer's total energy consumption was 11,835 GWh in 2024[2]. This is a 2.4 % increase from the previous year. The increase in energy consumption is proportional to the increased plant loading and production in Asia. Energy consumption and production in Europe and Americas remained stable compared to the previous year.

The majority of Messer's energy consumption is in its air separation units (ASUs), which consume electricity and atmospheric air as primary raw materials to produce air gases such as nitrogen, oxygen, and argon. ASUs accounted for 94 % of the total energy consumed in 2024.

Messer is taking concrete action to reduce its carbon footprint and contribute to the energy transition. In the Americas, as part of its investment in McGregor, Texas, Messer installed a co-located solar array that substantially powers its new air separation unit with renewable energy. In Europe Messer is also now operating solar panels installed at its plant in Bitola, North Macedonia, as well as multiple smaller rooftop solar installations across locations in Europe.

Messer further demonstrates its commitment to the environment by applying recognized standards in energy management and environmental management systems. In Europe, our energy management system is ISO 50001 certified in Romania, Hungary, Czech Republic, Croatia, France, Germany, and Spain. ISO 50001 is a standard which specifies management practices that are important to obtain improved energy performance.

Messer employs a globally recognized environmental management system and environmental protection policies in each of its regions. These policies and the environmental management systems of all subsidiaries are consistent with the international ISO 14001 standard and the recommendations of the European Industrial Gases Association (e.g. EIGA IGC Doc. 107 – Guidelines on Environmental Management Systems). In 2024 103 of our sites had their environmental management systems externally certified in accordance with ISO 14001 (previous year: 94).

Digitalization / IT security

Messer's Group CIO and IT Security Officer together with the responsible IT- and IT-security experts in each of its regions (Asia, Europe, Americas) are responsible for coordinating security measures, creating standards and cultivating the corresponding expertise for all the individual companies. IT security supports the sustainability of our digital information and the physical security of our information assets, in addition to helping to ensure that our key business processes can be carried out by safeguarding the necessary availability of our systems that ensure continuity of operations. IT security services are devised and regularly tested by the IT security teams.

Messer IT leaders at the corporate and regional level work on creating common strategies to further develop IT and IT security in line with corporate and regional strategy. IT risks are recorded as part of Group Risk Management using the risk management software “Corporater ERM”. This enables the aggregated risk situation to be presented at Group level.

[2] Energy consumption data includes plants that were commissioned in prior years. Energy consumption data does not include plants that were commissioned in the current year.

IT security and digitalization efforts are tailored to the business of Messer's regions. In Europe Messer has completed a comprehensive security assessment, actively trained employees in the dangers of cybercrime, and implemented tools to handle potentially dangerous emails and other vehicles. In addition, a Security Information and Event Management (SIEM) system and next-generation endpoint protection was implemented. Defining beneficial application scenarios for generative AI was also a key digitalization topic in all three regions.

In Asia in addition to focusing on cybersecurity, Messer is executing on its digitalization strategy to establish unified business platforms and standardize business processes in China and ASEAN. For companies in China and ASEAN cybersecurity is a foundation embedded in the strategy to ensure current and future security and technical measures, systematically strengthened through the control program framework with NIST (guidelines and best practices developed by the National Institute of Standards and Technology). Comprehensive user training programs enhance awareness and adherence to IT security best practices among all employees.

In the Americas cybersecurity is embedded in the general risk management program of the business. This includes regular audits and checks by third parties to assess our cybersecurity posture and identify actions to improve. The resulting "cybersecurity roadmap" for Messer in the Americas closely aligns with the NIST Framework and aims to improve our capabilities to prevent/detect/respond to cyber-attacks and evolving threats. Digitalization in the Americas is viewed as an important pillar of our business strategy and provides a fundamental framework for using IT to drive growth across the region. In the current technology landscape, platforms by leading providers are used to help transform business processes, drive automation, and exploit AI powered analytics. Using cloud-based technology platforms is also an increasingly important element of the IT strategy to enable digitalization, achieving flexibility, and speed while at the same time meeting our cybersecurity obligations.

Data protection

Messer is committed to compliance with the applicable data protection regulations and manages this process through corporate governance and regional and country-level execution.

The Group Privacy Officer ("GPO") is responsible for coordinating the central data protection department at Messer and oversees compliance with the General Data Protection Regulation ("GDPR") at the Messer's Corporate Office in Germany and the European national companies. This Data Protection Management System is further supported by Local Data Protection Officers or Local Data Protection Managers of the European national subsidiaries. Legal and Compliance teams in the Americas and Asia ensure compliance within their respective regions. As an additional line of defense, internal audit covers topics related to data protection.

Engaging customers

Customer focus has always been a top priority for Messer. We engage with our customers through a multi-channel approach that fosters reliability, transparency, responsiveness, innovation, and alignment with their needs. In doing so, Messer ensures it offers relevant products, gas applications or associated services, maintains a reliable product supply, promotes safety, and meets customer expectations while supporting their sustainability goals.

Messer's decentralized structure, with a Corporate Office located in Germany and presence in Asia, Europe, and the Americas, ensures ongoing dialogue with customers. Dedicated, regional teams allow for direct communication, enabling Messer to respond to customers' needs, evolving expectations, and feedback in a timely manner.

Messer regularly assesses customer satisfaction levels and gathers insights into individual needs. Each of Messer's regions conducts regular customer satisfaction surveys. Survey findings help drive continuous improvements in Messer's products, processes, and services, enhancing the performance of its customers, improving their satisfaction and further building loyalty. These surveys cover areas such as sales support logistics, technical service, back office, and Safety, Health, Environment and Quality (SHEQ) management.

In 2024 Messer's customer and sustainability teams collaborated directly with customers to address sustainability topics, sharing relevant data about its operations, products, and services, while understanding the specific environmental, social and governance goals and requirements of its customers. The sustainability team developed a new tool and training was introduced to better support sales teams in addressing customer inquiries about the carbon footprint of Messer bulk and cylinder products.

In 2024 Messer continued to create value for its customers through innovative technology solutions that increase customer efficiency, improve safety, and reduce downstream emissions. Since 2024 Messer has been offering its Carbon Capture as a Service (CCaaS) solutions under the name ZeCarb, which stands for "Zero Carbon". It helps hard-to-abate industries get closer to their net zero targets by capturing CO_2 emissions generated in their production process.

Economic report

General economic conditions

The various industrial gases that the Group offers, along with the associated services and technologies, are used in almost all industrial sectors as well as in food technology, medicine, research and science. Gross domestic product ("GDP"), as it applies to all sectors and to the economy at large, is ,therefore, a relevant indicator for the performance of the Messer Group.

According to Oxford Economics Ltd., an independent economic research and consulting firm[3], global GDP growth in 2024 will be 2.7 %, exceeding the expectations of 2.3 % set at the beginning of 2024[4]. The International Monetary Fund ("IMF") estimates GDP growth at a slightly higher 3.2 %.[5] Despite many crises, such as the war in Ukraine, inflation remaining at a higher level or continued high financing costs, the global economy proved to be very stable. Drivers included, among other things, very robust consumption and investment in the USA, as well as resilient economic development in emerging and developing countries.

Regional GDP developed very differently in 2024. In the industrialized countries, it grew by 1.7 % (previous year: 1.8 %), in the emerging countries by 4.1 % (previous year: 4.3 %). Within the Eurozone, GDP growth in 2024 at 0.7 % (previous year: 0.5 %) was[6] below that of the USA at 2.8 % (previous year: 2.9 %). The higher growth in emerging markets compared to industrialized countries is mainly due to India with 6.4 % (previous year: 7.7 %) and China with 5.0 % (previous year: 5.4 %). Brazil grew by 3.3 %, similar to the previous year (3.2 %).[7] Thus, the economic performance of most countries grew despite numerous geopolitical crises. The aforementioned countries all exceeded the expectations set at the beginning of the year.[8]

[3] Oxford Economics Ltd. – World Economic Prospects, January 2025
[4] Oxford Economics Ltd - World Economic Prospects Jan 2024
[5] World Economic Outlook Update, January 2025
[6] Oxford Economics Ltd. – Country Economic Forecast - Eurozone, February 2025
[7] Oxford Economics Ltd. – Country Economic Forecast, January 2025
[8] Oxford Economics Ltd. – World Economic Prospects, January 2025

The GDP in the Eurozone grew with 0.7 % in 2024, compared to 0.5 % in the previous year. Indicators such as consumption (1.0 %) and government spending (2.3 %) increased compared to the previous year. Inflation fell from 5.4 % to 2.4 %, which was mainly due to falling prices for food and energy. However, investments (2.0 %) and industrial production (3.0 %) also fell. A crucial role in this was played by developments in the economically largest country in the Eurozone, Germany. Here, industrial production (4.8 %) and investments (2.6 %) fell significantly in 2024. Within the Eurozone, the individual countries have developed in a highly heterogeneous manner. While GDP increased in Spain (3.2 %), France (1.1 %), Portugal (1.9 %), Belgium (1.0 %), the Netherlands (0.9 %) and Italy (0.5 %), a recession occurred in Germany (0.2 %), Austria (1.0 %) and Ireland (0.6 %).[9],[10] Economic growth also developed at different speeds in the Eastern European countries. In Poland (2.4 %), Slovakia (2.0 %) and the Czech Republic (1.0 %), real GDP increased, driven by higher consumption and higher domestic demand. The economic performance in the South-Eastern European countries, such as Serbia (3.8 %), Croatia (3.7 %), Slovenia (1.1 %), Bosnia and Herzegovina (2.2 %) and Hungary (0.6 %), has increased significantly in some cases. The reasons for this lie in the positive developments in private consumption and investment, which are the result of the decline in inflation.[11]

China's GDP grew by 5.0 % in 2024 compared to 5.4 % in the previous year. Most indicators showed positive growth rates, although some were below those of the previous year, which was influenced by the end of the pandemic. Fundamental values such as private consumption (5.7 %; previous year: 9.2 %), investments (4.9 %; previous year: 4.8 %) and exports rose by 12.5 % (previous year: 2.3 %) due, among other things, to the comparison period in 2023, which was still influenced by Covid, and the anticipated US tariffs for 2025. The growth in industrial production increased by 5.6 %, more than in the previous year (4.4 %). Among the factors that continue to dampen the economic sentiment in China are, in particular, the ongoing problems in the Chinese real estate market, the restructuring of which is only progressing slowly.[12]

In the USA, GDP grew by 2.8 % (previous year: 2.9 %) and was thus significantly above the expectations set at the beginning of 2024 (2.0 %). Reasons for the positive development include robust private consumption of 2.8 %, which was slightly above the previous year (2.5 %), higher exports (3.2 %; previous year: 2.8 %) and a still low unemployment rate. Industrial production fell by -0.3 % in the year (previous year: 0.2 %), but showed a clear upward trend, particularly in the last quarter. Inflation fell to 3.0 % compared to the previous year (4.1 %). The key interest rate has been lowered from 5.38 % to 4.38 % by the US central bank, the Federal Reserve Bank ("FED"). Brazil increased GDP by 3.3 %, similar to the previous year (3.2 %), which is due to higher private consumption (5.3 %), higher industrial production of (2.9 %) and a lower unemployment rate (6.8 %) than in the previous year (8.0 %). Inflation was at 4.8 % at the end of the year.[13]

Business performance

The industrial gases business is defined by a pronounced and highly varied diversification across economic sectors, customer segments and national activities. Furthermore, the industrial gases business is locally structured, which means that it is not directly dependent on global supply chains. The economic recovery, which continued in the years following the pandemic-related restrictions, initially led to an increasing demand for industrial gases in many markets relevant to us, including in Europe.

