

28 February 2024

RHI Magnesita N.V.
("RHI Magnesita" or the "Company" or "Group")

2023 Full Year Results

"M&A, disciplined pricing and operational improvement deliver 7% growth in Adjusted EBITA to €409 million"

RHI Magnesita, the leading global supplier of high-grade refractory products, systems and solutions, today announces its final results for the year ended 31 December 2023 ("2023" or the "Year").

Financial results (Adjusted, €m unless stated otherwise) ¹	2023	2022	Change	2022 (constant currency)	Change (constant currency)
Revenue	3,572	3,317	8%	3,236	10%
Adjusted EBITDA	543	500	9%	502	8%
Adjusted EBITA	409	384	7%	388	5%
Adjusted EBITA margin	11.4%	11.6%	(20)bps	12.0%	(60)bps
Adjusted EPS (€/per share)	4.98	4.82	3%		
Adjusted Operating Cash Flow	413	155	166%		
Net debt ²	1,304	1,168	12%		
Net debt to Pro Forma Adjusted EBITDA ³	2.3x	2.3x			

(Reported, €m unless stated otherwise)	2023	2022
Revenue	3,572	3,317
Gross profit	857	763
EBITA	378	372
Profit before income tax	233	270
Profit after income tax	171	167
EPS (€/per share)	3.50	3.31
Dividend ⁴ (€/per share)	1.80	1.60

1. Adjusted figures are alternative performance measures "APMs" excluding impairments, amortisation of intangibles and exceptional items to enable an understanding of the underlying performance of the business. Full details are shown in the APM section.

2. 2023 Net debt includes the impact of IFRS 16 of €70 million. 2022 adjusted Net debt figures are shown including the impact of IFRS 16 (€56 million) to facilitate comparison between reporting periods. For further details see Note 34.

3. Pro Forma Adjusted EBITDA is used to assess financial gearing and includes a full year of Adjusted EBITDA contribution from businesses acquired during the year.

4. Recommended final dividend of €1.25 per share, subject to AGM approval on 2 May 2024. Full year dividend of €1.80 per share includes the interim dividend of €0.55 per share paid to shareholders on 22 September 2023.

Operational and strategic highlights

- Consistent improvement in operational KPIs underpins strong financial results in a very difficult market environment
- Substantial M&A progress with six transactions completed since January 2023 in high priority geographic or product markets with attractive synergy potential. M&A contributed €56 million of Adjusted EBITDA in 2023, significantly exceeding guidance of c.€40 million
- Market leadership position established in India, the world's fastest growing major refractory market, with nine production facilities and a broad-based refractory business serving both steel and industrial customers
- Strategic cost saving and sales targets established in 2019 were achieved in the first half of 2023
- Sustainability commitment demonstrated through continuing real reduction in CO₂ emissions intensity, increased recycling rates and investments into technology partnerships and R&D

Financial highlights

- 8% increase in revenues mainly driven by contribution from acquisitions, offsetting a demand driven 5% decline in sales volumes in the base business
- Disciplined pricing supported Adjusted EBITA margin of 11.4% (2022: 11.6%) despite lower input costs for

- resilient pricing supported Adjusted EBITA margin of 11.4% (2022: 11.6%) despite lower input costs for 'cost-plus' competitors which reduced global refractory pricing during the year
- Record high refractory Adjusted EBITA margin of 9.7ppts offset temporarily lower raw material contribution of 1.7ppts, demonstrating structural improvement in cost position achieved during a period of very low plant capacity utilisation
- Adjusted operating cash flow of €413 million (2022: €155 million) as working capital release of €123 million in base business pre M&A supported high EBITA cash conversion of 101% (2022: 40%)
- Net debt to Pro Forma EBITDA of 2.3x (2022: 2.3x) maintained within the target range of 2.0-c.2.5x for compelling M&A, with €443 million of capital allocated to M&A during 2023
- Increased final dividend of €1.25 per share recommended (2022: €1.10), resulting in full year dividend of €1.80 per share (2022: €1.60)

Outlook and guidance

The key end markets of construction and transportation remain subdued in all geographies except India, leading to temporarily reduced demand for refractories from steel and cement customers. The strong contributions from glass and non-ferrous projects will markedly reduce in 2024, creating additional pressure on plant utilisation. The Group has taken pre-emptive action to preserve margins and is well positioned to increase output into a recovery, with significant operational gearing and fixed cost absorption benefits to be realised once customer demand returns. The timing of such recovery remains uncertain. Production is planned to increase in 2024 to match sales volumes, as inventory coverage ratios have now been reduced to target levels, counterbalancing the fixed cost under-absorption. Sales volumes in the base business excluding M&A in 2024 are assumed to be in line with 2023, whilst the full year effect of 2023 M&A should increase shipped volumes in 2024 by up to 10%. Acquisitions agreed or completed since January 2023 are expected to contribute c.€80 million of Adjusted EBITDA or c.€65 million of Adjusted EBITA in 2024.

Taking into account forecast sales volumes, even lower vertical integration margin contribution and possible pressure on refractory pricing, Adjusted EBITA in 2024 is guided to be at least in line with current analyst consensus of approximately €410 million, at an Adjusted EBITA margin of around 11.0%. The Group will target a working capital intensity of approximately 24% in 2024 and will seek to maintain Net debt to Pro Forma Adjusted EBITDA within the guided range of 2.0-c.2.5x for periods of compelling M&A. Capital expenditure will be shifted somewhat from fixed assets improvements to digital architecture redesign, which will require elevated levels of spending over the next three years at least.

Stefan Borgas, CEO said: "During a period of historic low demand from customers and low raw material prices RHIM has demonstrated good resilience. This was achieved by the focused investments of the past years into improving productivity in our global production network, by the contributions of the newly acquired businesses and by providing innovative solutions for our customers in many regions and markets. The energy of our customers and the passion of our employees and business partners will continue to support these three value drivers in the next years. In the longer term we are committed to developing technologies to reduce or eliminate CO₂ emissions from our production process and to assist our customers in reducing their own emissions, which will require significant capital investments."

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Conference call

A presentation for analysts will be held at 14:00 UK time (15:00 CET) on 28 February 2024 at the offices of Hudson Sandler, 25 Charterhouse Square, London EC1M 6AE. The analyst presentation will be broadcast live via webcast and conference call.

The webcast can be accessed using the following link:

<https://www.investis-live.com/rhimaginesita/65b0de267f77220c00d6eb3f/yjve>

A replay will be available on the same link shortly after event.

About RHI Magnesita

RHI Magnesita is the leading global supplier of high-grade refractory products, systems and solutions which are critical for high-temperature processes exceeding 1,200°C in a wide range of industries, including steel, cement, non-ferrous metals and glass. With a vertically integrated value chain, from raw materials to refractory products and full performance-based solutions, RHI Magnesita serves customers around the world, with around 16,000 employees in 47 main production sites, 8 recycling facilities and more than 70 sales offices. RHI Magnesita intends to leverage its leadership in terms of revenue, scale, product portfolio and diversified geographic presence to target strategically those countries and regions benefitting from more dynamic economic growth prospects.

The Group maintains a premium listing on the Official list of the London Stock Exchange (symbol: RHIM) and is a constituent of the FTSE 250 index, with a secondary listing on the prime segment of the Vienna Stock Exchange (Wiener Börse). For more information please visit: www.rhimaginesita.com

FORWARD LOOKING STATEMENTS

This announcement contains (or may contain) certain forward-looking statements with respect to certain of the Company's current expectations and projections about future events. These statements, which sometimes use words such as "aim", "anticipate", "believe", "intend", "plan", "estimate", "expect" and words of similar meaning, reflect the directors' beliefs and expectations and involve a number of risks, uncertainties and assumptions which could cause actual results and performance to differ materially from any expected future results or performance expressed or implied by the forward-looking statement. Statements contained in this announcement regarding past trends or activities should not be taken as a representation that such trends or activities will continue in the future. The information contained in this announcement is subject to change without notice and, except as required by applicable law, the Company does not assume any responsibility or obligation to update publicly or review any of the forward-looking statements contained in it and nor does it intend to. You should not place undue reliance on forward looking statements, which apply only as of the date of this announcement. No statement in this announcement is or is intended to be a profit forecast or profit estimate or to imply that the earnings of the Company for the current or future financial years will necessarily match or exceed the historical or published earnings of the Company. As a result of these risks, uncertainties and assumptions, the recipient should not place undue reliance on these forward-looking statements as a prediction of actual results or otherwise. The Company has no obligation or undertaking to update or revise the forward-looking statements contained in this announcement to reflect any change in its expectations or any change in events, conditions, or circumstances on which such statements are based unless required to do so by applicable regulations. The numbers presented throughout this announcement may not sum precisely to the totals provided and percentages may not precisely reflect the absolute figures, due to rounding.

CEO REVIEW

RHI Magnesita delivered a strong financial performance in 2023 despite challenging market conditions. Our achievements have been based on stepwise improvements in operations, prioritising the needs of our customers at all times, sustainability leadership, acquisitions and strategic delivery. During the year we made significant progress on both our M&A strategy and delivering the strategic cost savings and sales initiatives targets that were set in 2019.

In 2023 the key challenge for us has been to maintain momentum whilst managing our operations through a very weak demand environment. To achieve targeted inventory coverage levels, average plant utilisation across the year was reduced to 76% in the second half and production volumes lagged sales volumes throughout the year, with implications for low fixed cost absorption.

I am pleased to report that we successfully navigated these and many other challenges in 2023, delivering a 7% increase in Adjusted EBITA to €409 million (2022: €384 million), as M&A, cost saving initiatives and resilient pricing offset the underlying weakness in customer demand.

Health & Safety

It is with deep regret and sorrow that we report that two fatal incidents occurred at our plants in Austria in 2023 and early 2024. Thorough investigations of the root causes of these incidents have been or are being carried out and procedural changes will be implemented worldwide. A step-up of the safety culture among all RHI Magnesita business partners will come along with these new measures.

The health and safety of our employees in the workplace is a core value for RHI Magnesita. The Group's lost time injury frequency rate remained below our target of 0.50 per 200,000 hours and was the lowest rate recorded by the Group since listing in 2017, excluding the pandemic, at 0.16 per 200,000 hours (2022: 0.20). We are now adopting a lower target of 0.30, in line with leading peers in the broader industrial sector.

Key safety initiatives implemented during the year included improved inductions and safety training for new joiners, integration of safety topics into shift-start meetings and hand and finger safety communications campaigns.

Operational agility

The investments we have made in our production network since 2019 combined with further actions taken in response to global supply chain and energy market volatility in 2022 have created a more agile and responsive business. The ongoing focus on operational excellence, planning, logistics, inventory management and customer satisfaction are the key foundations of the improved operating performance that has been delivered in 2023. Customer surveys reported strong improvements in our net promoter score. To further improve operations, increase productivity, reduce inventory and improve customer experience, RHI Magnesita is now embarking on rebuilding its business processes and radically modernising its IT architecture. This investment will last three years at a cost of approximately €100 million.

Working capital intensity was maintained at the target level of 25%, with inventories held at the optimal level to ensure reliable deliveries to our customers. Consistency and reliability are the foundations for maintaining pricing, even whilst input costs have been falling across the refractory industry. Further investments in our planning processes and systems as well as a complete overhaul of our digital architecture in the next three years is aimed to further improve RHI Magnesita's operational delivery capabilities and customer service.

Strategic progress

The €130 million annual EBITA contribution from cost saving and sales initiatives set out in our 2019 strategic targets was realised in the first half of 2023, following investments in the rationalisation of our production network, growth in flow control revenues and M&A led growth in India, China and Türkiye.

During the year we made significant progress on our M&A strategy with the completion of six acquisitions.

During the year we made significant progress on our M&A strategy with the completion of six acquisitions, bringing the total number of businesses acquired since December 2021 to nine. Our strategy has been to focus on complementary product areas and geographies in which we are under-represented. We have broadened our customer offering through acquisitions in the alumina-based refractories, process industries and flow control segments.

The two acquisitions we completed in India are of great importance due to the unique growth environment for refractories in this region. The acquisition of Hi-Tech in Jamshedpur and the Indian refractory business of DBRL have substantially improved the Group's regional footprint. The expanded plant network and immediately available low-cost production capacity in India will increase RHI Magnesita's competitiveness in the region for both local sales and potential new export opportunities in West Asia, Africa and the Middle East.

A continuation of this M&A strategy to further complement our global business is underway, prioritising portfolio additions before deleveraging.

Sustainability performance

A core element of our strategy is to be the sustainability leader in the refractory and refractory raw materials industries. We committed to six sustainability targets to be met by 2025 which are in alignment with the UN sustainable development goals. We are progressing well in each of the target areas, although further work is now required to maintain improvements in energy consumption and CO₂ intensity following the recent acquisitions.

We have been leading the industry in the recycling of refractory raw materials since we identified this as a key lever to quickly and permanently reduce CO₂ emissions. In 2023 we recorded a recycling rate of 12.6% (2022: 10.5%) and we have now increased our target to achieve a recycling rate of 15% by 2025 (previously 10%). The speed with which we can continue to increase overall Group recycling rates from this point may moderate due to the dilution impact from new acquisitions where recycling rates are low or zero and as we reach technical limits or bottlenecks in the availability of suitable waste material. Since we began our recycling journey in 2018 and adjusting the baseline for M&A we have reduced our annual CO₂ emissions from 6.2 Mt to 4.6 Mt and improved our CO₂ emissions intensity per tonne of product shipped from 1.84t to 1.62t, with the majority of these emissions savings delivered by recycling.

We continue to invest in the research and development of new technologies to reduce CO₂ emissions in the refractory production process. During 2023 we decided to invest a further €5 million in MCi Carbon, an Australia based developer of mineralisation technology which can efficiently bind CO₂ into saleable solid carbon-negative materials, permanently removing emissions from the atmosphere. We are assessing the viability of this technology at our operational sites in Europe. We are also conducting nine other pilot projects and trials of alternative technologies, any combination of which will help us to progress our decarbonisation pathway. Such technologies may have wider applications beyond the refractory industry and if successful will help the Group to adapt to the consequences of the Carbon Border Adjustment Mechanism in Europe, which will be progressively introduced over the period 2026-2034 and will significantly increase the cost of Scope 1 CO₂ emissions in our European plants.

We remain committed to investing in the development of new technologies to deliver decarbonisation, to offering our customers low or zero CO₂ footprint refractory products and providing them with information to make sustainable procurement decisions. It is clear that this will require significant new capex in only a few years from now starting in Europe and subsequently in other geographies. Ultimately, the necessary investment to achieve decarbonisation would be very large. We will continue to lobby governments to provide the necessary infrastructure support for the development of renewable energy sources, hydrogen networks and CO₂ transport and sequestration solutions, whilst working with partners in the private sector worldwide to deliver permanent reductions in CO₂ emissions from energy intensive industrial processes. The cities of the future could be built without CO₂ emissions if we and our customers are successful.

Our people

Our strong operational and strategic delivery in 2023 represents the hard work of thousands of individuals working towards the RHI Magnesita vision worldwide. We materially increased the size of the business in 2023 through six acquisitions and I am excited to welcome into the Group the diverse range of talented and experienced people who have joined us this year. It is heartwarming to experience the passion, knowledge and new perspectives that our new colleagues have already brought into the Group. We have learned a great deal from each other in a short space of time and I am sure that the benefits from integrating our businesses will continue to deliver value in the years ahead.

Financial performance

A combination of delivering for our customers, agility and operational excellence in 2023 enabled us to beat our initial guidance for financial performance. The Group delivered an Adjusted EBITA margin of 11.4% compared to an initial expectation of 10% at the beginning of the year, resulting in a 7% increase in Adjusted EBITA to €409 million (2022:€384 million). This was achieved despite the weakest demand for refractory products in 15 years in most regions and a market-driven 5% decline in sales volumes pre-M&A.

We also generated significant cash flow, with Adjusted operating cash flow increasing to € 413 million (2022: €155 million). Strong cash flow and growth in EBITDA enabled us to maintain gearing within our guided range of 2.0-c.2.5x whilst allocating €443 million of capital to acquisitions. The full year annualisation of earnings from M&A plus synergies will support financial performance in 2024 and beyond as we integrate these new

businesses into our global network.

Outlook

Construction and transportation industries are the main drivers of customer demand and both end markets remain subdued at present in all geographies except India. Investment projects, especially in the glass and non-ferrous markets have peaked in 2023 and deliveries will decline in 2024 and beyond. RHI Magnesita has taken pre-emptive action to preserve margins and is well positioned to increase output into a recovery, with significant operational gearing and fixed cost absorption benefits to be realised when customer demand returns. The timing of such recovery remains uncertain. Production is planned to increase in 2024 to match sales volumes, as inventory coverage ratios are now at target levels. Sales volumes in the base business excluding M&A in 2024 are assumed to be in line with 2023, whilst the full year effect of 2023 M&A should increase shipped volumes in 2024 by up to 10%. RHI Magnesita has navigated significant challenges in 2023 whilst also continuing to build a stronger business through M&A and efficiency improvements, which will be capable of delivering significant value in a normal demand environment.

FINANCIAL REVIEW

Reporting approach

The Company uses a number of alternative performance measures (APMs) in addition to measures reported in accordance with International Financial reporting Standards as adopted by the European Union ("IFRS"), which reflect the way in which the Board and the Executive Management Team assesses the underlying performance of the business. The Group's results are presented on an "adjusted" basis, using APMs that are not defined or specified under the requirements of IFRS, but are derived from the IFRS financial statements. The APMs are used to improve the comparability of information between reporting periods and to address investors' requirements for clarity and transparency of the Group's underlying financial performance. The APMs are used internally in the management of our business performance, budgeting and forecasting. A reconciliation of key metrics to the reported financials is presented in the section titled APMs.

All references to comparative 2022 numbers in this review are on a reported basis, unless stated otherwise. Figures presented at constant currency represent 2022 translated numbers against average 2023 exchange rates as disclosed in Note 3 to the Consolidated Financial Statements. All reported volume changes year-on-year are excluding mineral sales, which is reported under the Industrials segment.

Revenue

The Group recorded revenues of €3,572 million, a 10% increase from the previous year's revenue of €3,236 million on a constant currency basis. Shipped volumes in the base business decreased by 5% as expected but increased by 11% including the contribution from M&A to 2.6 Mt (2022: 2.3 Mt).

On a reported basis, the increase in revenue was 8% (2022: €3,317 million), mainly due to the depreciation of three key currencies against the euro (the US dollar, Chinese yuan and Indian rupee). Foreign exchange effects impacted revenues in euro terms by €81 million. The Brazilian real strengthened slightly against the euro, with a small positive impact on revenue but resulting in a net negative impact on EBITA, due to the increased euro value of the local cost base in Brazil, where the Group is a net exporter.

	2023	2022 reported	2022 (constant currency)	Change	Change (constant currency)
Steel					
Revenue (€m)	2,461	2,371	2,311	4%	6%
Gross profit (€m)	550	521	527	6%	4%
Gross margin	22.3%	22.0%	22.8%	30bps	(50)bps
Adjusted EBITA (€m)	240	255	243	(6)%	(1)%
Adjusted EBITA margin	9.7%	10.8%	10.5%	(110)bps	(80)bps
Industrial					
Revenue (€m)	1,111	946	923	17%	20%
Gross profit (€m)	307	242	232	27%	32%
Gross margin	27.7%	25.6%	25.1%	210bps	260bps
Adjusted EBITA (€m)	169	128	113	32%	50%
Adjusted EBITA margin	15.2%	13.6%	12.2%	160bps	300bps

Steel revenues increased to €2,461 million, an increase of 4% on a reported basis (2022: €2,371 million) and 6% on a constant currency basis (2022: €2,311 million), representing 69% of Group revenue in 2023. The main driver behind the increase in revenues in the financial year 2023 was growth via M&A in the China & East Asia, Europe, CIS & Türkiye and India, West Asia & Africa regions. Sales volumes and revenues in North America decreased by 5% and 3%, respectively. In South America sales volumes reduced by 6% whilst revenues increased by 1% supported by FX and higher pricing.

Industrial revenues increased by 17% to €1,111 million (2022: €946 million) and by 20% in constant currency terms (2022: €923 million), outperforming steel revenue growth due to the later cycle nature of the business. Cement and lime revenues increased by 12% to €424 million (2022: €378 million), while non-ferrous metal revenues increased by 28% to €280 million (2022: €219 million) due to strong volume increases and pricing dynamics. Revenue in the glass business increased by 18% to €182 million (2022: €154 million) and revenues

dynamics. Revenues in the glass business increased by 16% to €162 million (2022: €134 million) and revenues from industrial applications increased by 40% to €143 million (2022: €102 million).

Industrial revenues includes revenue from mineral sales of €80 million, which were 10.8% lower than the prior year (2022: €92 million), due to lower market prices for refractory raw materials.

Cost of goods sold

Cost of goods sold increased by 6% to €2,714 million from €2,554 million in 2022 and by 10% on a constant currency basis, due to M&A. The cost of purchased raw materials increased by 10% to €1,166 million (2022: €1,064 million). Plant-related labour costs increased significantly by 25% during 2023 from €368 million to €461 million, due to M&A and as the Group responded to higher costs of living with wage increases for its staff. Following a period of disruption and high inflation in 2022, freight and energy costs decreased by 19% and 10% respectively in 2023, as both markets returned to a period of relative stability prior to disruption of Red Sea shipping lanes in December 2023. Unit costs in 2023 were impacted negatively by low production capacity utilisation, leading to under-absorption of fixed costs. Expenditure on general supplies including pallets, packaging and spare parts remained stable at €174 million compared to €171 million in 2022, despite the increase in shipped volumes.

Raw material prices

Raw material prices decreased in 2023, with the price of high-grade dead burned magnesia (DBM) from China decreasing by 21% from the beginning of the year and by 14% on average for medium grade DBM from China. Lower raw material prices usually result in lower finished goods pricing for refractories worldwide, as production costs for non-vertically integrated competitors are reduced. The cost of production of refractory raw materials for suppliers in China remained low due to availability of low-cost energy, whilst the cost of production of raw material remained comparatively higher for the Group, in particular for DBM production in Türkiye. As guided in the half year results, the EBITA contribution from vertical integration remained at approximately the same level as of the first half of 2023, at 1.7ppts.

Gross profit

The Group recorded gross profit of €857 million (2022: €763 million), an increase of 12% on a reported basis and 12% in constant currency terms. Gross margins increased by 100bps to 24.0% (2022: 23.0%), mainly due to resilient pricing in key customer markets.

On a divisional basis, gross profit excluding M&A in the Steel segment was stable at €500 million (2022: €521 million) despite the 5% decline in shipped volumes, as higher margins offset reduced sales. The Industrial segment recorded a strong increase in gross profit excluding M&A to €266 million (2022: €242 million) with increased margins of 30.3%, 290bps higher compared to the prior year. Profitability in the Industrial segment was supported by strong pricing dynamics in glass, non-ferrous metal and industrial applications markets and the later cycle nature of trading conditions compared to Steel.

(€m)	2023	2022 reported	2022 (constant currency)	Change	Change (constant currency)
Revenue	3,572	3,317	3,236	8%	10%
Cost of sales	(2,714)	(2,554)	(2,474)	6%	10%
Gross profit	857	763	762	12%	12%
SG&A	(449)	(375)	(371)	20%	21%
R&D expenses	(43)	(33)	(33)	30%	30%
OIE	(31)	(11)	(11)	182%	182%
EBIT	334	344	348	(3)%	(4)%
Amortisation	(44)	(29)	(29)	52%	52%
EBITA	378	372	377	2%	0%
Adjusted items	31	11	11	182%	182%
Adjusted EBITA	409	384	388	7%	5%
Refractory EBITA	348	303	-	15%	
Vertical integration EBITA	61	81	-	(25)%	

SG&A

Selling, general and administrative expenses (SG&A), before R&D-related expenses, amounted to €449 million in 2023, a 20% increase compared to the prior year (2022: €375 million), driven by broad-based inflation in particular in the cost of labour and M&A additions. Personnel and personnel-related expenses increased by €20 million. The Group undertook a review of its SG&A expenditures and implemented a focused reduction in SG&A headcount during the year, resulting in non-recurring restructuring costs of €11 million and estimated annual cost savings of €14 million. SG&A was negatively impacted by additions to bad debt provision of €18 million. The Group takes a prudent approach towards writing down bad debt in the periods in which they are incurred but continues to actively pursue repayment.

Depreciation and amortisation

Depreciation increased by 16% to €134 million (2022: €116 million), including €14 million of depreciation

relating to assets acquired during the year. The increase in depreciation was mainly due to M&A carried out during the period, with fixed assets increasing to €1,830 million at 31 December 2023 (31 December 2022: €1,886 million). Depreciation in 2024 is expected to be around €140 million.

Amortisation of intangible assets amounted to €44 million in 2023 (2022: €29 million) and is expected to be approximately €40 million in 2024.

Adjusted EBITDA

The Group recorded Adjusted EBITDA of ~~€43~~ million, a 9% increase compared to the prior year (2022: €500 million). Adjusted EBITDA margin increased to 15.2% (2022: 15.1%) an increase of 10bps, reflecting higher gross margins partially offset by increased SG&A. Adjusted EBITDA margin decreased by 20bps on a constant currency basis.

Adjusted EBITA

Adjusted EBITA increased to ~~€409~~ million from €384 million in 2022, in line with the increase in Adjusted EBITDA. Adjusted EBITA from businesses acquired during the year amounted to ~~€2~~ million, with the base business excluding M&A recording a reduction in Adjusted EBITA, mainly due to lower like for like sales volumes.

Adjusted EBITA margin reduced slightly to 11.4% (2022: 11.6%) as price increases and higher gross margins were offset by the increase in SG&A expenses and higher depreciation charges on the Group's enlarged asset base.

Vertical integration contributed 1.7ppts of the total Adjusted EBITA margin of 11.4%, lower than the 2.5ppts contribution from vertical integration in 2022, primarily due to the decline in the price of key refractory raw materials during the period. Lower raw material prices negatively impact the calculation of the contribution from the Group's raw material assets, which is based on the theoretical cost of acquiring those raw materials in the open market. The Group continues to expect a contribution of 2.5ppts to 3.5ppts from its vertical integration over the longer term due to the competitive cost position of its raw material assets.

The Group's refractory business contributed 9.7ppts towards the total Adjusted EBITA margin of 11.4%, an increase of 70 bps compared to the 9.1ppts contribution in 2022, reflecting resilient refractory pricing, lower freight and energy input costs and the benefits of structural cost reductions resulting from the Group's strategic cost-saving initiatives.

Adjusted EBITA and Adjusted EBITDA both exclude ~~€1~~ million of Items excluded from adjusted performance (2022: €11 million), including restructuring costs, M&A-related costs and other expenses as set out in "Items excluded from adjusted performance" below.

Net finance expenses

Net finance expenses, which includes interest payable on borrowings net of interest income on cash balances, gains and losses relating to foreign exchange, pension expenses, present value adjustments, factoring costs and non-controlling interest expenses, increased to €101 million (2022: €73 million).

Net interest expenses increased to €39 million (2022: €19 million) due to higher base rates on variable interest rate facilities, higher gross borrowings and interest costs associated with M&A bridge financing used to finance acquisitions in India in the first half of 2023 of €143 million. Interest expenses on borrowings of €58 million (2022: €27 million) were offset by €20 million of interest income on cash balances on deposit (2022: €8 million).

Other net financial expenses amounted to €32 million (2022: €31 million) including factoring costs of €12 million (2022: €7 million), pension charges of €12 million (2022: €6 million) and present value adjustments of €8 million (2022: €9 million).

Foreign exchange losses of €30 million were incurred in 2023 (2022: €23 million), including gains on embedded currency derivatives in sales contracts of €11 million (2022: €(13) million) and net exchange losses on translation of monetary assets and liabilities of €41 million (2022: €10 million), largely attributable to currency movements in Argentina and Türkiye.

Net interest expenses in 2024 are expected to be approximately €50 million (2023: €39 million) mainly due to higher interest rates on floating facilities and higher gross borrowings. Other adjusted net financial expenses are guided to be approximately €35 million in 2024, resulting in €85 million of adjusted net finance expenses for 2024.

(€m)	2023	2022
Net interest expenses	(39)	(19)
Interest income	20	8
Interest expenses	(58)	(27)
FX effects	(30)	(23)
Balance sheet translation	(41)	(10)
Derivatives	11	(13)
Other net financial expenses	(32)	(31)
Present value adjustment	(8)	(9)
Factoring costs	(12)	(7)
Pension charges	(12)	(6)
Non-controlling interest expenses	0	(1)

Capitalization of borrowing costs	8	0
Interest expense - Transaction costs	(1)	0
Other	(6)	(8)
Total net finance expenses	(101)	(73)

Items excluded from adjusted performance

In order to accurately assess the underlying performance of the business, the Group excludes certain items from Adjusted EBITA:

- €20 million recorded in "restructuring and write-down expenses", including €15 million of internal business restructuring and plant closure expenses;
- €8 million of expenses related to M&A activities;
- €4 million of costs relating to the tender offer from Rhône Capital launched on 30 May 2023; and
- €44 million amortisation of intangible assets.

Net finance costs are adjusted for €9 million of other net financial income including a €6 million credit on the unwinding of the discount used to value the Group's obligation under the Oberhausen provision, for further details see Note 31. Adjusted net interest expense was €35 million (2022: €19 million) after deducting €4 million of M&A bridge financing costs.

Adjusting for the above items results in a €14 million tax effect which is deducted from the adjusted performance metrics.

Taxation

Total tax for 2023 in the income statement amounted to €62 million (2022: 104 million), representing a 27% reported effective tax rate (2022: 38%). The effective tax rate in 2023 decreased compared to the tax rate in 2022 as the prior year was impacted by non-cash one-off items including restructuring, charges following agreements with tax authorities and a reduction in the deferred tax asset valuation following the reduction in the Austrian tax rate. See Note 14 to the financial statements for further details.

Reported profit before tax amounted to €233 million (2022: €270 million). Adjusted profit before tax amounted to €317 million (2022: €318 million), with an adjusted effective tax rate of 24% (2022: 25%). Adjusted items include tax expenses related to one-off restructuring or unrelated business items.

The adjusted effective tax rate guidance is between 23-25% for 2024.

Profit after tax

On a reported basis the Group recorded profit after tax of €171 million (2022: €167 million), profit attributable to shareholders of €165 million (2022: €156 million) and earnings per share of € 3.50 (2022: € 3.31).

Adjusted profit after tax increased to €241 million (2022: €237 million) and Adjusted earnings per share was €4.98 (2022: €4.82). A full reconciliation of EBITA to EPS and Adjusted EBITA to Adjusted EPS can be found in the table in the APMs section.

Profit attributable to shareholders is stated after non-controlling interests of €7 million (2022: €11 million). The Group, holding a majority stake of 56% in RHI Magnesita India Ltd., attributes most of its non-controlling interests to the earnings consolidated from this subsidiary. The Group's shareholding in RHI Magnesita India Ltd. decreased from 70% at 31 December 2022 to 56% at 31 December 2023 following the issuance of shares in RHI Magnesita India Ltd. via a QIP in April 2023 to partially fund the acquisitions of DBRL and Hi-Tech.

Guidance for non-controlling interest expense in 2024 is approximately €10 million.

(€m)	2023	Items excluded from adjusted performance	2023 adjusted	2022 reported	Items excluded from adjusted performance	2022 adjusted
EBITA	378	31	409	372	11	384
Amortisation	(44)	44	-	(29)	29	-
Net financial expenses	(101)	9	(92)	(73)	7	(66)
Result of profit in joint ventures	-	-	-	-	-	-
Profit before tax	233	84	317	270	47	318
Income tax	(62)	-14	(76)	(104)	24	(80)
Profit after tax	171	70	241	167	70	237
Non-controlling interest	7	-	7	11	-	11
Profit attributable to shareholders	165	-	235	156	70	226
Shares outstanding	47	-	47	47	-	47
Earnings per share (€ per share)	3.50	-	4.98	3.31	1.51	4.82

Earnings guidance

The Group's outlook for revenue, EBITDA and EBITA in 2024 is in line with current analyst consensus.

Refractory sales volumes in 2024 are expected to be broadly in line with 2023, excluding the positive contribution from M&A due to the full year contribution from businesses acquired during 2023, which should increase shipped volumes in 2024 by up to 10%. Acquisitions agreed or completed since January 2023 are expected to contribute c.€80 million of Adjusted EBITDA or c.€65 million of Adjusted EBITA in 2024.

Finished goods pricing in 2024 is forecast to be up to 5% lower compared to 2023 as non-vertically integrated competitors benefit from lower input prices. The Group continues to be impacted at a unit cost level by low fixed cost absorption, with plants running at 74% of production capacity in the fourth quarter of 2023. However, production is planned to increase in 2024 to match sales volumes, as inventory coverage ratios have now been successfully reduced to target levels, reducing fixed cost under-absorption.

The historically low vertical integration EBITA margin contribution of 1.7ppts recorded 2023 is expected to reduce to approximately 1.0ppts in 2024 due to continuing low market prices for magnesite- and dolomite-based raw materials. Refractory EBITA margins are targeted to be maintained at 10.0ppts, resulting in guidance for an Adjusted EBITA margin of approximately 11% in 2024 (2023: 11.4%).

Whilst the timing and extent of the current period of reduced demand for refractories is difficult to forecast, the Group is well positioned for any recovery in demand in its end markets and customer industries, with significant operational gearing and potential upside from higher raw material and finished goods prices combined with improved fixed cost absorption if demand returns to prior levels.

Taking into account forecast sales volumes, lower vertical integration margin contribution and expected pressure on refractory pricing, Adjusted EBITA in 2024 is guided to be at least in line with current analyst consensus of approximately €410 million.

Working capital

Working capital excluding M&A decreased to €794 million (31 December 2022: €918 million) driven by a decrease in inventories. Including additional working capital resulting from M&A in 2023, working capital increased to €974 million.

Working capital intensity excluding M&A, measured as a percentage of the last three months' annualised revenue, decreased to 23.0% (2022: 25.4%). Accounts receivable intensity excluding M&A was 10.6% (2022: 10.4%), accounts payable intensity was 11.8% (2022: 14.0%) and inventory intensity reduced to 24.3% (2022: 29.0%). Including the impact of M&A, working capital intensity stood at 24.2%, slightly below levels recorded the previous year.

Inventories excluding M&A decreased to €37 million (31 December 2022: €1,049 million), as the Group successfully reduced inventory volumes and production costs decreased. Production lagged sales throughout the year to achieve targeted inventory coverage ratios based on reduced customer demand. Inventory volumes excluding M&A decreased to 505kt from 606kt at 31 December 2022. Including the effect of M&A, inventories were €996 million.

Accounts receivable excluding M&A decreased to €66 million (31 December 2022: €375 million), reflecting successful initiatives implemented to reduce overdue customer payments during the year. Accounts receivable is calculated as trade receivables excluding factoring plus contract assets less contract liabilities and downpayments received, and a full reconciliation can be found in the APMs section. Including M&A, accounts receivable increased to €477 million.

Accounts payable excluding M&A reduced to €409 million (31 December 2022: €507 million) due to lower volumes and pricing of raw materials purchased, reflecting the subdued demand environment. Including M&A, accounts payable decreased to €498 million.

Working capital financing, used to provide low-cost liquidity and support the Group's commercial offering to customers, was €298 million on 31 December 2023 (31 December 2022: €314 million), comprising €259 million of accounts receivable financing (factoring) and €39 million of accounts payable financing (forfaiting). Working capital financing levels vary according to business activity, and the Board has set an internal limit of €320 million on its use.

The increase in overall working capital of €57 million versus 31 December 2022 was driven by the first-time consolidation and short-term working capital requirements of newly acquired businesses of €180 million, offset by a €123 million reduction in working capital in the base business prior to M&A.

Working capital intensity is targeted to be approximately 24% in 2024.

Other assets and liabilities

Cash flows from other assets and liabilities amounted to €(12) million (2022: €(2) million) comprising indirect and other tax rebates of €14 million (2022: €29 million), employee pension pay outs and pension provision movements of €(19) million (2022: €(25) million), employee variable remuneration and employee-related provisions of €29 million (2022: €16 million) and other cash flows of €(36) million (2022: €(21) million).

Capital expenditure

The Group incurred €180 million of capital expenditure (2022: €157 million), of which €86 million was maintenance related (2022: €77 million), €74 million was expansionary capital expenditure (2022: €79 million) and €19 million of maintenance and integration capital expenditure was incurred at newly acquired businesses.

Capital expenditure in 2024 is expected to be around €170 million, closer to the forecast level of depreciation of €140 million, as the Group completes the final stages of its Production Optimisation Plan launched in 2019. Maintenance capital expenditure in the base business is expected to be approximately €60 million, with

maintenance capital expenditure in the base business is expected to be approximately €60 million, with expansionary capital expenditure of €80 million (including €10 million carried over from 2023) and maintenance and integration capital expenditure in newly acquired businesses of €30 million.

Capital expenditure will be shifted from fixed assets improvements to digital architecture redesign, which will require elevated levels of spending over the next three years at least.

Acquisitions

The Group invested €443 million in acquisitions in 2023, comprising cash consideration of €325 million, working capital investments of €30 million and Net debt assumed on acquisition of €88 million. Expenditure on acquisitions was partly funded by the proceeds of an equity issuance by RHI Magnesita India Ltd, raising approximately €100 million via a QIP in April 2023. Following the QIP, an equity investment of €22 million by the Group in RHI Magnesita India Ltd via a Preferential Issue was concluded in the third quarter of 2023.