In America, the largest of the three regions, which also has a very high proportion of business in the USA, the economy continued to develop positively in the year of the US presidential election. The volume growth has

[9] Oxford Economics Ltd. – Country Economic Forecast - Eurozone, February 2025
[10] Oxford Economics Ltd. – Country Economic Forecast, January 2025 / February 2025
[11] Oxford Economics Ltd. – Country Economic Forecast, January 2025 / February 2025
[12] Oxford Economics Ltd. – Country Economic Forecast, January 2025
[13] Oxford Economics Ltd. – Country Economic Forecast, January 2025

recently been rather moderate, with a corresponding impact on market prices. Messer holds a very significant market position in the helium segment in America, which is currently experiencing an oversupply. This is due, among other things, to the still low demand for electronic gases. A recovery of this market is expected, but has not yet occurred in 2024.

Business development in Europe has been influenced by the outbreak of the war in Ukraine due to the very sharp increase in energy prices. As a result of high inflation rates, economic activity in the region has slowed down, with a corresponding impact on the demand for industrial gases. The low volume growth is a trend that continues in Europe. The successful pricing measures and the partly normalizing energy costs had a positive impact on the EBITDA and, in particular, the margin. In 2023 the adjusted margin was able to increase and was further expanded in 2024.

The economy in Asia continues to exhibit the highest growth rates of all three regions. However, since the Covid pandemic, China has not been able to regain its previous growth, despite immediate catch-up effects. The unresolved problems in the real estate sector – with negative effects on steel production – should be considered as an explanation for the partly declining demand for industrial gases, as should the factors associated with the export industry. This has a corresponding and ongoing impact on prices. Nevertheless, Messer was able to achieve significant sales growth in China due to a strong market position, as new and existing plants were brought into operation. CNY exchange rate effects had a negative impact on the consolidated result (reported in EUR). In ASEAN, driven mainly by business development in Vietnam, solid growth of around 11 % was sustained due to increasing demand from pipeline customers in the steel business and increased demand for liquefied gases.

Comparison of actual business performance with projected business performance

Forecast-Actual Comparison	2024 Actual	Forecast for 2024	2023 Actual	2023 Actual, adjusted
Revenue	4,481,355	Strong increase	2,109,018	1,666,768(1)
EBITDA	1,396,320	Strong decrease	3,605,289	443,134(2)
Investments	878,272	Strong increase	333,140	232,646(1)
Net debt	3,552,604	Moderate decrease	3,139,540	—
ROCE in %	7 %	Strong decrease	74 %	17 %(2)

(1) adjusted for effects from the acquisition of the Messer Industries Group
(2) adjusted for effects from the acquisition of the Messer Industries Group and the recognition of latent reserves as part of the purchase price allocation

Despite overall challenging economic conditions in the economic regions and sectors relevant to us, the Messer Group's business proved to be resilient in 2024. The forecast of a sharp increase in sales compared to the fiscal year 2023 was met with growth of around 112 % to € 4,481 million. This is almost exclusively due to the differing comparison period for the operational activities of the Messer Industries Group. Taking into account the special effects in 2023, a significant decrease in EBITDA was expected for the current fiscal year. Based on the adjusted figures (including currency effects), a moderately increasing EBITDA was predicted in the forecast. In fact, it was able to be significantly increased to € 1,396 million compared to the previous year. This is essentially due to positive special effects in Asia and a very positive development in the Europe region this year. Investments in tangible and intangible assets were in line with our forecast (strong increase) at around € 878 million. The Messer Group's net debt as of December 31, 2024, stood at € 3,553 million (previous year: € 3,140 million), which deviates from our forecast (moderate decrease). In addition to exchange rate effects, the reasons for the increase include a persistently high level of investment. For further information on this subject, please refer to the “Financing” section under “Overall situation of the Group”. The positive business development and the investments in line with our forecast have led to the ROCE corresponding to our forecast (a strong decrease) at 7 %.

Overall situation of the Group

Results of operations

In the fiscal year 2024 the Group generated worldwide sales of K€ 4,481,355 (previous year: K€ 2,109,018), which is distributed as follows across the individual regions:

Revenue	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023	Change
Americas	2,356,174	363,369	548.4 %
Europe	1,287,540	866,667	48.6 %
Asia	810,034	811,221	(0.1 %)
Corporate	27,607	67,761	(59.3 %)
	4,481,355	**2,109,018**	**112.5 %**

The fiscal year 2024 shows a strong increase in sales compared to the previous year. This is almost entirely due to the differing comparison period for the operational activities of the Messer Industries Group. Business activities in the various regions developed as follows:

Americas

The companies in the Americas region achieved a revenue increase of 548.4 %, driven by the acquisition of the Messer Industries Group in 2023. In addition to this one-off effect, the growth can be attributed to positive price trends with stable volumes in the USA. In Colombia and Chile sales were also increased, whereas Canada and Brazil, when considering the entire previous year, recorded a slight decline in sales, which is mainly due to currency effects.

Europe

In Europe revenue increased by 48.6 % compared to the previous year due to the effects of the acquisition of the Messer Industries Group. The increase is primarily due to the growth in Western European countries, while companies in Central and Eastern Europe experienced a moderate decrease in sales. This development was driven by lost revenue in Central Europe due to the pipeline customer Liberty Ostrava going into insolvency, as well as stagnant volumes at stable prices. In Southeastern Europe, sales were at previous year’s level. The declining volumes were offset by rising sales prices.

Asia

The Asia region recorded a slight decline in sales of -0.1 %. This development was driven by a decrease in sales in China, which was largely offset by positive sales growth in Vietnam. The declining effect was reinforced by an adverse currency effect. The existing problems in the real estate sector in China persisted in 2024 and have negatively impacted demand in the steel industry. Nevertheless, the development of business with major pipeline customers in the steel industry has been predominantly positive for Messer. The development of customers in other industries, as well as the business with specialty gases, was, in some cases significantly, below expectations. Despite a positive development in the business with pipeline customers (steel industry and other industries), Messer is reporting a decline in sales of LPG and specialty gases in China due to the price collapse in 2024. Sales in Vietnam have increased significantly in 2024. This development is due to the stabilization of business with pipeline customers, but also to the expansion of the LPG market and the sale of special gases.

In the fiscal year 2024 the Group achieved an EBITDA of K€ 1,396,320 worldwide (previous year: K€ 3,605,289).

EBITDA	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Operating profit (EBIT)	549,526	3,312,591
Depreciation of property, plant and equipment, amortization of intangible assets	846,388	291,948
Dividend income[1]	406	750
EBITDA	**1,396,320**	**3,605,289**
Revenue	4,481,355	2,109,018
Margin	**31.2 %**	**170.9 %**
(1) Dividend income from non-consolidated companies		

The operating result (EBIT) fell by K€ -2,763,065 in the previous fiscal year, which is essentially due to one-off effects from the acquisition of the Messer Industries Group on November 13, 2023. Adjusted for these effects, the EBIT in the previous year amounted to K€ 253,470 and has increased significantly in the current fiscal year in comparison. This is, however, largely due to the differing comparison period for the operational activities of the Messer Industries Group.

The profit from investments decreased by K€ -152,410 compared to the previous year. This includes the previous year's proportionate results of the Messer Industries Group, which is consolidated using the equity method, amounting to K€ 156,021. The companies have been fully consolidated in the Messer Group's consolidated financial statements since the acquisition date of November 13, 2023.

In the fiscal year the net amount of finance income and finance costs was K€ -218,942 (previous year: K€ -25,063). The main items within financial income and financing expenses are foreign exchange gains and losses, as well as the interest result. The interest result of K€ -209,067 changed significantly compared to the previous year (K€ 16,932). This was mainly due to the interest expenses resulting from newly obtained financing. Financial liabilities increased by K€ 313,984 to K€ 4,066,228 compared to the previous year. Further details on this can be found in the following section "Financial position".

Overall, a consolidated net profit including minority interests of K€ 245,398 (previous year: K€ 3,453,667) was achieved in the fiscal year 2024. Of this, K€ 211,516 (previous year: K€ 3,404,568) is attributable to the shareholders of the parent company.

Financial position

Messer has a central financial management system for global liquidity management as well as for interest rate and currency management. The most important objective for the financial management system is to ensure that the Group has a minimum level of liquidity to guarantee solvency at all times. To this end adequate liquidity is being tapped into, which will enable Messer to maintain its flexibility, security and independence. We can generate additional liquidity, if necessary, through various unused credit lines amounting to K€ 497,931.

Financing

A Syndicated Multicurrency Term, Revolving and Bridge Facilities Agreement (RFA I) was concluded on May 27, 2023, to acquire CVC's shares in Yeti German Co 1 GmbH. UniCredit Bank GmbH (formerly UniCredit Bank AG) acts as the agent. The RFA I consists of five lines, with the EUR Bridge Facility and the USD Bridge Facility being fully repaid in the course of 2024.

- EUR Term Loan Facility ("Term Facility 1") of € 600 million with a term until November 13, 2028, the interest rate consists of the EURIBOR (Euro Interbank Offered Rate) plus the margin. This depends on the ratio of net debt to EBITDA.
- USD Term Loan Facility ("Term Facility 2") of USD 700 million with a term until November 13, 2028, the interest rate consists of the Term SOFR (Secured Overnight Financing Rate) plus the margin. This depends on the ratio of net debt to EBITDA. Depending on the duration of the interest period, the margin is increased by a surcharge.
- Revolving facility of over € 600 million with a term until November 13, 2028, and an extension option by one or two years, subject to the lenders' approval. The interest rate for the revolving facility consists of the term SOFR or EURIBOR, respectively, in the currency of the drawdown, plus a margin. This depends on the ratio of net debt to EBITDA.
- The EUR Bridge Term Loan Facility ("EUR Bridge Facility") of € 1,450 million with an original term until November 13, 2024, was gradually refinanced during the course of 2024 and was repaid in full at the end of the original term.
- The USD 900 million bridge term loan facility (the "USD Bridge Facility") with an original term until November 13, 2024, was repaid in full on March 28, 2024.

As part of RFA I, the company must comply with a financial covenant. The ratio of net debt to operating profit before interest, taxes, depreciation and amortization of intangible assets and property, plant and equipment (EBITDA) must not exceed a defined value.

On March 25, 2024, Messer Industries USA Inc., USA, (guaranteed by Messer SE & Co. KGaA) issued a US Private Placement (USPP) amounting to USD 1,100 million to several investors in three tranches, which have maturities of seven, ten and twelve years. The proceeds from the USPP were used to fully repay the USD Bridge Facility and to finance general corporate purposes of the Messer Group.

On July 24, 2024, Messer SE & Co. KGaA (guaranteed by Messer Industries USA Inc., USA) received cash inflows from promissory note loans amounting to € 850 million. The transaction consisted of a total of six tranches with variable and fixed interest rates and maturities of three, five and seven years. All proceeds were used to partially repay the outstanding EUR Bridge Facility of € 1,450 billion at the end of July. On August 16, 2024, Messer SE & Co. KGaA received cash inflows from variable-rate promissory note loans with a total volume of € 100 million and the same maturities. The proceeds from these bonds were also used in August to partially repay the EUR Bridge Facility.

On November 6, 2024, Messer SE & Co. KGaA (guaranteed by Messer Industries USA Inc., USA) placed a EUR Private Placement ("EURPP") with a total volume of € 272 million. The transaction consists of two tranches of € 136 million each, with maturities in November 2034 and November 2036.

On November 7, 2024, Messer SE & Co. KGaA (guaranteed by Messer Industries USA Inc., USA) received funds from promissory note bonds totaling € 200 million. The transaction consisted of two tranches with a variable interest rate and is divided into € 125 million with a term until November 2027 and € 75 million with a term until November 2029.

The proceeds from the two transactions were used on November 13, 2024, together with available liquidity, to fully repay the remaining € 500 million bridge facility.

As of December 31, 2024, the net debt amounted to K€ 3,552,604 (previous year: K€ 3,139,540) and is calculated as follows:

	Dec. 31, 2024	Dec. 31, 2023	Change in 2024
Financial liabilities	4,066,228	3,752,244	8.4 %
Cash and cash equivalents	(513,624)	(612,704)	(16.2 %)
Net debt	**3,552,604**	**3,139,540**	**13.2 %**

The net debt of the Messer Group increased by € 413.1 million compared to the previous year. The ratio of existing financial liabilities (€ 4,066.2 million) to total assets (€ 14,384.3 million) was 28.3 % in the fiscal year (previous year: 26.8 %).

The change in financial debt is shown below:

Net financial debt as Jan. 1, 2024	**3,752,244**
Cash changes:	
New debt raised	**2,502,524**
Repayments	**(2,358,581)**
Non-cash changes:	
Additions to lease liabilities	**55,877**
Changes due to currency translation	**110,205**
Other non-cash changes	**3,959**
Net financial debt as of Dec. 31, 2024	**4,066,228**

Statement of cash flows

The cash flow statement is as follows:

Statement of cash flows	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Cash flow from operating activities	858,448	456,448
Cash flow from investing activities	(819,090)	(3,506,644)
Cash flow from financing activities	(137,387)	3,413,627
Changes in cash and cash equivalents	**(98,029)**	**363,431**
Cash and cash equivalents		
at the beginning of the period	**612.704**	**260,454**
Currency translation effect on cash and cash equivalents	(1,051)	(11,181)
at the end of the period	**513,624**	**612,704**

The cash flow from operating activities amounted to € 858.4 million and is above the previous year's level. This is due to the differing comparison period for the operational activities of the Messer Industries Group in the current fiscal year. The acquisition of helium inventories, see note 19 "Inventories" of the consolidated financial statements, as well as the payment of transaction-related liabilities in the current fiscal year, have a counteracting effect.

The development of the cash flow from investing activities cannot be compared due to the payment for the acquisition of the Messer Industries Group in the previous year. Excluding the one-off effect, the Messer Group's sustained investment activity continues. A significant portion of the expenditure in 2024 also went towards investments in property, plant and equipment. Similarly, expenses were incurred for the increase of investments and capital increases in associated companies.

The cash flow from financing activities shows an outflow of € -137.4 million, which is € 3,551.0 million higher than in the previous year. The previous year was particularly marked by the acquisition of the Messer Industries Group, which was financed both through equity and debt. The refinancing and capital increase that took place in the closed fiscal year had a positive impact of € 208.8 million on the cash flow from financing activities. Dividends paid to shareholders, as well as distributions on shares of other shareholders and interest paid amounting to € 272.5 million, resulted in a negative cash flow contribution from financing activities.

As of December 31, 2024, the Messer Group's cash funds amounted to € 513.6 million (previous year: € 612.7 million).

The Group has undertaken to invest in the acquisition, construction and maintenance of various production facilities. Obligations of this kind relate to the future purchase of plant and equipment at market prices. There are also long-term contracts giving rise to obligations. As of December 31, 2024, the obligation from orders and investment projects, as well as long-term contracts, amounted to € 1,853.8 million (previous year: € 759.2 million).

Investments

Capital expenditure continues to focus on safeguarding existing business and exploiting profitable growth potential. In accordance with economic principles, we primarily invest in projects that secure our product supply and/or offer opportunities for profitable growth. In addition, we regularly invest in the modernization of production facilities and sales tools.

In 2024 the Messer Group invested around € 878 million in tangible and intangible assets. These mainly concerned the construction of air separation units ("ASU") and other production facilities in the USA, Vietnam, China, Austria, Germany, Brazil, Belgium and Chile. The increase in investments compared to the previous year is mainly due to the year-round consideration of the investments of the companies of the former Messer Industries Group in the Americas and Western Europe, which have been incorporated with only two months of the year in the fiscal year 2023.

The investments were distributed across the regions as follows:

Investments	Jan. 1 – Dec. 31, 2024	Jan. 1 – Dec. 31, 2023
Americas	443,019	81,702
Europe	207,719	94,329
Asia	206,402	148,795
Corporate	21,132	8,314
	878,272	**333,140**

The projects in the Americas region are predominantly located in the USA and focused in 2024 on investments in the helium business, business expansion with air separation units in the field of liquefied gases, particularly in Texas, Arkansas and Ohio, as well as various generator projects for on-site customers, including those from the electronics industry. In addition, investments were made in the specialty gases business and in a nitrogen liquefier in Georgia. In Brazil a new air separation unit for the liquefied gas market and a nitrogen liquefier are being built, and in Chile a plant for the extraction and purification of carbon dioxide.

The Asian region is characterized by significant investments in Vietnam and China. In Vietnam, the focus of investments was on air separation units for on-site customers. In addition, production capacities are being expanded to supply the liquefied gas market in the south of the country. Messer is seeking further diversification in Vietnam by constructing a filling plant, facilities for special gases and nitrous oxide, and by investing in a generator for new customers in the electronics industry. In China investment projects also took center stage in 2024 strengthening our position in the liquefied gas market and, in addition to ongoing investments in capacity expansion for existing on-site customers, promoting balanced diversification of customers within the existing business model. In addition, investments were made in China in filling plants as well as in plants for the production of hydrogen, nitrous oxide and special gases. Furthermore, the construction of the first air separation unit in Thailand has been advanced in the Asian region.

In Europe our investment activities continued to focus on distribution center investments and selective growth projects. The selected growth projects in the 2024 fiscal year included, in particular, investments in carbon dioxide extraction facilities in Austria, Poland, the Czech Republic, Slovenia and Serbia. In addition, investments were made in an air separation unit for an on-site customer in Germany, an air separation unit to supply the liquefied gas market in Belgium, filling plants in Spain and Portugal, as well as various generators. Since 2024 the business activities of the service company Messer GasPack GmbH, which primarily invests in sales resources, have also been transferred from the Corporate segment to the Europe region.

The industrial gas activities of ASCO Kohlensäure AG, as well as the business activities of Messer SE& Co. KGaA, are summarized under “Corporate”.

Financial situation

The total assets increased by € 384.5 million in the reporting year and amounted to € 14,384.3 million as of December 31, 2024. This development is primarily due to an increase in the fixed assets through investments and an increase in inventories through the purchase of helium. For more information on the increase in long-term financial liabilities, please refer to note 27 “Financial liabilities” in the notes to the consolidated financial statements.

Non-current assets continue to account for the largest share of the balance sheet total at 85.5 % (previous year: 87.0 %).

The largest item on the assets side continues to be fixed assets (tangible and intangible assets), which account for 84.3 % (previous year: 85.9 %) of the total balance sheet, and increased by € 108.5 million compared to the previous year. This change is primarily due to the investments made during the current fiscal year, less the effect of scheduled depreciation.

The equity ratio, including minority interests, fell slightly compared to the previous year to 53.0 % (previous year: 53.8 %). The main reason for this was the increase in the total balance sheet. In contrast, the positive net profit amounted to € 245.4 million (previous year: € 3,453.7 million), as well as the shareholders’ contribution (less proportionate costs for raising equity capital, minus deferred taxes calculated on this amount) to the capital reserve amounting to € 20.8 million (previous year: € 1,552.3 million), which were heavily influenced by one-off effects from the transaction of the Messer Industries Group in the previous year.

Financial liabilities increased by € 314.0 million to € 4,066.2 million in the fiscal year and accounted for 28.3 % (previous year: 26.8 %) of the balance sheet total as of December 31, 2024. The Group’s net debt (financial liabilities less cash and cash equivalents) amounted to € 3,552.6 million on the balance sheet date (previous year: € 3,139.5 million). Further details on this can be found in the “Financial position” section.

Another significant item on the liabilities side in the fiscal year are the deferred tax liabilities resulting from the transaction and the recognition of hidden reserves as part of the purchase price allocation.

Operating assets

Net working capital breaks down as follows:

Operating assets	Dec. 31, 2024	Dec. 31, 2023
Inventories	724,311	309,819
Trade receivables	612,910	590,388
Trade payables	(410,668)	(388,227)
Liabilities for outstanding invoices	(121,777)	(125,638)
Prepayments received	(33,471)	(29,355)
	771,305	**356,987**

Compared to the previous year, operating assets increased by K€ 414,318 to K€ 771,305 at the end of the fiscal year. This is mainly due to the increase in inventories through the purchase of helium in the past fiscal year. For further details on this, please refer to note 19 “Inventories” in the consolidated notes. The increase in trade receivables is fully offset by the increase in trade payables.

The ratio of inventories (less deposits received) and trade receivables to trade payables (plus liabilities for outstanding invoices) has increased from 1.7:1 to 2.5:1 compared to the previous year. This is mainly due to the increase in inventories through the purchase of helium in the past fiscal year. The ratio of operating assets to revenue was 17.2 %, compared to 16.9 % in the previous year.

Overall statement on the economic situation

The revenue of the Messer Group increased by K€ 2,372,337 compared to the previous year, mainly due to the acquisition of the Messer Industries Group. While the growth in Europe and the Americas is primarily due to the differing comparison period of the operational activities, the revenue in Asia has slightly decreased due to the tense economic situation in China.