Acquisitions agreed or completed since January 2023 are expected to contribute €80 million of Adjusted EBITDA in 2024.

Cash flow

Adjusted operating cash flow increased significantly to €413 million (2022: €155 million) representing cash flow conversion from Adjusted EBITA of 101% (2022: 40%). The increase in cash conversion was supported by the increase in Adjusted EBITDA and a release of working capital of €3 million, compared to the €195 million increase in working capital in 2022, when inventories were raised as a result of and in response to global supply chain disruption.

Free cash flow increased to €258 million (2022: €43 million) supported by the higher level of Adjusted operating cash flow, offset by increased cash tax and interest payments. Cash income tax payments were €60 million (2022: €54 million) whilst net interest paid increased to €56 million (2022: €(36) million) as a result of higher average interest rates and borrowings. The Group incurred €355 million of cash outflow on six acquisitions completed in 2023 including cash consideration of €325 million and working capital investments of €30 million, partially funded by the equity raise via QIP in India of approximately €100 million.

Cash dividends paid in 2023 amounted to €78 million (2022: €71 million) and the cash change in Net debt was a decrease of €41 million (2022: €82 million). Net debt increased by a further €141 million of non-cash items comprising €87 million of debt in acquired businesses (2022: €19 million), new lease obligations of €15 million (2022: €20 million) and foreign exchange impacts of €1 million (2022: €33 million).

Cash flow €m	2023	2022
Adjusted EBITDA	543	500
Share based payments - gross non-cash	9	8
Working capital changes	53	(195)
Changes in other assets and liabilities	(12)	(2)
Investments in PPE, IA	(180)	(157)
Adjusted operating cash flow	413	155
Income taxes paid	(60)	(54)
Cash effects of other income/expenses and restructuring	(32)	(24)
Investments in financial assets	(14)	0
Cash inflows from the sale of PPE, IA	4	2
Cash inflows from the sale of financial assets	0	3
Investment subsidies received	0	1
Cash inflow from joint ventures and associates	0	0
Net interest paid/received	(56)	(36)
Net derivative cash inflow/outflow	5	(2)
Dividend payments to NCI	(3)	(2)
Other investing activities	2	0
Free cash flow	258	43
Investment in subsidiaries net of cash	(313)	(65)
Cash in from sales of subsidiaries net of cash	0	9
Capital contribution NCI	100	0
Investments in NCI	(8)	0
Payment for share issue costs	(3)	0
Treasury stock	0	0
Dividend payments	(78)	(71)
Change financial receivables from joint ventures & associates	3	2
Cash change in net debt	(41)	(82)
Debt from acquisitions	(87)	(19)
New lease obligations	(15)	(20)
Exchange effects	1	(33)
Actual change in net debt	(141)	(154)

Financial position

Net debt increased to €1,304 million, comprising total debt of €1,949 million, leases of €70 million and cash and cash equivalents of €704 million.

Total leases of €70 million (2022: €64 million) are included in the Group's Net debt position as required by IFRS 16.

The Group's leverage position was 2.3x Net debt to Pro Forma Adjusted EBITDA (31 December 2022: 3x), within the Group's gearing target range of between 2.0-2.5x EBITDA for compelling M&A opportunities. The main driver of the increase in gearing was the Group's M&A activity in 2023, with six acquisitions resulting in cash payments to sellers of €325 million, working capital investments in acquired businesses of €30 million and Net debt from acquired businesses as at 31 December 2023 of €88 million. Gearing was impacted by a 12% increase in Net debt, offset by a 9% increase in Adjusted EBITDA to €43 million and a 12% increase in Pro Forma Adjusted EBITDA, which includes 12 months of contribution from businesses acquired during the year, to €561 million (2022: €500 million).

The Group was able to maintain gearing within the guided range despite investing €443 million in M&A during the period due to a significant increase in Adjusted operating cash flow and the successful QIP raising €100 million in India.

Available liquidity at 31 December 2023 was €1,304 million, comprising undrawn committed facilities of €600 million and cash and cash equivalents of €704 million.

The Group refinanced a total of €676 million of new or existing debt facilities in 2023 to maintain liquidity levels, extend debt maturities and further establish links to the Group's sustainability performance. In April 2023, the Group issued a €170 million ESG-linked Schuldschein bond with average maturity of five years and refinanced an existing bilateral Term Loan, increasing the total loan amount from €115 million to €150 million and extending the maturity date to 2026. The refinanced Term Loan is now also ESG-linked. In November 2023 the Group signed a €200 million bilateral OeKB Term Loan with a final maturity date in March 2029 and with a variable margin linked to its ESG performance.

The Group has debt maturities of €149 million scheduled in 2024, of which €60 million is short-term debt that can be rolled into 2025, and €239 million of maturities in 2025. Out of the total gross debt of €1,949 million, 98% is denominated in euro. The floating to fixed ratio of the gross debt is 31% floating to 69% fixed and the weighted average cost of debt as of 31 December 2023 was 3.34%, including swaps.

The Group will seek to maintain the ratio of Net debt to Pro Forma Adjusted EBITDA within the guided range of 2.0-2.5x or above for periods of compelling M&A.

Return on invested capital

ROIC is used to assess the Group's efficiency in executing its capital allocation strategy, which is aimed at enabling organic growth, disciplined M&A and shareholder returns. ROIC is an APM, see the APM section for full details of how ROIC reconciles to IFRS metrics.

Following significant M&A activity in 2023, fixed assets have increased by €310 million, Goodwill has increased by €202 million and acquired businesses added €180 million to working capital. Whilst the balance sheet effects of M&A are captured in the year end calculation of Invested Capital, earnings from businesses acquired during the year are not consolidated prior to the date of completion under the existing definition of ROIC. The Group is therefore amending its definition of ROIC to use average invested capital, being the average of the level of invested capital at the beginning and end of the financial year.

Under the new definition, ROIC was 10.7% in 2023 (2022: 12.3%) based on average invested capital of €2,854 million (2022: €2,439 million) and NOPAT of €305 million (2022: €301 million). ROIC generated by the Group's Raw material assets was 8.9% (2022: 14.1%) and ROIC from the Refractory business was 11.0% (2022: 11.9%).

M&A

The Group aims to expand its presence through acquisitions in geographic markets where it is under-represented, such as in India, China, and Türkiye and other countries in South-East Asia. An additional focus of the Group's M&A strategy is to diversify its product portfolio by targeting new product segments, such as the non-basic or alumina-based refractory segment.

On 5 January 2023, the Group completed the acquisition of the Indian refractory business of Dalmia Bharat Refractories Ltd. ("DBRL") via a Share Swap Agreement, in exchange for 27 million shares in RHI Magnesita India Ltd., a 56% owned subsidiary of the Group which is listed on the Bombay Stock Exchange and National Stock Exchange of India. DBRL is one of the leading refractory producers in India with production capacity of over 300ktpa from five refractory plants. Following the acquisition and prior to the QIP, the Group's shareholding in RHI Magnesita Ltd. reduced from 70% to 60% and the Dalmia Bharat Group and minority shareholders in DBRL received a combined 14% stake in RHI Magnesita India Ltd.. Based on the closing share price of RHI Magnesita India Ltd. on 18 November 2022 of ₹645 per share, the Consideration Shares had a value of approximately ₹17,424 million (€212 million). DBRL recorded EBITDA of ₹683 million (€8 million) in the year to 31 March 2022.

On 13 January 2023, the Group entered into an agreement to acquire a 65% shareholding in Jinan New Emei, a company registered in China, for a cash consideration of €23 million plus assumed net debt and other liabilities of €17 million, with the payment of €3 million of cash consideration deferred to 2024.

On 31 January 2023, the Group, through its listed subsidiary in India, RHI Magnesita India Ltd., completed the acquisition of the flow control refractory business of Hi-Tech Chemicals Ltd. ("Hi-Tech") for a consideration of €87 million. The acquisition was funded through a combination of intercompany loans from the Group and

local bank lending.

On 29 March 2023, RHI Magnesita announced the acquisition of Dalmia GSB Refractories GmbH ("Dalmia GSB") for a cash consideration of approximately €13 million. Dalmia GSB recorded profit before tax of €1.7 million in the year to 31 March 2022 and had gross assets of €18 million at 31 March 2022.

On 21 April 2023, the Group announced the acquisition of the Europe, India and US operations of Seven Refractories for a cash consideration on completion of approximately €84 million.

On 3 October 2023, the Group announced the acquisition of the Germany, Czech Republic and Slovenia based refractory businesses of the Preiss-Daimler Group ("P-D Refractories") for a cash consideration of approximately €45 million.

Adjusted EBITDA contribution from the nine businesses acquired during the period December 2021 to December 2023 (i.e. Chongqing, SÖRMAS, MIRECO and all businesses acquired during 2023) was €56 million, exceeding guidance for approximately €40 million of contribution from M&A.

The full year Adjusted EBITDA contribution from businesses acquired during 2023 (i.e. DBRL, Jinan New Emei, Hi-Tech, Dalmia GSB, Seven Refractories and P-D Refractories) is expected to be approximately €80 million in 2024, or €65 million of EBITA.

Returns to shareholders

The Board's capital allocation policy remains to support the long-term Group strategy, providing flexibility for both organic and inorganic investment opportunities and delivering attractive shareholder returns over the medium term. These opportunities are assessed against a framework of strategic fit, risk profile, rates of return, synergy potential and balance sheet strength.

In 2023, the Group invested €74 million in expansionary capital expenditure, including expenditure incurred in relation to the integration of newly acquired businesses. The Group's total capital expenditure for the year 2023 amounted to €180 million.

Following the strong profitability, cash generation and strategic progress delivered in 2023, the Board has recommended a final dividend of €1.25 per share for the full financial year, and €85 million in aggregate. This represents a dividend cover of 2.8x Adjusted earnings per share. Subject to approval at the AGM on 2 May 2024, the final dividend will be payable on 13 June 2024 to shareholders on the register at the close of trading on 17 May 2024. The ex-dividend date will be 16 May 2024. Together with the interim dividend of €0.55 per share paid on 22 September 2023, the recommended final dividend represents a full year dividend of €1.80 per share in respect of the 2023 financial year.

The Board's dividend policy remains to target a dividend cover of below 3.0x adjusted earnings over the medium term. Dividends will be paid on a semi-annual basis with one third of the prior year's full year dividend being paid at the interim.

OPERATIONAL REVIEW

Steel overview

Steel	2023	2022 reported	2022 (constant currency)	Change	Change (constant currency)
Revenue (€m)	2,461	2,371	2,311	4%	6%
Gross profit (€m)	550	521	527	6%	4%
Gross margin	22.3%	22.0%	22.8%	30bps	(50)bps

Supplying refractory products and services to the steel industry accounted for 69% of RHI Magnesita's revenues in 2023 and the Group retained its leading position globally with a 13% market share, or 21% excluding China and East Asia. Refractory products are required to protect steel making equipment from extremely high temperatures of up to 1,800°C, chemical corrosion and abrasion. Refractory product applications include iron making (blast furnace or direct reduction), primary steel-making (basic oxygen furnace or electric arc furnace) as well as ingot and continuous casting. RHI Magnesita offers a complete range of products and solutions for the steel making process. The lifespan of refractory products in the steel making process can range from hours to months depending on the application, for example a slide gate is a consumable item that may need to be replaced every four hours whilst the lining of a primary steel making furnace could require re-lining at six month intervals. Refractory consumption in steel making is therefore classified as an operating expense by steel producers and usually accounts for around 2-3% of operating costs, on average.

Steel segment revenues increased by 4% to €2,461 million (2022: €2,371million) and by 6% in constant currency terms (2022: €2,311 million) as a 3% reduction in volumes excluding M&A, due to reduced demand in Europe, China and South America, was offset by resilient pricing and additional revenue from M&A. Average price per tonne increased by 7% compared to 2022.

The 3% reduction in the Group's shipped volume of steel refractories excluding M&A compares to World Steel Association data, which indicates a small decrease of 0.1% in global steel output in 2023, due to the weighting of the Group's business towards Europe, North American and South America where steel production declined by more than the global average.

Global steel demand in all regions excluding India, West Asia & Africa and other emerging markets declined in 2023 due to weakness in the key end markets of construction, transportation and consumer goods. High inflation and interest rate rises impacted consumer demand and the cost of financing for new capital projects in many economies. In India, high levels of domestic economic growth resulted in a 11.8% increase in steel

in many economies. In India, high levels of domestic economic growth resulted in a 11.0% increase in steel production compared to the prior year, reflecting strong conditions in construction and infrastructure markets.

Conditions in freight, energy and refractory raw materials markets eased with input costs in each category reducing versus the prior year, reflecting lower overall global demand and relative stability in supply chains, compared to the disruption in 2021 and 2022.

Industrial overview

Industrial	2023	2022 reported	2022 (constant currency)	Change	Change (constant currency)
Revenue (€m)	1,111	946	923	17%	20%
Gross profit (€m)	307	242	232	27%	32%
Gross margin	27.7%	25.6%	25.1%	210bps	260bps

RHI Magnesita is a leading supplier of refractory products and services to customers in the cement and lime, non-ferrous metals, glass, energy, environmental and chemicals industries. These Industrial customers accounted for 31% of Group revenues in 2023 and have longer replacement cycles compared to Steel customers, ranging from one to 20 years. Refractories are classified as capital expenditure by Industrial customers and represent between 0.2% and 1.5% of total costs over the life cycle of a facility. RHI Magnesita has a c.30% market share globally in cement refractories, c.25% market share in non-ferrous metals applications, 15% in the glass industry and 3% in other industrial applications such as energy, environment, chemicals and foundry.

The Industrial segment increased revenues by 17% to €1,111 million (2022: €946 million) or 20% in constant currency terms, with shipped volumes increasing by 17%. The longer lead time for Industrial projects and later cycle nature of the business supported pricing in 2023 as the Group realised the benefit of price increases for orders negotiated in prior periods.

Cement and lime revenues of €424 million represented 12% of Group revenues in 2023 (2022: €378 million) as price increases offset lower shipped volumes in all regions excluding India. The acquisition of DBRL in India was the main driver of a 25% increase in the shipped volume of cement and lime refractories versus 2022.

Demand for non-ferrous metals refractories remained at high levels in 2023, supported by high prices for non-ferrous metals, underlying green energy and transportation demand drivers and scrap production capacity additions. Non-ferrous metal refractory revenues increased by 28% to €280 million (2022: €219 million), driven by a 14% increase in volumes and higher pricing. The non-ferrous metal business remained the highest margin segment for the Group, with a gross margin of 42% in 2023 (2022: 37%).

Glass refractory shipped volumes increased by 7% in 2023, contributing to an increase in revenues of 18% from €154 million to €182 million in 2022.

Revenues from other industrial applications, including energy, environment, chemicals, foundry and aluminium increased by 40% to €143 million (2022: €102 million).

Minerals

The Group consumed 39% of its internally produced raw materials by value, in line with its vertical integration strategy. Raw materials not utilised internally are sold in the open market and reported under Minerals within the Industrial segment, generating revenues of €80 million in 2023 (2022: €92 million). Mineral sales volumes increased by 0.7% but revenues reduced due to lower market prices for raw materials.

Regional business units

In 2022 RHI Magnesita established an operational governance structure consisting of five regional business units, which continued in 2023. Managing the business through a regional structure enables the Group to serve its customers better through faster local decision making and improved accountability, supporting our local for local production strategy.

Revenue	2023	2022 reported	2022 (constant currency)	% change (reported)	% change (constant currency)
Europe, CIS & Türkiye	895	819	803	9%	11%
Steel	575	571	556	1%	3%
Industrial	320	248	247	29%	30%
North America	894	874	861	2%	4%
Steel	673	694	686	(3)%	(2)%
Industrial	221	179	175	23%	26%
India, West Asia & Africa	762	617	594	24%	28%
Steel	582	486	464	20%	25%
Industrial	180	131	130	37%	38%
South America	522	505	495	3%	5%

Steel	393	389	383	1%	3%
Industrial	129	116	112	12%	15%
China & East Asia	418	410	391	2%	7%
Steel	239	231	222	3%	8%
Industrial	179	179	168	0%	7%
Minerals	80	92	90	(13)%	(11)%
Total	3,572	3,317	3,234	8%	10%

Europe, CIS & Türkiye

Europe, CIS & Türkiye revenues increased by 9% to €895 million (2022: €819 million), or by 11% in constant currency terms, due to price increases and a 5% increase in sales volumes driven by M&A. Revenue per tonne increased by 4%.

Gross profit increased by 2% to €177 million (2022: €173 million) with lower gross margins of 19.8% (2022: 21.1%) due to higher unit costs resulting from low capacity utilisation.

Steel revenues increased by 3% in constant currency on 2% higher shipped volumes, as M&A supported growth against a backdrop of reduced customer demand. Steel production in the European Union decreased by 7.4% and in Türkiye by 4.0% according to WSA data, reflecting high energy and other production costs leading to temporary plant suspensions and reduced end market demand from the construction industry.

Industrial segment volumes increased by 14% and revenues by 30% in constant currency terms, supported by the acquisition of process industries focused P-D Refractories in the fourth quarter and strong cement sales year on year, with 22% higher shipped volumes in cement and lime. Industrial customers outside of cement reduced capital expenditure and postponed major projects to focus more on repair and maintenance.

Plant capacity utilisation was 81% on average in the first half of the year and decreased to 71% in the fourth quarter as the region successfully reduced finished goods inventory to optimum levels, in line with customer demand. This led to significant under-absorption of fixed costs, offset by lower energy and raw material prices. Key operational KPIs including PIFOT and customer net promoter scores improved during the year. Close management of receivables supported regional cash flows, with improved payment term control and reduced overdues in the base business, excluding M&A.

New customer wins in the waste to energy market were achieved, in line with the regional strategy. New product sales initiatives were focused on high recycling content product ranges, to further improve sustainability performance. A key driver of recycling rates during the year was the successful launch of a high-recycling content gunning repair mix for steel customers, utilising reclaimed material from cement rotary kiln linings. The Group continues to develop its automated sorting capabilities which are expected to further improve recycling productivity when implemented.

The Europe, CIS & Türkiye region has acquired and commenced the integration of five business in the last two years, comprising SÖRMAS, MIRECO, Dalmia GSB, Seven Refractories and P-D Refractories. Integration projects are proceeding in line with or ahead of expectations and these businesses together contributed EBITDA of €25 million in 2023, accounting for almost half of Group EBITDA from M&A of €56 million.

North America

Revenues in North America increased by 2% to €894 million (2022: €874 million) or by 4% in constant currency terms, as higher pricing offset a 5% decline in sales volumes. Revenue per tonne increased by 8% due to higher pricing year on year, however pricing pressure was evident towards the end of the period and is expected to continue 2024.

Gross profit increased to €250 million (2022: €236 million) at a margin of 27.9% (2022: 27.0%) as freight and other input costs reduced. Freight rates per tonne were 17% lower than 2022.

Two large steel customers idled operations during the year, contributing to the decline in shipped volumes and a bad debt reserve relating to €8 million of receivables from a major customer in Mexico was recorded. Sales of BOF refractories declined year on year but were offset by deliveries to greenfield steel projects, with new plant installations continuing despite the current low level of steel plant capacity utilisation, estimated at 75%.

RHI Magnesita's plant utilisation in Q4 2023 averaged 75% in the region to match customer demand and reduce inventory volumes to optimum levels, resulting in fixed cost under-absorption.

In the Industrial segment, cement and lime sales volumes declined but gross margins increased significantly, to 27.4% (2022: 21.4%) due to higher pricing and lower freight costs. New customers and applications in non-ferrous metals and aluminium projects were secured and will support sales into 2024.

The regional recycling rate increased to 8.3% (2022: 5.2%) as the Group seeks to replicate its success in the European market in other regions, with consumption of secondary raw materials increasing to 25 kt (2022: 16 kt).

New product developments and launches included fast-to-cast tundish mixes which allow shorter pre-heat and lower consumption than existing technology, two new high-recycling magnesia carbon brands and new fused magnesia brick formulations. Market share gains were realised in Thin Slab Isostatic products and the Group installed its first monotube changer in the USA, from the Interstop Systems product range, with further conversions planned in the near future.

In July 2023 the Group completed the acquisition of Seven Refractories, which included the Seven Lakeway site in Ohio.

RHI Magnesita received three awards in North America in recognition of innovation and sustainability: the Manufacturer's Association of Pennsylvania 2023 Manufacturing Innovator Award; the American Ceramic Society Corporate Environmental Achievement Award; and the World Refractories Association Safety Recognition Award.

India, West Asia & Africa

Revenues in the India, West Asia & Africa region increased by 24% to €762 million (2022: €617 million) or by 28% in constant currency, driven by M&A and organic volume growth. Acquisitions accounted for around 19% of the revenue increase with the remainder driven by organic demand growth. Revenue per tonne decreased by 13%, primarily due to a change in product mix resulting from M&A.

Gross profit increased by 40% to €187 million (2022: €133 million) with increased gross margins of 24.5% (2022: 21.6%) supported by lower input costs, including freight and purchased raw materials.

Steel revenues increased by 25% in constant currency terms, with the majority of the increase contributed by M&A completed during the year. Steel revenue per tonne reduced by 9% due to a reduced weighting of flow control product sales following the M&A and some increased competition from China based suppliers and domestic producers. Gross margin in steel increased to 22.8% (2022: 20.1%), reflecting lower input costs.

Steel production in India grew by 11.8% in 2023 according to WSA data, supporting strong organic sales growth. New steel plant projects under construction by JSW Group, JSPL Group, Arcelor Mittal, Tata and NMDC support further growth in steel output into 2024 and beyond, including 'green steel' projects seeking to reduce CO₂ emissions in the steel making process. Local refractory producers are increasing output to meet demand and RHI Magnesita is seeking to differentiate its offering through solutions contracts, competitive pricing and a focus on sustainability. In Africa, the Group was awarded lead supplier status to a greenfield steel project in Morocco and expanded its sales in Egypt, Kenya and South Africa.

The Group's steel flow control market position improved following the acquisition of Hi-Tech, with production network benefits, as well as the addition of alternative isostatic products and a cost-effective nozzle filling compound to the product range.

Industrial revenues increased by 37% to €180 million (2022: €131 million) largely due to the contribution of the DBRL acquisition, which led to an 89% increase in shipped volumes of industrial refractories and a 111% increase in cement refractory sales volumes. Industrial gross margin increased to 30.3% (2022: 27.1%). Non-ferrous metals sales were also strong, with a 43% increase in volumes driven by new projects and repairs in India, West Asia & Africa, including a major new copper customer in Gujarat, India. Gross margins in the Industrial segment increased to 30.3% (2022: 27.1%) due to resilient pricing and a favourable industry mix as higher margin non-ferrous metals sales increased.

The integration of the Hi-Tech and DBRL acquisitions has progressed in line with expectations, with sales operations now unified following a 'one face to the customer' principle. Production of various product ranges has been relocated within the enlarged network, to optimise between existing and acquired plants. The capacity of the Cuttack plant was successfully increased from 18 ktpa to 30 ktpa.

Supply chain reliability improved considerably compared to 2022, allowing inventory coverage to be reduced to targeted levels without impacting customer deliveries. However, disruption to Red Sea freight lanes in the fourth quarter of 2023 continues and may lead to higher costs and logistical impacts for the India, West Asia & Africa region in 2024. PIFOT increased to a record 81% by the end of 2023, reflecting production and logistics planning and forecasting improvements.

South America

Revenues in South America increased by 3% to €522 million (2022: €505 million) or by 5% in constant currency terms, as higher pricing offset a 6% decline in sales volumes. Revenue per tonne increased by 10% due to higher pricing. Gross profit increased to €146 million (2022: €130 million) at a margin of 28.0% (2022: 25.7%).

Steel revenues increased by 3% in constant currency terms to €393 million as price increases broadly offset a 6% reduction in shipped volumes, which was in line with the reduction in steel output for the region. Steel gross margin improved to 24.5% (2022: 23.5%) due to better pricing and a reduction in key input costs, notably freight, energy, raw materials. New long-term contracts were signed with two key steel customers in the region and revenue derived from long-term contracts represented 54% of the total for the region in 2023.

Industrial revenues increased by 15% in constant currency terms, driven by significantly higher sales volumes of glass refractories and higher pricing and volumes in non-ferrous metals. Cement sales volumes decreased by 11% but price increases delivered a 6% increase in revenues in constant currency terms. Industrial segment gross margins increased to 38.7% (2022: 33.1%), largely due to strong price realisation in glass and non-ferrous metals.

Significant price increases in Argentina resulted in loss of purchase power in local currency which lead to the application of hyperinflation accounting at Group level in 2023 in line with IAS 29. The Group is undertaking a review of its operating model to optimise profitability and ensure the long-term sustainability of its business in Argentina, where it is a key supplier for its customers.

China & East Asia

Revenues in China & East Asia increased to €418 million (2022: €410 million), an increase of 2% or 7% in constant currency terms, as the acquisition of Jinan New Emei offset volume and revenue decline in steel due to reduced local demand. Gross profit increased to €88 million (2022: €83 million) reflecting the revenue

increase and higher gross margin of 21.0% (2022: 20.0%).

Shipped volumes of steel refractories excluding M&A in China reduced by 6%, compared to flat China steel output year on year according to WSA data, as weakness in construction was balanced by growth in the autos and shipping end markets. Shipped volumes of refractories in East Asia reduced by 15%, due to inventory de-stocking and the temporary closure of a key plant by a steel customer during the year. Several conventional steelmakers in the region are planning new EAF projects, which is a positive development due to the Group's market leadership position in EAF refractories.

Industrial sales volumes increased by 2% and higher pricing supported revenue growth of 7%, mainly due to strong demand for glass and non-ferrous metals refractories in China. Industrial gross margin in the region increased slightly to 28.0% (2022: 27.5%).

The Group's priority in its China & East Asia business is to increase margins to higher levels that are closer to the average for the Group worldwide. Pricing is therefore being prioritised ahead of seeking to build further market share at this stage in the development of the business. Refractory tenders are highly competitive, with bids from multiple low-cost competitors and cost pressures on steel producers holding down overall pricing levels. The Group's strategy is to focus on higher value-added products and services to differentiate against lower quality competing suppliers. The region achieved the highest net promoter score globally from its customers in internal surveys and operational excellence was further demonstrated by the achievement of zero LTIF, PIFOT improvement and exceeding targets for scrap rates.

A 65% stake in Jinan New Emei, a Shandong based producer of steel flow control refractories, was acquired in May 2023 and contributed €49 million of revenue in the year. Multiple customer trials are underway in China & East Asia for Jinan New Emei products which could lead to sales growth in 2024. Production of alumina-based refractories at the Group's newly constructed facility in Chongqing commenced during 2023, supporting cement sales during the period and with potential for further ramp up and sales to other industrial segments in 2024.

Half year 2023 balance sheet correction

In the Group's unaudited half year results for the six month period to 30 June 2023 ("H1 2023 results") the initial consolidation of the Acquisition of Dalmia OCL and Dalmia Seven Refractories Ltd was incomplete because the purchase price allocation and the measurement of assets and liabilities had not been finalised by the reporting date and a preliminary purchase price allocation was provided. The Group funded its acquisition of Dalmia OCL through the issuance of 27 million shares in its listed Indian subsidiary, RHI Magnesita India Ltd., reducing its shareholding in RHI Magnesita India Ltd. from 70% to 60% in January 2023, and subsequently to 56% following a QIP in April 2023 and Preferential Issue in June 2023.

In the unaudited consolidated balance sheet dated 30 June 2023 that was published on 26 July 2023, non-controlling interests relating to RHI Magnesita India Ltd. was under-stated by €106 million and equity attributable to shareholders of RHI Magnesita N.V. was over-stated by the same amount. A correction to the half year balance sheet will be issued together with the Group's half year results for the six month period to 30 June 2024. There is no change to total equity or any item in the profit and loss or cash flow statements as a result of this correction.

ALTERNATIVE PERFORMANCE MEASURES (APMs)

Definitions of APMs used by the Group are set out below. The purpose and usefulness of each APM and a reconciliation to the nearest IFRS equivalent measure, or a reference to a reconciliation appearing elsewhere in this document. In general, APMs are presented externally to meet investor and analyst requirements for clarity and transparency of the Group's underlying financial performance. APMs are also used internally in the management of the Group's business performance, budgeting and forecasting. APMs are non-IFRS measures which enable investors and other readers to review alternative measurements of financial performance, but they should not be used in isolation from the main financial statements. Commentary within the Annual Report, including the Financial Review, the Consolidated Financial Statements and the accompanying notes, should be referred to in order to fully appreciate all the factors and context affecting the Group's financial performance. Readers are strongly encouraged not to rely on any single financial measure and to carefully review the Group's reporting in its entirety.

Performance APMs

Adjusted EBITDA

Adjusted EBITDA is a key non-IFRS measure that the Executive Management Team (EMT) and Directors use internally to assess the underlying financial performance of the Group and is viewed as relevant to capital intensive industries. The ratio of Net Debt to Adjusted EBITDA is used as a measure of financial gearing.

Adjusted EBITDA is defined as EBIT, as presented in the Condensed Consolidated Statement of Profit or Loss, before amortisation, depreciation, and Excluded Items (see definition below).

Pro Forma Adjusted EBITDA

Pro Forma Adjusted EBITDA is used to assess financial gearing and includes a full year of Adjusted EBITDA contribution from businesses acquired during the year.

Adjusted EBITA

Adjusted EBITA is a key non-IFRS measure that the EMT and Directors use internally to assess the underlying performance of the Group.

Adjusted EBITA is determined consistently with Adjusted EBITDA, but includes depreciation expense of property, plant and equipment to reflect the wear and tear cost and future replacement of productive assets.

Adjusted EPS

Adjusted EPS is a key non-IFRS measure and one of the Group's KPIs. Adjusted EPS is used to assess the Group's underlying operational performance, post tax and non-controlling interests on a per share basis.

This measure is based on Adjusted EBITA after finance income and expenses, taxes, share of profit or loss from associates and joint ventures and non-controlling interest. Share of profit or loss from associates and joint ventures is adjusted to exclude impairments and gains or losses recognised on disposals.

Adjusted EPS excludes finance income and expenses and certain foreign exchange effects, that are not directly related to operational performance. This includes the non-cash present value adjustments for the Oberhausen provision.

Taxes are calculated by applying the effective tax rate normalised for restructuring expenses and impairments.

Excluded items

Items that are excluded (Excluded Items) in arriving at the Group's Adjusted measures of Adjusted EBITA, EBITDA and EPS include:

Other income, other expenses and restructuring expenses as reflected on the Consolidated Statement of Profit or Loss as well as gains and losses within interest income, interest expenses and other net financial expenses that are non-recurring in nature and not reflective of the underlying operational performance of the business. Excluded items include restructuring related provisions, costs in relation to corporate transactions and other non-recurring costs. The tax impacts of the above Excluded Items are also adjusted for.

Cash flow performance measures

Adjusted operating cash flow and Free cash flow

Adjusted operating cash flow is a key non-IFRS measure used by the EMT and the Directors to reflect the operational cash generation capacity of the Group before the cash impacts of Excluded Items (see definition above).

Adjusted operating cash flow is defined as Adjusted EBITDA adjusted for working capital items, changes in other assets and liabilities and capital expenditure and other non-cash items, such as share based payments. This APM is reconciled to Net Cash flow from operating activities as follows:

€m	2023	2022
Adjusted operating cash flow (APM)	413	155
Capital expenditure ¹	180	157
Income Taxes paid ¹	(60)	(54)
Other income/expenses and restructuring items ¹	(32)	(24)
Net cash flow from operating activities¹	500	234

1. As reflected in the Consolidated Statement of Cash Flows

Free cash flow is determined from the IFRS measures of Net cash flow from operating activities, net cash used in investing activities and net cash (used in)/provided by financing activities and excludes the cash impacts of purchases and disposals of business and subsidiaries, dividends paid to equity shareholders of the Group, share capital transactions with shareholders, proceeds and repayment of borrowings and current borrowings and repayment of leases.

Free cash flow is reconciled to Cash changes in Net debt in the table in the Cash flow and working capital section. Cash changes in Net debt is reconciled to Change in cash and cash equivalents in the Net Debt APM reconciliation.

Balance sheet

Liquidity

Liquidity comprises cash and cash equivalents, short term marketable securities and undrawn committed credit facilities.

€m	2023	2022
Cash and cash equivalents ¹	704	521
Revolving credit facility	600	600
Liquidity (APM)	1,304	1,121

1. As reflected in the Consolidated Statement of Financial Position

Net Debt

Net Debt is the excess of current and non-current borrowings, associated debt derivatives for which hedge accounting is applied and lease liabilities over cash and cash equivalents and short-term marketable securities. The Board uses this measure for the purpose of capital management. A reconciliation of Net Debt is included in Note 34 to the Condensed Consolidated Interim Financial Statements.

€m	2023	2022
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€m	2023	2022
Cash changes in Net debt	(41)	(82)
Proceeds from borrowings ¹	336	344
Repayment of borrowings ¹	(16)	(278)
Change in current borrowings ¹	(63)	(14)
Repayment of lease obligations ¹	(20)	(21)
Change in cash and cash equivalents¹	196	(50)

1. As reflected in the Consolidated Statement of Cash Flows

Working capital

Working capital consists of inventories plus trade receivables and other receivables minus trade payables and other payables. Working capital intensity provides a measure of how efficient the Company is in managing operating cash conversion cycles. It is measured as Working capital divided by trailing three-month revenues (annualised) and is expressed as a percentage.

€m	2023	2022
Inventories (Note 21)	996	1,049
Trade receivables (Note 22)	538	433
Contract assets (Note 22)	4	4
Contract liabilities (Note 32)	(65)	(62)
Accounts receivable	477	375
Trade payables (Note 32)	(498)	(507)
Total working capital	974	918

1. As reflected in the Consolidated Statement of Financial Position

Return on invested capital (ROIC)

ROIC reflects the annualised return on invested capital of the Group. The Group has amended its definition of ROIC to use Average Invested Capital, being the average of the level of Invested Capital at the beginning and end of the financial year. ROIC is calculated as NOPAT (net operating profit after tax) divided by average invested capital of the year.