The EBITDA for the Messer Group has fallen sharply to around € 1,396 million compared to the previous year’s figure of around € 3,605 million. Similarly, the EBITDA margin fell from 170.9 % to 31.2 % in the 2024 fiscal year. This is due to the effects of the acquisition of the Messer Industries Group and the disclosure of hidden reserves as part of the purchase price allocation in the fiscal year 2023.

The Messer Group’s net debt increased in 2024 compared to the previous year due to exchange rate effects and a continued high level of investment of € 413 million and amounted to € 3,553 million as of the reporting date. Further details on this can be found in the “Financing” section.

In the fiscal year 2024 investments amounting to € 878 million were made in companies of the Messer Group, which is € 545 million higher than in the previous year. The investment ratio, measured against total revenue, corresponded to 19.6 %, compared to 15.8 % in the previous year.

The overall positive business development is confirmation of the company's business model, which is oriented towards stability and sustainability. The Messer Group has an international presence and is diversified across a wide range of countries within the regions. This allows for a good compensation of demand decreases in individual markets or specific industry weaknesses.

Forecast report

General economic development

Oxford Economics expects global real GDP growth for 2025 to be slightly above the previous year's level of 2.7 %, at 2.8 %. Inflation will fall to 3.7 % (previous year: 4.5 %) over the course of the year and will be below the respective target in some countries. However, it is still above the average values for 2010's years (2.5 % to 3.0 %). The announcement, and in some cases the already implemented plans by the new US government to introduce extensive tariffs will have a negative impact on global trade and will lead to lower GDP growth worldwide. In Ukraine, an end to the war is still not in sight, despite international efforts. The political tensions, as well as the currently applicable sanctions, between Russia and the Western states will persist even in the event of a possible ceasefire. Similarly, geopolitical tensions are also causing uncertainties in other parts of the world. With a higher probability than in the 20 years before the pandemic, extreme weather conditions will lead to supply shortages and affect economic growth. An increase in energy prices, particularly in Europe, is expected. The existing global trade barriers between China, the USA and Europe are not being further reduced. Even though there are currently no further major financial and political tensions, conflicts between national governments and the EU could arise, or mass deportations from the USA could lead to serious disruptions in the US labor market. In China a rising number of payment defaults and possible political missteps in curbing corporate debt, particularly in the real estate sector, could lead to greater financial strain and increase the risk of destabilizing market turbulence. In addition to these mentioned risks, fiscal tensions can arise in parts of the financial system, particularly due to the continued high key interest rates in the USA and Europe. Furthermore, geopolitical and supply-side uncertainties may flare up again and create economic risks.[14,15]

For the euro zone, Oxford Economics expects slightly higher GDP growth of 0.9 %, which is above last year's value (0.7 %). Inflation is expected to fall further to 2.1 % over the course of the year (previous year: 2.4 %), a figure that is above the ECB's target of 2 % and is due, among other things, to US tariffs and a weaker euro. Rising real wages, combined with a still stable labor market, have led to higher consumption levels compared to the previous year. A cautious reduction in interest rates by the ECB is expected. The introduction of US tariffs of 10 % or more is considered likely and will negatively impact trade, inflation and investment decisions.[16]

The expectation for GDP growth in Eastern European countries such as Poland (3.3 %), the Czech Republic (2.4 %) and Hungary (1.5 %) is higher than in the previous year, while Serbia, with GDP growth of 3.5 %, is below the previous year (3.8 %). In the case of Poland and Serbia, the drivers of development are state and private investments, a decrease or stabilization of inflation, as well as increasing consumption due to real wage increases.[17]

[14] Oxford Economics Inc. – World Economic Prospect, January 2025
[15] Oxford Economics Inc. – Country Economic Forecast, January / February 2025
[16] Oxford Economics Inc. – Country Economic Forecast, February 2025
[17] Oxford Economics Inc. – Country Economic Forecast, January / February 2025

In China growth of 4.7 % is expected for the full year 2025 which is lower than the previous year's growth of 5.0 %. With the help of government subsidies and fiscal policy measures such as interest rate reductions and an expansion of national debt, private consumption is intended to be increased and the risk of deflation, resulting from an oversupply in certain sectors, is to be mitigated. Slow wage growth, decreases in prices and investment in the housing market, as well as higher US tariffs, will negatively impact GDP growth. The growth expectation for industrial production will decrease from 5.6 % to 5.1 % in 2025.[18]

For the USA, GDP growth of 2.4 % is expected (previous year: 2.8 %). Inflation is expected to fall from 3.0 % last year to 2.7 %, but is still above the FED's target of 2 %. The reason for the persistent inflation is the persistently high costs of housing and services, as well as the tense situation on the labor market. The imposition of tariffs on goods from the USA's most important trading partners also leads to rising prices. It is expected that the FED will continue to maintain high key interest rates. Despite tariffs and persistently high food and energy prices, private consumption will remain above the level of the previous year. The mutual increase of tariffs could lead to lower GDP growth.[19]

Brazil is expected to experience significantly weaker growth of 1.8 % of GDP compared to the previous year, 2023, which was 3.3 %. The reasons for this are, in particular, the still high inflation rate of 4.6 %, the slowly growing private consumption and lower exports compared to the previous year.[20]

Outlook for the Messer Group

Despite geopolitical challenges and persistently high inflation and interest rates, as of December 31, 2024, the Messer Group has once again exceeded its forecasts for almost all significant financial performance indicators. The medium-term planning of the Messer Group is still defined by efforts to boost profitability while at the same time achieving a moderate development in net debt. With appropriate investments, we want to further increase sales and thus contribute to the further increase in the EBITDA margin of the Messer Group.

The planning figures were drawn up in fall and winter 2024 and are, therefore, based on the forecasts for economic development in the planning period made at that time. These were determined in all regions by the respective macroeconomic situation. Both in Asia and Europe, as well as in the Americas, a moderate economic development is also assumed for the year 2025.

Moderate organic growth is expected as a result of new sales markets and efficiency measures. The outlook for the Americas anticipates a strong increase in revenue, despite a moderate economic forecast for the fiscal year 2025. This is particularly driven by Brazil, as well as Canada, Colombia and Chile, while the planned growth in the USA is moderate. The growth in 2025 is expected to be generated primarily from the sale of additional quantities, but also partly from price increases. Despite the expected increase in revenue, we expect a slight decline in EBITDA, which primarily results from internal settlements.

In Europe, following the energy crisis resulting from the Russian war of aggression against Ukraine, a stabilizing energy price level is also expected in 2025; the expected economic activity in the region is to be classified as slightly increasing. For our business activities in Europe the stabilization of profitability and margins will also be the focus of the expected business development in 2025. In addition, there is the economically optimized utilization of the production capacities newly created in recent years, selected customer projects, and targeted capacity expansions. For the Europe region we expect moderate revenue growth in 2025, driven by volume and price increases to a comparable extent. Furthermore, we expect a slight decline in EBITDA compared to the strong fiscal year 2024, which is mainly due to higher costs, inflation, and also due to sales.

[18] Oxford Economics Inc. – Country Economic Forecast, January 2025
[19] Oxford Economics Inc. – Country Economic Forecast, February 2025
[20] Oxford Economics Inc. – Country Economic Forecast, January 2025

Despite the currently difficult overall economic situation in China and the countries in ASEAN, we continue to anticipate above-average market growth in a global comparison for the future. We will achieve this through our diversification process, which is well advanced in China and has been initiated in Vietnam, and which will cover the entire range of our sales profile. China's economic policy objective of assuming an increasingly significant position in the global economy, for example through the infrastructure measures being driven forward for this purpose, should result in a persistently high level of production in the heavy industries, and in particular in the steel industry, which is of great importance to us. However, within the framework of our forecast, we also expect a continued normalization on the sales side in the liquid gas market sector in 2025, with market prices remaining high, as in previous years. This is in addition to the weaker overall economic development expected for the upcoming fiscal year. The planned strong sales growth in Asia is due to the utilization of both new and existing facilities, particularly in ASEAN. The planned moderate EBITDA growth consists of a slightly declining (or currency-adjusted stable) EBITDA in China, partly due to positive one-off effects in 2024, and a strongly growing EBITDA in ASEAN, in direct connection with the sales development and a related higher capacity utilization.

The developments of the most important financial performance indicators of the Messer Group are planned as follows for the year 2025.

	2025 compared to 2024
Revenue	Strong increase
EBITDA	Slight increase
Investments	Strong decrease
Net debt	Strong decrease

The Messer Group expects strong sales growth. The reasons for this are the increasing utilization of newly commissioned plants, particularly in Asia, but also the increase in the utilization of existing plants, with an increase in sales volumes in all three regions, particularly in the Americas. Price increases are expected to drive sales growth to a significantly lesser extent than in the past two years. The Group considers itself to be in a good economic position but is fundamentally adopting a cautious stance in terms of short-term expectations. We expect only a slight increase in EBITDA for the fiscal year 2025, or a moderate increase at constant exchange rates. A strongly growing EBITDA forecast in Asia, excluding positive one-off effects in 2024, is offset by a cautiously planned development in the Americas and Europe, against the expected backdrop of a weak overall economic environment.

We will make future investment decisions in line with an appropriate net debt development of the Messer Group. The investment activities appropriate to this objective are carried out to a selected extent in order to support the non-current solid earnings development of the Messer Group. Approximately half of our investments are made in the Americas, particularly in the USA, followed by Europe and Asia. The other half is divided between the other two regions, with a slight majority in Europe.

Forward-looking statements

This forecast report contains forward-looking statements that are based on the current assessments of the company's management regarding future developments. The statements made should not be understood as guarantees that these expectations will indeed be met. The future business performance and earnings of the Messer Group are dependent on a number of risks and uncertainties and can, therefore, diverge significantly from the forward-looking statements made here.

Risk Management

The principles of the risk policy are defined by the Management Board of Messer Management SE in the Risk Management Directive and, in addition, in the Messer Group Guidelines. Risk management is aimed at securing assets and increasing the company's value. Thus, it is an essential component of all decisions and business processes. Messer's risk management is defined as a continuous task of entrepreneurial activity.

The risk strategy of the Messer Group is specified by the risk policy principles. These are intended to ensure that risks are fully identified and presented and assessed in a transparent and comparable manner. They oblige those responsible for risk to proactively manage and monitor risks. Messer's risk management manual also defines all methodological and organizational standards for dealing with risks.

Group-level risk management is a function of the Group Controlling, Planning and Risk department, which reports to the Chief Financial Officer. This department is responsible for the design and further development of the risk management system, the methods and procedures for identifying and assessing risks, as well as supporting the decentralized risk managers.

The organization of Messer Risk Management is directly aligned with the Group structure. It includes Messer SE & Co. KGaA and its subsidiaries, as well as non-consolidated companies with a shareholding of at least 50 %. In addition to the organizational structure, the risk management process is also fundamentally decentralized. At the regional level, decentralized risk managers have been appointed, who ensure the risk management process within the regions. Risk managers and their supporting risk management teams have been appointed at the level of Messer subsidiaries and central units. They are responsible for identifying, assessing, and independently managing risks at the local level and for reporting them to the regional or central risk management team ("bottom-up").

In addition, risks can be identified directly by the Management Board or the Group Risk Manager and submitted to the regions for evaluation ("top-down") or mapped at the Group level. The Group Risk Manager is responsible for the implementation of the risk management process in accordance with the guidelines. His responsibilities include, in particular, the plausibility check and aggregation of reported risks, as well as the definition and implementation of standards for risk identification and assessment. In addition, he is responsible for reporting to the Management Board and the Audit Committee of the Supervisory Board.

The existing management structure and established reporting processes ensure that not only events or developments that endanger the company are reported to the relevant authorities in a timely and regular manner, but also developments that could lead to the endangerment of company objectives (such as EBITDA). This enables management to take timely action against any potential business and/or financial risks.

We define risks as potential future events that could lead to a negative deviation from the forecasted objectives. The risks recorded in the risk report are assigned to globally defined risk categories, with the principle of individual risk recording being applied.

Financially assessed risks are quantified based on the probability of occurrence and their potential negative economic impact in the event of occurrence. Non-financially evaluated risks are taken into account qualitatively. The assessment of qualitative risks is based on the probability of occurrence and their potential negative consequences in the event of occurrence.

With the introduction of the risk management software “Corporate ERM” by Corporater Inc., the assessment of individual risks is carried out in the form of a gross and net assessment. Risks are generally recorded on a gross basis, and mitigating factors are only taken into account after their implementation. The risk assessment always follows a realistic risk scenario, which is based on the dimensions of the probability of occurrence and the possible impact/consequence in the event of the risk materializing. In order to assess the financial impact, the best, most likely, and worst-case scenarios must be defined as input values for the Monte Carlo simulation, which has been established as the standard evaluation method for calculating the Messer Value at Risk.

“Corporate ERM” is a digital tool for the early detection, analysis, management and documentation of risks. The “Corporate ERM” structure, like the Messer risk management system, is guided by the principles of the international risk management standard ISO 31000:2018. The integrated risk management of Messer Americas is based on the standard of the Committee of Sponsoring Organizations, the COSO 2017 Framework, and is adapted to the requirements of Messer.

The risk reports are generally submitted biannually (in January and July). The reported risks are summarized in a uniform reporting process into a Group-wide risk report and presented to and discussed with the Management Board of Messer Management SE. Semi-annual reporting increases the relevance and enhances the impact of the respective reports. Prior to reporting, a global risk assessment is carried out and the corresponding documentation is recorded in the “Corporate ERM” risk register. It reflects events or developments that may occur in the financial years 2025 and 2026. However, there can be no absolute certainty that all risks can be fully identified and managed.

If a new risk is identified outside of the regular risk reporting and its potential probability of occurrence and its net expected value exceed the defined threshold, an ad-hoc report is sent to the Chief Financial Officer and to the Group-level risk management. In addition, a Risk Committee was established at Messer in 2024. A quarterly discussion/vote takes place here, in particular to identify and assess risks that transcend regional boundaries. The Risk Committee is composed of the Chief Financial Officer of Messer Management SE and the regional CFOs, regional risk managers, Corporate Accounting, Corporate Finance & Treasury, Corporate Legal, Insurance and Compliance, and Group Controlling, Planning & Risk.

The requirement of the revised audit standard IDW PS 340 (new version) to carry out a risk aggregation for the risk-bearing capacity calculation using Monte Carlo simulation is fulfilled with the risk management software “Corporate ERM”. Risk aggregation is necessary to identify developments that endanger the portfolio as a result of combined effects of individual risks. The aggregation of risks is carried out as a scenario simulation process. The risk aggregation is prepared by the Group Risk Manager on the basis of the overall risk portfolio of the reported individual risks. Risks that are not financially assessed are examined qualitatively in terms of their content and are not included in the Monte Carlo simulation.

Compliance Management

Messer stands for responsible corporate management, which is focused on sustainable value creation and trusting cooperation with its shareholders, business partners, employees and other stakeholders. Our principles and processes not only require compliance with laws and regulations, but also ethically impeccable and responsible behavior, and are an integral part of our Compliance Management System ("CMS"). Our CMS is based on internationally and nationally recognized standards for good and responsible corporate governance.

The fundamental document of our CMS is the Messer Code of Conduct, which provides a binding framework for dealing with conflicts of interest and for complying with applicable laws, regulations, and local as well as company-internal operating rules that affect our business. The Code of Conduct is intended to ensure that Messer's values are communicated to all managers and employees.

Messer's CMS is supported by a clear commitment from the Board of Directors and the executives and senior managers of Messer, and serves as an instrument for building trust.

Based on a risk analysis that included all national subsidiaries and central departments, potential weaknesses at Messer were identified, and corresponding measures to mitigate risks were defined and implemented.

Messer SE & Co. KGaA has established binding compliance guidelines for its companies. The overarching principles are contained in the Code of Conduct, which is supplemented by the Business Partner Code of Conduct, the declaration on human rights and working conditions, the Corporate Sustainability Commitments, as well as more specific guidelines on combating corruption and bribery, exports, and other compliance issues. Management and employees are regularly informed and trained on the content and any changes to these and other guidelines and codes of conduct.

Compliance training is an essential element of Messer's compliance program. In collaboration with other departments and the regionally responsible compliance managers, e-learning courses are tailored to the specific circumstances of the Messer companies by Group Regulatory and Compliance (for Asia and Europe) and the Legal and Compliance department in the Americas (for the American companies). One of these courses, which deals with ethics and the code of conduct, must be completed by all employees. Additional courses on combating bribery and corruption, as well as on antitrust law, are mandatory for certain employees, depending on their professional duties and the expected interactions with third parties. Some courses are reassigned every year. More advanced courses are assigned every two years, and the training content of all courses is regularly updated.

The Management Board is responsible for monitoring the Messer CMS. This organizational concept is binding for all executives, managers, and employees of Messer. Within the framework of the applicable legal provisions, the executives are responsible for implementing this organizational concept or local equivalents in their national subsidiaries and ensuring compliance with these. Many of the guidelines, procedures, and programs issued by Messer SE & Co. KGaA have been implemented in all regions, and efforts to harmonize them are ongoing, with locally driven guidelines, procedures, and programs further supporting the compliance mission.

The Management Board has appointed a Chief Compliance Officer (CCO) who supports the executives and the supervisory bodies. The CCO is supported by the Group Regulatory and Compliance department. In addition, regional compliance managers and local compliance officers are appointed by the regional management in coordination with the respective national managers. These regional and local compliance officers are supported by the Group Compliance Officers at the corporate headquarters. The Management Board has defined the responsibilities, rights and obligations of all Compliance Officers in a Compliance Officer Policy.

The implementation of the compliance guidelines by the national subsidiaries is monitored through internal compliance audits. The Group Regulatory and Compliance department comments on the most important areas of compliance, such as compliance culture, compliance objectives, compliance risks, compliance program, compliance organization, compliance communication, compliance monitoring and improvement, as well as significant compliance violations. All identified areas for improvement and corrective measures are implemented through a continuous follow-up process.

The Messer Integrity Line is a communication platform that facilitates the reporting of concerns and (possible) violations. Employees can contact designated individuals to provide or report indications of compliance violations. Compliance violations are pursued and dealt with appropriately. They will also be used as an opportunity to consider preventive measures to ensure that the associated risk does not occur again in the future. The Integrity Line is also available to business partners and other third parties and can be accessed on the website of each local company.

Each year the Chief Compliance Officer submits a global compliance report to the Management Board and the Supervisory Board.

Internal Audit

In the fiscal year 2024 a total of 19 (previous year: 16) status audits (one initial audit in China, otherwise follow-up audits; Europe: 8; China: 10) were carried out by the internal audit department of Messer SE & Co. KGaA and the central organization of Messer China at companies within the Messer Group. Likewise, all audits carried out in 2023 were subject to a follow-up review.

All audits conducted by the Internal Audit department also involve consulting activities, in the sense that “best practice” information is shared and transnational support is organized. This is done taking into account the respective current standards of the companies in the countries. If necessary, other central functions are also involved in an advisory capacity (including SHEQ, Corporate Logistics, Central Sales functions). Compliance with corporate guidelines is checked, and random document checks as well as mass data evaluations from the SAP systems are carried out within the various processes in order to verify the effectiveness and efficiency of the processes, as well as the accuracy and reliability of financial reporting. Findings can be investigated and suggestions can be made on how to improve the transparency of business processes. The Audit Committee and the Supervisory Board of the Messer Group regularly ensure the quality and appropriate intensity of the audits.

The tasks of internal auditing are carried out in the Americas by Messer Americas Internal Audit. The internal audits include operational, compliance and consulting audits. In the fiscal year 2024 audits were carried out in the USA, Brazil, Colombia, Canada and Puerto Rico. They assess the appropriateness and effectiveness of existing guidelines and procedures through random sampling of transactions and monitor compliance with company policies and requirements. Based on these audits, observations are recorded and recommendations are made regarding the effectiveness and efficiency of processes and controls. In total, 21 compliance audits and four advisory audits were carried out in 2024 (previous year: 16). In addition, Internal Audit was involved in 15 Integrity Line audits.

The audit results and reports of the regions are shared and discussed with the Internal Audit management. Subsequently, they are presented in all relevant committees. In addition, Internal Audit maintains ongoing communication with the Group’s audit firm.

Risk Report

Responsible management and control of risks is an essential element of corporate management. We define risks as potential future events that could lead to a negative deviation from the set objectives. As an international provider of industrial gases, we are fundamentally exposed to risks that are inextricably linked to our business activities. Furthermore, future earnings performance is dependent not only on the fluctuating demand for industrial gases and related products, but also on the uncontrollable economic trends or geopolitical risks in individual countries.

The individual risk assessment follows a realistic risk scenario, which is based on the dimensions of the probability of occurrence and the possible impact/consequence in the event of the risk materializing. Risks are generally recorded on a gross basis, and mitigating factors are only taken into account after their implementation. To assess the financial impact, the best, most likely and worst-case scenarios must be evaluated with their potential negative impact on the financial targets in terms of EBITDA.

This assessment serves as the input value for the Monte Carlo simulation, which has been established as the standard assessment method for calculating the Messer Value at Risk.

A global risk assessment was conducted at the end of the 2024 financial year to ensure a comprehensive overview. The risks recorded in the risk report are assigned to globally defined risk categories, with the principle of individual risk identification being applied. The aggregated risk categories described below are evaluated in terms of their value at risk. This enables a risk classification into the categories low, medium and high.

Geopolitical risks

The impact of the war between Russia and Ukraine, which has been ongoing since February 24, 2022, in the Central and Eastern European region (“CEE”) continues. The currently applicable sanctions between Russia and the Western states will likely persist for the time being, even in the event of a possible ceasefire. In the event of a territorial escalation or a possible expansion of the conflict, Messer’s investments in a production facility in Ukraine and/or the Baltic States could be affected. A short- to long-term interruption of operations, as well as damage to these production facilities, could be the result.