€m	2023	2022
Revenue¹	3,572	3,317
Cost of sales ¹	(2,714)	(2,554)
Selling and marketing expenses ¹	(153)	(131)
General and administrative expenses ¹	(339)	(277)
Income taxes paid ²	(60)	(54)
NOPAT	305	301

€m	2023	2022
Goodwill ³	339	137
Other intangible assets ³	470	317
Property, plant and equipment ³	1,360	1,204
Investments in joint ventures and associates ³	6	6
Other non-current assets ³	37	40
Deferred tax assets ³	152	128
Inventories ³	996	1,049
Trade and other receivables ³	686	579
Income tax receivables ³	43	39
Deferred tax liabilities ³	(63)	(62)
Trade and other current liabilities ³	(820)	(780)
Income tax liabilities ³	(51)	(38)
Current provisions ³	(34)	(30)
Invested capital	3,122	2,587
Average invested capital	2,854	2,439
Return on invested capital⁴	10.7%	12.3%

1. As reflected in the Consolidated Statement of Profit and Loss

2. As reflected in the Consolidated Statement of Cash Flows
3. As reflected in the Consolidated Statement of Financial Position
4. NOPAT divided by average invested capital of the year. Invest Capital in 2021 €2,291 million

GLOSSARY

CEO	Chief Executive Officer
CFO	Chief Financial Officer
CO₂	Carbon dioxide
CoGS	Cost of Goods Sold
DBM	Dead Burned Magnesia
DBRL	Dalmia Bharat Refractories Limited
DGSB	Dalmia GSB Refractories GmbH
DSR	Dalmia Seven Refractories Ltd
EAF	Electric Arc Furnace
EBIT	Earnings Before Interest and Taxes
EBITA	Earnings Before Interest, Taxes and Amortisation
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
EEC	Environment, Energy and Chemicals
EMT	Executive Management Team
EPS	Earnings Per Share
EU	European Union
FX	Foreign Exchange
Hi-Tech	Hi-Tech Chemicals Ltd
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
Jinan New Emei	Jinan New Emei Industries Co. Ltd
NOPAT	Net Operating Profit After Tax
OCF	Operating Cash Flow
Oberhausen provision	Unfavourable contract required to satisfy EU remedies at the time of the combination of RHI and Magnesita to form RHI Magnesita
OIE	Other Income and Expenses
P-D Refractories	P-D Refractories CZ a.s.
PIFOT	Process In Full On Time
PPE	Property, Plants & Equipment / Personal Protective Equipment
QIP	Qualified Institutional Placement, a mechanism used for equity issuance in India
ROIC	Return On Invested Capital
Seven Refractories	Seven Refractories d.o.o.
SG&A	Selling, General and Administrative Expenses
SÖRMAŞ	Söğüt Refrakter Malzemeleri Anonim Şirketi
UK	United Kingdom
WSA	World Steel Association

Consolidated Financial Statements 2023

Consolidated Statement of Profit or Loss

for the year ended 31 December 2023

in € million	Note	2023	2022
Revenue	(5)	3,571.8	3,317.2
Cost of sales	(5)	(2,714.4)	(2,553.8)
Gross profit		857.4	763.4
Selling and marketing expenses		(153.0)	(131.3)
General and administrative expenses		(339.2)	(277.2)
Result from operating joint ventures and associates		0.1	0.1
Restructuring	(6)	(19.6)	6.8
Other income	(7)	27.1	4.8
Other expenses	(8)	(38.9)	(23.0)
EBIT		333.9	343.6
Interest income	(11)	19.7	8.3
Interest expenses on borrowings		(58.2)	(27.4)
Net expense on foreign currency effects	(12)	(30.4)	(23.3)

Other net financial expenses	(13)	(31.7)	(30.7)
Net finance costs		(100.6)	(73.1)
Profit before income tax		233.3	270.5
Income tax	(14)	(62.0)	(103.7)
Profit after income tax		171.3	166.8
RHI Magnesita N.V. shareholders		164.6	155.7
Non-controlling interests	(26)	6.7	11.1
in €			
Earnings per share - basic	(15)	3.50	3.31
Earnings per share - diluted	(15)	3.42	3.26

Consolidated Statement of Comprehensive Income

for the year ended 31 December 2023

in € million	Note	2023	2022
Profit after income tax		171.3	166.8
Currency translation differences			
Unrealised results from currency translation		(22.5)	49.9
Unrealised results from net investment hedge and foreign operations		(10.4)	(5.4)
Deferred taxes thereon	(14)	0.4	(3.2)
Current taxes thereon	(14)	0.0	4.1
Reclassification to profit or loss - Disposal subsidiaries		(0.6)	0.7
Cash flow hedges			
Unrealised fair value changes	(36)	(25.2)	58.0
Reclassification to profit or loss		(10.0)	(7.2)
Deferred taxes thereon	(14)	8.0	(11.9)
Items that may be reclassified to profit or loss in later periods		(60.3)	85.0
Remeasurement of defined benefit plans			
Remeasurement of defined benefit plans	(29)	(22.5)	58.0
Deferred taxes thereon	(14)	6.1	(18.5)
Items that are not reclassified to profit or loss in later periods		(16.4)	39.5
Other comprehensive (loss)/income after income tax		(76.7)	124.5
Total comprehensive income		94.6	291.3
RHI Magnesita N.V. shareholders		97.9	282.7
Non-controlling interests	(26)	(3.3)	8.6

Consolidated Statement of Financial Position

as at 31 December 2023

in € million	Note	31.12.2023	31.12.2022
ASSETS			
Non-current assets			
Goodwill	(17)	339.2	136.9
Other intangible assets	(18)	469.8	316.6
Property, plant and equipment	(19)	1,360.1	1,203.7
Investments in joint ventures and associates		6.2	5.7
Other non-current financial assets	(35)	43.4	55.1
Other non-current assets	(20)	36.7	40.0
Deferred tax assets	(14)	152.0	128.2
		2,407.4	1,886.2
Current assets			
Inventories	(21)	995.9	1,049.1
Trade and other current receivables	(22)	685.7	578.9
Income tax receivables	(14)	43.5	38.7
Other current financial assets	(35)	13.6	1.3
Cash and cash equivalents	(23)	703.5	520.7
		2,442.2	2,188.7
		4,849.6	4,074.9
EQUITY AND LIABILITIES			
Equity			
Share capital	(24)	49.5	49.5
Group reserves	(25)	1,152.2	951.7
Equity attributable to shareholders of RHI Magnesita N.V.		1,201.7	1,001.2
Non-controlling interests	(26)	161.8	47.4
		1,363.5	1,048.6
Non-current liabilities			
Borrowings	(27)	1,799.5	1,404.9
Other non-current financial liabilities	(28)	122.4	28.8

Other non-current financial liabilities	(28)	153.4	92.8
Deferred tax liabilities	(14)	62.5	62.0
Provisions for pensions	(29)	241.5	214.7
Other personnel provisions	(30)	55.2	51.7
Other non-current provisions	(31)	91.6	80.0
Other non-current liabilities		7.3	6.3
		2,391.0	1,912.4
Current liabilities			
Borrowings	(27)	149.3	215.1
Other current financial liabilities	(28)	40.9	50.1
Trade payables and other current liabilities	(32)	820.2	780.3
Income tax liabilities	(14)	50.8	38.3
Current provisions	(31)	33.9	30.1
		1,095.1	1,113.9
		4,849.6	4,074.9

Consolidated Statement of Cash Flows

for the year ended 31 December 2023

in € million	Note	2023	2022
Cash generated from operations	(33)	560.1	287.5
Income tax paid less refunds		(60.4)	(53.7)
Net cash flow from operating activities		499.7	233.8
Investments in property, plant and equipment and intangible assets		(179.5)	(156.7)
Investments in subsidiaries net of cash acquired		(313.3)	(63.2)
Cash receipts from the sale of equity instruments of interests in joint ventures		0.0	8.7
Cash inflows from the sale of property, plant and equipment		3.6	1.8
(Cash outflows) / Cash inflows from investments/ from the sale of financial assets		(13.8)	2.8
Dividends received from non-consolidated entities, joint ventures and associates		0.5	0.0
Investment subsidies received and cash inflows from non-current receivables		1.9	0.8
Interest received		18.9	6.1
Net cash used in investing activities		(481.7)	(199.7)
Payment for share issue costs in subsidiary		(2.6)	0.0
Proceeds from share issue in subsidiary		100.2	0.0
Acquisition of non-controlling interests		(8.2)	(1.4)
Dividends paid to RHI Magnesita N.V. shareholders		(77.7)	(70.5)
Dividend paid to non-controlling interests		(2.9)	(1.5)
Proceeds from long-term financing		336.0	344.4
Repayments of long-term financing		(15.9)	(278.0)
Changes in current borrowings and financial liabilities to joint ventures and associates		(60.6)	(12.2)
Interest payments		(72.7)	(41.0)
Repayment of lease obligations		(20.3)	(20.6)
Interest payments from lease obligations		(2.4)	(1.3)
Cash flows from derivatives		5.1	(1.8)
Net cash provided by/(used in) financing activities	(34)	178.0	(83.9)
Total cash flow		196.0	(49.8)
Change in cash and cash equivalents		196.0	(49.8)
Cash and cash equivalents at beginning of period		520.7	580.8
Reclassification of Cash and Cash equivalents	(23)	(9.3)	0.0
Foreign exchange impact		(3.9)	(10.3)
Cash and cash equivalents at end of period	(23)	703.5	520.7

Consolidated Statement of Changes in Equity

for the year ended 31 December 2023

in € million	Group reserves									Equity attributable to shareholders of RHI Magnesita N.V.	Non-controlling interests	Total equity
	Share capital	Treasury shares	Additional paid-in capital	Mandatory reserve	Retained earnings	Cash flow hedges	Defined benefit plans	Currency translation	Accumulated other comprehensive income			
Note	(24)	(25)	(25)	(25)	(25), (26)	(25)	(25)	(25)			(26), (42)	
31.12.2022	49.5	(116.1)	361.3	288.7	620.2	31.8	(85.6)	(148.6)		1,001.2	47.4	1,048.6
Profit after income tax	-	-	-	-	164.6	-	-	-		164.6	6.7	171.3
Currency translation differences	-	-	-	-	-	-	-	(23.2)		(23.2)	(9.9)	(33.1)
Cash flow hedges	-	-	-	-	-	(27.2)	-	-		(27.2)	-	(27.2)
Defined benefit plans	-	-	-	-	-	-	(16.3)	-		(16.3)	(0.1)	(16.4)

shareholders									
Dividends	-	-	-	-	(70.5)	-	-	-	(
Share transfer/vested LTIP	-	0.9	-	-	(0.9)	-	-	-	
Change in non-controlling interests due to addition to consolidated companies	-	-	-	-	-	-	-	-	
Reclassification of puttable non-controlling interests without a change of control	-	-	-	-	(4.8)	-	-	-	
Change in non-controlling interests due to addition to consolidated companies	-	-	-	-	-	-	-	-	
Change in non-controlling interests without a change of control	-	-	-	-	(0.4)	-	-	-	
Share-based payment expenses	-	-	-	-	8.3	-	-	-	
Transactions with shareholders	-	0.9	-	-	(68.3)	-	-	-	(
31.12.2022	49.5	(116.1)	361.3	288.7	620.2	31.8	(85.6)	(148.6)	1,0

Notes

to the Consolidated Financial Statements 2023

Principles and Methods

1. Authorisation of Financial Statements and Statement of Compliance with International Financial Reporting Standards

The Consolidated Financial Statements of RHI Magnesita N.V. and its subsidiaries (collectively referred to as "RHIM" or "the Group" for the year ended 31 December 2023, were approved and authorised for issue by the Board of Directors on 28 February 2024 and will be submitted for adoption to the Annual General Meeting of shareholders in May 2024. RHIM is a public limited company incorporated under the laws of the Netherlands (naamloze vennootschap), having its official seat (statutaire zetel) in Arnhem, the Netherlands, and its office at Kranichberggasse 6, 1120 Vienna, Austria, registered with the Dutch Trade Register under number 68991665 and listed on the London Stock Exchange, with a secondary listing on the Vienna Stock Exchange (Wiener Börse).

The Group is a global industrial group whose core activities include the development and production, sale, installation and maintenance of high-grade refractory products and systems used in industrial high-temperature processes exceeding 1,200°C.

Basis for preparation

The Consolidated Financial Statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. The Consolidated Financial Statements also comply with the financial reporting requirements included in Title 9 of Book 2 of the Dutch Civil Code.

The accounting policies that follow have been consistently applied to all years presented, except where otherwise indicated. With the exception of specific items such as derivative financial instruments, plan assets for defined benefit obligations, financial assets measured at Fair Value through Profit or Loss (FVPL) or Other Comprehensive Income (FVOCI) and financial liabilities measured at FVPL, the Consolidated Financial Statements are prepared on a historical cost basis.

The financial year of RHI Magnesita N.V. and the Group corresponds to the calendar year. Subsidiaries with a financial year different to the Group, due to local legal requirements, provide financial information to allow consolidation consistent with the Group's financial year. The Consolidated Financial Statements are presented in Euros and all values are rounded to the nearest € million with one decimal, except where otherwise indicated. The Group has availed of the exemption provided by section 264 paragraph 3 HGB of the German Commercial Code for the following entities: RHI Urmitz AG & Co. KG (Koblenz), Magnesita Refractories GmbH (Wiesbaden), RHI Magnesita Sales Germany GmbH (Wiesbaden), RHI Refractories Site Services GmbH (Wiesbaden), RHI Magnesita Deutschland AG (Wiesbaden), RHI Magnesita Wetrot GmbH (Puschwitz) and RHI Magnesita Bochum GmbH (Bochum). According to this provision, the mentioned companies are exempt from preparing statutory financial statements, if required by the German Commercial Code, since they are included in the Consolidated Financial Statements of the Group.

Basis of consolidation

The Consolidated Financial Statements consolidate the Financial Statements of the Group. Subsidiaries are consolidated from the date on which the Group obtains control, including when control is obtained via potential voting rights, and continue to be consolidated until the date that control ceases.

The financial information of subsidiaries is prepared for the same reporting year as the parent company, using consistent accounting policies. When the Group ceases to have control, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in the Statement of Profit or Loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in Other Comprehensive Income (OCI) in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This treatment may mean that amounts previously recognised in OCI are recycled through the Statement of Profit or Loss. Intercompany balances and transactions, including unrealised profits arising from intragroup transactions, are eliminated in full. Unrealised losses are eliminated in the same way as unrealised gains except that they are only eliminated to the extent that there is no evidence of impairment.

Non-controlling interests represent the equity in subsidiaries that is not attributable, directly or indirectly, to the Group's shareholders.

Please refer to the Company Financial Statements of RHI Magnesita N.V. for a list of the Company's subsidiaries, joint ventures and associates in which it holds more than 20%.

Going concern

In considering the appropriateness of adopting the going concern basis in preparing the Consolidated Financial Statements,

the Directors have assessed the potential cash generation of the Group and considered a range of downside scenarios that model different degrees of potential economic downturn, using the same model performed for the viability assessment. This assessment covers the period to 31 December 2025.

The scenarios considered by the Directors include a severe but plausible downside and a reverse stress test which determines the level of EBITDA that could breach the Group's debt covenant. Further mitigating actions within management control would be undertaken in such scenarios, including but not limited to: working capital and SG&A reduction, deferring capital expenditure, or reducing or cancelling the dividend, but these were not incorporated in the downside modelling.

The Directors have also considered the Group's current liquidity and available facilities. As of 31 December 2023, the Consolidated Statement of Financial Position reflects cash and cash equivalents of €703.5 million (2022: €520.7 million). In addition, the Group has access to a €600.0 million (2022: €600.0 million) Revolving Credit Facility (RCF), which is currently undrawn and not relied upon for the purpose of the going concern assessment. The Group has complied with the financial covenants of the Group's loan agreements (refer to Note (27)).

In the scenarios assessed and taking into account liquidity, available resources and before the inclusion of all mitigating actions, the Directors consider it is appropriate to continue to adopt the going concern basis in preparing the Consolidated Financial Statements for the period ended 31 December 2023.

2. Impact of new financial reporting standards and interpretations

Management has assessed the impact of new or amended IFRS and interpretations issued by the IASB and IFRS endorsed by the European Union effective on or after 1 January 2023. Management assessed that application of these has not had a material impact on the Consolidated Financial Statements for 2023. Refer to Note (3) on the results of the impact analysis on the implementation of a minimum taxation for income taxes under the new Pillar II legislation.

Furthermore, management has assessed the impact of new or amended IFRS and interpretations issued by the IASB that have not yet become effective. No new or amended IFRS or interpretations have been early adopted. Except for the amendments to IAS 7 & IFRS 7 covering new disclosure requirements for the Group's existing liabilities related to supply finance arrangements, management does not anticipate any significant impact on the Consolidated Financial Statements in the period of initial application after the adoption of these amendments.

Since supplier financing arrangements related to trade payables (see Note (32)) exist in the Group, and are expected to continue in the coming years, the amendments to IAS 7 & IFRS 7 will bring additional disclosures on the effects of these arrangements on the Group's liabilities, cash flows and exposure to liquidity risk. The Group is analysing the impacts of the additional disclosures in terms of content and scope.

3. Significant Accounting Policies, Judgements and Estimates

Interests in other entities

Business combinations

Business combinations are accounted for using the acquisition method. The identifiable assets acquired and liabilities assumed, including any contingent consideration, are recognised at their fair values at the acquisition date. The amount of the purchase consideration and value of non-controlling interest on acquisition, if any, above the fair value of assets and liabilities is recognised as goodwill. A bargain purchase gain, if any, is recognised within other income immediately. Transaction costs related to a business combination are expensed as incurred. The acquisition of a non-controlling interest in a subsidiary and the sale of an interest are accounted for as transactions within equity unless they result in the loss of control. Sales of interests accounted for as equity transactions also include share issues in subsidiaries which dilute RHI Magnesita N.V.'s share in the subsidiary's net assets and where the dilution does not result in the loss of control. The difference between the purchase consideration or sale proceeds after tax and the relevant proportion of the non-controlling interest, measured by reference to the carrying amount of the interest's net assets at the date of acquisition or sale, is recognised in retained earnings as a movement in equity attributable to the shareholders of RHI Magnesita N.V.

Where the Group acquires less than 100% of shares in a business combination, IFRS 3 'Business Combinations' allows an accounting policy choice whereby non-controlling interest is either reflected at the proportionate share of the acquired identifiable net assets (excluding goodwill) or at fair value. This accounting policy choice can be exercised individually for each acquisition. If a non-wholly owned subsidiary of RHI Magnesita N.V. is the deemed acquirer in a business combination, goodwill is measured either as the excess of the full consideration transferred plus non-controlling interests, if any, over the acquired identifiable net assets or as the excess of RHI Magnesita N.V.'s share in the consideration transferred plus non-controlling interests, if any, over the acquired identifiable net assets. This accounting policy choice can be exercised individually for each acquisition too. For business combinations achieved in stages, the Group's previously held equity interest is remeasured to fair value at the acquisition date. Any gains and losses arising from such remeasurement are recognised in profit or loss.

Net assets of subsidiaries not attributable to the Group are shown separately in equity as non-controlling interests.

As part of a business acquisition or subsequently, the Group may enter into agreements with non-controlling interests in the form of a call option, a put option or a forward contract to acquire the outstanding shares. A call option provides the Group with the right to acquire the outstanding shares not already owned, while a written put option allows the non-controlling interest to sell their shares to the Group. A forward contract creates a commitment for the Group to purchase and for the non-controlling interest to sell the outstanding shares at a later date. The option or forward price may be based on an earnings multiple such as EBITDA subject to contractual limits, if any, or may be fixed and exercisable at a future date. A financial liability is recognised on the written put option at the present value of the estimated redemption amount. Where the option is assessed to result in the non-controlling interest transferring the risks and rewards of ownership to the Group, on acquisition, the financial liability forms part of the purchase consideration with no value assigned to non-controlling interests. For fixed price call and put options, the risks and rewards of ownership relating to the outstanding shares are assumed to have transferred to the Group.

Where the risks and rewards of ownership under the option are not transferred to the Group, the financial liability is not considered as part of the purchase consideration and a non-controlling interest is recognised on acquisition. The financial liability is initially recognised against equity attributable to shareholders of RHI Magnesita N.V. The Group applies the provisions of IAS 32 'Financial Instruments: Presentation' and subsequently derecognises the non-controlling interest to the extent that it is equal or less than the financial liability, against equity attributable to shareholders of RHI Magnesita N.V.

The subsequent measurement of the financial liability is conditional on the nature of the underlying cash consideration. If the option or forward contract will be settled at a fixed cash consideration, the financial liability is subsequently measured at amortised cost. If the option or forward contract will be settled at a variable cash consideration (e.g. EBITDA multiple or similar P&L measures) the financial liability is subsequently measured at fair value through profit or loss (FVPL). Fair value changes resulting from the remeasurement of the financial liability are reflected within other net financial expenses.

Dividends paid to non-controlling interest with a fixed price or option are reflected as an expense within other finance expenses unless there is a contractual right to reduce the liability.

Goodwill may also arise upon investments in joint ventures and associates, being the surplus of the cost of investment over the Group's share of the net fair value of the identifiable net assets. Any such goodwill is recorded within the corresponding investment in joint ventures and associates.

Significant judgement: Recognition of non-controlling interest of Jinan New Emei

The acquisition of Jinan New Emei Industries Co Ltd. includes a commitment for the Group to acquire the outstanding shares (35%), see Note (42). The Group has concluded, based on the terms and pricing of the commitment, that the risks and rewards of ownership associated with the outstanding shares have not been transferred to the Group. Therefore, the financial liability

was not considered as part of the purchase consideration and a non-controlling interest was recognised on acquisition. The financial liability arising from the commitment has been recognised in accordance with the Group's accounting policy related to fixed-term or puttable non-controlling interests. Being that the financial liability was initially recognised against equity attributable to shareholders of RHI Magnesita N.V. while the said non-controlling interests were derecognised to zero - also against equity attributable to shareholders of RHI Magnesita N.V.

Significant estimate: Measurement of assets acquired and liabilities assumed in business combinations

Estimates relating to the calculation of fair values of acquired assets, liabilities and contingent liabilities are required within the context of business combinations disclosed in Note (42).

Where intangible assets are identified, estimates are necessary for the determination of fair values by means of discounted cash flows, including the duration, amount of future cash flows, and discount rate. Fair values of physical assets are estimated with reference to comparable assets in the market.

When making estimates in the context of purchase price allocations on major acquisitions, the Group consults with independent experts who accompany the execution of the discretionary decisions and record this in appraisal documents. The Group has a period of one year from the date of control of the acquired businesses to update initial fair value estimates. The Group does not expect changes in these fair value estimates to have a significant impact on the recognised assets and liabilities over the remaining measurement period.

Goodwill and Other intangible assets

Goodwill

Goodwill arising on consolidation represents the excess of the cost of acquisition over the Group's interest in the fair value of the identifiable assets, liabilities and contingent liabilities of a subsidiary at the date of acquisition. Goodwill is initially recognised at cost and is subsequently measured at cost less any accumulated impairment losses. Goodwill recognised as an asset is reviewed for impairment at least annually.

On disposal of a subsidiary, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

Other intangible assets

Mining rights

Mining rights were recognised in the course of the purchase price allocation for former Magnesita Group and are amortised based on the depletion of the related mines. Depletion is calculated based on the volume mined in the period in proportion to the total estimated economically viable volume.

Customer relationships

Customer relationships arise from the acquisition of business and are measured at assigned fair values on acquisition, less accumulated amortisation and impairments. These intangibles are amortised on a straight-line basis over their expected useful lives.

Development costs

Research costs are expensed in the year incurred and included in general and administrative expenses. Development costs, including internally developed software, are only capitalised if the costs can be measured reliably and are expected to result in future economic benefits either through use or sale. Capitalisation will also only arise when the product or process development can be clearly defined and is feasible in technical, economic and capacity terms. For internally developed software, costs are capitalised when these can be directly and conclusively allocated to individual programmes and represent a significant extension or improvement on existing software. All other internally developed software costs are expensed. Development costs are amortised on a straight-line basis over their expected useful lives of up to ten years, with internally developed software amortised over a period of up to four years. Amortisation is recognised in cost of sales.

Other intangible assets

These mainly represent purchased third-party software, land-use rights and patent fees and are recognised when future associated economic benefits are expected to accrue to the Group. These intangibles are initially measured at their acquisition cost and amortised over their expected useful lives.

The useful lives of the Group's main classes of intangible assets are:

Customer relationships	6 to 20 years
Internally generated intangible assets	4 to 18 years
Other intangible assets	4 to 65 years

The useful economic lives of intangible assets are reviewed regularly and adjusted if necessary.

The carrying value of other intangible assets are assessed at each reporting period for indicators of impairments. See below for the accounting policy relating to impairment of non-current assets other than goodwill and intangible assets with indefinite useful life.

Significant judgement: Measurement of mining rights

Management has assessed that given the few or no viable alternatives for the Group's refractory products, which are extracted from the Group's mines and used in the construction and automotive industries, together with their continued use in the transition to a green economy, no indicators of impairment have arisen and as a consequence the useful lives remain unchanged.

Property, plant and equipment

Property, plant and equipment is measured at acquisition or construction cost, less accumulated depreciation and accumulated impairment losses. These assets are depreciated on a straight-line basis over their expected useful life to their estimated residual values and from when they are available for use in the manner intended by management.

Construction costs of assets comprise of direct costs as well as a proportionate share of capitalisable overhead costs and borrowing costs. If borrowed funds are directly attributable to an investment, borrowing costs are capitalised as a cost of the assets. If no direct connection between an investment and borrowed funds can be demonstrated, the average rate on borrowed capital of the Group is used as the capitalisation rate due to the central funding of the Group.

Expected demolition and disposal costs at the end of an asset's useful life are capitalised as part of its acquisition cost and

recorded as a provision. The recognition criteria are a legal or constructive obligation towards a third-party and the ability to reliably estimate future cost.

Land and plant under construction are not depreciated. Depreciation of property, plant and equipment is based on the following useful lives:

Real estate, land and buildings	8 to 60 years
Technical equipment and machinery	8 to 50 years
Other plant, office equipment, furniture and fixtures	3 to 35 years

The carrying value of property, plant and equipment is assessed at each reporting period for indicators of impairments. See below for accounting policy relating to impairment of non-current assets other than goodwill and intangible assets with indefinite useful life.

The residual values and economic useful lives of property, plant and equipment, are reviewed regularly and adjusted if necessary.

When components of plant or equipment have to be replaced at regular intervals, the relevant replacement costs are capitalised when economic benefits are expected to arise for the Group. The carrying amount of the replaced components is derecognised. Regular maintenance and repair costs are expensed as incurred.

Gains or losses from the disposal of property, plant and equipment, which result from the difference between the net realisable value and the carrying amount, are recognised as income or expense in the Consolidated Statement of Profit or Loss.

Significant estimate: Useful lives of property, plant and equipment and intangible assets

Management uses its experience to estimate the remaining useful life of an asset. The actual useful life of an asset may be impacted by an unexpected event that may result in an adjustment to the carrying amount of the asset. No such events are expected to arise which would have a material impact on carrying values within 12 months from the balance sheet date.

Leases

A contract, or part of a contract, that conveys the right to control the use of an identified asset for a period of time in exchange for payments to be made to the owners (lessors) is accounted for as a lease. Contracts are assessed to determine whether it is or contains, a lease at inception or when the terms and conditions of a contract are significantly changed. The lease term is the non-cancellable period of a lease, together with contractual options to extend or to terminate the lease early, where it is reasonably certain that an extension option will be exercised, or a termination option will not be exercised. At the commencement of a lease contract, a right-of-use asset and a corresponding lease liability are recognised, except for low-value items or for lease terms of less than 12 months. The commencement date of a lease is the date on which the underlying asset is made available for use. The lease liability is measured at an amount equal to the present value of the lease payments during the lease term that are not paid at that date. The lease liability includes contingent rentals and variable lease payments that depend on an index, rate, or where they are fixed payments in substance.

The lease liability is remeasured when the contractual cash flows of variable lease payments change due to a change in an index or rate when the lease term changes following a reassessment. Lease payments are discounted using the interest rate implicit in the lease. If that rate is not readily available, the incremental borrowing rate is applied. The incremental borrowing rate reflects the rate of interest that the lessee would have to pay to borrow over a similar term and similar security, the funds necessary to obtain an asset of a similar nature and value to the right-of-use asset in a similar economic environment.

In general, a corresponding right-of-use asset is recognised for an amount equal to each lease liability, adjusted by the amount of any pre-paid lease payment relating to the specific lease contract, less any lease incentives, and for any estimated restoration and removal costs. The depreciation on right-of-use assets is recognised in the Statement of Profit or Loss. Right-of-use assets are assessed for impairment indicators (see accounting policy on impairment of non-current assets).

Impairment of goodwill, property, plant and equipment and other intangible assets

Goodwill

Goodwill is reviewed at least annually for impairment. Any impairment loss is recognised as an expense immediately. For the purpose of impairment testing, goodwill is allocated to groups of individual Cash-Generating Units (CGUs) expected to benefit from the combination. If the recoverable amount of the CGU is less than the carrying amount of the CGU (including goodwill) allocated to it, the resulting impairment loss is applied first to the allocated goodwill and then to the other assets on a pro-rata basis of the carrying amount of each asset. Reversals of impairment losses on goodwill are not permitted. The cash flows used to determine the recoverable amount of the CGU, including goodwill, is consistent with the description provided below for property, plant and equipment and other intangibles.

Significant estimate: Determination of recoverable amounts of CGUs which include goodwill

Management makes use of various estimates and assumptions in determining the cash flow forecasts used to determine the recoverable amounts of CGUs to which goodwill is allocated for the annual impairment test. Key assumptions include discount rates used to discount cash flows, the perpetual annuity growth rate, projected revenue and projected EBIT margin of the associated CGU. For further details on impairment tests for CGUs which include goodwill, refer to Note (17).

Property, plant and equipment and other intangibles

Property, plant and equipment, including right-of-use assets and intangible assets are tested for impairment if there is any indication that the value of these items may be impaired. An asset is considered to be impaired if its recoverable amount is less than its carrying amount. In the Group, individual assets do not generate cash inflows independent of one another and assets are combined in CGUs, which largely generate independent cash inflows. These CGUs are combined in strategic business units and reflect the market presence and appearance and drive cash inflows. The organisational structures of the Group reflect these units. In addition to the joint management and control of the business activities in each unit, the sales know-how, the knowledge of the long-standing customer relationships or knowledge of the customer's production facilities and processes further support these units. Product knowledge is manifested in the application-oriented knowledge of chemical, physical and thermal properties of RHI Magnesita products. The services offered extend over the life cycle of products at the customer's plant, from the appropriate installation and support of optimal operations, to environmentally sound disposal with the customer or sustainable reuse in the Group's production process. These factors determine cash inflow to a significant extent and consequently form the basis for the CGU structures.

The CGUs of the strategic business unit Steel are Linings and Flow Control. These two CGUs are determined according to the production stages in the process of steel production. In the Industrial business unit, each industry line of business (Glass, Cement/Lime, Non-Ferrous Metals and Environment, Energy, Chemicals) forms a separate CGU. All raw material producing facilities are combined in one CGU.

According to IAS 36 'Impairment of Assets' the recoverable amount of a CGU is defined as the higher of its fair value less costs of disposal and its value in use (present value of future cash flows). For the purpose of testing CGUs for impairment the Group determines the recoverable amount of the CGUs solely on the basis of value in use. In assessing value in use, the estimated future cash flows of the CGU in its present condition are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks, including country, specific to the CGU.

The cash flows projections used for impairment testing are based on the strategic business and financial planning model of the Group including the 2024 budget, as approved by the Board, and the Long-Term Plan covering a four-year period. The terminal value is based on a growth rate derived from the difference of the current and the possible degree of utilisation of the assets. To forecast the CGUs' cash flows, management predicts the growth rate using external sources for the development of the customers' industries and expert assumptions, including forecasts about the regional growth of steel production and the output of the non-steel clients. Growth rates are also influenced by the development of the specific refractory consumption patterns, including technological improvements.

If the carrying amount is higher than the recoverable amount, an impairment loss equivalent to the resulting difference is recognised in the Statement of Profit or Loss. If the reason for an impairment loss recognised in the past for property, plant and equipment or for other intangible assets ceases to exist, a reversal of the impairment is recognised in profit or loss. An impairment loss is reversed only to the extent that the CGUs carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised in prior years.

Significant judgement: Identification of impairment indicators related to CGUs without goodwill

Management reviewed CGUs for indicators of impairment. These indicators included both external factors affecting the CGUs, such as laws and regulations in specific countries and global and local economic conditions and internal factors, including but not limited to, useful lives of assets, major breakdowns or decisions to divest from certain businesses. Based on the impairment indicator review, no impairment indicators were identified at any of the CGUs, that did not have goodwill allocated to them.

Additionally, management has assessed the useful lives of assets and these continue to be appropriate due to the limited refractory and other product alternatives available and as the steel and industrial sectors in which the Group operates, continue to play a significant part in the transition towards sustainable output and the transition to a green economy.

Financial instruments

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. In general, financial instruments can be classified to be measured subsequently at amortised cost, fair value through profit or loss or fair value through other comprehensive income. Classification of financial assets depends on the contractual terms of the cash flows as well as on the entity's business model for managing the financial assets. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Financial assets are classified as amortised cost, if the contractual cash flows include solely payments of principal and interest and which are held in order to collect the contractual cash flows. If the contractual cash flows include solely payments of principal and interest, but are held to collect both the contractual cash flows and sell the financial asset, then they are classified as fair value through other comprehensive income. If the contractual cash flows do not solely include payments of principal and interest, then they are classified as fair value through profit or loss.

The Group initially recognises securities on the trading date when it becomes a party to the contractual provisions of the instruments. All other financial assets and financial liabilities are initially recognised on the date when they are originated. Financial instruments, except for trade receivables, are initially recognised at fair value. Financial assets are derecognised if the entity transfers substantially all the risks and rewards or if the entity neither transfers nor retains substantially all the risks and rewards and has not retained control. Financial liabilities are derecognised when the contractual obligations are settled, withdrawn or have expired.

Investments in debt securities are subsequently measured at fair value through profit and loss if the contractual terms of cash flows do not solely include payments of principal and interest. Otherwise, they are subsequently carried at amortised cost.

Investments in equity securities, including non-consolidated subsidiaries, are of minor importance and recognised and measured either at fair value through profit or loss, or at fair value through OCI, if the latter option was exercised.

Financial assets at amortised costs are measured by applying the effective interest method.

Trade and other current receivables

Trade receivables are recognised initially at the amount of consideration that is unconditional, unless they contain significant financing components when they are recognised at fair value and, depending on the business model, subsequently carried either at amortised cost minus any valuation allowances or at fair value through other comprehensive income minus any valuation allowances for expected or incurred credit losses. Irrespective of the measurement category, any impairment losses are recognised in the Statement of Profit or Loss. Valuation allowances for expected credit losses are calculated in accordance with the simplified approach of the impairment model for financial instruments (see accounting policy on impairment of financial assets below).

The Group sells trade receivables to financial institutions in the scope of factoring arrangements on a recurring basis based on its liquidity needs. Prospectively, the extent and the specific trade receivables impacted by future sales cannot be identified. Therefore, trade receivables which qualify for a future sale under the terms of existing factoring agreements are allocated to a portfolio whose objective is collecting the contractual cash flows and selling them. These trade receivables are carried at fair value through other comprehensive income minus any valuation allowances. Whereas trade receivables which do not qualify for a future sale under the terms of existing factoring agreements are allocated to a portfolio whose objective is only to collect the contractual cash flows and are therefore carried at amortised cost minus any valuation allowances.

In factoring arrangements, trade receivables are derecognised where the Group transfers substantially all the risks and rewards associated with the financial assets. Payments received from customers following the sale are recognised in current borrowings until repaid to the factorer.

Cash and cash equivalents

Cash and cash equivalents include cash in hand, cheques received, cash at banks and short-term cash deposits with an original term of up to three months. Moreover, investments in money market funds exposed to insignificant value fluctuations due to their high credit rating and investments in short-term money market instruments that can be converted to defined cash amounts within a few days at any time, are also reflected as cash equivalents.

Borrowings

Financial liabilities include liabilities to financial institutions and other lenders and are measured at fair value less directly attributable transaction costs at initial recognition. In subsequent periods, these liabilities are measured at amortised cost applying the effective interest rate method.

A financial liability is derecognised when the obligation under the liability is discharged (by payment or legal release), cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability. The difference in the respective carrying amounts is subsequently recognised in the Statement of Profit or Loss, including any costs or fees.

Trade payables and other current liabilities

These liabilities are initially recognised at fair value, and subsequently measured at amortised cost. The Group may participate in supply chain finance arrangements whereby suppliers may elect to receive a discounted early payment of their invoice from a bank as opposed to the agreed contractual payment terms. Where this arises, the Group settles the amount owed to the bank. The invoice due date as well as the value of the original liability remains unaltered. Financial liabilities subject to supply chain finance arrangements continue to be classified as trade payables since they represent liabilities to pay for goods or services, are invoiced or formally agreed with the supplier and are part of the working capital used in the Group's normal operating cycle.

Derivative financial instruments and hedging activities

Derivative financial instruments not designated as hedges

Derivative contracts are used in the management of interest rate risk, commodity price risk and foreign currency risk. These derivative financial instruments, which are not designated in an effective hedging relationship in accordance with IFRS 9 'Financial Instruments', are recognised initially at fair value on the date on which a derivative contract is entered into and subsequently remeasured at fair value with changes in fair value reflected in the Statement of Profit or Loss. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative.

Derivative financial instruments include forward exchange contracts and embedded derivatives in open orders denominated in a currency other than the functional currency of either contracting party, with the assessment made on a case-by-case basis at the respective forward rate on the reporting date. These forward rates are based on spot rates, including forward premiums and discounts. Unrealised valuation gains or losses and results from the realisation are recognised in the Statement of Profit or Loss in net expense of foreign exchange effects and related derivatives.

Forward purchase or sale arrangements for the physical delivery of non-financial assets that are entered into in line with the Group's expected purchase, sale or usage requirements ("own use") and are normally entered into to hedge the associated price risk are not recognised or measured at fair value. These forward contracts are assessed to be off-balance-sheet executory contracts due to their own use features. If the own use exemption is not met, the forwards will be recognised at fair value, with fair value remeasurement recorded in the Statement of Profit or Loss.

Significant Judgement: Own use exemption on gas and power forward purchase and physical delivery CO₂-certificate forwards

Due to the reduction of free CO₂ emission certificates and the expected increase in CO₂ market prices, the Group hedges the associated price risk by use of physical delivery forward purchases for own use. The Group also enters into fixed price and quantity forward gas and power contracts to secure supply for its production process and reduce price volatility. The own use exemption does not require fair value recognition and measurement of the forward purchases and thus volatility in the Statement of Profit or Loss can be avoided. The own use exemption requires contracts to be entered into and continued to be held for delivery and usage requirements of the Group. The Group settles the forwards through physical delivery and does not expect to sell any (unexpected) surplus of either gas, power or CO₂ emission certificates. Management have judged that these forward purchases based on current and expected future requirements satisfy the own use exemption and have not applied fair value recognition and measurement.

Derivative financial instruments designated as cash flow hedges

For derivative financial instruments which are designated as an effective cash flow hedge in accordance with IFRS 9 'Financial Instruments', hedge accounting is applied. The hedging instruments, used to hedge the underlying items, are measured at fair value with the effective part of the fair value changes recorded in OCI as an unrealised gain or loss. At the time of the realisation of the underlying transaction, the fair value changes of the hedging instrument recognised in OCI is recycled to the Statement of Profit or Loss. Ineffective parts of the cash flow hedges are recognised immediately in the Statement of Profit or Loss. Where the hedged item is a non-financial asset or liability, the amount accumulated in OCI is transferred to the initial carrying amount of the asset or liability. If the hedged transaction is no longer expected to take place, the accumulated amount recorded in OCI is reclassified to the Statement of Profit or Loss. All relationships between hedging instruments and hedged items are documented, as well as risk management objectives and strategies for undertaking hedge transactions. The effectiveness of hedges is also continually assessed and hedge accounting is discontinued when there is a change in the risk management strategy.

Net investment hedge

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge are recognised in OCI and presented in the currency translation difference reserve within equity while any gains or losses relating to the ineffective portion are recognised in the Statement of Profit or Loss. On disposal of the foreign operation, the cumulative amount of any such gains or losses in OCI is reclassified to the Statement of Profit or Loss.

Impairment of financial assets

Impairment of certain financial assets is based on expected credit losses (ECL). ECL is defined as the difference between all contractual cash flows the entity is entitled under the contract and the cash flows expected to be received. The measurement of expected credit losses is generally a function of the probability of default, loss given default and the exposure at default.