Similarly, geopolitical tensions are also causing uncertainties in other parts of the world. With the inauguration of the new US President, punitive tariffs on goods from the European Union, Canada and China were implemented by decree. Among other things, tariffs of 25 % were imposed on steel and aluminum from all countries. Additional flat-rate duties of 10 % or more on imports from the EU are possible. The Messer Group supplies a wide range of industries and sectors. An increase in tariffs could have an impact on consumer prices and, consequently, lead to a generally lower demand for the affected products. In response, countermeasures are expected from the Chinese government and the European Union, which would result in further export restrictions. An escalating trade conflict could lead to rising inflation in some countries and hinder global growth.

Messer is closely monitoring the further development of the geopolitical situation, including the resulting impact on risk development, in all three regions, and corresponding countermeasures are being initiated at the regional level.

We classify these geopolitical risks as medium overall, with a medium level of risk and a high probability of occurrence.

Economic risks

The business success of Messer depends to a certain extent on economic influences, as an economic downturn can lead to a reduction in purchasing power in the affected market. The Messer Group supplies a wide range of industries and sectors: These include, among others, companies from the fields of steel production and metal processing, the chemical industry, petrochemicals, the food and beverage industry, the glass industry, as well as the healthcare sector. This is done on the basis of long-term supply contracts with terms of up to 15 years in Europe, up to 20 years in the Americas and up to 30 years in Asia.

The business development in Europe in the first years following the outbreak of the war in Ukraine was influenced by the very strong increase in energy prices. Inflation fell to 2.4 % in 2024, which was mainly due to falling prices for food and energy. Oxford Economics forecasts GDP growth of 0.9 % in the Eurozone in 2025 and 1.2 % in 2026[21]. Possible tariffs imposed by the US government could lead to rising inflation in some European countries and negatively impact growth.

Messer's strong position in the European region, with a share of 29 % of total revenue, increases the risk that negative impacts from periods of economic weakness cannot be fully compensated by better developments in other markets.

The economy in Asia continues to exhibit the highest growth rates of all three regions. However, since the Covid-19 pandemic, China has not been able to match its previous growth, despite immediate catch-up effects. The unresolved problems in the real estate sector – with negative effects on steel production – should be considered as an explanation for the partly declining demand for industrial gases, as should the factors associated with the export industry. Deflation risks in 2025 continue to be the biggest concern for China's economic growth. Core inflation, which is a measure of the dynamics of supply and demand domestically, is expected to be slightly negative in the first half of 2025. Weak domestic activity and overcapacity suggest that economic momentum in China will remain subdued. Oxford Economics forecasts GDP growth of 4.7 % in China in 2025 and 4.2 % in 2026[22]. Possible tariffs imposed by the US government could negatively impact Chinese growth.

In the case of regional variations within China, the positioning of Messer production facilities in different provinces of the country can, however, have a partially balancing effect. A significant decline in market demand in some of the key industries and sectors can adversely affect the future development of the results. Messer's strong position in Asia, with a share of over 18 % of total revenue, increases the risk that negative impacts from periods of economic weakness in China cannot be fully offset by better developments in other markets.

In the most important market in the Americas region, the US market, a positive dynamic is evident, the likelihood of a recession has decreased, and further growth is expected. Reasons for the positive development include robust private consumption, higher exports, and a persistently low unemployment rate. Possible tariffs by the EU or China in response to the US government's tariffs could negatively impact American growth. Oxford Economics forecasts GDP growth of 2.4 % in the US market in 2025 and 2.5 % in 2026[23]. Messer's strong position in the Americas region, with a revenue share of 53 % and a disproportionately high contribution to earnings from these markets, could offset negative impacts from periods of economic weakness in other markets.

We assess the economic risks as medium overall, with a low level of risk and a medium probability of occurrence.

[21] Oxford Economics, Country Economic Forecast Eurozone, February 12, 2025
[22] Oxford Economics, Country Economic Forecast China, January 30, 2025
[23] Oxford Economics, US Country Economic Forecast, February 12, 2025

Market and price risks

The industrial gases business is subject to competition, which has increased within the context of globalization. The highly competitive landscape could reduce future earnings and cash flows. Messer operates in many countries and is, therefore ,exposed to local political, social and economic conditions and the resulting business risks. A significant decline in market demand in some of the key industries and sectors that are important for Messer, for example due to production relocations, insolvencies, persistently high local energy costs, or currently due to the steel industry being characterized by global overcapacity, can adversely affect the future development of the results. The highly competitive environment can, therefore, lead to unexpected and disproportionate price developments in individual countries, which may reduce Messer's future revenue and results. In particular, in China, the market environment is characterized by intense competition, which can have an impact on the selling prices of certain products.

Russia's invasion of Ukraine has led to a sharp increase in energy costs, particularly in Europe. Although energy costs are declining again in some countries, this continues to present market risks for Messer. This applies particularly to countries whose energy supply depends on natural gas, as well as to energy-intensive companies that must cease or significantly reduce their production.

We classify these market and price risks as medium overall, with a medium level of risk and a high probability of occurrence.

Financial risks

The Messer Group also uses external financing to fund growth and investments. Efficient external financing is dependent on a stable and, in particular, liquid financial sector. Messer relies on cash from ongoing operations to meet its operational and financial obligations (including compliance with covenants arising from debt financing). This depends to a large extent on a positive operating cash flow.

Messer has valued business or company assets. The application of IAS 36, i.e., the implementation of impairment tests, may require write-offs of business or company assets. This applies, for example, if the market and business prospects of a subsidiary or associated company or a cash-generating group unit deteriorate significantly compared to the original valuation date. In the event of necessary impairments, significant impacts on earnings and balance sheet ratios may arise. In conjunction with planning, the discernible uncertainty has been taken into account by corresponding write-downs on receivables and adjusted business assumptions. As a result of the military conflict between Russia and Ukraine, as well as the associated sanctions, the Messer Group has initiated the sale of its indirect shareholdings in subsidiaries in Russia.

Global economic collapse or downturns are a recurrent threat in conjunction with financial or debt crises. Messer is closely monitoring current developments in order to counteract them, if necessary, with cost and investment-saving programs. The potentially deteriorating creditworthiness of our customers as a result of crises entails the risk of bad debts as well as the delay of joint projects.

At the end of 2024 the Messer Group's main financing agreements consisted of a syndicated loan agreement ("RFA I"), a US private placement ("USPP"), various promissory note loans ("SSD") and a EUR private placement ("EURPP"). Compliance with the assurances given within the framework of the various financing contracts must be ensured. In particular, Messer must meet the Net Debt (financial liabilities less cash and cash equivalents) / EBITDA covenant agreed under the RFA I, the USPP and the EURPP.

In addition, financial risks at Messer can also arise from changes in exchange rates and interest rates. Interest rate risk, currency risk and liquidity risk is managed centrally by the Corporate Finance & Treasury department, and in individual cases also decentrally in subsidiaries, in accordance with the guidelines set by the company management. Corporate Finance & Treasury - and where applicable, the relevant subsidiaries - identify, assess and hedge financial risks. Currently, Messer uses market-standard foreign exchange forwards and interest rate swaps as hedging instruments. The Treasury guidelines include principles for the general risk management necessary for this purpose, as well as specific regulations for certain areas, such as exchange rate risk, interest rate risk, the use of derivative financial instruments, and the investment of surplus liquidity. The risks are monitored at all times and the extent of protection is adjusted if necessary.

Income and operating cash flow are essentially unaffected by market interest rates, as the Group does not hold any significant interest-bearing assets. At the end of the reporting period, there are exclusively derivative financial instruments entered into with international financial institutes with investment grade ratings. The interest rate risk arising from the syndicated loan agreement and the promissory note loans is partially reduced by interest rate swaps. Tax regulations can also involve company risks. Messer, therefore, consults with internal and external experts. We currently classify the potential financial risks as low, given their low risk level and low probability of occurrence.

Currency risks

Messer largely hedges against transaction risks that may arise when exporting products, as soon as an order is received. As far as the operating activities of the Messer Group are concerned, the individual Group companies predominantly conduct their business locally in their functional currency. The overall currency risk from transaction risks is thus considered low overall. However, a number of Group companies are exposed to foreign currency risks in connection with operational transactions not denominated in their own functional currency. These mainly concern payments for capital goods, product or service imports, and are secured as far as possible. Like all market participants, we may be unexpectedly confronted with the appreciation of a functional currency, which weakens the country’s international competitiveness in the export sector and our activities on the ground. We consider currency risks arising from the conversion of foreign currency positions into euros (functional currency) to be standard business practice. Losses in value against the euro can lead to a lower corporate annual profit and less corporate equity. We currently classify these currency risks as low, given their low risk level and low probability of occurrence.

Acquisition risks

Messer is continuously evolving strategically. In addition to expanding and strengthening our existing business and continuously optimizing our sourcing and logistics processes, we strive to grow organically as well as through acquisitions. We are entering into new partnerships in the form of joint ventures, consolidating existing markets and divesting activities that no longer belong to our core business. However, downstream risks can arise within the Group as a result of the sale of companies or business activities. Decisions to proceed with acquisitions or to enter into new partnerships are subject to the risk of having incorrectly judged future market potential and the assumptions for project feasibility. The financing of these projects is associated with potential risks. Messer, therefore, relies on internal committees that analyze strategic development potential before approval and compile the information relevant to decision-making. In M&A projects experienced employees from the specialist departments conduct a due diligence process before the acquisition in order to obtain the greatest possible certainty about the future development potential of the M&A project. We also reduce the risk with corresponding agreements in purchase contracts. We currently assess the acquisition risks as low, with a low level of risk and a low probability of occurrence.

Cost risks

Regulatory or governmental changes or intervention in the energy sector can lead to rising energy prices in individual countries. The increasing demand for energy leads to significant volatility in oil and energy prices – with corresponding effects on the prices of the operating materials required by Messer, as well as on those of the raw materials. As a result of the conflict between Russia and Ukraine there has been a sharp increase in the price of natural gas. This has a particularly significant impact in Europe, where natural gas is also used for the generation of electrical energy. Here, energy prices are subject to strong volatility in some countries.

Overall, the demand for energy is growing worldwide, leading to rising energy prices across the globe. Purchase prices for individual significant products can thus fluctuate considerably. The company management takes measures to manage the raw material price risks as well as the energy price risk arising from the purchase of electricity for ongoing operations. The objective is to economically hedge against these risks, insofar as this is possible and reasonable.

Messer can partially pass on electricity price increases to customers through contractual price adjustment clauses or mitigate them through long-term supply contracts. Nevertheless, price increases in energy and external procurement costs can impact profitability. Rising prices for fuels, such as diesel, also increase the costs for the transportation of our products. We assess the cost risks, particularly due to the suspension of natural gas and fuel supplies from Russia, as low overall, with a low risk level and a medium probability of occurrence.