Loss allowance is measured for expected credit losses on debt instruments, trade receivables and contract assets measured at amortised cost. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group recognises lifetime ECL for trade receivables and contract assets by applying the simplified approach. The ECL on these financial assets are generally estimated using a provision matrix based on the Group's historical credit loss experience for customer groups located in different geographic regions. Forward-looking information is incorporated in the determination of the applicable loss rates for trade receivables. For the Group, the general economic development of the countries in which it sells its goods and services is relevant in determining if the adjustment of the historical loss rates is necessary.

For all other financial instruments, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Group makes use of the practical expedient for financial instruments with an 'investment grade' rating that it is assumed to be of low credit risk and with no significant increase in the credit risk. Under the practical expedient, the expected credit loss is calculated using the 12-month ECL. Among other factors, the Group considers a significant increase in credit risk to have taken place when contractual payments are more than 30 days past due.

The Group assumes that a default event has occurred when trade receivables are 180 days past due unless reasonable and supportable information confirms otherwise. For those financial instruments where objective evidence of default is present, an individual assessment of ECL takes place.

Generally, financial instruments are written off when there is no reasonable expectation of recovering amounts due.

Inventories

Inventories are stated at the lower of cost or net realisable value as of the reporting date. The determination of acquisition cost of purchased materials is based on the average cost. Finished goods and work in progress are valued at fixed and variable

of purchased materials is based on the average cost. Finished goods and work in progress are valued at less and further production cost. The net realisable value is the estimated selling price in the ordinary course of business minus any estimated cost to complete and to sell the goods. Impairments due to reduced usability are reflected in the calculation of the net realisable value.

Provisions and contingent liabilities

Provisions are recognised when the Group incurs a legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to meet this obligation, and the amount of the obligation can be reliably estimated.

Provisions for warranties are created for individual contracts at the time of the sale of goods or after the service has been provided. The amounts of the provisions are based on the expected or actual warranty claims.

Provisions for restructuring are recognised once a detailed formal restructuring plan has been developed and announced prior to the reporting date or whose implementation was commenced prior to the reporting date.

The Group recognises provisions for demolition and disposal costs and environmental damages. The Group's facilities and its refractory, exploration and mining operations are subject to environmental and governmental laws and regulations in each of the jurisdictions in which it operates. These laws govern, among other things, reclamation or restoration of the environment in mined areas and the clean-up of contaminated properties. These provisions include the estimated demolition and disposal costs of plants and buildings as well as environmental restoration costs arising from mining activities, based on the present value of estimated cash flows of the expected costs. The estimated future costs of asset retirements are reviewed annually and adjusted, if appropriate.

A provision for an onerous or unfavourable contract is recognised when the expected benefits to be derived from a contract are lower than the unavoidable cost of meeting its obligations under the contract. Provisions are measured at the present value of the unavoidable costs of meeting the obligation under the contract which exceed the economic benefits expected to arise from that contract.

Provisions for labour and civil contingencies are recognised for all risks referring to legal proceedings that represent a probable loss. Assessment of the likelihood of loss includes an analysis of available evidence, including the opinion of internal and external legal advisors of the Group.

Provisions are measured at their discounted settlement value as of the reporting date if the discounting effect is material.

If maturities cannot be estimated, they are shown within current provisions.

Significant estimate: Measurement of other provisions

The recognition and measurement of other provisions disclosed in Note (31) are based on best estimates using the information available at the reporting date. The estimates take into account the underlying legal or constructive obligation and are performed by internal experts or, when appropriate, also by external experts. Despite the best possible assumptions and estimates, cash outflows expected at the reporting date may deviate from actual cash outflows. As soon as additional information is available, the estimates made are reviewed and provisions are also adjusted. The majority of other provisions refers to an unfavourable contract which was recognised in the course of the acquisition of former Magnesita Group and is mainly based on an estimate of forgone profit margins compared to market conditions. Moreover, restructuring provisions and provisions related to the rehabilitation and restoration of the mining sites or for environmental damages are recorded within other provisions. These are subject to measurement uncertainties in terms of the estimated costs to settle the obligation, estimated term until rehabilitation and restoration, discount rate and inflation rate. Changes in these parameters may result in higher or lower provisions.

A contingent liability is disclosed, where material, if the existence of the obligation will only be confirmed by future events or where the amount of the obligation cannot be measured with reasonable reliability. A contingent liability is not disclosed if the likelihood of a material cash outflow is considered remote. The Group's contingent liabilities are reviewed on a regular basis.

Employee related benefits

Provisions for post-employment benefits

Pension plans

With respect to post-employment benefits relating to pensions, a differentiation is made between defined contribution and defined benefit plans.

Defined contribution plans limit the Group's obligation to the agreed contributions to earmarked pension schemes. The contributions are expensed as incurred.

Defined benefit plans require the Group to provide agreed benefits to active and former employees and their dependents.

Pension obligations are measured using the projected unit credit method and is netted against the fair value of the plan assets, if any. If the plan assets are not sufficient to cover the obligation, the net obligation is recognised as a liability. However, if the plan assets exceed the obligations, the net surplus recognised is limited to reductions of future contribution payments to the plan and is presented as other non-current assets in the Statement of Financial Position. The Group applies the requirements of IFRIC 14 and restricts recognition of the net surplus by applying an asset recognition ceiling where the Group does not have an unconditional right to a refund, assuming full settlement of the liabilities. Changes in the asset ceiling are recorded in OCI.

The present value of defined benefit obligations is determined separately for each plan, annually, by independent qualified actuaries. The present value of future benefits is based on the length of service, expected wage/salary developments and pension adjustments.

The expense to be recognised in a period includes current and past service costs, settlement gains and losses, interest expenses from the interest accrued on obligations, interest income from plan assets and administration costs paid from plan assets. The net interest expense is shown separately in net finance costs. All other expenses related to defined benefit plans are allocated to the costs of the relevant functional areas.

Actuarial assumptions required to calculate these obligations include the discount rate, increases in wages/salaries and pensions, retirement starting age and probability of employee turnover and actual claims. The calculation is based on local demographic parameters.

Interest rates, which are based on high-quality corporate bonds issued with comparable maturities and currencies, are applied to determine the present value of pension obligations. In countries where there is not a sufficiently liquid market for high-quality corporate bonds, the returns on government bonds are used as a basis.

The rates of increase for wages/salaries are based on an average of past years, which is also considered to be realistic for the future, while the retirement age is based on the respective statutory provisions of the country concerned.

Remeasurement gains and losses are recorded net of deferred taxes under OCI in the period incurred.

Other post-employment benefits

Includes provisions for termination benefits primarily related to obligations to employees whose employment is subject to Austrian law.

Employees who joined an Austrian company before 31 December 2002 receive a one-off lump-sum termination benefit as defined by the Austrian labour legislation if the employer terminates the employment or when the employee retires. It is

regarded as a post employment benefit and classified as a defined benefit plan under IAS 19 'Employee Benefits'. The termination payment depends on the relevant salary at the time of the termination as well as the number of years of service and ranges between two and 12 monthly salaries. These defined benefit obligations are measured using the projected unit credit method applying an accumulation period of 25 years. Remeasurement gains and losses are recorded directly to OCI after considering tax effects.

For employees who joined an Austrian company after 31 December 2002, employers are required to make regular contributions equal to 1.53% of the monthly wage/salary to a statutory termination benefit scheme. The Company has no further obligations. Claims by employees to termination benefits are filed with the statutory termination benefit scheme, while the continuous contributions are treated as defined contribution plans and included in the personnel expenses of the functional areas.

Significant estimate: Pension plans and other post-employment benefits classified as defined benefit plans

The measurement of defined benefit obligation and plan assets requires use of estimates such as discount rates, mortality rates, salary increases and inflation. These estimates are reviewed and updated when a valuation is performed by third-party experts. Further details of the estimates and assumptions together with sensitivities on changes to assumptions is reflected in Note (29). Changes in these assumptions may result in differences between cash outflows expected at the reporting date and actual cash outflows.

Other employee benefits

This includes service anniversary bonuses, payments to semi-retirees and lump-sum settlements.

Service anniversary bonuses are one-time special payments that are dependent on the employee's wage/salary and length of service. The employer is required by collective bargaining agreements or company agreements to make these payments after an employee has reached a certain number of years of uninterrupted service with the same company. Obligations are mainly related to service anniversary bonuses in Austrian and German group companies. Provisions for service anniversary bonuses are calculated based on the projected unit credit method. Remeasurement gains or losses are recorded in the personnel costs of the functional areas.

Local labour laws and other similar regulations require individual group companies to create provisions for semi-retirement obligations. The obligations are partially covered by qualified plan assets and are reported on a net basis in the Statement of Financial Position.

Income taxes

Income tax expense represents the sum of current tax and deferred tax.

Income tax is recognised in the Statement of Profit or Loss, except to the extent that it relates to items recognised in OCI or directly in equity, including tax-related impacts.

Current tax is based on the taxable profit for the period and is determined in accordance with the rules applicable in the relevant jurisdictions and includes taxes relating to prior periods. The liability for current tax is calculated using tax rates and laws that have been enacted or substantively enacted at the balance sheet date.

Deferred tax is provided, using the liability method, on temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. Deferred tax liabilities are recognised for all taxable temporary differences except:

- Where the deferred tax liability arises on initial recognition of goodwill
- Where the deferred tax liability arises on the initial recognition of an asset or liability in a transaction that is not a business combination, at the time of the transaction, affects neither accounting profit nor taxable profit or loss and, at the time of the transaction, does not give rise to equal taxable and deductible temporary differences
- In respect of taxable temporary differences associated with investments in subsidiaries and associates and interest in joint arrangements, where the Group is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future
- For financial instruments which were issued by subsidiaries to non-controlling interests and which are classified as a financial liability in accordance with IFRS

Deferred tax assets are recognised for deductible temporary differences, carry-forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which these can be utilised, except where the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and at the time of the transaction, affects neither accounting profit nor taxable profit and loss and, at the time of the transaction, does not give rise to equal taxable and deductible temporary differences.

In respect of deductible temporary differences associated with investments in subsidiaries, associates and interest in joint arrangements, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable or increased to the extent that it is probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date. Deferred taxes of the Group's Austrian subsidiaries are determined at the corporation tax rate which is expected to be applicable when the temporary differences reverse (24.0% if the temporary difference is reversing in 2023 and 23.0% if the temporary difference reverses in 2024 or later). Deferred tax assets and liabilities of the Group's Brazilian subsidiaries are measured at 34.0%.

Deferred tax assets and liabilities are offset only when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the current tax assets and liabilities on a net basis or to realise the assets and settle the liabilities simultaneously.

Where tax legislation may not be clear or result in uncertainty, the Group will determine its tax obligations and resulting income tax expense using an approach which it believes has a probable chance of being accepted by the tax authorities based on historical experience, legal advice and communication with the tax authorities, as appropriate. Where the Group adopts an approach to an uncertain tax position that it regards as having a less than probable chance of being accepted by the tax authorities, the income tax expense and resulting income and deferred tax balances are adjusted to reflect this uncertainty using either the most likely outcome method or the expected value method.

Based on the Organisation for Economic Co-operation and Development (OECD) initiative, numerous jurisdictions are in the process of introducing a global minimum tax whose aim is to ensure that multinational groups with revenue of over €750.0 million are subject to a minimum taxation of 15%. The Pillar Two legislation was enacted in Austria in 2023 and is coming into effect for financial years starting after 31 December 2023. If the Pillar Two legislation were effective as per the reporting date, a top-up tax of maximum €0.3m would be required in relation to one subsidiary. In addition, there are subsidiaries operating in other countries which might qualify as low tax jurisdictions but are not included in the above estimate since they have incurred an IFRS loss before taxes in 2023. Even if these companies had generated reasonably estimated IFRS profits before taxes the estimated top-up tax would not have exceeded €0.5 million in 2023. With regards to deferred taxes the Group has applied the accounting policy according to the amendment of not recognising or disclosing information about deferred tax assets and liabilities as a result of the Pillar Two legislation.

Significant judgement: Uncertain tax treatments and recognition of deferred tax assets

Management makes judgements in relation to the recognition of current and deferred income taxes. In making judgements, management believes that the tax positions the Group adopts are in line with the applicable legislation and reflect the probable outcome. The tax obligations and receivables, upon audit by the tax authorities at a future date, may differ as a result of differing interpretations. These interpretations may impact the expected timing and quantum of taxes payable and recoverable.

Significant estimates: Recognition of deferred tax assets

Income tax expense is based on the tax laws applicable in the individual countries. Due to their complexity, the tax items presented may be subject to different interpretations by local tax authorities. When determining the amount of the deferred tax assets to be recognised, mainly relating to tax losses, an estimate is required of future taxable income which is influenced by factors such as prices, gross profit margins and interest rates. A 10% change in the future taxable profit from the assumption made on the reporting date within the planning period defined for the accounting and measurement of deferred taxes would not result in a significant change in the carrying amount of deferred tax assets on recognised tax losses, over a 12-month period from the date of these Consolidated Financial Statements. Refer to Note (14) for details on recognised deferred tax assets.

Revenue, income and expenses

Revenue from contracts with customers

Revenue from the sale of goods and services is recognised at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. Revenue is recognised to the extent that it is highly probable that there will not be a significant reversal of revenue in future periods. If the consideration in a contract includes a variable amount, the Group estimates the amount of consideration to which it will be entitled at inception and limits the recognition of revenue subject to the variability, until it is highly probable that a significant reversal of cumulative revenue recognised will not occur. The Group applies the practical expedient in IFRS 15 'Revenue from Contracts with Customers' and does not recognise the impact of financing for payment terms as the average credit terms is currently 60 days. At contract inception, the Group identifies the goods or services promised in the contract and assesses which of the promised goods or services shall be identified as separate performance obligation. Promised goods or services give rise to separate performance obligations if they are capable of being distinct. Revenue is recognised as control is transferred, either over time or at a point of time. Control is defined as the ability to direct the use of and obtain substantially all of the economic benefits from an asset.

For the delivery of refractory products, the goods promised are distinct and control of the goods is passed to the customer typically when physical possession has been transferred. The transport service does not give rise to a separate performance obligation to which a part of revenue would have to be allocated, as this service is usually performed before control of the products is transferred to the customer.

In consignment arrangements, the Group retains control of the goods generally until a withdrawal of the products from the consignment occurs. Most of the products within consignment arrangements have a high stock turnover rate.

The Group provides services (e.g. supervision, installation) that are either sold separately or bundled together with the sale of products to a customer. Contracts for bundled sales of products and installation services usually comprise of two performance obligations being (1) the promise to transfer products and (2) provide services which are capable of being distinct and separately identifiable in the context of the contract. Accordingly, the transaction price is allocated based on the relative stand-alone selling prices of the product and service. Revenue from services is recognised over time using an input method to measure progress towards completion of the service as the customer simultaneously receives and consumes the benefits provided by the Group.

Contracts for bundled sales of refractory products and non-refractory products (e.g. machines) provided to the customer free of charge comprise two performance obligations that are separately identifiable. Consequently, the Group allocates the transaction price based on the relative stand-alone selling prices of these performance obligations and allocates revenue to the non-refractory product which is delivered free of charge.

Expected penalty fees from guaranteed durabilities on refractory products are considered as a variable consideration in the form of a contract or a refund liability. However, the estimation of the variable consideration is not subject to a constraint as the Group has significant experience with promising durabilities and as a consequence does not expect significant reversal of revenue recognised in prior periods. All other product warranties issued by the Group guarantee that the transferred products correspond to the contractually agreed specifications and are classified as assurance type warranties. Consequently, no separate distinct performance obligation to the customer exists.

If transfer of goods or services to a customer is performed before the customer pays consideration or before payment is due and is conditional on something other than the passage of time, a contract asset, excluding any amounts presented as a receivable, is recognised.

If a customer pays consideration before the entity transfers a good or service to the customer, the entity shall present the contract as a contract liability when the payment is made.

Contract costs, which are defined as the incremental costs of obtaining a contract, are recognised as an asset where the Group expects to recover those costs, except for those costs which are expected to be recovered within 12 months.

As the term of customer contracts is less than one year, the Group adopted the practical expedient not to disclose performance obligations for contracts with original expected duration of less than one year.

Significant Judgement: Revenue recognition

For customer contracts in the Steel segment with variable payment arrangements where the transaction price depends on the customer's production performance, (e.g. quantity of steel produced) management has determined that the commitment to transfer each of the products and services to the customer is not separately identifiable from the other commitments in the context of such contracts. The customer expects complete refractory management for the agreed product areas in the steel plant in order to enable steel production. Thus, only one performance obligation, being the performance of a management refractory service, exists.

Cost of sales

Cost of sales comprises the production cost of goods sold as well as the purchase price of merchandise sold. In addition to direct material and production costs, it also includes overheads including depreciation charges on production equipment, amortisation charges of intangible assets as well as impairment losses and reversals of impairment losses of inventories. Moreover, cost of sales also includes the costs of services provided by the Group or services received.

Selling and marketing expenses

This item includes personnel expenses for the sales staff as well as depreciation charges and other operating expenses related to the market and sales processes.

General and administrative expenses

General and administrative expenses primarily consist of personnel expenses for the administrative functions, legal and other

consulting costs, expenses for research and non-capitalisable development costs.

Interest income and expenses

Interest income and expenses are recognised in accordance with the effective interest method.

Dividends

Dividends from investments that are not accounted for using the equity method are recognised in the Statement of Profit or Loss at the time the legal claim arises.

Foreign currency translation and hyperinflation accounting

Functional currency and presentation currency

The Consolidated Financial Statements are presented in Euro, which represents the functional and presentation currency of RHI Magnesita N.V.

Consolidated subsidiary financial information is based on the currency of the primary economic environment in which it operates (functional currency).

Hyperinflation accounting

Financial Statements of subsidiaries which operate in a country whose functional currency is considered hyperinflationary are restated for the changes in the general purchasing power before translation to the reporting currency of the Group and before consolidation in order to reflect the same value of money for all items. The Group has started to account for the restatements required by IAS 29 'Financial Reporting in Hyperinflationary Economies' on the Financial Statements of the subsidiary operating in Argentina as from the current reporting period, as the cumulative impact of applying this Standard has become material in 2023.

The cumulative impact from changes in the general purchasing power of its functional currency until 1 January 2023 on the opening balances of non-monetary items has been recorded directly in equity attributable to the shareholders of RHI Magnesita N.V.

In 2023, the closing balances of the non-monetary items as well as all items of the Statement of Profit or Loss are restated for the changes in the general purchasing power of its functional currency in 2023 as follows. Items recognised in the Statement of Financial Position which are not measured at the applicable year-end measuring unit are restated based on the general price index. All non-monetary items measured at cost or amortised cost are restated for the changes in the general price index from the later of transaction date or the first-time application date to the reporting date. Monetary items are not restated. All items of the Statement of Profit or Loss are restated for the change in a general price index from the date of initial recognition to the reporting date. Gains and losses resulting from the net-position of monetary items are reported in the Consolidated Statement of Profit or Loss in Net finance costs. The Financial Statements of the subsidiary in Argentina are therefore reported at the applicable measuring unit on the reporting date.

The price index IPIM published by the Argentinian "National Institute of Statistics and Censuses (INDEC)" is applied to determine the changes in the general purchasing power. The following table provides the level and changes of the price index for the current and the previous reporting period:

	31.12.2023	31.12.2022
Price level	3,533.19	1,134.59
Index movement (in %)	211.41	94.79

Foreign currency transactions and balances

In individual subsidiaries, joint ventures and associates, transactions in foreign currency are translated into the functional currency at the rate of exchange prevailing on the dates of the transaction. Gains and losses arising from the settlement of such transactions and the measurement of monetary assets and liabilities in foreign currencies at the closing rate are recognised in the Statement of Profit or Loss under net expense on foreign exchange effects and related derivatives. Unrealised currency translation differences from monetary items which form part of a net investment in a foreign operation are recognised in OCI in equity. When a non-derivative financial instrument is designated as the hedging instrument in a net investment hedge in a foreign operation, the effective portion of the foreign exchange gains and losses is recognised in the currency translation difference reserve within equity. Non-monetary items, other than those measured at fair value, are carried at historical rates and not retranslated subsequent to initial recognition.

Group companies

Financial information of foreign subsidiaries with a functional currency different to the Euro are translated as follows:

Assets and liabilities of foreign subsidiaries outside the scope of hyperinflation accounting under IAS 29 are translated at the closing rate on the reporting date of the Group, while monthly income and expenses and consequently the profit or loss for the year as presented in the Statement of Profit or Loss are translated at the respective closing rates of the previous month. Differences resulting from this translation process and differences resulting from the translation of amounts carried forward from the prior year are recorded under OCI without recognition to profit or loss. Monthly cash flows are translated at the respective closing rates of the previous month. Goodwill and adjustments to the fair value of assets and liabilities related to the purchase price allocations of a subsidiary outside the European currency area are recognised as assets and liabilities of the respective subsidiary and translated at the closing rate.

Assets and liabilities of foreign subsidiaries in the scope of hyperinflation accounting under IAS 29 as well as income and expenses and consequently the profit or loss for the year are translated at the respective closing rate on the reporting date of the Group.

On disposal of a non-Euro functional currency subsidiary, joint venture or associate, the related accumulated exchange gains and losses recognised in equity are reclassified to the Statement of Profit or Loss. In addition, when monetary items cease to form part of a net investment in a foreign operation or when in case of a net investment hedge the foreign operation is disposed, the currency translation differences previously recognised in OCI are reclassified to profit or loss.

The Euro exchange rates of the currencies of the Group's significant operations are shown in the following table:

Currencies	1 € =	Closing rate		Average rate ¹⁾	
		31.12.2023	31.12.2022	2023	2022
Brazilian Real	BRL	5.37	5.63	5.42	5.47
Canadian Dollar	CAD	1.46	1.45	1.46	1.37
Chinese Renminbi Yuan	CNY	7.87	7.42	7.65	7.09
Indian Rupee	INR	92.58	88.26	89.20	82.50
US Dollar	USD	1.11	1.07	1.08	1.06

1) Arithmetic mean of the monthly closing rates.

4. Climate change and energy transition

In 2019 the Group announced its commitment to reduce Scope 1, 2 and 3 (raw materials) CO₂ emissions intensity by 15% by 2025, compared to a 2018 baseline. The below describes how the Group has considered climate related impacts in some key areas of the Consolidated Financial Statements and how this translates into the valuation of its assets and management of

areas of the Consolidated Financial Statements and now this translates into the valuation of its assets and measurement of liabilities, as progress is made in reducing its own CO₂ emissions and RHIM prepares for the energy transition and technological changes that are likely to affect its customer industries.

Note (3) includes the significant accounting estimates, judgements and key sources of estimation uncertainties and how those uncertainties have the potential to have a material effect on the Consolidated Statement of Financial Position in the next 12 months. This note describes the key areas of climate impacts that potentially have longer-term effects on amounts recognised at 31 December 2023.

Financial planning assumptions

As disclosed in the Sustainability section on page 58, climate-related risks faced by the Group include physical and transitional risks. The most material transitional risk impact is expected to be higher operating costs due to an increase in the level or scope of carbon pricing and changes to regulatory frameworks. This risk is most prominent in Europe where the existing system of allowances is to be replaced by the Carbon Border Adjustment Mechanism ('CBAM'), with all existing CO₂ emissions allowances to be progressively phased out by 2034. The Group has also identified climate-related opportunities, such as increased demand for its products arising from the transition by its customers to lower-carbon emitting industrial processes and increased demand for refractory products that are produced with a lower-carbon footprint.

The Consolidated Financial Statements are based on reasonable and supportable assumptions that represent management's current best estimate of the range of economic conditions that may exist in the foreseeable future. The Group has performed an assessment of the potential future impact of climate change on key elements of its Consolidated Financial Statements utilising the Paris-aligned Mitigation and Hot House World Limited mitigation scenarios. The largest impact from higher carbon prices as contained in these scenarios is from 2026 onwards. The negative impacts are concentrated within the Group's assets located in Europe whilst opportunities are expected to be global in nature.

The Group is investing in the research and development of new technologies for the manufacturing of refractories which may enable it over the long term to avoid or capture its CO₂ emissions and thereby mitigate the impact of higher carbon prices.

Impairment of CGUs and goodwill

The nominal growth rate used in the value in use determination is equal to the long-term rate of growth in steel/cement and/or inflation (depending on the country and business involved) and in any case no higher than the average long-term growth rate of the reference market. The Group has also taken account of the long-term impact of climate change, in particular by considering in the estimation of the terminal value a long-term growth rate in line with the change in steel/cement demand in 2030-2050 based on the specific characteristics of the businesses involved.

The Group is currently already subject to the first phase ('Transitional Period') of the CBAM. Imported minor consumables made out of steel (<1% of revenue) are currently covered and RHIM complies with existing regulations and follows their development. Management is pursuing a number of strategies to accommodate the impact of CBAM to the EU assets, such as integrating carbon pricing in our financial planning, actively managing a hedging programme to fix future prices, increase the use of secondary raw materials and investing in fuel switching, renewable energy and energy efficiency. Absent to any mitigating action by management, it is expected that the gross profit could reduce by 23% from 2030, on average across the EU assets and increase by 17% in regions outside the EU.

Restoration provisions

Management recognises liabilities that are expected to be incurred in relation to rehabilitation and restoration of the mining sites. As of the balance sheet date, the Group's mines have an expected life between 8 and 100 years. The introduction of more stringent legislation could result in our mining operations becoming uneconomical earlier than anticipated, thus affecting the timing of our restoration liabilities. The discount rate used to measure asset restoration provisions is between 8-37 years term, in line with available government bond rates.

Management does not expect any reasonably possible change in the expected timing of restoration of our mines to have a material effect on the Group total provisions, assuming cash flows remain unchanged.

Deferred tax assets

In jurisdictions where new or additional climate change related legislation is enacted, our taxable profits could be affected thereby impacting the recoverability of deferred tax assets. It is expected that sufficient deferred tax liabilities and forecasted taxable profits are available for recovery of the deferred tax assets recognised at 31 December 2023. The assessment of deferred taxes is described in Note (14). For certain deferred tax assets recognised in Brazil, the period extends beyond 5 years. Currently, no legislation is in place in Brazil that could limit the timing and, or the extent of the recognised deferred tax assets.

ESG-linked loans

The Group has taken out loans from financial institutions based on terms which are linked to Group EcoVadis ESG rating performance. On the reporting date the carrying amount of such ESG-linked financial liabilities amounts to €1,512.0 million. The financing costs may increase or decrease depending on future changes in the Group's ESG rating. The ESG rating is determined by multiple criteria covering not only the climate-related aspects but also sustainability and governance related aspects. The Group's ESG rating on the reporting date shows a considerable headroom to the ESG rating assumed in a worst case scenario.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segmental analysis

The Group comprises two reportable segments Steel and Industrial which have been determined by aggregation of the underlying operating segments for Steel and Industrial. The segmentation of the business activities reflects the internal control and reporting structures and is regularly monitored by the Chief Executive Officer (Chief Operating Decision Maker (CODM)), who has the responsibility over allocation of resources and evaluates the performance of each segment.

The reportable segment Steel specialises in supporting customers in the steel-producing and steel-processing industry. The reportable segment Industrial serves customers in the glass, cement/line, non-ferrous metals and environment, energy and chemicals industries. The main activities of the two segments consist of market development, global sales of high-grade refractory bricks, mixes and special products as well as providing services at the customers' sites and are described in detail in the Strategic Report.

The globally located manufacturing sites, which extract and process raw materials, are combined in one strategic business unit. The allocation of manufacturing cost of the production plants to the Steel and Industrial segments is based on the supply flow.

Statements of Profit or Loss up to gross profit are available for each segment. Revenues and Gross profit are the key internal performance measures provided to and used by the CODM. Selling and marketing expenses, general and administrative expenses, restructuring and write-down expenses, other income and expenses, profit of joint ventures, net finance costs and income taxes are managed centrally and separately and thus not allocated to the segments.

Segment assets include trade receivables and inventories, which are available to the operating segments and are reported to the CODM for control and measurement; property, plant and equipment, goodwill and other intangible assets, are allocated to the segments based on the capacity of the productive assets base. All other assets are not allocated.

The following tables show the financial information for the reportable segments for the year 2023 and the previous year:

2023 in € million

Steel Industrial Group 2023

Revenue	2,460.7	1,111.1	3,571.8
Gross profit	549.9	307.5	857.4
EBIT			333.9
Net finance costs			(100.6)
Profit before income tax			233.3
Depreciation and amortisation charges	(125.7)	(51.8)	(177.5)
Segment assets 31.12.2023	2,607.1	1,099.0	3,706.1
Investments in joint ventures and associates 31.12.2023			6.2
Reconciliation to total assets			1,137.3
Total assets			4,849.6
Additions to property, plant and equipment and intangible assets	128.9	66.1	195.0

2022 in € million	Steel	Industrial	Group 2022
Revenue	2,371.4	945.8	3,317.2
Gross profit	521.0	242.4	763.4
EBIT			343.6
Net finance costs			(73.1)
Profit before income tax			270.5
Depreciation and amortisation charges	(101.2)	(43.3)	(144.5)
Segment assets 31.12.2022	2,231.9	911.3	3,143.2
Investments in joint ventures and associates 31.12.2022			5.7
Reconciliation to total assets			926.0
Total assets			4,074.9
Additions to property, plant and equipment and intangible assets	128.6	68.8	197.4

No single customer contributed 10% or more to consolidated revenue in 2023 and in 2022. Companies that are known to be part of a group are treated as one customer.

When allocating revenue to product groups, a distinction is made between shaped products (e.g. hydraulically pressed bricks, fused cast bricks, isostatically pressed products), unshaped products (e.g. repair mixes, construction mixes and castables), management refractory services (e.g. full line service, contract business, cost per performance) as well as other revenue. Other mainly includes revenue from the sale of non-group refractory products.

In the reporting year, revenue is classified by product group as follows:

in € million	Steel	Industrial	Group 2023
Shaped products	1,142.9	815.1	1,958.0
Unshaped products	530.3	212.0	742.3
Management refractory services	712.2	8.3	720.5
Other	75.3	75.7	151.0
Revenue	2,460.7	1,111.1	3,571.8

In 2022, revenue was classified by product group as follows:

in € million	Steel	Industrial	Group 2022
Shaped products	1,100.4	692.6	1,793.0
Unshaped products	449.3	192.1	641.4
Management refractory services	755.7	0.2	755.9
Other	66.0	60.9	126.9
Revenue	2,371.4	945.8	3,317.2

Segment reporting by country

The Revenue is based on the locations of the customers.

In € million	2023	2022
Netherlands	14.0	11.2
USA	612.2	586.5
India	476.6	344.0
Brazil	371.1	367.8
PR China	259.5	221.6
Other countries	1,838.4	1,786.1
Revenue	3,571.8	3,317.2

The carrying amounts of goodwill, other intangible assets and property, plant and equipment are classified based on the location of the Group companies:

in € million	31.12.2023	31.12.2022
Brazil	502.7	464.8
India	383.2	69.7
Austria	368.5	352.9

USA	224.6	234.1
Germany	212.3	187.1
PR China	200.5	171.4
Other countries	277.2	177.2
Goodwill, intangible assets and property, plant and equipment	2,169.0	1,657.2

6. Restructuring

Summary of restructuring and write-down expenses/income recognised as follows:

in € million	2023	2022
Restructuring (expenses)/income	(19.6)	6.8

2023

Restructuring includes €11.5 million of termination costs following the transfer of certain global functions to the regions. In addition, it includes €4.9 million of plant closure costs, which mainly reflect €2.0 million of costs in Dashiqiao plant, China.

In Brazil, an impairment loss was recognised on fixed assets of €1.3 million which was partially caused by a flood at the Contagem plant.

2022

Following the approval by the regional government in Germany for the repair, upgrade and connection of the railway infrastructure to the Mainzlar plant, the Group committed to continue with its operations. The commitment was regarded as an indicator of an impairment reversal, following the write down of the non-current assets in 2020 of €7.7 million. The reversal of the write down amounted to €5.3 million in 2022. Additionally, around €6.4 million in employee restructuring and plant dismantling provisions were reversed.

The Group decided to close the operations at the plant in Dashiqiao, China, resulting in employee restructuring expenses of €2.2 million. Plant idling costs incurred during 2022 of €3.4 million were included within restructuring expenses. The Group continues its negotiations with the joint venture partner to exit its share of the net assets and amounts due of €22.9 million, see Note (28).

7. Other income

in € million	2023	2022
Net amortisation of Oberhausen provision	10.8	2.0
Bargain purchase gain	7.5	0.0
Income from the disposal of non-current assets	3.4	0.5
Miscellaneous income	5.4	2.3
Other income	27.1	4.8

The net amortisation of the Oberhausen provision mainly includes a release of €9.6 million (2022: €9.2 million) following a reassessment. €7.5 million refers to the preliminary bargain purchase gain from acquisition of P-D Refractories. Miscellaneous income mainly includes non-operational gains from the disposal of a joint venture as well as reimbursement of the stamp duty tax from Chile.

8. Other expenses

in € million	2023	2022
Expenses for strategic projects	(16.0)	(10.1)
Losses from the disposal of non-current assets	(6.7)	(1.7)
Miscellaneous expenses	(16.2)	(11.2)
Other expenses	(38.9)	(23.0)

Expenses for strategic projects amounting to €16.0 million (2022: €10.1 million) mainly include legal and consulting fees related to business development activities as well as costs related to integrate the newly acquired companies. Miscellaneous expenses mainly consist of increase in onerous provisions in Austria and Türkiye as well as legal and consultancy fees paid to evaluate Rhône Capital's Partial Offer for Shares in the Company.

9. Expense categories

The presentation of the Consolidated Statement of Profit or Loss is based on the function of expenses. The following table shows a classification by expense category for 2023 and the previous year:

in € million	2023	2022
Cost of materials	(1,374.5)	(1,365.0)
Personnel costs	(747.3)	(627.8)
Energy costs	(256.8)	(285.7)
Freight expenses	(229.0)	(285.3)
Depreciation and amortisation charges	(177.5)	(144.5)
External services	(164.1)	(136.7)
Changes in inventories, own work capitalised	(53.6)	64.3
Write-down expenses	(1.4)	0.0
Other income and expenses	(233.8)	(193.0)
Total expenses	(3,238.0)	(2,973.7)

Cost of materials includes expenses for raw materials and supplies and purchased goods of €1,310.4 million (2022: €1,317.6 million) and expenses for services received amounting to €64.1 million (2022: €47.4 million). Research and development costs amounted to €51.0 million (2022: €41.9 million), of which €8.1 million (2022: €8.6 million) in development costs were capitalised. Amortisation and impairment of development costs recognised within cost of sales was €3.1 million (2022: €3.5 million).

Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets are recognised as an expense in the Consolidated Statement of Profit or Loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT equipment, office furniture and other small items. Expenses for short-term, low-value and variable lease payments in 2023 amount to €5.3 million (2022: €3.5 million).

Other income and expenses include other income of €35.5 million (2022: €27.1 million); this is mainly comprised of: a preliminary bargain purchase gain of €7.5 million (2022: €0.0 million), income from research grants which amounted to €4.2 million (2022: €4.3 million), profit on disposal of non-current assets, insurance reimbursements and amortisation of grants related to assets. Other expenses mainly include commissions, repairs and maintenance, travel costs, external consulting and information technology costs.

10. Personnel costs

Personnel costs consist of the following components:

in € million	2023	2022
Wages and salaries	(579.5)	(478.5)
Social security contribution	(113.0)	(99.2)
Fringe benefits	(33.4)	(28.7)
Pension and other post-employment benefits		
Defined contribution plans	(10.9)	(11.4)
Defined benefit plans	(3.6)	(4.8)
Other expenses termination benefits	(6.9)	(5.2)
Personnel expenses (without interest expenses)	(747.3)	(627.8)

Average employee numbers

The average number of employees of the Group based on full time equivalents amounts to:

	2023	2022
Salaried employees	7,063	6,391
Waged workers	7,953	7,119
Number of employees on annual average	15,016	13,510

120 full time equivalents of salaried employees work in the Netherlands (2022: 124 employees). Total includes average employees of newly acquired businesses from the date of acquisition.

11. Interest income

Includes interest income on cash at banks and similar income amounting to €19.3 million (2022: €8.0 million).

12. Net expense on foreign currency effects

The net expense comprising the foreign currency effects from translating foreign currency balances into the functional currency, the results from forward exchange contracts and derivatives in open orders as well as the gain on the net monetary position related to hyperinflation accounting (IAS 29) consists of the following items:

in € million	2023	2022
Foreign currency losses	(43.6)	(10.0)
Gains/(losses) on forward exchange contracts and derivatives in open orders	10.7	(13.3)
Gain on net monetary position	2.5	0.0
Net expense on foreign currency effects	(30.4)	(23.3)

The foreign currency losses in the current reporting period mainly result from the appreciation of the functional currencies against major foreign currencies related to subsidiaries with a net asset foreign currency exposure and the devaluation of the functional currencies against major foreign currencies related to subsidiaries with a net liability foreign currency exposure. Moreover, the restatement of foreign currency losses in accordance with hyperinflation accounting (IAS 29) has increased the reported foreign currency losses of the subsidiary in Argentina.

13. Other net financial expenses

Other net financial expenses consist of the following items:

in € million	2023	2022
Net interest expense relating to personnel provisions	(12.4)	(5.7)
Unwinding of discount of provisions and payables	(7.7)	(8.5)
Interest expense on non-controlling interest liabilities	(6.5)	(5.3)
Interest expense on lease liabilities	(2.4)	(1.3)
Income from the revaluation of NCI put options	6.6	4.7
Other interest and similar income and expenses ¹⁾	(9.3)	(14.6)
Other net financial expenses	(31.7)	(30.7)

1) Mainly includes costs associated with the trade receivables factoring programme of €11.7 million (2022: €7.2 million).

14. Taxation

Income tax

Income tax consists of the following items:

in € million	2023	2022
Current tax expense	(66.7)	(52.7)
Deferred tax (expense)/income relating to temporary differences	8.6	(11.9)
tax loss carryforwards	(3.9)	(39.1)
	4.7	(51.0)
Income tax	(62.0)	(103.7)

The current tax expense includes net income tax expense for previous periods of €4.5 million (2022: €2.3 million net income).

In recognising deferred tax assets, the Group has considered (i) the impacts of the global economic environment in which it operates, (ii) uncertainties and potential adverse effects of economic volatility and (iii) the Group's latest forecasts and assumptions used for goodwill impairment testing and viability statement assessment. The Group's forecasted period is four years with the fifth year being the final year, consistent with goodwill impairment testing. In Brazil, a longer time frame is used due to the annual limitation for use of losses (30% of the taxable profits of the relevant year) which requires a longer-term prediction. Information on tax contingencies is provided under Note (39).

In addition to the income taxes recognised in the Consolidated Statement of Profit or Loss, a tax income of €14.5 million (2022: €29.5 million income tax expense), was recognised in OCI mainly relating to cash flow hedges and measurement gains and losses on employee post-employment benefits.

A reconciliation of the difference between the income tax expense, which would result from the application of the Austrian

corporate tax rate of 24% on the profit before income tax (the Austrian tax rate being used as holding company KHI Magnesita N.V. is tax resident in Austria), and the income tax reported is shown below:

in € million	2023	2022
Profit before income tax	233.3	270.5
Income tax expense calculated at 24% (2022: 25%)	56.0	67.6
Different foreign tax rates	2.1	5.9
Expenses not deductible for tax purposes, non-creditable taxes	28.0	21.4
Non-taxable income and tax benefits	(27.9)	(25.7)
Tax losses and temporary differences of the financial year not recognised	1.2	2.3
Utilisation of previously unrecognised loss carryforwards and temporary differences	(1.0)	0.0
Recognition of previously unrecognised loss carryforwards and temporary differences	(0.2)	(3.1)
Change in write down of deferred tax assets	0.0	3.0
Deferred tax expense due to tax rate changes	2.0	2.7
Deferred tax assets derecognised	0.0	23.6
Deferred income tax relating to prior periods	(6.9)	5.2
Income tax relating to foreign currency translation of local currency to functional currency	4.0	2.8
Current income tax relating to prior periods	4.5	(2.3)
Other	0.2	0.3
Recognised tax expense	62.0	103.7
Effective tax rate (in %)	26.6%	38.4%

Below is the summary of major effects on the effective tax rate reconciliation:

In 2023, expenses not deductible for tax purposes mainly includes: transfer pricing adjustments and inventory revaluations in Brazil of €5.4 million (2022: €3.4 million); share-based payments and other employee costs and write up of treasury shares in Austria of €5.1 million (2022: €2.9 million); inflation, inventory and FX adjustments, asset impairment and exempt income in South America of €4.1 million (2022: €5.0 million); non-creditable withholding taxes in Austria of €1.6 million (2022: €2.4 million); non-deductible expense for debt waivers of €1.2 million (2022: €0.0 million) and non-deductible subsidiary recharged expenses of €1.1 million (2022: €1.2 million).

In 2023, non-taxable income and tax benefits mainly include: tax incentives in Brazil of €7.9 million (2022: €7.4 million); additional tax depreciation in Austria of €7.2 million (2022: €7.5 million) relating to historical acquisitions; non-taxable preliminary bargain purchase gain in newly acquired companies of €2.2 million (2022: €0.0 million); income of foreign permanent establishments in Austria of €0.6 million (2022: €1.0 million); and inflationary adjustments in South America of €4.0 million (2022: €3.1 million). Furthermore, other non-taxable income in 2022 includes non-taxable income from the write up of shares of €2.1 million in Austria.

The change in the tax rate in Austria from 25% to 24% in 2023 and 23% in 2024, resulted in a deferred tax income of €0.3 million from deferred taxes on taxable and deductible temporary differences (2022: €2.4 million deferred tax expense). In the United States a change in the tax rate from 25.65% to 24.19% led to a deferred tax income of €0.6 million (2022: deferred tax expense due to a tax rate change from 24.15% to 25.65% amounting to €0.9 million). In Türkiye an increase of the tax rate from 20% to 25% led to a deferred tax expense of €2.3 million (2022: deferred tax income due to a tax rate change from 22% to 20% of €0.3 million).

Deferred taxes expense relating to prior periods based on information obtained in the reporting period, arises mainly from Mexico amounting to a deferred tax expense of €1.0 million (2022: deferred tax expense of €4.6 million). In Germany there is a deferred tax income relating to prior periods amounting to €7.3 million (2022: deferred tax expense of €2.3 million). Deferred income tax relating to foreign currency translation of local currency tax base is due to the devaluation of the Turkish Lira against the Euro of €4.0 million (2022: €2.8 million).

The current income tax expense relating to prior periods of €4.5 million arose mainly in Austria of €2.6 million (2022: current income tax income of €2.2 million) and the United States of €1.2 million (2022: income tax expense of €1.0 million). In 2022 there was an additional charge of €1.4 million following the allocation of certain Group functions and responsibilities to Austria.

In 2022 deferred tax assets derecognised pursuant to a tax position reassessment of €23.6 million included an income adjustment following agreement with the tax authorities on the allocation of certain Group functions, including €8.7 million adjustment in relation to an intercompany debt waiver. These tax impacts had the primary effect of reducing previously recognised tax losses and the cash tax impact was €1.4 million. The Group's effective tax rate was 38.3%. Drivers for the 2022 effective tax rate were mainly the non-cash (€23.6 million) and cash (€1.4 million) tax impacts as mentioned above, deferred tax adjustments from Mexico of €4.6 million and the lower income tax rate in Austria of €2.7 million. In 2023, the Group's effective tax rate was not showing such big one-off effects, decreasing it to 26.6%.

Deferred taxes

Deferred taxes are related to the following significant balance sheet items and tax loss carryforwards:

	31.12.2023		2023	31.12.2022		2022
in € million	Deferred tax assets	Deferred tax liabilities	(Expense)/Income	Deferred tax assets	Deferred tax liabilities	(Expense)/Income
Property, plant and equipment, intangible assets	29.2	119.8	3.1	25.1	113.3	(6.1)
Inventories	24.3	10.1	0.1	20.8	9.0	6.3
Trade receivables, other assets	12.0	9.2	11.5	11.0	21.1	(17.2)
Pensions and other personnel provisions	45.0	0.3	(4.8)	41.9	0.3	(4.6)
Other provisions	29.6	0.4	1.6	27.4	0.6	0.2
Trade payables, other liabilities	27.9	6.0	(2.9)	22.2	6.7	9.5
Tax loss carried forward	67.3	0.0	(3.9)	68.8	0.0	(39.1)
Offsetting	(83.3)	(83.3)	0.0	(89.0)	(89.0)	0.0
Deferred taxes	152.0	62.5	4.7	128.2	62.0	(51.0)

For temporary differences and tax loss carryforwards of subsidiaries which have generated tax losses either in the current or previous reporting period deferred tax assets amounting to €5.3 million (2022: €1.9 million) have been recognised in the Consolidated Statement of Financial Position, as sufficient taxable income is expected to be generated in the future.

Tax loss carryforwards totalled €401.9 million at 31 December 2023 (2022: €407.7 million). A significant part of the tax loss carryforwards originated in Brazil and Austria where their deduction can be carried forward indefinitely. Furthermore, there are tax loss carryforwards in China expiring within the next five years. The annual utilisation of tax loss carryforwards is limited to 75% in Austria and 30% in Brazil of their respective taxable profits. Deferred tax assets were not recognised on tax losses and tax loss carryforwards of €181.0 million (2022: €179.2 million). Thereof €60.7 million (2022: €53.4 million) relate to Brazil, €60.7 million (2022: €63.7 million) relate to Luxembourg, €23.6 million (2022: €23.2 million) relate to China, €19.4 million (2022: €18.8 million) relate to the UK, €3.6 million (2022: €5.9 million) relate to Dubai, €5.9 million (2022: 5.9 million) relate to Germany, €4.4 million (2022: €3.6 million) relate to France, €0.0 million (2022: €2.0 million) relate to Denmark and €2.7 million (2022: €2.7 million) relate to other countries.

in € million	31.12.2023	31.12.2022
Year of expiry		
2022	0.0	0.4
2023	0.0	0.2
2024	5.9	7.4
2025	1.7	1.8
2026	2.0	2.1
2027	8.4	11.9
2028	5.8	0.8
2029 or later	0.5	0.0
Not subject to expiration	156.7	154.6
Total unrecognised tax losses	181.0	179.2

No deferred tax assets were recognised on temporary differences totalling €176.2 million (2022: €209.0 million), which are expected to reverse by 2034. Thereof €150.8 million (2022: €180.9 million) relate to Austria, €24.9 million (2022: €26.2 million) relate to China and €0.5 million (2022: €1.9 million) relate to other countries.

Taxable temporary differences of €1,240.6 million (2022: €1,113.7 million) and temporary deductible differences of €49.9 million (2022: €7.2 million) were not recognised on shares in subsidiaries as the distributions of profit or the sale of the investments are controlled by the Group.

Income tax receivables

Income tax receivables amounting to €43.5 million (2022: €38.7 million) are mainly related to tax prepayments and deductible withholding taxes.

Income tax liabilities

Income tax liabilities amounting to €50.8 million (2022: €38.3 million) primarily include income taxes for the current year and previous years.

15. Earnings per share

Earnings per share is calculated by dividing the profit or loss attributable to the shareholders of the Group by the weighted average number of shares outstanding during the financial year.

	2023	2022
Profit after income tax attributable to RHI Magnesita N.V. shareholders (in € million)	164.6	155.7
Weighted average number of shares for basic EPS	47,078,254	47,000,708
Effects of dilution from share options	1,014,964	793,302
Weighted average number of shares for dilutive EPS	48,093,218	47,794,010
Earnings per share basic (in €)	3.50	3.31
Earnings per share diluted (in €)	3.42	3.26

The weighted average number of shares for basic and dilutive EPS considers the weighted average effect of the newly issued ordinary shares as well the effect of changes in treasury shares during the reporting period. As of 31 December 2023, there are 1,049,347 diluting options (2022: 849,046).

16. Dividend payments and proposed dividend

The final proposed dividend is subject to the approval of the Annual General Meeting in May 2024 and was not recognised as a liability in these Consolidated Financial Statements. The final proposed dividend for 2023 will amount to €1.25 per share (2022: €1.10 per share).

In line with the Group's dividend policy, the Board paid out an interim dividend in September 2023 of €0.55 per share for the first half of 2023 amounting to €26.0 million. The total dividend for 2023, which includes the proposed final dividend, yet to be approved by shareholders, amounts to €1.80 per share (2022: €1.60 per share).

Based on a resolution adopted by the Annual General Meeting of RHI Magnesita N.V. on 24 May 2023, the final dividend for 2022 amounted to €1.10 per share and was paid out in July 2023, amounting to €51.7 million. The total dividend for 2022 amounted to €1.60 per share.

17. Goodwill

in € million	2023	2022
Carrying amount at beginning of the year	136.9	114.4
Newly acquired businesses	197.0	20.6
Currency translation	(1.6)	1.9
Hyperinflation adjustment	6.9	0.0
Carrying amount at year-end	339.2	136.9

Impairment of CGUs with significant goodwill

Goodwill is tested for impairment at least annually based on the CGU to which it is allocated. The Group's significant goodwill is assigned to the Steel CGUs and to the Industrial Cement & Lime CGU as shown in the table below.

The impairment test is based on the value in use; the recoverable amount is determined using the discounted cash flow method and incorporates the terminal value. The Group is subject to environmental and other laws and regulations and has established environmental policies and procedures aimed at compliance with these laws. Impairment testing incorporated considerations for increased energy and raw material prices in its budget and the Long-Term Plan and estimates the total increase in investments in research and development costs at approximately €47.8 million. Current technology used by the customer industries requiring advanced heat-resistant materials for their production depend on refractory materials and in our view will remain in use in the observable future.

The cash flows projections used for impairment testing are based on the strategic business and financial planning model of the

The cash flows projections used for impairment testing are based on the strategic business and financial planning model of the Group including the 2024 budget, as approved by the Board, and the Long-Term Plan, covering a four-year period. The cash flows are geared to a steady-state business development, which balances out possible economic or other non-sustainable fluctuations in the detailed planning period and forms the basis for the calculation of the terminal value.

The key assumptions used in determining the value in use are:

- Revenue: projected sales were built up with reference to markets and product categories, incorporating projections of developments in key markets.
- EBIT margin: projected margins reflect historical performance, our expectations for future cost inflation and the impact of all completed projects to improve operational efficiency.
- Discount rate before tax: a discount rate that is calculated taking into account the weighted average cost of capital of comparable companies; the corresponding parameters are derived from capital market information. In addition, country-specific risk premiums are considered in the weighted average cost of capital.
- Perpetual annuity growth rate: for the purposes of the Group's value in use calculations, a long-term growth rate into perpetuity was applied immediately at the end of the fifth-year detailed planning period comprising the 2024 budget and the subsequent four-year period covered by the Long-Term Plan. As in the previous year, the terminal value is based on a growth rate derived from the difference between the current and possible degree of asset capacity and utilisation.

Forecast EBIT has been projected using:

- Expected future sales are based on the strategic plan, which was constructed at a market level with input from regional commercial managers. An assessment of the market using external sources for the development of the customer's industries; regional growth rates of the steel production and output of the non-steel clients in combination with the development of the specific refractory consumption including technological improvements.
- Current cost structure and production capacity, which include our expectations for future cost inflation. The assumptions were updated considering the latest economic developments, including energy, freight and raw material prices. The forecasts include cash flows from future investments related to capacity maintenance while expansion investments are excluded.

Working capital is included in the carrying amount of the CGUs; therefore, the recoverable amount only takes into account changes in working capital.

The following table shows the perpetual annuity growth rates and discount rates before tax applied in the value in use determination for CGUs to which significant goodwill is allocated:

	2023			2022		
	Discount rate before Tax	Perpetual annuity growth rate	Goodwill in € million	Discount rate before Tax	Perpetual annuity growth rate	Goodwill in € million
Steel - Linings	9.9%	0.9%	212.8	10.8%	0.9%	107.2
Steel - Flow Control	10.0%	0.9%	66.5	11.1%	0.9%	28.5
Industrial - Cement & Lime	10.5%	0.9%	55.1	11.2%	0.9%	0.1

As a sensitivity, the effect of the following downside scenarios to the key assumptions would, in isolation, not result in an impairment of goodwill:

- increase of the estimated discount rate by 10%
- decrease of the perpetual annuity growth rate by 50%
- decrease of revenue by 5%
- decrease of EBIT margin by 10%.

18. Other intangible assets

in € million	Mining rights	Customer relationship	Internally generated intangible assets	Other intangible assets	Prepayments made and intangible assets under construction	Total
Cost at 31.12.2022	151.9	132.1	78.5	156.8	0.0	519.3
Currency translation	1.5	(5.1)	(0.1)	(2.4)	(0.2)	(6.3)
Additions	0.0	0.0	8.0	2.0	0.1	10.1
Additions initial consolidation	0.0	158.9	0.0	6.4	8.0	173.3
Retirements and disposals	(1.0)	0.2	(0.6)	(1.0)	0.0	(2.4)
Reclassifications	0.0	(1.8)	0.0	8.4	14.2	20.8
Cost at 31.12.2023	152.4	284.3	85.8	170.2	22.1	714.8
Accumulated amortisation 31.12.2022	14.5	45.4	48.8	94.0	0.0	202.7
Currency translation	0.0	(0.5)	0.0	0.5	0.0	0.0
Amortisation charges	2.5	20.2	3.6	17.3	0.0	43.6
Retirements and disposals	0.0	0.2	(0.2)	(0.3)	0.0	(0.3)
Reclassifications	0.0	(0.5)	0.0	(0.5)	0.0	(1.0)
Accumulated amortisation 31.12.2023	17.0	64.8	52.2	111.0	0.0	245.0
Carrying amounts at 31.12.2023	135.4	219.5	33.6	59.2	22.1	469.8

in € million	Mining rights	Customer relationship	Internally generated intangible assets	Other intangible assets	Total
Cost at 31.12.2021	139.3	99.2	70.9	145.4	454.8
Currency translation	12.6	4.4	0.1	1.0	18.1
Additions	0.0	0.0	8.7	7.2	15.9
Additions initial consolidation	0.0	28.5	0.0	0.0	28.5
Retirements and disposals	0.0	0.0	(0.8)	(0.7)	(1.5)
Reclassifications	0.0	0.0	(0.4)	3.9	3.5
Cost at 31.12.2022	151.9	132.1	78.5	156.8	519.3
Accumulated amortisation 31.12.2021	11.1	35.3	44.8	81.0	172.2
Currency translation	0.9	0.7	0.0	0.3	1.9
Additions	2.5	20.2	3.6	17.3	43.6
Retirements and disposals	0.0	0.2	(0.2)	(0.3)	(0.3)
Reclassifications	0.0	(0.5)	0.0	(0.5)	(1.0)
Accumulated amortisation 31.12.2022	14.5	45.4	48.8	94.0	202.7
Cost at 31.12.2023	152.4	284.3	85.8	170.2	714.8
Accumulated amortisation 31.12.2023	17.0	64.8	52.2	111.0	245.0
Carrying amounts at 31.12.2023	135.4	219.5	33.6	59.2	469.8

Amortisation charges	2.5	9.4	4.0	15.0	28.9
Retirements and disposals	0.0	0.0	0.0	(0.7)	(0.7)
Reclassifications	0.0	0.0	0.0	0.4	0.4
Accumulated amortisation 31.12.2022	14.5	45.4	48.8	94.0	202.7
Carrying amounts at 31.12.2022	137.4	86.7	29.7	62.8	316.6

Internally generated intangible assets comprise capitalised software and product development costs.

The intangible assets resulting from customer relationships of former Magnesita Group have a carrying amount of €55.0 million (2022: €61.1 million) and a remaining useful life between five to nine years. Information on the customer relationships of the acquired entities in 2023 is provided in Note (42).

Other intangible assets include in particular acquired patents, trademark rights, software, and land-use rights. The land-use rights have a carrying amount of €23.8 million (2022: €20.9 million) and a remaining useful life between 14 to 54 years.

There are no restrictions on the sale of intangible assets.

19. Property, plant and equipment

in € million	Real estate, land and buildings	Technical equipment, machinery	Other plant, furniture and fixtures	Prepayments made and plant under construction	Right-of-use assets	Total
Cost at 31.12.2022	712.2	1,143.1	392.7	231.6	112.4	2,592.0
Currency translation	(0.6)	(1.5)	1.2	3.0	0.2	2.3
Additions ¹⁾	13.5	18.6	10.9	127.1	14.8	184.9
Additions initial consolidation	52.3	51.0	6.3	5.8	21.8	137.2
Retirements and disposals	(35.0)	(23.9)	(15.0)	0.0	(14.7)	(88.6)
Reclassifications	15.5	43.7	20.5	(100.5)	0.0	(20.8)
Cost at 31.12.2023	757.9	1,231.0	416.6	267.0	134.5	2,807.0
Accumulated depreciation 31.12.2022	317.4	767.5	252.1	1.3	50.0	1,388.3
Currency translation	(0.4)	0.5	0.0	0.0	0.7	0.8
Depreciation charges	16.9	66.5	29.7	0.0	20.8	133.9
Impairment charges	0.0	0.4	1.0	0.0	0.0	1.4
Reversal of impairment charges	0.0	0.0	0.0	0.0	(0.4)	(0.4)
Retirements and disposals	(30.1)	(21.0)	(12.9)	0.0	(13.8)	(77.8)
Reclassifications	0.0	0.2	0.5	0.0	0.0	0.7
Accumulated depreciation 31.12.2023	303.8	814.1	270.4	1.3	57.3	1,446.9
Carrying amounts at 31.12.2023	454.1	416.9	146.2	265.7	77.2	1,360.1

1) Including €7.9 million capitalised borrowing costs.

in € million	Real estate, land and buildings	Technical equipment, machinery	Other plant, furniture and fixtures	Prepayments made and plant under construction ¹⁾	Right-of-use assets	Total
Cost at 31.12.2021	670.3	1,143.6	379.4	209.7	87.1	2,490.1
Currency translation	11.0	13.2	4.9	11.2	2.6	42.9
Additions ²⁾	8.2	14.9	15.1	122.6	20.7	181.5
Additions initial consolidation	6.0	2.9	0.6	0.3	7.0	16.8
Retirements and disposals	(10.8)	(85.0)	(34.5)	(0.5)	(5.0)	(135.8)
Reclassifications	27.5	53.5	27.2	(111.7)	0.0	(3.5)
Cost at 31.12.2022	712.2	1,143.1	392.7	231.6	112.4	2,592.0
Accumulated depreciation 31.12.2021	311.5	793.4	260.3	1.5	33.7	1,400.4
Currency translation	0.3	5.7	1.1	0.1	1.2	8.4
Depreciation charges	15.1	54.1	26.2	0.0	20.2	115.6
Reversal of impairment charges	(1.5)	(3.0)	(0.9)	(0.3)	(0.3)	(6.0)
Retirements and disposals	(8.0)	(82.7)	(34.2)	0.0	(4.8)	(129.7)
Reclassifications	0.0	0.0	(0.4)	0.0	0.0	(0.4)
Accumulated depreciation 31.12.2022	317.4	767.5	252.1	1.3	50.0	1,388.3
Carrying amounts at 31.12.2022	394.8	375.6	140.6	230.3	62.4	1,203.7

1) Prepayments made and plant under construction include €10.2 million relating to intangible assets. €3.5 million was transferred to intangibles assets during the year.

2) Including €1.5 million capitalised borrowing costs.

Prepayments made and plant under construction includes €258.7 million (2022: €212.0 million) mainly relating to the expansion and production optimisation of the plants in Brazil during 2023. The spent in 2022 mainly related to the expansion of a production plant in Austria and a magnesite plant in Brazil.

Please refer to Note (27) for the restrictions on the sale of property, plant and equipment.

The Right-of-use assets per category developed as follows as of 31 December 2023:

Right-of-use assets	Right-of-use assets technical	Right-of-use assets other equipment,
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in € million	land and buildings	equipment and machinery	furniture and fixtures	Total
Cost at 31.12.2022	68.8	33.0	10.6	112.4
Currency translation	(0.3)	0.4	0.1	0.2
Additions	8.7	0.8	5.3	14.8
Additions initial consolidation	20.9	0.7	0.2	21.8
Retirements and disposals	(7.5)	(4.8)	(2.4)	(14.7)
Cost at 31.12.2023	90.6	30.1	13.8	134.5
Accumulated depreciation 31.12.2022	25.3	19.2	5.5	50.0
Currency translation	0.0	0.5	0.2	0.7
Depreciation charges	11.9	5.3	3.6	20.8
Reversal of impairment charges	0.0	(0.4)	0.0	(0.4)
Retirements and disposals	(7.2)	(4.6)	(2.0)	(13.8)
Accumulated depreciation 31.12.2023	30.0	20.0	7.3	57.3
Carrying amounts at 31.12.2023	60.6	10.1	6.5	77.2

The Right-of-use assets per category developed as follows as of 31 December 2022:

in € million	Right-of-use assets land and buildings	Right-of-use assets technical equipment and machinery	Right-of-use assets other equipment, furniture and fixtures	Total
Cost at 31.12.2021	47.8	31.9	7.4	87.1
Currency translation	1.0	1.5	0.1	2.6
Additions	16.7	1.2	2.8	20.7
Additions initial consolidation	5.1	0.1	1.8	7.0
Retirements and disposals	(1.8)	(1.7)	(1.5)	(5.0)
Cost at 31.12.2022	68.8	33.0	10.6	112.4
Accumulated depreciation 31.12.2021	15.4	14.4	3.9	33.7
Currency translation	0.4	0.6	0.2	1.2
Depreciation charges	11.2	6.1	2.9	20.2
Reversal of impairment charges	0.0	(0.2)	(0.1)	(0.3)
Retirements and disposals	(1.7)	(1.7)	(1.4)	(4.8)

The average lease term is 11 years for land and buildings, six years for technical equipment and three years for other equipment, furniture and fixtures. Impacts resulting from extension and termination options, as well as residual value guarantees are immaterial. Detail on lease liabilities is in Note (28).

20. Other non-current assets

in € million	31.12.2023	31.12.2022
Tax receivables	13.9	18.7
Other non-current assets	22.8	21.3
Other non-current assets	36.7	40.0

Tax receivables relate to input tax credits, which are expected to be utilised in the medium term. Other non-current assets mainly include deferred mine stripping costs.

21. Inventories

in € million	31.12.2023	31.12.2022
Raw materials and supplies	274.0	303.3
Work in progress	220.5	206.7
Finished products and goods	488.6	526.3
Prepayments made	12.8	12.8
Inventories	995.9	1,049.1

Net write-down expenses amount to €11.6 million (2022: €8.0 million). Please refer to Note (27) for the restrictions of the disposal of inventories.

22. Trade and other current receivables

in € million	31.12.2023	31.12.2022
Trade receivables	537.6	433.4
Contract assets	3.5	3.5
Other tax receivables	95.4	106.4
Prepaid expenses	8.4	5.9
Other current receivables	40.8	29.7
Trade and other current receivables	685.7	578.9
thereof financial assets	541.4	433.9
thereof non-financial assets	144.3	145.0

The Group enters into factoring agreements and sells trade receivables to financial institutions. Trade receivables sold at the end of the year was €259.4 million (2022: €245.1 million). These have been derecognised as substantially all risks and rewards as

and of the year, and cash payments (from customers) have been recognised as receivables in the balance sheet as well as control have been transferred. Payments received from customers following the sale are recognised in current borrowings until repaid to the factorer.

Other tax receivables include primarily VAT, as well as receivables from energy tax refunds, and tax research subsidies.

Other current receivables mainly relate to advances for insurance, IT services as well as custom and import-related services and costs.

23. Cash and cash equivalents

in € million	31.12.2023	31.12.2022
Cash at banks and in hand	644.4	471.8
Money market funds	59.1	48.9
Cash and cash equivalents	703.5	520.7

Cash and cash equivalents include amounts not available for use by the Group totalling €9.9 million at 31 December 2023 (2022: €23.2 million). Cash not available for use by the Group is mainly related to deposits for bank guarantees.

Money market funds with an opening balance of €9.3 million have been reclassified to other current financial assets since their value has significantly changed in the current reporting period and thus do no longer meet the definition of cash equivalents. The reclassification is shown separately in the Consolidated Statement of Cash Flows.

24. Share capital

At 31 December 2023, the authorised share capital of RHI Magnesita N.V. amounts to €100,000,000 divided into 100,000,000 ordinary shares unchanged to prior year. Thereof 47,130,338 (2022: 47,017,695) fully paid-in ordinary shares are issued. In addition, there are 2,347,367 (2022: 2,460,010) treasury shares held by the Company. All issued RHI Magnesita shares grant the same rights. The shareholders are entitled to dividends and have one voting right per share at the Annual General Meeting. There are no shares with special control rights.

25. Group reserves

Treasury shares

At 31 December 2023, RHI Magnesita treasury shares amount to 2,347,367 (2022: 2,460,010).

Additional paid-in capital

At 31 December 2023, as well as at 31 December 2022, additional paid-in capital comprised premiums on the issue of shares less issue costs by RHI Magnesita N.V.

Mandatory reserve

The Articles of Association stipulate a mandatory reserve of €288,699,230.59 which was created in connection with the merger between former RHI Group and former Magnesita Group in 2017. No distributions, allocations or additions may be made and no losses of the Company may be allocated to the mandatory reserve.

Retained earnings

Retained earnings includes the result of the financial year and results that were earned by consolidated companies during prior periods, but not distributed. The difference between the purchase consideration or sale proceeds after tax and the relevant proportion of the non-controlling interest, measured by reference to the carrying amount of the interest's net assets at the date of acquisition or sale, is recognised in retained earnings too.

Accumulated other comprehensive income

Cash flow hedge reserves includes gains and losses from the effective part of cash flow hedges less tax effects. The accumulated gain or loss from the hedge allocated to reserves is only reclassified to the Statement of Profit or Loss if the hedged transaction also influences the result or is terminated.

Reserves for defined benefit plans include the gains and losses from the remeasurement of defined benefit pension and termination benefit plans taking into account tax effects. No reclassification of these amounts to the Statement of Profit or Loss will be made in future periods.

Currency translation includes the accumulated currency translation differences from translating the Financial Statements of foreign subsidiaries, unrealised currency translation differences from monetary items which are part of a net investment in a foreign operation, net of related income taxes, as well as the effective portion of foreign exchange gains or losses when a financial instrument is designated as the hedging instrument in net investment hedge in a foreign operation.

26. Non-controlling interests

Subsidiaries with material non-controlling interests

RHI Magnesita India Ltd., based in New Delhi, India is a listed company on the BSE Limited and NSE Limited. RHI Magnesita India Ltd., including the acquired Hi-Tech business, is the (direct or ultimate) parent company of Dalmia OCL Ltd. (Dalmia OCL), Dalmia Seven Refractories Ltd. and Intermetal which together form the Subgroup India. This Subgroup India is included in the Steel and Industrial segments and the share of the non-controlling interests amounts to 43.9% (2022: 29.8%). Aggregated financial information of Subgroup India as of 31 December 2023 is provided below:

in € million	31.12.2023	31.12.2022 ¹⁾
Non-current assets	420.3	50.4
Current assets	257.9	168.3
Non-current liabilities	(18.4)	(2.5)
Current liabilities	(151.8)	(71.7)
Net assets before intragroup eliminations	508.0	144.5
Intragroup eliminations	(1.6)	0.1
Net assets	506.4	144.6
Carrying amount of non-controlling interests	148.6	43.1

1) The disclosed financial information as of 31 December 2022 only relates to RHI Magnesita India Ltd. which is why it is not comparable to this year's financial information.

The aggregated Statement of Profit or Loss and Statement of Comprehensive Income of Subgroup India for financial year 2023 are shown below:

in € million	2023	2022 ¹⁾
Revenue	426.9	294.6
Operating expenses, net finance costs and income tax	(410.3)	(257.4)
Profit after income tax before intragroup eliminations	16.6	37.2
Intragroup eliminations	(1.8)	0.6
Profit after income tax	14.8	37.8

Profit and income tax	2023	2022
thereof attributable to non-controlling interests	6.6	11.3
in € million	2023	2022 ¹⁾
Profit after income tax	14.8	37.8
Other comprehensive (expense)/income	(32.7)	(8.2)
Total comprehensive income	(17.9)	29.6
thereof attributable to non-controlling interests	(7.9)	8.8

1) The disclosed financial information for 2022 only relates to RHI Magnesita India Ltd. which is why it is not comparable to this year's financial information.

The following table shows the summarised Statement of Cash Flows of Subgroup India for financial year 2023:

in € million	2023	2022 ¹⁾
Net cash flow from operating activities	38.2	21.5
Net cash flow from investing activities	(123.0)	(6.9)
Net cash flow from financing activities	75.3	(6.4)
Total cash flow	(9.5)	8.2

1) The disclosed financial information for 2022 only relates to RHI Magnesita India Ltd. which is why it is not comparable to this year's financial information.

Net cash flow from financing activities includes dividend payments to non-controlling interests amounting to €2.6million (2022: €1.5 million).

Change of non-controlling interests without a change of control

In 2023 the Group has acquired 100% of the shares of Dalmia OCL Ltd, India, through the non-wholly owned subsidiary RHI Magnesita India Ltd. and 51% of the shares of Dalmia Seven Refractories Ltd ('DSR'), India, in exchange for 27,000,000 newly issued equity shares in RHI Magnesita India Ltd. worth €270.0 million and a cash consideration worth €55.2 million (see Note (42)).

The share issue which has diluted the Group's share in RHI Magnesita India Ltd. resulted in an increase of non-controlling interests by €122.3 million and has created a dilution gain of €147.7 million reported within equity attributable to shareholders of RHI Magnesita N.V. The share issue is a non-cash transaction which had no impact on the Consolidated Statement of Cash Flows.

Subsequently, the increase of non-controlling interests because of the share issue was offset with the decrease of non-controlling interests as result of acquisition of Dalmia OCL and DSR of €68.8 million (refer to Note (42)) resulting in a net increase of non-controlling interests of €53.7 million as presented in the Consolidated Statement of Changes in Equity.

In April 2023, RHI Magnesita India Ltd. issued 15,715,034 equity shares through a Qualified Institutional Placement which raised cash proceeds amounting to €100.0 million. The share issue which has diluted the Group's share in RHI Magnesita India Ltd. resulted in an increase of non-controlling interests by €63.8 million and has created a dilution gain amounting to €36.2 million reported within equity attributable to shareholders of RHI Magnesita N.V. The cash inflow from this share issue is reported within the cash flow from financing activities in the Consolidated Statement of Cash Flows.

in € million	January 2023	April 2023
Consideration received	270.0	100.0
Carrying value of the sold interest in RHI Magnesita India Ltd.	122.3	63.8
Dilution gain recognised in retained earnings	147.7	36.2

In June 2023, RHI Magnesita India Ltd. issued 2,790,061 equity shares on a preferential basis which raised cash proceeds amounting to €22.5 million. The share issue has diluted the non-controlling shareholder's share in RHI Magnesita India Ltd. and insofar a purchase of non-controlling interests occurred which has decreased non-controlling interests by €3.2 million and increased equity attributable to shareholders of RHI Magnesita N.V. by the same amount. The share issue had no impact on the Consolidated Statement of Cash Flows since the cash proceeds were fully funded by the Group.

Following the acquisition of 51% of the shares of Dalmia Seven Refractories Ltd in January 2023 (see Note (42)) the company was renamed to RHI Magnesita Seven Refractories Ltd. Within the Seven Refractories' business combination which was closed on 24 July 2023, the Group acquired the remaining shares (49%) of RHI Magnesita Seven Refractories Ltd held by the non-controlling shareholders for a cash consideration of €6.9 million (including directly attributable transaction costs of €0.8 million). The difference between the carrying amount of the non-controlling interests' portion of equity acquired and the consideration paid was recorded in retained earnings within equity.

In addition, the Group has acquired non-controlling interests of Seven Refractories' Group and Söğüt Refrakter Malzemeleri Anonim Şirketi (Sörmüş) for a cash consideration of €1.3 million with the difference between the carrying amount of the non-controlling interests' portion of equity acquired and the consideration paid recorded in retained earnings within equity.

27. Borrowings

Borrowings include all interest-bearing liabilities due to financial institutions and other lenders.

In April 2023, the Group successfully issued a Bonded loan ("Schuldscheindarlehen") in the amount of €170.0 million with an average tenor of five years and at competitive pricing. Additionally, the Group has successfully refinanced a bilateral Term Loan, increasing the total loan amount from €115.0 million to €150.0 million and extending the maturity date to 2026.

In November 2023, the Group has issued a new €200.0 million bilateral OeKB-backed Term Loan with final maturity in March 2029, to partially refinance a €70.0 million Term Loan otherwise maturing in February 2024.

All above mentioned instruments are ESG-linked and the margin payable is adjusted based on the Group's EcoVadis ESG rating performance. The proceeds of the new instruments will be used for general corporate purposes, including refinancing and acquisitions.

To further support acquisition financing, the Group has additionally entered into two bilateral Term Loans in December 2022 and January 2023 amounting to INR 13.25 billion (€149.1 million) and which are fully repaid as at 31 December 2023, to fund the Group's acquisition of Hi-Tech and Dalmia OCL (renamed to RHI Magnesita India Refractories Ltd.).

Net debt excluding lease liabilities/Adjusted EBITDA is the key financial covenant of the loan agreements and is shown under Note (38). Compliance with the covenants is measured on a semi-annual basis. In line with the covenant requirements, net debt excluding lease liabilities to Adjusted EBITDA cannot exceed 3.5x. Breach of covenants leads to an anticipated maturity of loans. During 2023 and 2022, the Group met all covenant requirements.

The breakdown of borrowings is presented in the following table:

in € million	Total		
	31.12.2023	current	non-current
Syndicated & Term Loan	1,114.1	45.5	1,068.6
Bonded loans ("Schuldscheindarlehen")	755.0	35.0	720.0
Other credit lines and other loans	62.9	60.3	2.6
Total liabilities to financial institutions	1,932.0	140.8	1,791.2
Other financial liabilities	18.3	8.9	9.4
Capitalised transaction costs	(1.5)	(0.4)	(1.1)
Borrowings	1,948.8	149.3	1,799.5

in € million	Total		
	31.12.2022	current	non-current
Syndicated & Term Loan	942.4	130.7	811.7
Bonded loans ("Schuldscheindarlehen")	585.0	0.0	585.0
Other credit lines and other loans	84.6	84.6	0.0
Total liabilities to financial institutions	1,612.0	215.3	1,396.7
Other financial liabilities	9.0	0.1	8.9
Capitalised transaction costs	(1.0)	(0.3)	(0.7)
Borrowings	1,620.0	215.1	1,404.9

Considering interest swaps, 69% (2022: 73%) of the liabilities to financial institutions carry fixed interest and 31% (2022: 27%) carry variable interest.