Product purchasing risks

The ability of Messer to serve customers with a wide range of products and services does not depend solely on our own production. The products and services that we obtain from internal or external suppliers also play a role here. The main objective is the ability to reliably supply customers with appropriate quality at all times. The availability of appropriate quantities of products and services at appropriate prices is the key to achieving this goal. Nevertheless, delivery difficulties or failures may occur due to product shortages, particularly of raw CO_2, or the failure of individual suppliers. Furthermore, the procurement of replacements can lead to a cost risk, provided that the products and services are to be procured at higher prices or are associated with higher transportation costs. Messer counteracts this risk through a broad network of supplier companies as well as strict monitoring of product availability.

In June 2024, the European Union adopted another package of sanctions in light of Russia's ongoing war against Ukraine. This package of sanctions has excluded the import of helium from Russia. Messer has secured its helium supply through new supply contracts in Algeria, the USA and Qatar, but higher prices and higher transport costs are to be expected here. In addition, we are always looking for further supply options for all products and services. We continue to assess the product purchasing risks as a whole as medium, among other things due to existing impairments in various areas of the supply chain, with a medium level of risk and a medium probability of occurrence.

Transport risks

Another goal of Messer is to supply its customers with products at the right time, in the right place, in the desired quantity and quality. To ensure this goal, we rely on internal and external distributors, who mostly transport our products to customers by truck. Conversely, we also rely on our suppliers' distributors to ensure that sufficient and high-quality products are available at all times. When transported by truck, there is a risk of product loss due to improper storage of the products, as well as due to inadequate transport security or accidents. Furthermore, the closure of relevant transport routes can lead to delays and thus to higher costs.

Currently, there is a shortage of suitable drivers in many countries where Messer operates. In particular, in the USA, Messer operates its own truck fleet with employed drivers. The shortage of suitable driving personnel entails the risk of not being able to hire enough drivers to meet the demand. Furthermore, this creates a cost risk, as the increased demand for drivers could lead to higher wages. The shortage of drivers has worsened, particularly in Europe, since the beginning of the Russian invasion of Ukraine, and may have a negative impact on the distribution of our products.

Messer is countering the risk of a driver shortage, particularly in the USA, by relying on a broad network of carefully selected distributors. In addition, we continuously monitor the necessary resources as well as those available. We currently classify these transport risks as low, given their low risk level and low probability of occurrence.

Personnel risks

Messer relies heavily on the commitment, motivation and skills of its employees. In many countries where Messer operates, there is full employment and a related shortage of skilled workers. The loss of specialized and managerial personnel and a prolonged search for replacements in key positions could negatively impact operational processes and increase the costs associated with new appointments. The long-term success of Messer will continue to depend on attracting and non-current qualified employees in competition with other companies, regardless of demographic challenges. Country- and sector-specific fluctuation risks are identified and addressed in a targeted manner. Messer addresses these risks through personnel development and succession processes, as well as annual salary reviews. We currently classify these personnel risks as low, given their low risk level and low probability of occurrence.

Legal and contractual risks

Companies are repeatedly confronted with allegations that they have infringed on industrial property rights or legal obligations, delivered defective products, or failed to comply with environmental protection regulations. Regardless of their chances of success, such claims can result in very high defense costs. Tax laws and competition regulations can also give rise to business risks. The Messer Group represents its interests in such matters with the support of internal and external experts.

In connection with an accident in the USA, the Group has formed provisions that are fully covered by existing and recognized insurance claims. In connection with investigations in Spain, there are still two provisions of approximately € 5 million each. Further information on these investigations can be found in note 31 "Contingent liabilities" in the consolidated notes.

In many countries our business activities are subject to specific environmental laws and regulations, for example on air emissions, groundwater pollution, the use and handling of dangerous substances and soil analysis and detoxification. This can give rise to liability risks in conjunction with either past or current operations. In particular, the new environmental requirements in the new EU member states, which have been adapted to EU guidelines, necessitate the adaptation of our standards there, if necessary. This could result in higher production costs and modifications to the production process. However, recent history has shown that the integration of stricter environmental regulations leads to a more efficient production process and a higher quality product. Competition law regulations can also involve company risks. Messer, therefore, consults with internal and external experts. We continue to rate these risks as medium, with a medium level of risk and a medium probability of occurrence.

IT risks

The use of state-of-the-art information technology plays a key part in handling and securing business processes within the Messer Group, but also entails corresponding risks.

The failure of business-critical IT applications, as well as the IT system failure of entire locations, could significantly disrupt processes within the Messer Group and lead to operational interruptions. Furthermore, in principle, IT systems can be affected by the misuse of digital technologies as a means of committing new types of crime, so-called cybercrime (“E-Crime”). Phishing or cyber attacks cannot only impair or cause the failure of the affected IT systems, but also lead to the disclosure of confidential data to third parties, thus posing a threat.

The security and compliance of information systems are central themes of our IT orientation. On this basis, we are constantly designing, implementing and reviewing measures to protect data, applications, systems and networks. This process takes both preventive and corrective measures into account.

Regular inspections of central European infrastructure are carried out by specialized service providers to identify vulnerabilities and address them in a prioritized manner. In the past reporting year, the vulnerability scans were supplemented by a compromise assessment of the data center. During the reporting year, the central system for Security Information and Event Management (“SIEM”) and the associated modern security architecture were implemented on the end devices. The associated Security Operation Center (“SOC”) has been established and the transition to the regular 24/7-Betrieb is scheduled to be completed in the coming months. The contract for the existing security awareness platform, which was due to expire this year, was not renewed. A new, more modern and functionally more comprehensive solution has been selected as a successor for future use.

The local and regional requirements associated with the implementation of the European NIS2 Directive have been analyzed both locally and globally. A working group responsible for implementation has been established, and a concept for further action is being defined.

Across all regions, companies like Messer find themselves facing a continuously growing threat landscape, which will in the future compel us to take increasingly far-reaching measures in the area of threat prevention.

The measures planned or already being implemented for 2025 are intended to further reduce the risk in the region. Despite technical and organizational measures, employees will continue to represent the greatest risk for the occurrence of an IT security incident in the future. We continue to assess these risks as overall medium, with a medium level of risk and a low probability of occurrence.

Operational risks

Operational interruptions due to unexpected disruptions of infrastructure caused by accidents, sabotage, criminal activities and other unpredictable adverse influences can lead to production and delivery failures at our production facilities. The Messer production facilities are regularly maintained and continuously monitored. In the event of an operational interruption, we have emergency and contingency plans, as well as additional instruments, to mitigate the resulting capacity and financial consequences for our customers. Messer is continuously working on expanding its delivery capacity and flexibility, as well as its storage options, in order to ensure the security of supply for our customers, even in emergency situations. The availability and quality of our services also depend on the availability of necessary hardware components or production resources, such as bottles and tanks, as well as the performance quality of our suppliers and business partners. With a low risk level and a low probability of occurrence, we classify operational risks as low.

Climate-related risks

Operational disruptions caused by climate-related events, such as heatwaves, floods, hurricanes or other natural disasters, can lead to production and delivery disruptions at our production facilities. In principle, Messer evaluates all risks – including climate-related risks – using a structured approach based on the international risk management standard ISO 31000:2018. Climate-related risks are included here either as physical risks (natural hazards and climate change) or as transition risks (market and regulatory risks). The relative significance of climate-related physical risks is measured based on the likelihood of occurrence, the potential impact, the possibility of damage mitigation, and location-specific risk tolerance.

Possible physical risks (natural hazards) that can directly or indirectly influence the operational process are analyzed over short, medium and long-term periods, and additionally a worst-case scenario for the year 2050. This allows for a better understanding of how Messer could evolve in relation to various physical risks. The 2050 scenario for assessing physical risk is based on the SSP5-8.5 (Shared Socioeconomic Pathways) – the global climate development paths coordinated by the IPCC (Intergovernmental Panel on Climate Change). This scenario represents a global development with strong and sustained economic growth based on fossil fuels. The climate data required as a basis for the assessment are obtained from a renowned data service and are updated once a year.

In 2024 a global assessment of the most important Messer locations was carried out and climate-related risks were determined in terms of their significance. With a low risk level and a low probability of occurrence, we classify climate-related risks as low.

Overall statement

The assessment of the overall risk situation is the result of a consolidated consideration of all significant individual risks based on the Messer risk management system in place. This takes into account local, regional and global perspectives. Messer's risk strategy is specified in the risk management system. These are intended to ensure that risks are fully identified and presented and assessed in a transparent and comparable manner. They oblige those responsible for risk to proactively manage and monitor risks.

By using the risk management software "Corporate ERM", we have created all the technical prerequisites to be informed in good time about potential risk situations. In the event of newly identified significant individual risks, as well as significant changes in the assessment of known individual risks, the Management Board and, where applicable, the Supervisory Board will also be informed immediately outside of the biannual risk reporting through ad-hoc reporting.

The aforementioned risks are not the only risks to which Messer is exposed. Risks that are currently unknown or considered insignificant may, under changed circumstances, potentially have a negative impact on Messer's business operations. Messer is also dependent on uncontrollable economic trends in individual countries or geopolitical risks.

The Messer Group has taken out adequate insurance policies to cover potential damage and liability risks, ensuring that any financial consequences resulting from these risks can be largely mitigated or entirely eliminated. The scope of these insurances is continuously optimized in line with the specific needs of the national companies.

Messer sees the greatest challenges for its business activities in the economic developments in the European and Chinese markets, unexpected and disproportionate price developments in individual countries, and the political and financial consequences of the Russian invasion of Ukraine, as well as US customs policy. The current risk situation is significantly higher compared to previous business years. Our vigilant, active risk management system, as described below, helps us to limit risk. For the fiscal year 2025 and for the subsequent years, no risks are apparent that could have a material impact on the continued existence of Messer, either individually or as a whole.

Opportunity Report

As an international provider of industrial gases, Messer generally benefits from the versatile applications of industrial gases in the manufacture of products in many countries around the world. Industrial gases are as important to many areas of our lives as water and electricity. With our investments we are seizing the corresponding opportunities to realize new business potential and to maintain or expand our market position. We are taking advantage of the additional opportunities that arise from internationalization and the potential of emerging markets by establishing or further expanding our locations in these countries. This enables us, among other things, to gain access to selected new markets that have long-term growth potential.

In detail, the following opportunities may be particularly significant for the business development as well as the asset, financial and earnings situation of the Messer Group.

Two of the key opportunities for the Messer Group are:

Market opportunities

Messer continuously monitors markets and competitors and evaluates the resulting growth opportunities. Changing requirements are analyzed, opportunities are identified and our actions are aligned accordingly.

We continue to expect market growth in the Americas and Asia, but we do not expect any further market price dynamics in our forecast for 2025 that would otherwise have a positive impact on our revenue and earnings. In Europe we anticipate a moderate growth dynamic. If the economy develops more dynamically in individual countries or overall, this could have a positive impact on our revenue and results. If there should be a further reduction in the currently elevated energy price and inflation levels, particularly in Europe, this could have a positive impact on industrial production and, consequently, on the demand for our products.

Opportunities through industrial gas applications

Our products are used worldwide in a wide range of production processes. In the field of application technology, the Messer Group continuously analyzes production processes in order to enable more efficient production workflows for our customers through the use of industrial gases. New applications identified in this way could open up corresponding business potential with a positive impact on revenue and earnings.

Further opportunities may arise due to the following circumstances:

Opportunities through our employees

Our employees are a fundamental component of our company's success. We offer our employees a safe and attractive working environment that is aligned with the changing world of work. Working from home has gained in importance and has established itself as a suitable form of work. Messer is developing concepts that allow a hybrid work environment and shared workspaces. Through the resulting increase in flexible working models, we also aim to increase the loyalty and satisfaction of our employees towards the company. Messer's aim is to retain employees long-term. Messer promotes group-wide management of ideas and perspectives, in which our employees can submit transnational improvement proposals. Furthermore, we support the targeted development and utilization of the potential of our employees through systematic personnel development programs and further training opportunities. We are convinced that investments in the development of our employees can promote our corporate culture as a whole and have a positive impact on our revenue and results.

Opportunities through sustainable practices

Sustainability is a complex issue that permeates all areas of an organization – from product development and personnel issues to digitization and climate neutrality. The Management Board is committed to sustainability. Therefore, sustainability management at Messer is also anchored throughout the company and is brought to life by a range of specialist functions as well as experts worldwide. Sustainability must be reflected in our actions and attitudes in order to meet the demands of our stakeholders. The responsible use of all resources, particularly energy, is of great importance to Messer. Messer continuously invests in projects that contribute to sustainably increasing the energy efficiency of our production facilities. By installing solar panels at our production facilities, for example, we use renewable energy sources and reduce CO_2 emissions. The use of green hydrogen makes a further significant contribution to decarbonization, and this should be a key focus of our investments in the coming years.

Opportunities through digitalization

Digitalization must be further advanced within the company in order to remain competitive. To this end, it is essential to continuously improve employees' knowledge of cyber risks and technology risks. Our employees participate in regular training sessions and are thus made aware of these issues. This is how we create a strong, digital corporate culture. We have already created the prerequisites for this by realigning our IT infrastructure towards a multi-cloud environment. In doing so, we depend on reliable technology partners and globally established standards in all our national subsidiaries to ensure the operation of our central IT systems and applications. The same applies to the protection of data and information provided via such systems. We are continuously improving the tools to support our production, bulk and bottled gas management, which has comprehensive implications for the value chain of our company and that of our customers. Newly coordinated digital processes save electrical energy in production through optimized plant operation and improve our route planning for delivering to customers. This makes a positive contribution to environmental protection, while at the same time reducing our production and operating costs, which could have a positive effect on our bottom line.

Information on Messer SE & Co. KGaA according to the German Commercial Code (HGB)

Foundations of the company

The management report of Messer SE & Co. KGaA ("Company") will be combined with the management report of the Messer Group ("Group") for the first time for the fiscal year 2024. Messer SE & Co. KGaA, headquartered in Sulzbach (Taunus) and with its business address in Bad Soden am Taunus, acts as the management holding company of the group. As the parent company, it holds the shares of companies belonging to the Messer Group, either directly or indirectly.

The statements regarding the foundations of the Group and the statements on organization, corporate structure and management, strategy and financing strategy also apply to Messer SE & Co. KGaA.

The preparation of the annual financial statements of Messer SE & Co. KGaA is carried out in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The average number of employees employed during the financial year rose to 292 (previous year: 247).

Overall situation of the company

The economic success of Messer SE & Co. KGaA is closely linked to the performance of its investments. The opportunities and risks, therefore, lie in the operational development of the subsidiaries and the resulting impact on the value of the financial investments.

Profit and Loss Account (Summary)	2024	2023	Change
Revenue	108,596	99,265	9.4 %
Change in inventory	13,560	5,917	>100 %
Other operating income	9,650	20,145	(52.1 %)
Cost of materials	(101,188)	(86,608)	16.8 %
Personnel expenses	(46,055)	(33,015)	39.5 %
Depreciation	(1,752)	(4,307)	(59.3 %)
Other operating expenses	(33,477)	(71,558)	(53.2 %)
EBIT	**(50,666)**	**(70,161)**	**(27.8 %)**

Results of operations

In fiscal year 2024 the company generated revenue in the amount of K€ 108,596 (previous year: K€ 99,265). These primarily result from the sale of helium, IT services, for which corresponding contracts with affiliated companies form the basis, as well as engineering services to subsidiaries and third-party customers in the hardware sector, licensing revenues and income from management services, as well as the sale of systems and system components. The increase in sales revenues by K€ 9,331 is mainly due to higher income from management services and increased hardware sales to affiliated companies abroad.

The gross profit (revenue plus change in inventory minus cost of materials) increased to K€ 20,968 (previous year: K€ 18,574). The cost of materials ratio (cost of materials in relation to the sum of revenue and inventory changes) taking into account the inventory change has only increased minimally to 82.84 % compared to the previous year (82.34 %).

The decline in other operating income amounting to K€ 9,650 (previous year: K€ 20,145) is mainly due to foreign exchange gains amounting to K€ 5,539 (previous year: K€ 8,751) and the reversal of provisions amounting to K€ 4,831 (previous year: K€ 7,061).

Personnel expenses have risen from K€ 33,015 in the previous year to K€ 46,055 in the reporting year due to strong personnel growth.

The decrease in other operating expenses to K€ 33,477 (previous year: K€ 71,558) is mainly due to the absence of the special effects incurred in the previous year from the merger loss of Yeti Warehouse GmbH as well as the increased consulting costs in the previous year in connection with the transaction.

The revenues from the company’s investments and profit distribution agreements amounted to K€ 215,136 in the fiscal year 2024 (previous year: K€ 187,188). The increase compared to the previous year is due to higher revenues from profit distribution agreements.

The company’s negative interest result deteriorated from K€ -35,641 in the previous year to K€ -101,856 in the reporting year. The increase is due to the additional financing required for the acquisition of the Messer Industries Group as part of the transaction.

The company closed the fiscal year 2024 with a net profit of K€ 46,516 (previous year: K€ 85,040). The previous year’s forecast of an annual surplus in the mid-double-digit million-euro range was achieved.

Assets and financial position

The financial assets and receivables from affiliated companies represent the company’s most important assets.

The total balance sheet has increased from K€ 5,589,405 to K€ 5,715,042 compared to the previous year.

The increase in financial assets by K€ 215,658 to a total of K€ 5,322,192 is mainly due to additions of loans to affiliated companies totaling K€ 115,798.

The decrease in receivables from affiliated companies from K€ 112,204 to K€ 265,840 results from lower loan receivables.

In the reporting year the company's equity capital increased, on the one hand, by resolution of April 26, 2024, due to an increase in the subscribed capital through the issuance of new shares by K€ 315 to K€ 130,141, and on the other hand, by the increase in the capital reserve by resolution of June 26, 2024 by K€ 20,847 to K€ 2,508,704.

In addition to the increase in equity, the increase in liabilities to affiliated companies by K€ 144,690 to K€ 192,783 contributed significantly to the increase in total assets. The funds raised were essentially used to finance the provision of loans to affiliated companies.

Cash flow from operating activities amounts to K€ -70,379 (previous year: K€ 51,889) and results mainly from the decrease in trade payables and other liabilities. Cash flow from financing activities amounts to K€ 193,399 (previous year: K€ 3,569,383). Last year was heavily influenced by the effects of the acquisition of the Messer Industries Group. In the current fiscal year, it is essentially composed of the increase in liabilities towards affiliated companies. The total cash balance as of the reporting date amounts to K€ 67,230 (previous year: K€ 36,359).

The liabilities to credit institutions have decreased by K€ 45,970 compared to the previous year, to K€ 2,042,021. For further information on the company's financial liabilities, please refer to the note "Liabilities to credit institutions" in the notes to the annual financial statements of Messer SE & Co. KGaA according to the German Commercial Code (HGB).

The collateral for the full amount of the financing arrangements takes the form of guarantees provided by individual Group companies and the pledging of shares in Messer Griesheim China Holding GmbH. This is the German holding company for our Chinese activities.

The credit lines of Messer SE & Co. KGaA that were not utilized as of December 31, 2024, amount to € 433.3 million (previous year: € 431.7 million).

The assets, earnings and financial position of the investments, including Messer SE & Co. KGaA as the management holding company, are presented in the consolidated financial statements of Messer SE & Co. KGaA as of December 31, 2024.

Overall statement on the economic situation

The annual surplus in the double-digit million range is primarily due, on the one hand, to revenues from profit and loss transfer agreements and, on the other hand, to higher dividend and interest income. The operating result was negative in 2024, driven by high administrative costs and increased procurement costs for helium, combined with limited possibilities for passing on these costs, as well as higher operational costs for the engineering and IT departments. This negative effect was partly mitigated by increased revenues from management services, due to the strong sales growth of the European subsidiaries.

The company’s forecast report

In its forecast Messer SE & Co. KGaA assumes the same development of global economic conditions as the Messer Group.

The company expects a strongly negative annual loss for the fiscal year 2025. The significant decrease in earnings is primarily due to substantially higher interest expenses as a result of increasing indebtedness. As a counteracting effect, a higher operating result is expected compared to the previous year, due to increasing revenues from management services as well as significantly lower transaction costs.

Opportunities and Risks Report, Risk Management of the Company

Messer SE & Co. KGaA is generally subject to the same opportunities and risks as the Messer Group. The opportunities and risks of the company as a management holding company of the Messer Group arise directly from the revenues or expenses resulting from profit distribution agreements, as well as indirectly through its influence on the valuation of financial assets and the level of revenues from investments, stemming from the opportunities and risks of the Group. All specific risks are taken into account in the annual financial statements through corresponding impairment losses.

Since the company is closely connected to the companies in the Messer Group, among other things, through financing and guarantee commitments as well as through medium- and direct investments in the subsidiaries, the risk and opportunity situation of the company is essentially dependent on the risk and opportunity situation of the Messer Group. In this regard, the statements regarding the overall assessment of the Group’s risk and opportunity situation also serve as a summary of the Company’s risk and opportunity situation.

For further information on this subject, please refer to the sections “Risk Management”, “Risk Report” and “Opportunity Report” of the Group.

Final declaration to the report on relations with affiliated companies (dependency report, § 312 paragraph 3 AktG)

In accordance with Section 312 (3) of the German Stock Corporation Act (AktG), we, as the managing directors of the general partner of Messer SE & Co. KGaA, Messer Management SE, declare that, in the transactions listed in the report on relations with affiliated companies, the company has received appropriate consideration in each case and has not been disadvantaged, based on the circumstances known to us at the time the transactions were carried out.

Bad Soden am Taunus, March 24, 2025

Messer SE & Co. KGaA,
represented by: Messer Management SE, the general partner with unlimited liability

Bernd Eulitz	Helmut Kaschenz

Dr. Werner Hickel	Virginia Esly	Elena Skvortsova