The following table shows fixed interest terms and conditions, taking into account interest rate swaps, without liabilities from deferred interest:

Interest terms fixed until	Effective annual interest rate	Currency	31.12.2023 Carrying amount in € million	Interest terms fixed until	Effective annual interest rate	Currency	31.12.2022 Carrying amount in € million
2024	EURIBOR + margin	EUR	573.6	2023	EURIBOR + margin	EUR	372.3
	3.10%	EUR	35.0		Variable rate + margin	EUR	34.0
	Various - Variable rate	Various	34.3		Various - Variable rate	Various	27.4
2025	0.50%	EUR	150.0		0.25%	EUR	115.0
2026	3.63%	EUR	264.0	2024	3.10%	EUR	35.0
2027	2.44%	EUR	743.6	2025	0.59%	EUR	177.0
2028	1.90%	EUR	118.5	2027	2.72%	EUR	751.8
2029	1.52%	EUR	8.0	2028	0.92%	EUR	86.5
2031	1.28%	EUR	5.0	2029	1.52%	EUR	8.0
				2031	1.28%	EUR	5.0
			1,932.0				1,612.0

The table above shows how long the interest rates are fixed, rather than the maturity of the underlying instruments.

Property, plant and equipment and inventories in the amount of €6.9 million (2022: €0.0 million) have been pledged as security for loans.

28. Other financial liabilities

Other financial liabilities include the negative fair value of derivative financial instruments as well as lease liabilities and fixed-term and puttable non-controlling interests payable in Group companies. Additional explanation on derivative financial instruments is provided under Note (36).

in € million	31.12.2023			31.12.2022		
	Current	Non-current	Total	Current	Non-current	Total
Forward exchange contracts	0.8	0.0	0.8	0.6	0.0	0.6
Interest rate derivatives	0.0	2.4	2.4	0.0	0.0	0.0
Commodity swaps	1.1	9.9	11.0	0.9	0.2	1.1
Derivatives in open orders	2.9	0.0	2.9	9.5	0.0	9.5
Derivative financial liabilities	4.8	12.3	17.1	11.0	0.2	11.2
Lease liabilities	18.1	51.8	69.9	17.5	46.4	63.9
Fixed-term or puttable non-controlling interests	18.0	69.3	87.3	21.6	46.2	67.8
Other financial liabilities	40.9	133.4	174.3	50.1	92.8	142.9

In line with the Group's accounting policy, the carrying amount of non-controlling interest is reduced to nil and replaced with a financial liability where the Group has provided a written put option (usually together with a call option) or has entered into a forward contract to acquire the shares not controlled by the Group. The carrying amount of the financial liabilities represents the discounted value of the expected settlement for the following non-controlling interest:

Ownership interest held by NCI in € million		31.12.2023	31.12.2022
Horn & Co. Minerals Recovery GmbH & Co.KG	49.00%	7.7	8.4
RHI Magnesita (Chongqing) Refractory Materials Co., Ltd.	49.00%	15.2	21.3
Jinan New Emei Industries Co. Ltd.	35.00%	30.9	0.0
Liaoning RHI Jinding Magnesita Co., Ltd.	16.67%	22.9	26.4
RHI Refractories Liaoning Co., Ltd.	34.00%	10.6	11.7
Other financial liabilities		87.3	67.8

During the period, €6.5 million (2022: €5.3 million) was recognised as an interest expense on the liability and €6.6 million income

During the period, the liability (2022: €4.7 million) was recognised as an interest expense on the liability and the liability (2022: €4.7 million income) was recognised within other net financial expenses as an adjustment to the amount payable where the written put option price or forward price is based on earnings multiple or is affected by a change in the discount rate. See Note (13). Dividends paid to non-controlling interest amounting to €7.4 million (2022: €2.1 million) have reduced the liability in the current reporting period since there is a contractual right to reduce the liability.

29. Provisions for pensions

The net liability from pension obligations in the Consolidated Statement of Financial Position is as follows:

in € million	31.12.2023	31.12.2022
Present value of pension obligations	420.7	395.5
Fair value of plan assets	(186.4)	(186.6)
Deficit of funded plans	234.3	208.9
Asset ceiling	5.2	3.8
Net liability from pension obligations	239.5	212.7
Overfunded pension plans	2.0	2.0
Other pension plans	241.5	214.7

The present value of pension obligations by beneficiary groups is as follows:

in € million	31.12.2023	31.12.2022
Active beneficiaries	61.5	64.2
Vested terminated beneficiaries	44.0	43.4
Retirees	315.2	287.9
Present value of pension obligations	420.7	395.5

The pension obligations are measured using the following actuarial assumptions for the key countries in which the Group operates:

in %	31.12.2023	31.12.2022
Interest rate		
Austria and Germany	3.3%	3.8%
Brazil	10.1%	10.5%
United Kingdom	4.5%	4.8%
USA	4.8%	5.0%
Future salary increase		
Austria	3.9%	4.5%
Germany	2.5%	2.5%
Brazil	4.5%	4.3%
United Kingdom ¹⁾	n/a	3.3%
USA	3.3%	3.3%
Future pension increase		
Austria	5.3%	3.0%
Germany	2.2%	2.2%
Brazil	4.5%	4.3%
United Kingdom	3.0%	3.4%
USA	2.0%	2.0%

1) No active plan members at 31.12.2023.

These are average values which were weighted with the present value of the respective pension obligation.

The calculation of the actuarial interest rate for the Eurozone countries is based on a yield curve for returns of high-quality corporate bonds denominated in EUR with an average rating of AA, which is derived from pooled index values. The calculation of the actuarial interest rate for the USD and GBP currency area is based on a yield curve for returns of high-quality corporate bonds denominated in USD and GBP with an average rating of AA, which is derived from pooled index values. Where there are very long-term maturities, the yield curve follows the performance of bonds without credit default risk. The interest rate is calculated annually at 31 December, taking into account the expected future cash flows which were determined based on the current personal and commitment data.

The calculation in Austria was based on the AVÖ 2018-P demographic calculation principles for salaried employees from the Actuarial Association of Austria. In Germany, the Heubeck Richttafeln 2018 G actuarial tables were used as a basis. In the other countries, country-specific mortality tables were applied.

The main pension regulations are described below:

The Austrian group companies account for €80.3 million (2022: €81.2 million) of the present value of pension obligations and for €8.8 million (2022: €18.1 million) of the plan assets. The agreed benefits include pensions, invalidity benefits and benefits for surviving dependents. Commitments in the form of company or individual agreements depend on the length of service and the salary at the time of retirement. For the majority of commitments, the amount of the pension subsidy is limited to 75% of the final remuneration including a pension pursuant to the General Social Insurance Act (ASVG). The Group has concluded pension reinsurance policies for part of the commitments. The pension claims of the beneficiaries are limited to the coverage capital required for these commitments. Pensions are predominantly paid in the form of annuities and are partially indexed. For employees joining the company after 1 January 1984, no defined benefits were granted. Rather, a defined contribution pension model is in place. In addition, there are commitments based on the deferred compensation principle, which are fully covered by pension reinsurance policies and commitments for preretirement benefits for employees in mining operations.

The pension plans of the German group companies account for €107.2 million (2022: €107.7 million) of the present value of pension obligations and for €0.7 million (2022: €0.7 million) of the plan assets. The benefits included in company agreements comprise pensions, invalidity benefits and benefits for surviving dependents. The amount of the pension depends on the length of service for the majority of the commitments and is calculated as a percentage of the average monthly wage/salary of the last 12 months prior to retirement. In some cases, commitments to fixed benefits per year of service have been made. The pensions are predominantly paid in the form of annuities and are adjusted in accordance with the development of the consumer price index for Germany. The pension plans are closed for new entrants, except one contribution-based plan. There is no defined contribution model on a voluntary basis. Individual commitments have been made, with major part of them being retired beneficiaries.

The pension plan of the US group company Magnesita Refractories Company, York, USA, accounts for €71.2 million (2022: €71.6 million) of the present value of pension obligations and for €63.0 million (2022: €63.3 million) of the plan assets. The

pension plan is a non-contributory defined benefit plan covering a portion of the employees of the company. The plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). Effective 21 June 1999, the company offered the participants the opportunity to elect to participate in a single enhanced defined contribution plan. Participants who made this election are no longer eligible for future accruals under this plan. All benefits accrued as of the date of transfer will be retained. Employees hired after 21 June 1999 and employees that did not meet the plan's eligibility requirements as of 21 June 1999 are not eligible for this plan. The pensions are predominantly paid in the form of annuities and are adjusted annually based on the US consumer price index. The company's contributions for the year ended 31 December 2021 met, or exceeded, the minimum funding requirements of ERISA.

The pension plan of the UK group company Magnesita Refractories Ltd., Dinnington, United Kingdom, accounts for €41.2 million (2022: €39.0 million) of the present value of pension obligations and holds €45.7 million (2022: €41.2 million) of assets, although no plan assets are reflected on the balance sheet due to the application of International Financial Reporting Interpretations Committee 14 (IFRIC 14) (asset ceiling). The company sponsors a funded defined benefit pension plan for qualifying UK employees. The plan is administered by a separate Board of Trustees which is legally separate from the company. The trustees are composed of representatives of both the employer and employees, plus an independent professional trustee. The trustees are required by law to act in the interest of all relevant beneficiaries and are responsible for the investment policy with regard to the assets plus the day-to-day administration of the benefits. Under the plan, employees are entitled to annual pensions on retirement at age 65. During 2022, the Board of Trustees agreed to a buy-in of the defined benefit obligation with a third-party insurer in the United Kingdom. In terms of the buy-in, the insurer assumed the obligations relating to the plan from July 2022 while the plan assets were liquidated and transferred to the insurer at a value of around €61.7 million. Until the defined benefit scheme is wound up (the buy-out), the Group will continue to recognise the pension obligation and the value of the insurance policy as a plan asset equal to the pension obligation. The surplus plan assets of €4.5 million, at 31 December 2023 are not recognised due to the application of IFRIC 14 and the asset ceiling requirements. It is expected that the remaining surplus, net of adjustments, tax payments and other minor expenses will be refunded to the Group once the plan will be wound up.

The pension liabilities of the Brazilian group company Magnesita Refratários S.A. account for €54.9 million (2022: €49.9 million) of the present value of pension obligations and for €30.6 million (2022: €29.1 million) of the plan assets. The pension plan qualifies as an optional benefit plan. Employees are entitled to contribute to the plan, with the company contributing 1.5 times this value. The agreed benefits include pensions, invalidity benefits and benefits for surviving dependents. Commitments in the form of company or individual agreements depend on the length of service and salary at the time of retirement. For the majority of commitments, the amount of the company pension obligation is limited to 75% of the final remuneration. At retirement, the employee may choose to receive up to 25% of his/her amount at once or receive it on a pro-rata base with different options of monthly quotes.

The following table shows the development of net liability from pension obligations:

in € million	2023	2022
Net liability from pension obligations at beginning of year	212.7	268.1
Currency translation	2.1	4.5
Additions initial consolidation	11.3	0.0
Pension cost	11.8	8.8
Remeasurement losses/(gains)	22.5	(48.1)
Benefits paid	(16.8)	(17.3)
Employers' contributions to external funds	(4.1)	(3.3)
Net liability from pension obligations at year-end	239.5	212.7

The present value of pension obligations developed as follows:

in € million	2023	2022
Present value of pension obligations at beginning of year	395.5	495.0
Currency translation	4.0	11.7
Additions initial consolidation	11.3	0.0
Current service cost	2.2	3.4
Interest cost	19.3	11.8
Remeasurement losses/(gains)		
from changes in demographic assumptions	(0.5)	0.0
from changes in financial assumptions	27.7	(107.5)
due to experience adjustments	(3.1)	13.5
Benefits paid	(35.2)	(33.0)
Employee contributions to external funds	0.6	0.6
Plan amendments	(1.1)	0.0
Present value of pension obligations at year-end	420.7	395.5

The movement in plan assets is shown in the table below:

in € million	2023	2022
Fair value of plan assets at beginning of year	186.6	255.5
Currency translation	2.0	6.2
Interest income	9.3	6.8
Administrative costs (paid from plan assets)	(0.4)	(0.4)
Gains/(losses) on plan assets less interest income	2.6	(69.7)
Benefits paid	(18.4)	(15.7)
Employers' contributions to external funds	4.1	3.3
Employee contributions to external funds	0.6	0.6
Fair value of plan assets at year-end	186.4	186.6

The changes in the asset ceiling are shown below:

in € million	2023	2022
Asset ceiling at beginning of year	3.8	28.6
Currency translation	0.1	(0.9)
Interest expense	0.1	0.0
Losses/(gains) from changes in asset ceiling less interest expense	1.2	(23.9)
Asset ceiling at year-end	5.2	3.8

At 31 December 2023, the weighted average duration of pension obligations amounts to 10.5 years (2022: 10.5 years).

The following amounts were recorded in the Consolidated Statement of Profit or Loss:

in € million	2023	2022
Current service cost	1.2	3.4
Interest cost	19.4	11.8
Interest income	(9.3)	(6.8)
Interest expense from asset ceiling	0.1	0.0
Administrative costs (paid from plan assets)	0.4	0.4
Pension expense recognised in profit or loss	11.8	8.8

The remeasurement results recognised in OCI are shown in the table below:

in € million	2023	2022
Accumulated remeasurement losses at beginning of year	95.4	143.6
Remeasurement losses/(gains) on present value of pension obligations	24.1	(94.0)
(Gains)/losses on plan assets less interest income	(2.6)	69.7
Losses/(gains) from changes in asset ceiling less interest expense	1.2	(23.9)
Accumulated remeasurement losses at year-end	118.1	95.4

The present value of plan assets is distributed to the following classes of investments:

in € million	31.12.2023			31.12.2022		
	Active market	No active market	Total	Active market	No active market	Total
Insurances	22.0	54.9	76.9	0.0	82.1	82.1
Equity instruments	39.9	0.0	39.9	34.4	0.0	34.4
Debt instruments	44.0	0.4	44.4	22.0	2.5	24.5
Cash and cash equivalents	9.5	0.9	10.4	11.8	0.7	12.5
Other assets	14.6	0.2	14.8	32.0	1.1	33.1
Fair value of plan assets	130.0	56.4	186.4	100.2	86.4	186.6

The present value of the insurances to cover the Austrian pension plans corresponds to the coverage capital. Insurance companies predominantly invest in debt instruments and to a low extent in equity instruments and properties.

Plan assets do not include own financial instruments or assets utilised by the Group.

The Group works with professional fund managers for the investment of plan assets. They act on the basis of specific investment guidelines adopted by the pension fund committee of the respective pension plans. The committees consist of management staff of the finance department and other qualified executives. They meet regularly in order to approve the target portfolio with the support of independent actuarial experts and to review the risks and the performance of the investments. In addition, they approve the selection or the extension of contracts of external fund managers.

The largest part of the other assets is invested in pension reinsurance, which creates a low counterparty risk towards insurance companies. In addition, the Group is exposed to interest risks and longevity risks resulting from defined benefit commitments.

The Group generally endows the pension funds with the amount necessary to meet the legal minimum allocation requirements of the country in which the fund is based. Moreover, the Group makes additional allocations at its discretion from time to time. In the financial year 2024, the Group expects employer contributions to external plan assets to amount to €5.1 million and direct payments to entitled beneficiaries to €17.3 million. In the previous year, employer contributions of €3.1 million and direct pension payments of €16.2 million had been expected for the financial year 2023.

The following sensitivity analysis shows the change in present value of the pension and termination benefit obligations if one key parameter changes, while the other influences are maintained constant. In reality, it is rather unlikely that these influences do not correlate. The present value of the pension obligations for the sensitivities shown was calculated using the same method as for the actual present value of the pension obligations (projected unit credit method).

in € million	Change of assumption in percentage points or years	31.12.2023		31.12.2022	
		Pension plans	Termination benefits	Pension plans	Termination benefits
Present value of the obligations		420.7	36.2	395.5	31.5
Interest rate	+0.25	(9.6)	(0.9)	(9.7)	(1.4)
	(0.25)	10.2	0.9	10.1	0.5
Salary increase	+0.25	0.6	0.9	0.3	0.5
	(0.25)	(0.1)	(0.9)	(0.3)	(1.4)
Pension increase	+0.25	7.8	0.0	8.0	0.0
	(0.25)	(6.6)	0.0	(7.4)	0.0
Life expectancy	+ 1 year	2.7	0.0	9.1	0.0
	(1) year	(1.9)	0.0	(8.1)	0.0

These changes would have no immediate effect on the result of the period as remeasurement gains and losses are recorded in OCI without impact on profit or loss. The assumptions regarding the interest rate are reviewed semi-annually; all other assumptions are reviewed at the end of the year.

30. Other personnel provisions

in € million	31.12.2023	31.12.2022
Termination benefits	33.8	31.5
Service anniversary bonuses	18.7	17.9
Semi-retirements	2.7	2.3

Other personnel provisions	55.2	51.7
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Provisions for termination benefits

The provision for termination benefits relates mainly to employees that joined an Austrian company before 1 January 2003 and are subject to a one-off lump-sum termination benefit under Austrian legislation. This is regarded as a post-employment benefit and accounted for consistently with pensions benefits described above.

Provision for the Austrian termination benefits, which accounts for over 80.0% of the balance (2022: 90.0%) were based on the following measurement assumptions:

in %	31.12.2023	31.12.2022
Interest rate	3.3%	3.8%
Future salary increase	3.3%	3.9%

The interest rate for the measurement of termination benefit obligations in the Euro area was determined taking into account the Company specific duration of the portfolio.

Provisions for termination benefits developed as follows:

in € million	2023	2022
Provisions for termination benefits at beginning of year	31.5	44.1
Currency translation	0.0	0.1
Additions initial consolidation	2.0	0.4
Current service cost	1.9	1.0
Interest cost	1.6	0.5
Remeasurement (gains)	(0.1)	(9.9)
Benefits paid	(3.1)	(4.7)
Provisions for termination benefits at year-end	33.8	31.5

Payments for termination benefits are expected to amount to €2.4 million in the year 2024. In the previous year, the payments for termination benefits expected for 2023 amounted to €1.3 million.

The following remeasurement gains and losses were recognised in OCI:

in € million	2023	2022
Accumulated remeasurement losses at beginning of year	17.8	27.7
Remeasurement (gains)	(0.1)	(9.9)
Accumulated remeasurement losses at year-end	17.7	17.8

At 31 December 2023 the average duration of termination benefit obligations amounted to 10.6 years (2022: 12.6 years).

Provisions for service anniversary bonuses

The measurement of provisions for service anniversary bonuses relating to employees in Austria and Germany is based on an interest rate of 3.3% (2022: 3.8%) in Austria and 4.2% (2022: 3.8%) in Germany and considers salary increases of 5.2% (2022: 5.6%) in Austria and 2.5% in Germany (2022: 2.5%).

Provisions for semi-retirement

The funded status of provisions for obligations to employees with semi-retirement contracts is shown in the table below:

in € million	31.12.2023	31.12.2022
Present value of semi-retirement obligations	4.2	5.8
Fair value of plan assets	(1.5)	(3.4)
Provisions for semi-retirement obligations	2.7	2.4

External plan assets are ring-fenced from all creditors and exclusively serve to meet semi-retirement obligations.

31. Other Provisions

The development of provisions is shown in the tables below for 2023 and 2022:

in € million	Onerous/unfavourable contracts	Labour and civil contingencies	Demolition/disposal costs, environmental damages	Restructuring costs	Other	Total
31.12.2022	62.3	8.4	23.2	12.0	4.2	110.1
Currency translation	2.8	0.4	(0.3)	0.0	0.0	2.9
Reversals	(2.0)	(2.6)	(1.0)	(0.7)	(1.3)	(7.6)
Additions	11.4	6.3	7.7	3.1	7.5	36.0
Additions interest	5.6	1.1	1.0	0.0	0.0	7.7
Use	(12.6)	(1.8)	(1.0)	(5.7)	(1.9)	(23.0)
Reclassifications	0.0	(0.6)	0.0	0.0	0.0	(0.6)
31.12.2023	67.5	11.2	29.6	8.7	8.5	125.5
non-current	52.4	11.2	28.0	0.0	0.0	91.6
current	15.1	0.0	1.6	8.7	8.5	33.9

in € million	Onerous/unfavourable contracts	Labour and civil contingencies	Demolition/disposal costs, environmental damages	Restructuring costs	Other	Total
31.12.2021	53.9	7.1	19.5	33.5	4.6	118.6
Currency translation	5.8	0.9	0.5	0.0	(0.1)	7.1
Reversals	(2.6)	(2.4)	(0.4)	(10.5)	0.0	(15.9)

Additions	9.4	5.8	4.3	3.5	1.4	24.4
Additions interest	6.0	1.0	1.4	0.0	0.1	8.5
Use	(10.2)	(5.2)	(2.5)	(14.2)	(1.7)	(33.8)
Reclassifications	0.0	1.2	0.4	(0.3)	(0.1)	1.2
31.12.2022	62.3	8.4	23.2	12.0	4.2	110.1
non-current	49.9	8.4	21.7	0.0	0.0	80.0
current	12.4	0.0	1.5	12.0	4.2	30.1

In November 2017, the Group sold a plant located in Oberhausen, Germany, in order to satisfy the conditions imposed by the European Commission in their approval of the merger of RHI Refractories and Magnesita. Under the terms, the Group remains obligated to provide raw materials at cost and recognised a provision for unfavourable contracts as part of the purchase price allocation to reflect the foregone profit margin and is reflected within onerous/unfavourable contracts. The non-current portion of this contract obligation amounts to €47.7 million as of 31 December 2023 (2022: €49.9 million) and the current portion to €10.6 million (2022: €10.7 million). The unwinding of the discount led to a credit of €5.6 million in 2023 (2022: €6.0 million). In addition, provisions for other unfavourable contracts amount to €9.1 million (2022: €1.7 million), the increase was driven by additional onerous contracts identified mainly in Türkiye, China and Europe.

The provision for labour and civil contingencies primarily comprises labour and civil litigation amounting to €7.8 million (2022: €3.6 million) arising mainly in Brazil.

The provision for demolition and disposal costs and environmental damages primarily includes provisions for the estimated costs of mining site restoration of several mines in Brazil amounting to €9.4 million (2022: €4.7 million) and various sites in the USA amounting to €6.2 million (2022: €7.2 million).

Provisions for restructuring costs amounting to €8.7 million at 31 December 2023 (2022: €12.0 million) primarily consist of estimated benefit obligations to employees due to termination of employment and dismantling costs. €2.8 million (2022: €6.2 million) relates to the remaining redundancy costs at Mainzlar, Germany for employees not subject to the restart of operations, €3.2 million (2022: €3.5 million) relates to the plant closure in Trieben, Austria and €2.0 million (2022: €0.0 million) pertains to the termination of employment as a result of the Group's reorganisation of certain global functions to regional ones.

Other consists mainly of provisions for claims arising from warranties and other similar obligations from the sale of refractory products.

32. Trade payables and other current liabilities

in € million	31.12.2023	31.12.2022
Trade payables	497.9	506.5
Contract liabilities	64.6	61.8
Liabilities to employees	136.4	97.2
Capital expenditure payable	33.0	43.1
Taxes other than income tax	32.6	35.0
Payables from commissions	9.4	7.7
Other current liabilities	46.3	29.0
Trade payables and other current liabilities	820.2	780.3
thereof financial liabilities	561.2	566.4
thereof non-financial liabilities	259.0	213.9

Trade payables include an amount of €84.1 million (2022: €68.8 million) for raw material purchases subject to supply chain finance arrangements.

Contract liabilities mainly consist of prepayments received on orders. In 2023 €61.8 million (2022: €57.9 million) revenue was recognised that was included in the contract liability balance at the beginning of the period.

The item liabilities to employees primarily consists of obligations for wages and salaries, payroll taxes and employee-related duties, performance bonuses, unused vacation and flextime credits. The increase in liabilities to employees is primarily driven by the newly acquired entities, higher bonus accruals and underlying inflationary effects in wages and salaries.

33. Cash generated from/(used in) operations

in € million	2023	2022
Profit after income tax	171.3	166.8
Adjustments for		
income tax	62.0	103.7
depreciation	133.9	115.6
amortisation	43.6	28.9
write down/(write-up) of property, plant and equipment and intangible assets	1.0	(6.0)
income from the reversal of investment subsidies	(1.3)	(0.7)
(write ups)/impairment losses/loss from sale on securities	(22.5)	1.5
losses from the disposal of property, plant and equipment	4.4	2.4
losses from the disposal of subsidiaries	0.6	1.1
net interest expense, derivatives and valuation call/put options	58.3	47.3
result from disposal of joint ventures and associates	(2.7)	(0.2)
other non-cash changes	46.0	26.1
Changes in working capital		
inventories	182.7	(30.0)
trade receivables	1.7	(12.5)
contract assets	0.0	0.0
trade payables	(118.0)	(156.8)
contract liabilities	(13.9)	4.5
Changes in other assets and liabilities		
other receivables and assets	13.1	25.7
provisions	(24.6)	(49.4)
other liabilities	24.5	19.5
Cash generated from operations	560.1	287.5

Other non-cash changes include: expenses of the employee long-term incentive programme of €8.7 million (2022: €8.3 million); net interest expenses for defined benefit pension plans amounting to €12.4 million (2022: €5.7 million) and net remeasurement gains of monetary foreign currency positions and derivative financial instruments of €35.6 million (2022: €13.2 million).

34. Net cash flow from financing activities

The reconciliation of movements of financial liabilities and assets to cash flows arising from financing activities for the current and the prior year is shown in the tables below:

in € million	31.12.2022	Cash changes		Non-cash changes				31.12.2022
			Changes in foreign exchange rates	Interest and other fair value changes	Reclassifications	Additions from initial consolidation	Additions and modifications of leases (IFRS 16)	
Borrowings ¹⁾	(1,620.0)	(257.0)	0.9	0.6	0.0	(73.3)	0.0	(1,948.3)
Lease liabilities	(63.9)	22.7	0.7	(2.4)	0.0	(12.2)	(14.8)	(69.6)
Cash and cash equivalents	520.7	196.0	(3.9)	0.0	(9.3)	0.0	0.0	703.5
Net debt	(1,163.2)	(38.3)	(2.3)	(1.8)	(9.3)	(85.5)	(14.8)	(1,315.4)
Liabilities to fixed-term or puttable non-controlling interests	(67.8)	7.4	4.3	0.3	0.0	(31.5)	0.0	(87.6)

1) As from 1 January, 2023 "Borrowings" excludes "financial liabilities from accrued interest" which are now presented under "other current liabilities". Prior period comparatives have been revised to conform with current year presentation.

in € million	31.12.2021	Cash changes		Non-cash changes				31.12.2021
			Changes in foreign exchange rates	Interest and other fair value changes	Reclassifications	Additions from initial consolidation	Additions and modifications of leases (IFRS 16)	
Borrowings ¹⁾	(1,534.7)	(52.5)	(19.5)	(1.3)	0.0	(12.0)	0.0	(1,620.0)
Lease liabilities	(55.5)	20.6	(1.3)	0.0	0.0	(7.0)	(20.7)	(63.6)
Cash and cash equivalents	580.8	(49.8)	(10.3)	0.0	0.0	0.0	0.0	520.7
Net debt	(1,009.4)	(81.7)	(31.1)	(1.3)	0.0	(19.0)	(20.7)	(1,163.2)
Liabilities to fixed-term or puttable non-controlling interests	(60.0)	2.1	1.6	(0.6)	0.0	(10.9)	0.0	(67.8)

1) As from 1 January, 2023 "Borrowings" excludes "financial liabilities from accrued interest" which are now presented under "other current liabilities". Prior period comparatives have been revised to conform with current year presentation.

35. Additional disclosures on financial instruments

The following tables show the carrying amounts and fair values of financial assets and liabilities by measurement category and level and the allocation to the measurement category. In addition, carrying amounts are shown aggregated according to measurement category.

			31.12.2023		31.12.2022	
	Measurement category IFRS 9 ¹⁾	Level	Carrying amount	Fair value	Carrying amount	Fair value
in € million						
Non-current financial assets						
Marketable securities	FVPL	1	11.8	11.8	9.0	9.0
Shares	FVPL	3	0.5	0.5	0.5	0.5
Shares	FVOCI	3	4.6	4.6	0.0	0.0
Interest rate derivatives and commodity swaps designated as cash flow hedges	-	2	20.5	20.5	42.4	42.4
Investments in non-consolidated subsidiaries	FVPL	-	2.4	2.4	3.0	3.0
Other non-current financial assets	AC	-	3.6		0.2	
Trade and other current receivables	AC	-	510.4		387.7	
Trade and other current receivables	FVOCI	-	31.0	31.0	46.2	46.2
Current financial assets						
Marketable securities	FVPL	1	11.3	11.3	0.0	0.0
Derivatives in open orders and Forward exchange contracts	FVPL	2	0.4	0.4	1.1	1.1
Commodity swaps designated as cash flow hedges	-	2	0.4	0.4	0.0	0.0
Other current financial receivables	AC	-	1.6		0.2	
Cash and cash equivalents	AC	-	703.5		520.7	
Financial assets			1,302.0		1,011.0	
Non-current and current borrowings						
Liabilities to financial institutions	AC	2	1,932.0	1,919.8	1,612.0	1,578.1
Other financial liabilities	AC	-	16.8		8.0	
Non-current and current other financial liabilities						
Lease liabilities	-	-	69.9		63.9	
Commodity swaps designated as cash flow hedges	-	2	11.0	11.0	1.1	1.1

Derivatives in open orders and Forward exchange contracts	FVPL	2	3.8	3.8	10.1	10.1
Interest rate derivatives designated as cash flow hedges	-	2	2.4	2.4	0.0	0.0
Liabilities to fixed-term or puttable non-controlling interests	AC	2/3	33.5	33.5	38.1	38.1
Liabilities to fixed-term or puttable non-controlling interests	FVPL	3	53.7	53.7	29.7	29.7
Trade payables and other current liabilities	AC	-	561.2		566.4	
Financial liabilities			2,684.3		2,329.3	
Aggregated according to measurement category						
Financial assets measured at amortised cost			1,219.1		908.8	
Financial assets measured at FVOCI			35.6		46.2	
Financial assets measured at FVPL			26.4		13.6	
Financial liabilities measured at amortised cost			2,543.5		2,224.5	
Financial liabilities measured at FVPL			57.5		39.8	

- 1) FVPL: Financial assets/financial liabilities measured at fair value through profit or loss.
FVOCI: Financial assets measured at fair value through other comprehensive income.
AC: Financial assets/financial liabilities measured at amortised cost.

In the Group, marketable securities, derivative financial instruments and shares are measured at fair value. Interests in subsidiaries not consolidated are recognised at cost, which due to materiality reasons, is considered a reasonable approximation of fair value.

Fair value is defined as the amount for which an asset could be exchanged, or a liability settled, between market participants in an arm's length transaction on the day of measurement. When the fair value is determined it is assumed that the transaction in which the asset is sold or the liability is transferred takes place either in the main market for the asset or liability, or in the most favourable market if there is no main market. The Group considers the characteristics of the asset or liability to be measured which a market participant would consider in pricing. It is assumed that market participants act in their best economic interest.

The Group takes into account the availability of observable market prices in an active market and uses the following hierarchy to determine fair value:

Level 1:	Prices quoted in active markets for identical financial instruments.
Level 2:	Measurement techniques in which all important data used are based on observable market data.
Level 3:	Measurement techniques in which at least one significant parameter is based on non-observable market data.

The fair value of securities and shares is based on price quotations at the reporting date (Level 1), where such quotations exist. In other cases, a valuation model (Level 3) would be used for such instruments with an exception if such instruments are immaterial to the Group, in which case cost serves as an approximation of fair value.

The fair value of interest derivatives in a hedging relationship (interest rate swaps) is determined by calculating the present value of future cash flows based on current yield curves taking into account the corresponding terms (Level 2).

The fair value of foreign currency derivative contracts correspond to the market value of the forward exchange contracts and the embedded derivatives in open orders denominated in a currency other than the functional currency. These derivatives are measured using quoted forward rates that are currently observable (Level 2).

The fair value of commodity swaps for natural gas reflects the difference between the fixed contract price and the closing quotation of the natural gas price (EEX Base) as of the respective due date of the transaction. The closing price on the stock exchange is used as the input (Level 2).

Liabilities to financial institutions and other financial liabilities are carried at amortised cost in the Consolidated Statement of Financial Position. Liabilities related to fixed-term or puttable non-controlling interests based on a fixed consideration are recognised at amortised cost whereas those liabilities based on a variable consideration are recognised at fair value. The fair values of the liabilities to financial institutions are only disclosed in the Notes and calculated at the present value of the discounted future cash flows using yield curves that are currently observable (Level 2). The carrying amount of other financial liabilities approximate their fair value at the reporting date. In April 2023, the Group recognised a liability related to the commitment to acquire the remaining shares in Jinan New Emei held by other shareholders (see Note 42), amounting to €31.5 million, which will be due in 2026 at the earliest. The fair value is based on the present value of Jinan New Emei's EBITDA performance and certain other variables (see Note 42). The principal valuation parameters are deemed to be non-observable (Level 3).

The carrying amounts of other financial assets approximately correspond to their fair value. Due to the low amounts no material deviation between the fair value and the carrying amount is assumed and the credit default risk is accounted for by forming valuation allowances.

Trade and other current receivables and liabilities as well as cash and cash equivalents are predominantly short-term. Therefore, the carrying amounts of these items approximate fair value at the reporting date.

No contractual netting agreement of financial assets and liabilities were in place as at 31 December 2023 and 31 December 2022.

Net results by measurement category in accordance with IFRS 9

The effect of financial instruments on the income and expenses recognised in 2023 and 2022 is shown in the following table, classified according to the measurement categories defined in IFRS 9:

in € million	2023	2022
Net gain/(loss) from financial assets and liabilities measured at fair value through profit or loss	18.1	(14.6)
Net (loss)/gain from financial assets and liabilities measured at amortised cost	(4.1)	4.6

The net gain from financial assets and liabilities measured at fair value through profit or loss includes income from securities and shares, income from the disposal of securities and shares, impairment losses and income from reversals of impairment losses, fair value gains and losses on the measurement of liabilities to fixed-term or puttable non-controlling interests, fair value gains and losses and realised results of derivative financial instruments outside the scope of hedge accounting.

The net loss from financial assets and liabilities measured at amortised cost includes changes in valuation allowances and losses on derecognitions. Net finance costs include interest income amounting to €19.7 million (2022: €8.3 million) and interest expenses of €75.2 million (2022: €47.5 million), which result from financial assets and liabilities measured at amortised cost.

Other non-current financial assets

Other non-current financial assets consist of the following items:

in € million	31.12.2023	31.12.2022
Interest rate derivatives and commodity swaps	20.5	42.4
Marketable securities and shares	16.9	9.5
Non-current portion of restricted cash	3.4	0.0
Interests in subsidiaries not consolidated	2.4	3.0
Non-current portion of non-current loans	0.2	0.2
Other non-current financial assets	43.4	55.1

Accumulated impairments on investments, securities and shares amount to €3.7 million (2022: €4.3 million). The increase in marketable securities and shares includes a €4.6 million investment representing a minority stake in MCI Carbon Pty Ltd.

Other current financial assets

This item of the Consolidated Statement of Financial Position consists of the following components:

in € million	31.12.2023	31.12.2022
Marketable securities ¹⁾	11.3	0.0
Derivatives in open orders and forward exchange contracts	0.7	1.1
Current portion of non-current loans	1.3	0.2
Current portion of restricted cash	0.3	0.0
Other current financial assets	13.6	1.3

1) Money market funds held for trading have been reclassified to other current financial assets in 2023. Refer to Note (23) for details.

36. Derivative financial instruments

Interest rate derivatives

The Group has concluded interest rate swaps and one interest rate collar to hedge the cash flow risk associated with financial liabilities carrying variable interest rates. The combination of the interest rate swaps and the variable interest debt instruments creates synthetic fixed interest debt instruments without exposure to variability in cash flows due to changes of interest rates. The combination of the interest rate collar and the variable interest debt instruments limits the variability of the debt instruments' cash flows due to changes of interest rates to a predetermined range. The Group has designated all interest rate swaps and the interest rate collar as hedging instruments with the variable interest cash flows of the debt instruments as hedged items in individual hedging relationships recognised as cash flow hedges. The economic relationship between the hedging instrument and the hedged item is determined by comparing the critical terms (nominal value, currency, interest payment date, interest reset dates, etc.) of both items. If the critical terms of the hedging instrument and the hedged item are either the same or closely aligned an economic relationship is assumed to exist. The Group has established a hedge ratio of 1:1 and the cash flow changes of the underlying hedged items are balanced out by the cash flow changes of the hedging instruments. Potential hedge ineffectiveness could arise out of differences in critical terms between the hedging instruments and hedged items. Credit risk may affect hedge effectiveness. However, this risk is assessed to be very low as only international banks with high credit ratings are the counterparties to the hedging instruments.

The fair value of all interest rate derivatives was €17.9 million at the reporting date (2022: €42.4 million) and is shown in other non-current financial assets (liabilities) in the Consolidated Statement of Financial Position. For the reporting period of 2023, €14.5 million loss (2022: €59.1 million gain) has been recognised in OCI as fair value movements of the hedging instrument and €10.0 million (2022: €7.2 million) has been reclassified from OCI to profit or loss and recognised within other net financial expenses reflecting the settlement of the hedging instrument when interest on the underlying debt instrument is paid. No ineffectiveness has been recognised in the Consolidated Statement of Profit or Loss.

The financial effect of the hedged item and the hedging instrument for the year 2023 and 2022 is shown as follows:

in € million	Carrying amount	Statement of Financial Position	Change in fair value recognised in Other Comprehensive Income	Nominal amount
2023	17.9	Other non-current financial assets (liabilities)	(14.5)	EUR 1,081.1 million
2022	42.4	Other non-current financial assets	59.1	EUR 709.2 million

in € million	Cash flow hedge reserve within Equity	Balance net of deferred tax
2023	17.9	13.8
2022	42.4	32.7

Commodity swaps

To hedge the cash flow risk associated with commodity price of gas and oil the Group has entered into financial commodity swaps. The Group has designated all commodity swaps as hedging instruments with expected purchases of commodities used in the production as hedged items in individual hedging relationships recognised as cash flow hedges. The economic relationship between the hedged item and the hedging instrument is deemed upright based on the expectations that the values of the hedged item and the hedging instrument will typically move in opposite directions in response to the hedged risk determined by comparing the critical terms (nominal value, currency, commodity purchase date, commodity swaps settlement dates, etc.) of both items. If the critical terms of the hedging instrument and the hedged item are either the same or closely aligned an economic relationship is assumed to exist. The Group has established a hedge ratio of 1:1 and the cash flow changes of the underlying hedged items are balanced out by the cash flow changes of the hedging instruments. Potential hedge ineffectiveness could arise out of differences in critical terms between the hedging instruments and the hedged items. For oil hedges a source of potential ineffectiveness is different but similar underlyings (crude oil vs fuel oil). Credit risk may affect hedge effectiveness. However, this risk is assessed to be very low as only international banks with high credit ratings are the counterparties to the hedging instruments.

The fair value of all commodity swaps was €10.5 million loss at the reporting date and is shown in other non-current and current financial assets (liabilities) in the Consolidated Statement of Financial Position. For the reporting period of 2023, €10.8 million loss has been recognised in OCI as fair value movements of the hedging instrument and €1.4 million has been removed from cash flow hedge reserve and included directly in the carrying amount of the inventory reflecting the net settlement of the hedging instrument when the underlying inventory is purchased. No ineffectiveness has been recognised in the Consolidated Statement of Profit or Loss.

The financial effect of the hedged items and the hedging instruments for the year 2023 is shown as follows:

in € million	Carrying amount	Statement of Financial Position	Change in fair value recognised in Other Comprehensive Income	Nominal amount
		Other current and non-current financial assets (liabilities)		
2023	(10.5)		(10.8)	Gas 1,141 GWh Oil 700,297 bbl

in € million	Cash flow hedge reserve within Equity	Balance net of deferred tax
2023	(10.5)	(7.9)

Forward exchange contracts

Foreign exchange forward contracts are entered into to reduce the Group's cash flow exposure to currency movements based on the internal risk assessment and analysis conducted. Hedge accounting is not applied to these economic hedges.

The nominal value and fair value of forward exchange contracts as of 31 December 2023 are shown in the table below:

			31.12.2023	
Purchase	Sale	Nominal in	Nominal value in million	Fair value in € million
EUR	ZAR	ZAR	175.0	0.0
MXN	USD	MXN	670.0	0.0
USD	INR	USD	20.0	(0.1)
EUR	USD	USD	150.0	(0.6)
BRL	USD	USD	30.0	(0.1)
CLP	USD	USD	18.5	0.2
EUR	INR	EUR	33.0	(0.1)
CZK	EUR	EUR	16.0	0.2
Forward exchange contracts				(0.5)

The nominal value and fair value of forward exchange contracts as of 31 December 2022 are shown in the table below:

			31.12.2022	
Purchase	Sale	Nominal in	Nominal value in million	Fair value in € million
EUR	USD	EUR	25.0	0.1
USD	INR	USD	8.5	0.0
INR	EUR	INR	4,000.0	(0.6)
Forward exchange contracts				(0.5)

37. Financial risk management

Financial risks are incorporated in the Group's corporate risk management framework and are centrally controlled by Corporate Treasury.

None of the following risks have a significant influence on the going concern premise of the Group.

Credit risks

The maximum credit risk from recognised financial assets amounts to €1,302.0 million (2022: €1,011.0 million) and is primarily related to investments with banks and receivables due from customers.

The credit risk with banks related to investments (especially cash and cash equivalents) is reduced as business transactions are only carried out with prime financial institutions with a good credit rating. Individual counterpart exposures limits are assigned to each financial institution based on a matrix composed of the credit rating (S&P or Moody's) and balance sheet assets.

Trade Receivables are hedged as far as possible through credit insurance and collateral arranged through banks (guarantees, letters of credit) in order to mitigate credit and default risk. Credit and default risks are monitored continuously, and valuation allowance are recognised for risks that have occurred and are identifiable.

This credit risk from trade receivables and contract assets, which is hedged by existing credit insurance and letters of credit, is shown by customer segment in the following table:

in € million	31.12.2023	31.12.2022
Steel	360.0	284.6
Industrial	181.1	148.8
Gross credit exposure	541.1	433.4
Credit insurance and letters of credit	(235.4)	(214.5)
Net credit exposure	305.7	218.9

The movement in the valuation allowance in respect of trade receivables and contract assets during the year and the previous year was as follows:

in € million	2023		2022	
	Individually assessed - credit impaired	Collectively assessed - not credit impaired	Individually assessed - credit impaired	Collectively assessed - not credit impaired
Accumulated valuation allowance at beginning of year	29.4	0.9	23.2	0.6
Currency translation	0.1	-	0.8	-
Additions initial consolidation	9.1	-	0.3	-

Addition	18.4	-	7.0	0.3
Use	(4.3)	-	(1.3)	-
Reversal	(0.7)	(0.1)	(0.6)	-
Accumulated valuation allowance at year-end	52.0	0.8	29.4	0.9

The increase in the valuation allowance in 2023 is mainly driven by €13.4 million from acquired entities in 2023.

For trade receivables and contract assets, for which no objective evidence of impairment exists, lifetime expected credit losses have been calculated using a provision matrix as shown below. To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due.

in € million	Trade receivables and contract assets					
	not past due	less than 30 days	more than 31 days	Collectively assessed - not credit impaired	Individually assessed - credit impaired	Total
31.12.2023						
Expected credit loss rate in %	0.01 - 0.57%	0.05-1.22%	0.30 - 59.13%			
Gross carrying amount invoiced	414.2	27.8	17.0	459.0	89.5	548.5
Lifetime expected credit loss	(0.6)	(0.1)	(0.1)	-	-	(0.8)
Valuation allowance - credit impaired	-	-	-	-	(52.0)	(52.0)
Carrying amount with either expected credit loss or incurred loss allowance	-	-	-	-	-	495.7
Carrying amount without expected credit loss or incurred loss allowance	-	-	-	-	-	45.4
Total trade receivables and contract assets						541.1

in € million	Trade receivables and contract assets					
	not past due	less than 30 days	more than 31 days	Collectively assessed - not credit impaired	Individually assessed - credit impaired	Total
31.12.2022						
Expected credit loss rate in %	0.02 - 0.34%	0.07-0.81%	0.31-49.48%			
Gross carrying amount invoiced	385.6	10.8	3.0	399.4	30.1	429.5
Lifetime expected credit loss	(0.5)	(0.1)	(0.4)	-	-	(1.0)
Valuation allowance - credit impaired	-	-	-	-	(29.3)	(29.3)
Carrying amount with either expected credit loss or incurred loss allowance	-	-	-	-	-	399.2
Carrying amount without expected credit loss or incurred loss allowance	-	-	-	-	-	37.7
Total trade receivables and contract assets						436.9

Liquidity risk

Liquidity risk refers to the risk that financial obligations cannot be met when due. The Group's financial policy is based on long-term financial planning and is centrally controlled and monitored continuously at the Group. The liquidity requirements resulting from budget and medium-term planning are secured by concluding appropriate financing agreements. As of 31 December 2023, the Group has a committed Revolving Credit Facility (RCF) of €600.0 million, which was unutilised (2022: committed RCF was €600.0 million and was also unutilised). The RCF is a syndicated facility with multiple international banks and matures in 2028. The liquidity of the Group's subsidiaries is managed regionally but with central steering. Access to liquidity and optimised cash levels is ensured by Corporate Treasury, which supports business needs and lowers borrowing costs. Refer to Note (27) for a description of the consequences if financial covenants embedded in loan agreements are breached. Refer to Note (4) for a description of the potential impacts on the finance costs of ESG-linked loans if the Group's ESG rating gets downgraded.

Non-derivative financial liabilities

An analysis of the terms of non-derivative financial liabilities based on undiscounted cash flows including the related interest payments shows the following expected cash outflows:

in € million	Carrying amount 31.12.2023	Cash outflows	Remaining term		
			up to 1 year	2 to 5 years	over 5 years
Borrowings					
fixed interest	433.1	454.5	48.4	391.0	15.1
variable interest	1,498.9	1,736.0	154.5	1,363.8	217.7
Other financial liabilities	16.8	22.5	13.7	8.8	0.0
Lease liabilities	69.9	77.2	17.9	33.8	25.5
Liabilities to fixed-term or puttable non-controlling interests	87.3	181.2	18.0	13.1	150.1
Trade payables and other current liabilities	561.2	561.2	561.2	0.0	0.0
Non-derivative financial liabilities	2,667.2	3,032.6	813.7	1,810.5	408.4

in € million	Carrying amount 31.12.2022	Cash outflows	Remaining term		
			up to 1 year	2 to 5 years	over 5 years
Borrowings					
fixed interest	469.0	481.4	118.5	274.3	88.6
variable interest	1,143.1	1,284.7	132.9	1,129.1	22.7
Other financial liabilities	8.0	8.1	(0.2)	8.3	0.0
Lease liabilities	63.9	70.2	18.5	33.6	18.1
Liabilities to fixed-term or puttable non-controlling	67.0	102.0	21.6	15.7	145.5

interests	61.8	182.8	21.6	15.7	145.5
Trade payables and other current liabilities	506.5	506.5	506.5	0.0	0.0
Non-derivative financial liabilities	2,258.3	2,533.7	797.8	1,461.0	274.9

Derivative financial instruments

The remaining terms of derivative financial instruments as of 31 December 2023 and 31 December 2022 are shown in the table below:

	Remaining term				
in € million	Carrying amount 31.12.2023	Cash flows	up to 1 year	2 to 5 years	over 5 years
Receivables from derivatives with net settlement					
Interest rate derivatives	20.3	20.3	0.0	20.3	0.0
Commodity swaps	0.5	0.5	0.4	0.1	0.0
Forward exchange contracts	0.4	0.4	0.4	0.0	0.0
Liabilities from derivatives with net settlement					
Commodity swaps	11.0	11.0	1.1	9.9	0.0
Derivatives in open orders	2.9	2.9	2.9	0.0	0.0
Interest rate derivatives	2.4	2.4	0.0	1.5	0.9

	Remaining term				
in € million	Carrying amount 31.12.2022	Cash flows	up to 1 year	2 to 5 years	over 5 years
Receivables from derivatives with net settlement					
Interest rate swaps	42.4	42.4	0.0	40.6	1.8
Forward exchange contracts	0.1	0.1	0.1	0.0	0.0
Derivatives in open orders	1.0	1.0	1.0	0.0	0.0
Liabilities from derivatives with net settlement					
Derivatives in open orders	9.5	9.5	9.5	0.0	0.0

Foreign currency risks

Foreign currency risks arise where business transactions (operating activities, investments, financing) are conducted in a currency other than the functional currency of a company. They are monitored at Group level and analysed with respect to hedging options. Usually, the net position of the Group in the respective currency serves as the basis for decisions regarding the use of hedging instruments.

Foreign currency risks arise in financial instruments which are denominated in a currency other than the functional currency and are monetary in nature. These include trade receivables and payables, cash and cash equivalents as well as financial liabilities as shown in the Consolidated Statement of Financial Position. Investments in equity instruments are not of a monetary nature, and therefore not linked to a foreign currency risk in accordance with IFRS 7 'Financial Instruments: Disclosures'.

The majority of foreign currency financial instruments in the Group result from operating activities and intragroup financing transactions. The Group may designate intragroup balances as part of a net investment hedge in accordance with IAS 21 'The Effects of Changes in Foreign Exchange Rates' with the effective portion of exchange gains and losses recognised in equity. Significant provisions denominated in foreign currencies are also included in the analysis of risk.

The following table shows the foreign currency positions in the Group's major currencies as of 31 December 2023 and 31 December 2022:

in € million	USD	EUR	GBP	INR	Other	Total
Financial assets	729.3	59.6	8.2	2.6	47.8	847.5
Financial liabilities, provisions	(469.8)	(95.3)	(14.8)	(0.8)	(22.4)	(603.1)
Net foreign currency position	259.5	(35.7)	(6.6)	1.8	25.4	244.4
in € million	USD	EUR	GBP	INR	Other	Total
Financial assets	813.3	69.5	11.2	5.2	60.3	959.5
Financial liabilities, provisions	(664.5)	(100.7)	(15.4)	(0.4)	(28.7)	(809.7)
Net foreign currency position	148.8	(31.2)	(4.2)	4.8	31.6	149.8

The disclosures required by IFRS 7 for foreign exchange risks include a sensitivity analysis that shows the effects of hypothetical changes in the relevant risk variables on profit or loss and equity. In general, all non-functional currencies in which Group companies enter into financial instruments are considered to be relevant risk variables. The effects on a particular reporting period are determined by applying the hypothetical changes in these risk variables to the financial instruments held by the Group as of the reporting date. It is assumed that the positions on the reporting date are representative for the entire year. The sensitivity analysis does not include the foreign exchange differences that result from translating the net asset positions of the group companies with a functional currency other than Euro into the Group's reporting currency, the Euro.

A 10% appreciation or devaluation of the relevant functional currency against the following major currencies as of 31 December 2023 would have had the following effect on profit or loss and equity (both excluding income tax):

in € million	Appreciation of 10%		Devaluation of 10%	
	(Loss)/gain	Equity	Gain/(loss)	Equity
US Dollar	(22.0)	(20.3)	26.8	24.9
Euro	1.5	6.1	(1.9)	(7.4)
Indian Rupee	(0.2)	(0.2)	0.2	0.2
Other currencies	(1.7)	(1.7)	2.1	2.1

The effect in equity also includes the exchange effects recorded directly in OCI in line with the Group's policy.

The hypothetical effect on profit or loss and on equity at 31 December 2022 can be summarised as follows:

in € million	Appreciation of 10%		Devaluation of 10%	
	(Loss)/gain	Equity	Gain/(loss)	Equity
US Dollar	(12.9)	(12.9)	15.8	15.8
Euro	1.3	5.9	(1.6)	(7.2)
Indian Rupee	(0.4)	(0.4)	0.5	0.5
Other currencies	(2.5)	(2.5)	3.0	3.0

The effect in equity also includes the exchange effects recorded directly in OCI in line with the Group's policy.

Interest rate risks

The interest rate risk in the Group is primarily related to debt instruments carrying variable interest rates, which may lead to fluctuations in results and cash flows. At 31 December 2023, one interest rate collar with a nominal value of €180.0 million and interest rate swaps with a nominal value of €901.1 million (2022: €709.2 million) existed with the interest rate swaps converting the variable interest rate of the hedged debt instrument into a fixed interest rate. Further information is provided in Note (36).

The exposure to interest rate risks is presented through sensitivity analysis in accordance with IFRS 7. This analysis shows the effects of changes in market interest rates on interest payments, interest income and interest expense and on equity.

The Group measures fixed interest financial assets and financial liabilities at amortised cost and did not use the fair value option - a hypothetical change in the market interest rates for these financial instruments at the reporting date would have had no effect on profit and loss or equity.

Changes in market interest rates on debt instruments designated as cash flow hedges to protect against interest rate-related payment fluctuations within the scope of hedge accounting have an effect on equity and are therefore included in the equity-related sensitivity analysis. If the market interest rate as of 31 December 2023 had been 25 basis points higher or lower, equity would have been €1.7 million (2022: €1.1 million) higher or lower considering tax effects.

Changes in market interest rates have an effect on the interest result of primary variable interest debt instruments whose interest payments are not designated as hedged items as a part of cash flow hedge relationships against interest rate risks and are therefore included in the calculation of the result-related sensitivities. If the market interest rate as of 31 December 2023 had been 25 basis points higher or lower, the interest result would have been €0.2 million (2022: €0.1 million) lower or higher.

Commodity price risk

The Group manages its exposure to commodity prices, namely gas and electricity purchases in Europe, by entering into forward fixed price take or pay contracts with various suppliers to mitigate and reduce the impact of price volatility and secure the energy supply for its production process. These contracts are accounted for as executory contracts as the commodities purchases are for own use purposes. The Group's Energy Risk policy sets out thresholds for fixing quantities based on the expected usage which is usually over a five-year period with lower levels of forward purchases in the outer years.

In line with the above strategy, the Group may also enter into financial commodity swap contracts to fix prices for expected purchases not covered by the fixed price take or pay contracts within the overall defined thresholds. Further information is provided under Note (36).

Other market price risk

The Group holds certificates in an investment fund amounting to €11.8 million (2022: €9.0 million) in order to provide the legally required coverage of personnel provisions of its Austrian subsidiaries. The market value of these certificates is influenced by fluctuations of the worldwide volatile stock and bond markets.

38. Capital management

The objectives of the capital management strategy of the Group are to continue as a going concern and to provide a capital base from which to finance growth and investments, to service debt, and to increase shareholders value, including the payment of dividends to shareholders.

The Group manages its capital structure through careful monitoring and assessment of the overall economic framework conditions, credit, interest rate and foreign exchange risks and the requirements and risks related to operations and strategic projects.

	31.12.2023	31.12.2022
Net debt (in € million) ¹⁾²⁾	1,303.9	1,163.2
Net gearing ratio (in %)	95.6%	110.9%
Net debt to Adjusted EBITDA	2.40x	2.33x

1) Further information is provided under Note (34).

2) As from 1 January 2023 "Net debt" excludes "financial liabilities from accrued interest" which are now presented under "other current liabilities". Prior period comparatives have been revised to conform with current year presentation.

Net debt, which reflects borrowings and lease liabilities net of cash and cash equivalents and short-term marketable securities held for trading, is managed by Corporate Treasury. The main task of the Corporate Treasury department is to execute the capital management strategy as well as to secure liquidity to support business operations on a sustainable basis, to use banking and financial services efficiently and to limit financial risks while at the same time optimising earnings and costs.

The net gearing ratio is the ratio of net debt to total equity.

Net debt excluding lease liabilities/Adjusted EBITDA is the main financial covenant of loan agreements. The key performance indicator for net debt in the Group is the group leverage, which reflects the ratio of Net debt to Adjusted EBITDA, including lease liabilities. It is calculated as follows:

in € million	31.12.2023	31.12.2022
EBIT	333.9	343.6
Amortisation	43.6	28.9
Restructuring and write-down expenses	19.6	(6.8)
Other operating income and expenses	11.8	18.2
Adjusted EBITA	408.9	383.9
Depreciation	133.9	115.6
Adjusted EBITDA	542.8	499.5
Total debt ¹⁾	1,948.8	1,620.0
Lease liabilities	69.9	63.9
Less: Cash and cash equivalents	703.5	520.7

Less: Cash and cash equivalents	100.0	200.1
Less: Marketable securities	11.3	0.0
Net debt ¹⁾	1,303.9	1,163.2
Net debt excluding IFRS 16 lease liabilities	1,234.0	1,099.3
Net debt to Adjusted EBITDA	2.40x	2.33x
Net debt to Adjusted EBITDA excluding IFRS 16 lease liabilities	2.27x	2.20x

1) As from 1 January 2023 "Net debt" excludes "financial liabilities from accrued interest" which are now presented under "other current liabilities". Prior period comparatives have been revised to conform with current year presentation.

In both 2023 and 2022, all externally imposed financial covenants have been complied with. The Group has sufficient liquidity headroom within its committed debt facilities.

39. Contingent liabilities

At 31 December 2023, warranties, performance guarantees and other guarantees amount to €70.9 million (2022: €61.9 million). Contingent liabilities have a remaining term of between two months and three years. Based on past experience, the probability that contingent liabilities are realised is considered to be low.

The Group is subject to lawsuits and disputes in the normal course of the business; the Group has assessed these positions and recorded provisions where necessary.

Uncertain tax treatments

The calculation of income taxes is based on the tax laws applicable in the individual countries in which the Group operates. Due to their complexity, the tax items presented in the Consolidated Financial Statements may be subject to different interpretations by local finance authorities. In this context it should be noted that a tax provision is generally recognised when the Group has a present obligation as a result of a past event, and when it is considered probable that there will be a future outflow of funds.

The Group is continually adapting its global presence to improve customer service and maintain its competitive advantage, and leads open discussions with tax authorities about, for example, transfer of functions and related profit between related parties and exit taxation. In this regard, disputes may arise, where the Group management's understanding differs from the positions of the local tax authorities. In such cases, where an appeal is available, management's judgements are based on a likely outcome approach, taking into consideration advice from professional firms and previous experiences when assessing the risks.

The Group is party to several tax proceedings in Brazil which involve estimated contingent liabilities amounting to €271.8 million (2022: €243.0 million). These tax proceedings are as follows:

Income Tax relating to historical corporate transactions

There are three proceedings in which Brazilian Federal Tax Authorities issued tax assessments which rejected the deduction of goodwill generated in two corporate transactions that were undertaken 2007 and 2008, for Corporate Income Taxes. The tax authorities issued assessments arguing that such transactions cannot generate deductions as they do not fulfil the requirements provided by law. Although the Group has been broadly successful, the tax authorities have appealed those outcomes. The final outcome of these proceedings is expected within one and three years. The exposure of €177.2 million (2022: €157.0 million) is limited to the fiscal tax years ended 2018 at which stage all available goodwill tax deductions had been made.

Royalties

The Group is party to 38 proceedings where the Brazilian Mining Authorities ("ANM") challenged the criteria used for calculating and paying the Financial Compensation for Exploration of Mineral Resources ("CFEM"), which are mining royalties payable by every mining company. The authorities have mainly disputed the basis of production costs estimates used in the determination of the royalties that are payable. The claims relate to fiscal years up to 2017, following which the legislation for royalties was changed. The Group, together with its technical and legal advisors continues to challenge ANM assessments. Most of the procedures are ongoing within the ANM administrative courts. Final decisions of the first cases are expected within four to five years. As of 31.12.2023, the potential risk amounts to €31.5 million (2022: €28.2 million), including interest and penalties.

Corporate income and other taxes

There are several tax audits ongoing in Brazil mainly relating to: offsetting federal tax payables and receivables, social security contributions, as well as offsetting certain federal tax debts with corporate income tax credits. The potential cash outflow resulting from the outcome of these tax audits amount to €63.1 million (2022: €57.8 million).

Civil litigation contingencies

Magnesita Refratários S.A., Contagem, Brazil, is party to a public civil action for damages allegedly caused by overloaded trucks in contravention of Brazilian traffic legislation. In 2017, a decision was rendered in favour of Magnesita Refratários S.A. in the trial court. The decision is being appealed by the Public Attorney of Minas Gerais which requested the suspension of the proceeding until the Brazilian Superior Court of Justice can assess other similar cases. The potential loss from this proceeding amounts to €18.3 million as of 31 December 2023 (2022: €15.5 million).

There are other minor proceedings and lawsuits in which subsidiaries are involved that have no significant impact on the financial position and performance of the Group.

40. Other financial commitments

Capital commitments amount to €9.3 million at 31 December 2023 (2022: €20.4 million) and are exclusively due to third parties. They are shown at nominal value.

In addition, the Group has purchase commitments related to the supply of raw materials, especially for electricity, natural gas, strategic raw materials as well as for the transport of raw materials within the Group. This results in other financial commitments of the nominal value of €307.9 million at the reporting date (2022: €399.7 million). The remaining terms of the contracts amount to up to four years. Purchases from these arrangements are recognised in accordance with the usual course of business. Purchase contracts are regularly reviewed for imminent losses, which may occur, for example, when requirements fall below the agreed minimum purchase volume or when contractually agreed prices deviate from the current market price level.

41. Independent Auditor's remuneration

in € million	2023	2022
Fees in respect of the audit of the Consolidated and Parent Company Financial Statements ¹⁾	(1.1)	(1.1)
Other audit fees, in respect of subsidiaries' audit, to PwC network firms	(2.0)	(1.8)
Total audit fees	(3.1)	(2.9)
Non-audit services - Interim review ¹⁾	(0.2)	(0.2)
Other non-audit services	(0.3)	0.0
Total fees	(3.6)	(3.1)

1) Total fees to PricewaterhouseCoopers Accountants N.V. totalled €1.3 million (2022: €1.3 million).

42. Business Combinations

The aggregated transaction costs expensed in the Consolidated Statement of Profit or Loss relating to all business combinations closed in 2023 amounted to €4.5 million.

Acquisition of Horn & Co Minerals Recovery Group (MIRECO)

The purchase price allocation was finalised in 2023 and did not materially differ from the preliminary purchase price allocation disclosed in the last year's Consolidated Financial Statements.

Acquisition of Sömaş

Last year the Group completed the acquisition of Sömaş. The preliminary amounts recognised for the acquired assets and liabilities at the acquisition date have been adjusted compared to the Consolidated Financial Statements 2022 during the measurement period in accordance with IFRS 3. The final amounts recognised for each major class of assets and liabilities as a result of this acquisition are the following:

in € million	preliminary value	fair value adjustments	final value
Property plant and equipment	3.6	16.7	20.3
Intangible assets: Customer relationships	10.5	(3.0)	7.5
Intangible assets: Order backlogs	5.9	(1.1)	4.8
Inventories	14.1	0.7	14.8
Other assets	16.2	0.0	16.2
Total assets acquired	50.3	13.3	63.6
Deferred tax liabilities	3.8	3.0	6.8
Other liabilities	8.9	0.3	9.2
Total liabilities assumed	12.7	3.3	16.0
Net identifiable assets acquired	37.6	10.0	47.6
Less: Non-controlling interests	(5.0)	(1.6)	(6.6)
Goodwill	13.8	(8.4)	5.4
Consideration paid	46.4		46.4

Compared to the preliminary valuation a positive fair value adjustment on property, plant and equipment has been recognised which mainly results from the reassessment of the useful lives of machinery & equipment in use with a carrying amount of close to zero at the acquisition date. The machinery & equipment's fair value was measured using the replacement cost approach based on current cost obtained from third parties and internal information. The negative fair value adjustments related to the order backlog and the customer relationships result from an increase in contributory asset charges associated with the fair value adjustment on property, plant and equipment compared to the preliminary valuation.

Acquisition of Dalmia OCL

In November 2022, the Group signed a share swap agreement stipulating its acquisition of 100% of the shares of Dalmia OCL Ltd, India, through the non-wholly owned subsidiary RHI Magnesita India Ltd. Dalmia OCL owns 51% of the shares of Dalmia Seven Refractories Ltd ('DSR'), India, which were also acquired in the scope of this business combination. The acquisition was closed on 5 January 2023 which is the acquisition date. The remaining 49% of DSR's shares were acquired on 24 July 2023 by the Group, see Note (26). After the acquisition, Dalmia OCL was renamed to RHI Magnesita India Refractories Ltd. and Dalmia Seven Refractories Ltd. ('DSR') was renamed to RHI Magnesita Seven Refractories Ltd.

The acquired companies are one of the leading refractory producers in India engaged in the business of manufacturing and selling alumina bricks as well as basic bricks, non-basic bricks and flow control products with a focus on customers in the Industrial and Steel segments. Dalmia OCL and DSR have five manufacturing facilities.

The acquisition enables the Group to increase its presence in the high growth Indian refractory market considering a forecast steel production growth in India of 12% per annum and a compound annual growth rate of 7-8% until 2030. The production footprint and product offering of the acquired companies is highly complementary to the Group's existing plant locations (four plants) and product range with focus in the Industrial segment, where the Group had been under-represented. Moreover, significant synergies are expected through network benefits and additional production capacities in important industrial locations in the south and west of India, where the Group had no assets.

The consideration transferred amounting to €325.2 million comprises two elements: issued equity shares and cash. RHI Magnesita India Ltd. issued 27,000,000 equity shares with a fair value equivalent of €270.0 million based on the quoted share price (Level 1). The cash consideration amounts to €55.2 million.

The following table shows the final amounts recognised for each major class of assets and liabilities and the fair value adjustments as a result of the acquisition:

in € million	book value	fair value adjustments	(adjusted) value
Property plant and equipment and other intangible assets	30.1	17.5	47.6
Intangible assets: Customer relationships	0.0	106.9	106.9
Intangible assets: prepayments on mining rights	0.0	8.0	8.0
Inventories	42.7	0.0	42.7
Trade and other receivables (gross contractual amounts: €42.2 million)	38.8	0.0	38.8
Cash and cash equivalents	0.1	0.0	0.1
Total assets acquired	111.7	132.4	244.1
Trade and other liabilities	53.3	0.0	53.3
Lease Liabilities	9.9	0.0	9.9
Provisions and deferred tax liabilities	1.6	0.0	1.6
Borrowings	19.7	0.0	19.7
Total liabilities assumed	84.5	0.0	84.5
Net identifiable assets acquired	27.2	132.4	159.6
Plus: net decrease in non-controlling interests ¹⁾			68.8
Goodwill			96.8
Consideration			325.2

Consideration paid, net of cash acquired for purposes of the Consolidated Statement of Cash Flows

55.1

Equity shares issued and transferred

270.0

1) The net decrease in non-controlling interests is explained below.

The fair value of the customer relationships was measured using the multi-period excess earnings method. Under this method, the fair value of the customer relationships is calculated by determining the present value of earnings after tax attributable to the acquired companies' existing customers. The customer relationships in the Industrial segment are amortised over the estimated useful life of 10 years, while the customer relationships in the Steel segment are amortised over the estimated useful

life of 20 years.

The goodwill recognised as a result of this acquisition is attributable to the expected synergies mentioned above and is not tax deductible.

The Group measures goodwill as the excess of RHI Magnesita N.V.'s share in the consideration transferred plus non-controlling interests over the acquired identifiable net assets. RHI Magnesita N.V.'s share in the consideration transferred amounts to €189.2 million which has been determined on the basis of its calculated ownership interests in Dalmia OCL and DSR under a 'look-through' approach immediately after the share swap. Accordingly, RHI Magnesita N.V.'s share of the consideration attributable to Dalmia OCL amounts to 60.11%, whereas its share of the consideration attributable to DSR amounts to 30.66%.

Consistent with the 'look-through' approach the Group recognises non-controlling interests for this acquisition amounting to €67.2 million which were measured at the calculated share in Dalmia OCL's and DSR's net assets attributable to the non-controlling shareholders (39.89% for Dalmia OCL and 69.34% for DSR). The consideration transferred attributable to the non-controlling shareholders amounting to €136.0 million is eliminated against non-controlling interests. Both the recognition and the elimination have decreased non-controlling interests on acquisition by €68.8 million.

The impact of the share swap on the non-controlling interests in RHI Magnesita India Ltd. is described in Note (26).

Since the date of inclusion of the acquired companies in the Group's Consolidated Financial Statements, revenues have increased by €115.3 million, Adjusted EBITA has increased by €9.5 million and net income has decreased by €2.8 million. The acquired companies form part of the Steel and Industrial reportable segments.

Acquisition of Hi-Tech

In October 2022, the Group signed an agreement stipulating its acquisition of the refractory business of Hi-Tech Chemicals Ltd ('Hi-Tech'), India, via an asset deal. The acquisition was closed on 31 January 2023 which is the acquisition date.

Hi-Tech is a leading specialty refractory producer in India engaged in the business of manufacturing and selling of premium flow control products like ISO, slide-gate plates, shrouds, plugs apart from castables, nozzle opening compound or tundish monolithics with a focus on customers in the Steel segment. Hi-Tech operates a state-of-the-art manufacturing facility in the city of Jamshedpur, India.

This acquisition enables the Group to expand its presence and participate in the high growth refractory market in India and the wider region considering a forecast steel production growth in India of 12% per annum and a compound annual growth rate of 7-8% until 2030. Through the acquisition the Group can expand its flow control product offering and enlarge its production capacities based on a low cost and semi-automised production. Moreover, substantial synergies are expected through economies of scale and additional production capacities for a strategic market segment.

The cash consideration paid upon closing of the acquisition amounts to €87.0 million.

The following table shows the final amounts recognised for each major class of assets and liabilities and the fair value adjustments as a result of the acquisition:

in € million	book value	fair value adjustments	(adjusted) value
Property plant and equipment	11.7	10.7	22.4
Intangible assets: Customer relationships	0.0	23.8	23.8
Inventories	7.8	0.0	7.8
Trade and other receivables	0.1	0.0	0.1
Total assets acquired	19.6	34.5	54.1
Trade and other liabilities	0.3	0.0	0.3
Deferred tax liabilities	0.0	1.9	1.9
Total liabilities assumed	0.3	1.9	2.2
Net identifiable assets acquired	19.3	32.6	51.9
Goodwill			35.1
Consideration			87.0
Consideration paid, net of cash acquired for purposes of the Consolidated Statement of Cash Flows			87.0

The fair value of the customer relationships was measured using the multi-period excess earnings method. Under this method, the fair value of the customer relationships is calculated by determining the present value of earnings after tax attributable to the acquired refractory business' existing customers. The customer relationships are amortised over the estimated useful life of 20 years.

The goodwill recognised as a result of this acquisition is attributable to the expected synergies mentioned above and is not tax deductible.

Since the date of inclusion of the acquired refractory business in the Consolidated Financial Statements, revenues have increased by €25.8 million, Adjusted EBITA has increased by €2.8 million and net income has increased by €0.6 million. The acquired refractory business forms part of the Steel reportable segment.

Acquisition of Jinan New Emei

In January 2023, the Group signed a share purchase agreement stipulating its acquisition of 65% of the shares of Jinan New Emei Industries Co Ltd. ('Jinan New Emei'), China. Jinan New Emei owns 100% of the shares of Jinan Emei Metallurgical Materials Co Ltd ('JEMM'), China, which were also acquired in the scope of this acquisition. The acquisition was closed on 26 April 2023 which is the acquisition date.

The acquired companies are leading manufacturers of refractory slide gate plates and systems, nozzles and mixes for steel flow control applications serving customers in the Steel segment. The recently commissioned state-of-the-art and highly automated plant in Laiwu, Shandong province, is a major part of the acquisition.

The acquisition enables the Group to expand its flow control product range and its solutions contract offering in the Chinese domestic market, both of which are key strategic priorities. Moreover, the acquisition gives access to substantial new customer relationships in China and deliver additional production capacity for increasing supply of refractories in both China and the wider East Asia region.

The consideration payable in cash amounts to €22.9 million. Thereof an amount of €19.8 million was paid upon closing of the acquisition. The remaining amount of €3.1 million is a liability towards the former owner which reflects deferred cash consideration and estimated post-closing adjustments related to working capital and net debt, payable one year after the closing date.

The following table shows the final amounts recognised for each major class of assets and liabilities and the fair value adjustments as a result of the acquisition:

in € million	book value	fair value adjustments	(adjusted) value
Property plant and equipment	19.3	0.3	19.6
Intangible assets: Customer relationships	0.0	5.9	5.9
Other intangible assets	4.8	0.0	4.8
Inventories	16.4	(0.3)	16.1
Trade and other receivables (gross contractual amounts: €64.8 million)	64.5	(3.9)	60.6
Cash and cash equivalents	5.7	0.0	5.7
Total assets acquired	110.7	2.0	112.7
Trade and other liabilities	66.4	2.7	69.1
Borrowings	15.2	0.0	15.2
Total liabilities assumed	81.6	2.7	84.3
Net identifiable assets acquired	29.1	(0.7)	28.4
Less: Non-controlling interests			(9.9)
Goodwill			4.4
Consideration			22.9

Consideration paid, net of cash acquired for purposes of the Consolidated Statement of Cash Flows	14.1
Liability towards former owner	3.1

The fair value of the customer relationships was measured using the multi-period excess earnings method. Under this method, the fair value of the customer relationships is calculated by determining the present value of earnings after tax attributable to the acquired companies' existing customers. The customer relationships are amortised over the estimated useful life of around eight years.

The goodwill recognised as a result of this acquisition is attributable to synergies resulting from the integration of the acquired companies into the existing refractories business in China and is not tax deductible.

The Group recognises non-controlling interests for this acquisition measured at the present ownership instruments' proportionate share in Jinan New Emei's net assets. These were derecognised to zero in line with the Group's accounting policy related to fixed term or puttable non-controlling interests, see Note (3).

Since the date of inclusion of the acquired companies in the Consolidated Financial Statements, revenues have increased by €49.3 million, Adjusted EBITA has decreased by €1.1 million and net income has decreased by €0.9 million. Had the inclusion of the acquired companies taken place as of 1 January 2023, revenues would have increased by €74.8 million, Adjusted EBITA would have increased by €0.1 million and net income would have decreased by €1.7 million. The acquired companies form part of the Steel reportable segment.

The Group has also signed a commitment to purchase the remaining shares (35%) of Jinan New Emei in exchange for a contingent consideration. The purchase may be executed no earlier than three years after the closing date and no later than four years after the closing date. The contingent consideration is calculated based on an agreed multiple of the average annual EBITDA delivered by Jinan New Emei over the three-year period from 2023 to 2025 (assuming that the purchase is executed in 2026), its future net debt and its future working capital compared to a target working capital. Due to a contractual cap the contingent consideration cannot exceed an amount equivalent to €127.8 million (CNY 1 billion).

For this contingent consideration on the closing date the Group recognised a financial liability amounting to €31.5 million, subsequently measured at fair value through profit or loss and payable in 2026 at the earliest. The Group has concluded, based on the terms and pricing of the commitment, that the risks and rewards of ownership associated with the outstanding shares have not been transferred to the Group; refer to Note (3).

Acquisition of Dalmia GSB

In March 2023, the Group signed an agreement stipulating its acquisition of 100% of the shares of Dalmia GSB Refractories GmbH ('Dalmia GSB'), Germany. The acquisition was closed on 28 April 2023 which is the acquisition date.

Dalmia GSB is a leading supplier of monolithic lances and other precast products to European steel customers for use in the desulphurisation and homogenisation of molten steel, based in Bochum, Germany.

The acquisition enables the Group to expand its product range offered to customers in the Steel segment and to gain a market share in the European lances market. Moreover, attractive potential synergies are expected to be realised through the inclusion of additional products within the Group's heat management solutions offering and from cross-selling, procurement and logistics benefits.

The consideration paid in cash amounts to €13.1 million. Additionally, the Group repaid borrowings on behalf of Dalmia GSB in the amount of €7.2 million upon closing of the acquisition. Since under the purchase agreement the Group is obliged to repay the borrowings, the repaid amounts are included in the net cash outflow related to the acquisition which after deduction of the cash acquired amounts to €18.1 million.

The fair value adjustments of assets and liabilities based on the final purchase price allocation as a result of the acquisition have decreased the net assets of Dalmia GSB from €1.6 million to €-1.7 million. The difference between the consideration paid and the (adjusted) negative net assets is allocated to goodwill amounting to €14.8 million. The goodwill recognised as a result of this acquisition reflects the acquired market share and expected synergies mentioned above and is allocated to the Steel segment. The goodwill is not tax deductible. The acquired company forms part of the Steel reportable segment.

Acquisition of Seven Refractories Group

In April 2023, the Group signed a share purchase agreement for the acquisition of 75.5% of the shares of Seven Refractories Deutschland GmbH, Germany and 100% of the shares of Seven Refractories d.o.o, Slovenia. Seven Refractories d.o.o owns equity investments with non-controlling interests in six companies located in Italy, Cyprus, the USA and the United Kingdom which were also acquired in the scope of this business combination.

The acquisition was closed on 17 July 2023 which is the acquisition date.

Seven Refractories Group is a specialist supplier of non-basic monolithic refractory mixes serving customers in the Industrial and Steel segments. Products offered by Seven Refractories Group range from low temperature fireclay to ultra-high temperature zircon mixes, high-grade alumina mixes and sustainable taphole clay with a low CO₂ footprint. Seven Refractories Group has three production sites in Slovenia, India and the US and sales offices and service centres in Cyprus, Germany, Italy and the United Kingdom.

The acquisition will enable the Group to offer a broader range of non-basic refractory mixes and is expected to be highly complementary to the Group's existing non-basic portfolio. Attractive potential synergies are expected through cross selling

complementary to the Group's existing non-basic portfolio. Attractive potential synergies are expected through cross-selling opportunities, logistics improvements, increased recycling usage, procurement efficiencies and low capital intensity brownfield expansion projects. Lastly, the acquisition gives access to substantial new customer relationships in 45 countries.

The consideration paid in cash amounts to €84.4 million.

Until the date the Consolidated Financial Statements were authorised for issue, the initial consolidation is incomplete because the purchase price allocation and the measurement of assets and liabilities has not been finalised. The outstanding measurement considerations mainly relate to customer relationships and trade receivables. The fair value adjustments of assets and liabilities based on the preliminary purchase price allocation as a result of the acquisition are the following:

in € million	book value	fair value adjustments	(adjusted) value
Property plant and equipment and other intangible assets	10.5	0.0	10.5
Intangible assets: Customer relationships	0.0	26.4	26.4
Loan receivables	8.9	(7.6)	1.3
Inventories	11.0	0.0	11.0
Trade and other receivables	34.2	0.0	34.2
Cash and cash equivalents	6.7	0.0	6.7
Total assets acquired	71.3	18.8	90.1
Trade and other liabilities	22.6	0.0	22.6
Deferred tax liabilities	0.1	5.1	5.2
Borrowings	29.6	0.0	29.6
Total liabilities assumed	52.3	5.1	57.4
Net identifiable assets acquired	19.0	13.7	32.7
Less: Non-controlling interests			(3.0)
Goodwill			54.7
Consideration			84.4
Consideration paid, net of cash acquired for purposes of the Consolidated Statement of Cash Flows			77.7

The amounts recognised for the acquired assets and liabilities on the closing date and the resulting goodwill are preliminary and subject to adjustment for a period of one year from the closing date as allowed under the accounting standards. On finalisation of the purchase price allocation, adjustments, including tax impacts, if any, will be reflected against goodwill. The initial accounting for this acquisition including the purchase price allocation is expected to be finalised by the end of June 2024.

The preliminary fair value of the customer relationships was measured using the multi-period excess earnings method. Under this method, the fair value of the customer relationships is calculated by determining the present value of earnings after tax attributable to the acquired companies' existing customers. The customer relationships are amortised over the estimated useful life of 15 years.

The preliminary goodwill recognised as a result of this acquisition is attributable to the synergies mentioned above and is not tax deductible.

The Group recognises non-controlling interests for this acquisition measured at the present ownership instruments' proportionate share in the acquired companies' net assets.

Since the date of inclusion of the acquired companies in the Consolidated Financial Statements, revenues have increased by €41.8 million, Adjusted EBITA has increased by €0.9 million and net income has decreased by €0.5 million. Had the inclusion of the acquired companies taken place as of 1 January 2023, revenues would have increased by €94.2 million and net income would have decreased by €1.6 million. The acquired companies form part of the Steel and Industrial reportable segments.

Acquisition of P-D Refractories

In August 2023, the Group signed a purchase agreement for the acquisition of the refractory business of Wetro GmbH ('Wetro'), Germany, via an asset deal, of 100% of the shares of P-D Refractories GmbH, Germany, and 86.77% of the shares of P-D Refractories CZ a.s., Czech Republic. P-D Refractories CZ a.s. owns 50% of the shares of P-D Kremen d.o.o, Slovenia, which were also acquired in the scope of this business combination. P-D Kremen d.o.o unlike the other P-D companies is a joint venture under IFRS 11 and the Group therefore accounts for the investment in this company under the equity method.

The acquisition was closed on 2 October 2023 which is the acquisition date.

P-D Refractories is a producer of high-quality alumina-based refractories for industrial applications in process industries, with a leading market position in the glass and aluminium sectors. Previously part of the Preiss-Daimler Group, the assets acquired include refractory plants in Germany and Czech Republic and clay, quartzite and silica raw material sites in Czech Republic and Slovenia.

The acquisition will increase the Group's capabilities in alumina-based refractories and its presence in process industries, where the Group had been under-represented compared to other customer sectors. Substantial synergies are expected to be generated through access to new customers and cross-selling opportunities, production network and logistics efficiencies, vertical integration benefits, recycling, technology transfer and procurement savings.

The consideration paid in cash amounts to €44.5 million. Additionally, the Group repaid borrowings on behalf of P-D Refractories GmbH in the amount of €22.3 million upon closing of the acquisition. Since under the purchase agreement the Group is obliged to repay the borrowings, the repaid amounts are included in the net cash outflow related to the acquisition.

Until the date the Consolidated Financial Statements were authorised for issue, the initial consolidation is incomplete because the purchase price allocation and the measurement of assets and liabilities has not been finalised. The outstanding measurement considerations mainly relate to property, plant and equipment and inventories. The fair value adjustments of assets and liabilities based on the preliminary purchase price allocation as a result of the acquisition are the following:

in € million	book value	fair value adjustments	(adjusted) value
Property plant and equipment and Investments	53.2	(32.5)	20.7
Deferred tax assets	0.0	10.5	10.5
Inventories	81.7	(12.6)	69.1
Trade and other receivables	38.2	0.0	38.2
Cash and cash equivalents	3.6	0.0	3.6
Total assets acquired	176.7	(34.6)	142.1
Trade and other liabilities	41.9	0.0	41.9
Other provisions	3.1	0.0	3.1

Provisions for pensions	14.5	(3.2)	11.3
Deferred tax liabilities	1.3	(1.3)	0.0
Borrowings	28.3	0.0	28.3
Total liabilities assumed	89.1	(4.5)	84.6
Net identifiable assets acquired	87.6	(30.1)	57.5
Less: Non-controlling interests			(5.5)
Bargain purchase gain			(7.5)
Consideration			44.5
Consideration paid less cash acquired plus repaid borrowings for purposes of the Consolidated Statement of Cash Flows			63.2

The amounts recognised for the acquired assets and liabilities on the closing date and the resulting bargain purchase gain are preliminary and subject to adjustment for a period of one year from the closing date as allowed under the accounting standards. On finalisation of the purchase price allocation, adjustments, including tax impacts, if any, will be reflected against the bargain purchase gain. The initial accounting for this acquisition including the purchase price allocation is expected to be finalised by the end of June 2024.

The fair value adjustments of assets and liabilities based on the preliminary purchase price allocation as a result of the acquisition have decreased the net assets of the acquired companies from €87.6 million to €57.5 million. These include the devaluation of obsolete inventories, an adjustment of the acquired fixed assets' carrying amount and the impact from the remeasurement of assumed provisions for pensions. Taking into account these adjustments and the respective tax impacts the acquisition has resulted in the recognition of a preliminary bargain purchase gain amounting to €7.5 million within other income. This gain mainly reflects the expected tax benefits resulting from the future reversal of temporary differences associated with the mentioned adjustments.

The Group recognises non-controlling interests for this acquisition measured at the present ownership instruments' proportionate share in P-D Refractories CZ a.s.'s net assets.

Since the date of inclusion of the acquired companies in the Consolidated Financial Statements, revenues have increased by €32.3 million, Adjusted EBITA has decreased by €0.6 million and net income has decreased by €1.7 million. Had the inclusion of the acquired companies taken place as of 1 January 2023, revenues would have increased by €164.1 million and net income would have decreased by €1.0 million. The acquired companies mainly form part of the Industrial reportable segment.

43. Transactions with related parties

Related companies include subsidiaries that are not consolidated, joint ventures, associates and MSP Foundation, Liechtenstein, as a shareholder of RHI Magnesita N.V., since it exercises significant influence based on its shareholding of more than 25% in RHI Magnesita N.V. The personnel welfare foundation of Stopinc AG, Switzerland, as well as Chestnut Beteiligungs GmbH, Germany and FEWI Beteiligungs GmbH, Germany (shareholders of the Group, which are related to a director) are considered related companies.

Related persons are persons having authority and responsibility for planning, directing and controlling the activities of the Group (key management personnel) and their close family members. Key management personnel comprises members of the Board of Directors of RHI Magnesita N.V. and the Executive Management Team (EMT).

Related companies

In 2023 and 2022, the Group conducted the following transaction with its related companies:

in € million	Joint ventures		Associates	
	2023	2022	2023	2022
Revenue from the sale of goods and services	2.2	0.7	0.0	0.0
Purchase of raw materials	5.5	4.0	0.0	0.0
Interest income	0.0	0.0	0.0	0.7
Trade liabilities	1.0	0.5	0.0	0.0

In 2023 and 2022, no transactions were carried out between the Group and MSP Foundation, FEWI Beteiligungs GmbH or Chestnut Beteiligungs GmbH, with the exception of the dividend paid.

A service relationship with respect to the company pension scheme of the employees of Stopinc AG exists between the personnel welfare foundation of Stopinc AG and the fully consolidated subsidiary Stopinc AG. Stopinc AG makes contribution payments to the plan assets of the foundation to cover pension obligations. The pension plan is recognised as a defined benefit plan and is included in Note (29). At 31 December 2023, no current accounts receivable existed (2022: €0.0 million). In the past reporting period, employer contributions amounting to €0.6 million (2022: €0.6 million) were made to the personnel welfare foundation. At 31 December 2023, a net asset from overfunded pension plans of €1.7 million (2022: €1.7 million) is recognised.

Related persons

Remuneration of key management personnel of the Group comprises the remuneration of the active Board of Directors and the EMT.

in € million	2023	2022
Executive Directors and EMT		
Short-term employee benefits	9.7	7.9
Share-based payments	6.4	4.6
Total	16.1	12.5
Non-Executive Directors ¹⁾	1.2	1.1

(1) Compensation paid to Non-Executive Directors mainly reflects fees for services as Directors.

Employee representatives acting as Non-Executive Directors do not receive additional compensation for these services and are not included in the above table.

Share dealing reports of persons discharging managerial responsibilities are published on the website of RHI Magnesita N.V. and announced via regulatory news services. The Group maintains Directors' & Officers' liability insurance for the Board of Directors and Company officers.

The Group and a close relative of a Non-Executive Director agreed a non-remunerated consultancy agreement to advise the Group on the economic and political framework in countries in which it does not yet have strong business links.

44. Material events after the reporting date

After the reporting date on 31 December 2023, there were no events of special significance which may have a material effect on the financial position and performance of the Group.

Statement of the Board of Directors

Statement pursuant to Article 5:25c, paragraph 2, subsection c. of the Dutch Financial Markets Supervision Act ("Wet op het financieel toezicht").

The Consolidated Financial Statements for the year ended 31 December 2023, have been prepared on a going concern basis and in accordance with IFRSs, as issued by the IASB and interpretations issued by the IFRIC, and as endorsed by the European Union (EU).

To our knowledge,

- the Consolidated Financial Statements referred to above give a true and fair view of the assets, liabilities, financial position, and profit of RHI Magnesita N.V. and the undertakings included in the consolidation as a whole; and
- the Annual Report for RHI Magnesita Group (comprising RHI Magnesita NV and its affiliated companies whose details are included in its Financial Statements) for the year ended 31 December 2023 gives a true and fair view of the state of affairs as of the balance sheet date, the development and course of business during the financial year, and that the Annual Report describes the material risks that the RHI Magnesita Group faces.

Vienna, 28 February 2024

Executive Directors

Stefan Borgas

Ian Botha

Non-Executive Directors

Herbert Cordt

John Ramsay

Janet Ashdown

David Schlaff

Stanislaus Prinz zu Sayn-Wittgenstein Berleburg

Janice "Jann" Brown

Karl Sevelda

Marie-Hélène Ametsreiter

Wolfgang Ruttensstorfer

Employee Representative Directors

Karin Garcia

Martin Kowatsch

Michael Schwarz

Company Financial Statements of RHI Magnesita N.V.

Company Balance Sheet as at 31 December 2023
(before appropriation of result)

in € million	Note	31.12.2023	31.12.2022
ASSETS			
Non-current assets			
Property, plant and equipment		0.3	0.2
Non-current financial assets	(A)	1,196.2	943.3
Securities		0.5	0.5
Deferred tax assets		6.9	10.8
Total non-current assets		1,203.9	954.8
Current assets			
Receivables from group companies		8.6	52.2
Other current receivables		1.3	0.4
Cash and cash equivalents	(B)	0.8	1.6
Total current assets		10.7	54.2
Total assets		1,214.6	1,009.0
EQUITY AND LIABILITIES			
Equity			
Share capital	(C)	49.5	49.5
Treasury shares	(D)	(110.7)	(116.1)
Additional paid-in capital	(E)	361.3	361.3
Legal and mandatory reserves	(F)	86.3	86.3
Other reserves		650.7	464.5
Result for the period	(L)	164.6	155.7

Shareholders' Equity		1,201.7	1,001.2
Non-current liabilities			
Non-current liabilities	(G)	0.3	0.2
Current liabilities			
Current liabilities	(H)	12.6	7.6
Total liabilities		12.9	7.8
Total equity and liabilities		1,214.6	1,009.0

Company Statement of Profit or Loss for the period 1 January 2023 to 31 December 2023

in € million	Note	2023	2022
General and administrative expenses	(I)	(29.7)	(22.0)
Result before taxation		(29.7)	(22.0)
Net financial result	(J)	(0.4)	0.0
Loss before income tax		(30.1)	(22.0)
Income tax		(3.3)	(18.8)
Net result from investments	(K)	198.0	196.5
Net result for the period	(L)	164.6	155.7

Movements in Shareholders' Equity

in € million	Share capital	Treasury shares	Legal and mandatory reserves				Other reserves		Equity attributable to shareholders
			Additional paid-in capital	Cash flow hedges	Currency translation	Mandatory reserve	Retained earnings	Net result	
31.12.2022	49.5	(116.1)	361.3	31.8	(148.6)	288.7	378.9	155.7	1,001.2
Appropriation of prior year result	-	-	-	-	-	-	155.7	(155.7)	-
Net result	-	-	-	-	-	-	-	164.6	164.6
Share transfer / Vested LTIP	-	5.4	-	-	-	-	(5.4)	-	-
Share-based expenses	-	-	-	-	-	-	8.7	-	8.7
Dividends	-	-	-	-	-	-	(77.7)	-	(77.7)
Net income / (expense) recognised directly in equity	-	-	-	(25.8)	(14.0)	-	144.7	-	104.9
31.12.2023	49.5	(110.7)	361.3	6.0	(162.6)	288.7	604.9	164.6	1,201.7

in € million	Share capital	Treasury shares	Additional paid-in capital	Legal and mandatory reserves			Other reserves	Net result	Equity attributable to shareholders
				Cash flow hedges	Currency translation	Mandatory reserve	Retained earnings		
31.12.2021	49.5	(117.0)	361.3	(7.1)	(197.3)	288.7	164.7	243.1	785.9
Appropriation of prior year result	-	-	-	-	-	-	243.1	(243.1)	-
Net result	-	-	-	-	-	-	-	155.7	155.7
Share transfer / Vested LTIP	-	0.9	-	-	-	-	(0.9)	-	-
Share-based expenses	-	-	-	-	-	-	8.3	-	8.3
Dividends	-	-	-	-	-	-	(70.5)	-	(70.5)
Net income / (expense) recognised directly in equity	-	-	-	38.9	48.7	-	34.2	-	121.8
31.12.2022	49.5	(116.1)	361.3	31.8	(148.6)	288.7	378.9	155.7	1,001.2

General

RHI Magnesita N.V. (the "Company"), is a public limited company incorporated under the laws of the Netherlands (naamloze vennootschap), having its official seat (statutaire zetel) in Arnhem, the Netherlands, and its office at Kranichberggasse 6, 1120 Vienna, Austria, registered with the Dutch Trade Register under number 68991665.

The shares of RHI Magnesita N.V. (ISIN code NL0012650360) are listed on the Main Market of the London Stock Exchange and are included in the FTSE 250 index. The Company holds a secondary listing on the Vienna Stock Exchange (Wiener Börse).

Basis of preparation

The Company Financial Statements have been prepared in accordance with the provisions of Part 9 of Book 2 of the Dutch Civil Code. The Company uses the option of Section 362, subsection 8 of Part 9, Book 2, of the Dutch Civil Code to prepare the Company Financial Statements on the basis of the same accounting principles as those applied for the Consolidated Financial Statements. Valuation is based on recognition and measurement requirements of accounting standards adopted by the EU (i.e. only IFRS that is adopted for use in the EU at the date of authorisation) as explained further in the Notes to the Consolidated Financial Statements.

Fiscal Unity

For corporate income tax purposes, RHI Magnesita N.V., Vienna Branch, acts as the head of a corporate tax group in Austria with the following companies:

- RHI Magnesita GmbH
- Veitscher Vertriebsgesellschaft mb.H
- Veitsch-Radex Vertriebsgesellschaft mb.H
- Refractory Intellectual Property GmbH
- Veitsch-Radex GmbH
- Radex Vertriebsgesellschaft mb.H
- RHI Refractories Raw Material GmbH
- Lokalbahn Mixnitz-St. Erhard GmbH

According to the Group and tax compensation agreement, which forms a legal requirement for the Austrian corporate tax group, tax compensation payments within the corporate tax group are calculated based on the stand-alone method, without charging negative tax compensations. In case of a taxable profit, the respective tax group member has to pay a tax compensation to RHI Magnesita N.V. as the head of the corporate tax group amounting to the legally applicable corporate tax rate (24.0% for 2023). In case of a taxable loss, the respective tax group member does not receive a negative tax compensation by RHI Magnesita N.V., but rather the taxable loss is carried forward internally and reduces the calculation base for any future tax compensation payment by the respective tax group member to RHI Magnesita N.V. (group internal carry forward of losses). Any tax compensation payment by tax group members to RHI Magnesita N.V. is reduced by withholding taxes paid by the respective group member, which RHI Magnesita N.V. could credit against any corporate income tax due in Austria. For cases of termination of the corporate tax group or cases in which a tax group member leaves the corporate tax group, the group and tax compensation agreement foresees a final tax compensation true-up.

The corporate income tax rate for the Company is 24.0% (2022: 25.0%). The effective tax rate is 2.0% (2022: 86.0%) with an income tax expense of €3.3 million (2022: €18.8 million expense) on a loss before income tax of €30.1 million (2022: €22.0 million loss). The low effective income tax rate is mainly attributable to a substantial non-taxable income derived from investments in subsidiaries (€198.0 million). Still, the Company, as head of a fiscal unity, consolidated the taxable results of the other unity members and recognised a tax expense of €3.3 million.

All income and expenses are settled through their intercompany (current) accounts.

Significant accounting policies

Non-current financial assets

In the Company Financial Statements, investments in Group companies are stated at net asset value, in accordance with the equity method, if the Company effectively exercises influence of significance over the operational and financial activities of these investments. The net asset value is determined on the basis of the accounting principles applied by the Company. In case the net asset value of an investment in a Group company is negative, any existing loans to Group companies considered as net investment are impaired. A provision for any remaining equity deficit is recognised when an outflow of resources is probable and can be reliably estimated.

Receivables from Group companies

Accounts receivables are measured at fair value and are subsequently measured at amortised cost, less allowance for credit losses. The carrying amount of the accounts receivable approximates the fair value.

Net result from investments

The share in the result of investments comprises the share of the Company in the result of these investments.

Non-current financial assets

(A) Non-current financial assets

The financial fixed assets comprise investments in:

		31.12.2023	31.12.2022
Name and registered office of the company	Country of core activity	Share in %	Share in %
RHI Magnesita Deutschland AG, Wiesbaden, Germany	Germany	12.5	12.5
RHI Refractories Raw Material GmbH, Vienna, Austria	Austria	25.0	25.0
RHI Magnesita GmbH, Vienna, Austria	Austria	100.0	100.0

The investments have developed as follows:

in € million	2023	2022
At beginning of year	943.3	644.8
Transactions with non-controlling interests without change of control	161.0	(5.2)
Changes from currency translation and cash flow hedges	(39.8)	87.7
Changes from defined benefit plans	(16.3)	39.5
Dividend distribution	(50.0)	(20.0)
Net result from investments	198.0	196.5
Balance at year-end	1,196.2	943.3

The following list, prepared in accordance with the relevant legal requirements (Dutch Civil Code, Book 2, Sections 379), shows all companies in which RHI Magnesita N.V. holds a direct or indirect share of at least 20%:

		31.12.2023		31.12.2022	
Ser. no.	Name and registered office of the company	Shareholder	Share in %	Shareholder	Share in %
1.	RHI Magnesita N.V., Arnhem, Netherlands				
2.	Agellis Group AB, Lund, Sweden	39.	100.0	39.	100.0
3.	Baker Refractories Holding Company, Delaware, USA	28.	100.0	28.	100.0
4.	Baker Refractories I.C., Inc., Delaware, USA	3.	100.0	3.	100.0
5.	Dalmia GSB Refractories GmbH, Bochum, Germany	53.	100.0	-	0.0
6.	Didier Société Industrielle de Production et de Construction - "D.S.I.P.C.", Valenciennes, France	53.	100.0	53.	100.0
7.	Dutch Brasil Holding B.V., Arnhem, Netherlands	99.	100.0	99.	100.0
8.	Dutch MAS B.V., Arnhem, Netherlands	53.	100.0	53.	100.0
9.	Dutch US Holding B.V., Arnhem, Netherlands	99.	100.0	99.	100.0
10.	Feuerfestwerk Bad Hönningen GmbH, Wiesbaden, Germany	103.	100.0	103.	100.0
11.	Foreign Enterprise "VFRA" Dnipropetrovsk Ukraine	39	100.0	39	100.0

11.	Foreign Enterprise "RHI", Dnepropetrovsk, Ukraine	57.	100.0	57.	100.0
12.	GIX International Limited, Dinnington, United Kingdom	104.	100.0	104.	100.0
13.	Horn & Co. RHIM Minerals Recovery GmbH, Siegen, Germany	54.	51.0	54.	51.0
14.	Indresco U.K. Limited, Dinnington, United Kingdom	12.,78.	100.0	12.	100.0
15.	Intermetal Engineers (India) Private Limited, Mumbai, India	55.	100.0	55.	99.9
16.	Jinan New Emei Industries Co. Ltd., Jinan, PR China	49.	65.0	-	0.0
17.	Liaoning RHI Jinding Magnesita Co., Ltd, Dashiqiao, PR China 1)	39.	100.0	39.	83.3
18.	Lokalbahn Mixnitz-St. Erhard GmbH, Vienna, Austria	76.	100.0	76.	100.0
19.	LWB Refractories Hagen GmbH, Wiesbaden, Germany	103.	100.0	103.	100.0
20.	LWB Refractories Holding France S.A.S., Valenciennes, France	103.	100.0	103.	100.0
21.	Magnesita Asia Refractory Holding, Limited, Hong Kong, Hong Kong	20.	100.0	20.	100.0
22.	Magnesita Finance S.A., Luxembourg, Luxembourg	7.,35.	100.0	7.	100.0
23.	Magnesita Malta Finance Ltd., St. Julians, Malta	24.,103.	100.0	24.,103.	100.0
24.	Magnesita Malta Holding Ltd., St. Julians, Malta	29.,103.	100.0	29.,103.	100.0
25.	Magnesita Mineração S.A., Brumado, Brazil	22.,35.	100.0	35.	100.0
26.	Magnesita Refractories (Canada) Inc., Montreal, Canada	3.	100.0	3.	100.0
27.	Magnesita Refractories (Dalian) Co., Ltd., Dalian, PR China	22.	100.0	22.	100.0
28.	Magnesita Refractories Company, York, USA	40.	100.0	40.	100.0
29.	Magnesita Refractories GmbH, Wiesbaden, Germany	103.	100.0	103.	100.0
30.	Magnesita Refractories Limited, Dinnington, United Kingdom	3.	100.0	3.	100.0
31.	Magnesita Refractories México, S.A. de C.V., Monterrey, Mexico	3.,4.	100.0	3.,4.	100.0
32.	Magnesita Refractories Middle East Free Zone Establishment, Dubai, United Arab Emirates	22.	100.0	22.	100.0
33.	Magnesita Refractories S.C.S., Valenciennes, France	20.,103.	100.0	20.,103.	100.0
34.	Magnesita Refractories S.R.L., Milano, Italy	103.	100.0	103.	100.0
35.	Magnesita Refratários S.A., Contagem, Brazil	7.	100.0	7.	100.0
36.	Magnesita Resource (Anhui) Company Ltd., Chizhou, PR China	21.,49.	100.0	49.	100.0
37.	P-D Refractories CZ a.s., Velké Opatovice, Czech Republic	54.	86.8	-	0.0
38.	Producción RHI México, S. de R.L. de C.V., Ramos Arizpe, Mexico	71.,104.	100.0	71.,104.	100.0
39.	Radex Vertriebsgesellschaft mb.H., Leoben, Austria	101.	100.0	101.	100.0
40.	Rearden G Holdings Eins GmbH, Wiesbaden, Germany	22.	100.0	22.	100.0
41.	Refractarios Argentinos S.A, Industrial Comercial Y Minera (I.C.M.), San Nicolás, Argentina 2)	7.,9.,104.	100.0	7.,42.	100.0
42.	Refractarios Magnesita Colombia S.A.S., Sogamoso, Colombia	7.,35.	100.0	7.	100.0
43.	Refractarios Magnesita Perú S.A.C., Lima, Peru	7.,35.	100.0	7.,42.	100.0
44.	Refractory Intellectual Property GmbH, Vienna, Austria	54.	100.0	54.	100.0

		31.12.2023		31.12.2022	
Ser. no.	Name and registered office of the company	Shareholder	Share in %	Shareholder	Share in %
45.	Refractory Intellectual Property GmbH & Co KG, Vienna, Austria	44.	100.0	44.,54.	100.0
46.	RHI Canada Inc., Burlington, Canada	104.	100.0	104.	100.0
47.	RHI Chile S.A., Santiago, Chile	41.,12.,104.	100.0	12.,104.	100.0
48.	RHI Italia S.R.L., Brescia, Italy	54.	100.0	54.	100.0
49.	RHI Magnesita (China) Co., Ltd., Shanghai, PR China	39.	100.0	39.	100.0
50.	RHI Magnesita (Chongqing) Refractory Materials Co., Ltd., Chongqing, PR China	49.	51.0	49.	51.0
51.	RHI Magnesita Belgium NV, Evergem, Belgium	58.,83.	100.0	58.,83.	100.0
52.	RHI Magnesita Bochum GmbH, Bochum, Germany	53.	100.0	-	0.0
53.	RHI Magnesita Deutschland AG, Wiesbaden, Germany	1.,39.	100.0	1.,39.	100.0
54.	RHI Magnesita GmbH, Vienna, Austria	1.	100.0	1.	100.0
55.	RHI Magnesita India Limited, New Delhi, India	7.,9.,104.	56.1	7.,9.,104.	70.2
56.	RHI Magnesita India Refractories Limited, Rajgangpur, India	55.	100.0	-	0.0
57.	RHI Magnesita RE Limited, Guemsey, United Kingdom	39.	100.0	39.	100.0
58.	RHI Magnesita Sales Germany GmbH, Wiesbaden, Germany	83.	100.0	83.	100.0
59.	RHI Magnesita Seven Refractories Limited, Dseven, India	56.	100.0	-	0.0
60.	RHI Magnesita Switzerland AG, Hünenberg, Switzerland	39.,53.	100.0	39.,53.	100.0
61.	RHI Magnesita Trading B.V., Rotterdam, Netherlands	1.,54.	100.0	54.	100.0
62.	RHI Magnesita Turkey Refrakter Ticaret Anonim Sirketi, Eskisehir, Türkiye 3)	18.,39.,99.	100.0	39.	100.0
63.	RHI Magnesita Vietnam Company Limited, Ho Chi Minh City, Vietnam	70.	100.0	70.	100.0
64.	RHI Magnesita Wetro GmbH, Puschwitz, Germany	54.	100.0	-	0.0
65.	RHI Marvo S.R.L., Bucharest, Romania	39.,99.	100.0	39.,99.	100.0
66.	RHI Refractories (Dalian) Co., Ltd., Dalian, PR China	39.,49.	100.0	39.	100.0
67.	RHI Refractories (Site Services) Limited, Dinnington, United Kingdom	78.	100.0	14.	100.0
68.	RHI Refractories Africa (PTY) LTD, Sandton, South Africa	39.	100.0	39.	100.0
69.	RHI Refractories Andino, C.A., Puerto Ordaz, Venezuela	104.	100.0	104.	100.0
70.	RHI Refractories Asia Pacific Pte. Ltd, Singapore, Singapore	54.	100.0	54.	100.0
71.	RHI Refractories España, S.L., Lugones, Spain	8.,53.	100.0	8.,53.	100.0
72.	RHI Refractories France SA, Valenciennes, France	53.,58.,89.	100.0	89.	100.0
73.	RHI Refractories Ibérica, S.L., Oviedo, Spain	89.	100.0	89.	100.0
74.	RHI Refractories Liaoning Co., Ltd., Bayuquan, PR China	39.,49.	100.0	39.	66.0
75.	RHI Refractories Nord AB, Stockholm, Sweden	89.	100.0	89.	100.0
76.	RHI Refractories Raw Material GmbH, Vienna, Austria	1.,39.,54.	100.0	1.,39.,54.	100.0
77.	RHI Refractories Site Services GmbH, Wiesbaden, Germany	53.	100.0	53.	100.0
78.	RHI Refractories UK Limited, Bonnybridge, United Kingdom	53.	100.0	53.	100.0
79.	RHI Refratários Brasil Ltda., Contagem, Brazil	7.,35.,104.	100.0	9.,35.	100.0
80.	RHI Trading (Dalian) Co., Ltd, Dalian, PR China	39.,49.	100.0	39.	100.0
81.	RHI Ukraina LLC, Dnepropetrovsk, Ukraine	39.,99.	100.0	39.,99.	100.0
82.	RHI United Offices America, S.A. de C.V., Monterrey, Mexico	61.,71.	100.0	61.,71.	100.0
83.	RHI Urmitz AG & Co. KG, Mülheim-Kärlich, Germany	53.,77.	100.0	53.,77.	100.0
84.	RHI US Ltd., Delaware, USA	9.	100.0	9.	100.0
85.	RHI Wostok Limited Liability Company, Moscow, Russia	39.,54.	100.0	39.,54.	100.0

86.	RHI Wostok Service Limited Liability Company, Moscow, Russia	39,54.	100.0	39,54.	100.0
87.	RHIM Mireco Mitterdorf GmbH, St.Barbara im Mürztal, Austria	13.	100.0	13.	100.0
88.	RHI-Refinex, S.A. de C.V., Ramos Arizpe, Mexico	71,104.	100.0	71,104.	100.0

Ser. no.	Name and registered office of the company	31.12.2023		31.12.2022	
		Shareholder	Share in %	Shareholder	Share in %
89.	Sapref AG für feuerfestes Material, Basel, Switzerland	104.	100.0	104.	100.0
90.	Seven Lakeway Refractories LLC, Huron, USA	92,94.	100.0	-	0.0
91.	Seven Refractories (UK) Ltd, Rotherham, United Kingdom	92.	76.0	-	0.0
92.	Seven Refractories d.o.o, Divača, Slovenia	54.	100.0	-	0.0
93.	Seven Refractories Deutschland GmbH, Düsseldorf, Germany	54,92.	100.0	-	0.0
94.	Seven Refractories Holding, Inc., Huron, USA	92.	100.0	-	0.0
95.	Seven Refractories Limited, Nicosia, Cyprus	92.	51.0	-	0.0
96.	Seven Refractories S.r.l., Castellazzo Bormida, Italy	92.	100.0	-	0.0
97.	Sipra S.p.A., Bergamo, Italy	92.	52.0	-	0.0
98.	Sömaş Söğüt Refrakter Malzemeleri Anonim Şirketi, Söğüt / Bilecik, Türkiye	39.	91.0	39.	89.2
99.	Veitscher Vertriebsgesellschaft mb.H., Vienna, Austria	54.	100.0	54.	100.0
100.	Veitsch-Radex GmbH, Vienna, Austria	54.	100.0	54.	100.0
101.	Veitsch-Radex GmbH & Co OG, Vienna, Austria	54.	100.0	54,100.	100.0
102.	Veitsch-Radex Vertriebsgesellschaft mb.H., Vienna, Austria	54.	100.0	54.	100.0
103.	Vierte LWB Refractories Holding GmbH, Hilden, Germany	40.	100.0	40.	100.0
104.	VRD Americas B.V., Arnhem, Netherlands	39,54.	100.0	39,54.	100.0
105.	Zimmermann & Jansen GmbH, Wiesbaden, Germany	53.	100.0	53.	100.0
106.	Dr.-Ing. Petri & Co. Unterstützungs-Gesellschaft mb.H., Wiesbaden, Germany	53.	100.0	53.	100.0
107.	Hom & Co Polska sp. z o.o., Chorzów, Poland	13.	100.0	13.	100.0
108.	Mag Tec Participações Ltda., Contagem, Brazil i.l.	35.	98.7	35.	98.7
109.	Magnesita Refractories Private Limited, Mumbai, India	40,103.	100.0	40,103.	100.0
110.	Magnesita Refractories S.A. (Pty) Ltd., Middleburg, South Africa	29.	100.0	29.	100.0
111.	Minerals and Metals Recovering - Mireco Aktiebolag, Fagersta, Sweden	13.	100.0	13.	100.0
112.	Mireco SARL, Entzheim, France	13.	100.0	13.	100.0
113.	Mireco S.H.P.K, Lebushe, Kosovo	13.	100.0	13.	100.0
114.	RHI Réfractaires Algérie, Sidi Amar, Algeria	72.	100.0	72.	100.0
115.	Rudgruvans Industrier Aktiebolag, Fagersta, Sweden	13.	100.0	13.	100.0
	Equity-accounted joint ventures and associated companies
116.	Chongqing Boliang Refractory Materials Co., Ltd., Chongqing, PR China	49.	51.0	49.	51.0
117.	Magnesita-Envoy Asia Ltd., Kaohsiung, Taiwan	3.	50.0	3.	50.0
118.	P-D Kremen d.o.o., Šentjemej, Slovenia	37.	50.0	-	0.0

- 1) In accordance with IAS 32, fixed-term or puttable non-controlling interests are shown under liabilities.
2) Further shareholder is Magnesita Refratários S.A., Contagem, Brazil.
3) Further shareholders are VRD Americas B.V., Arnhem, Netherlands and Dutch MAS B.V., Arnhem, Netherlands.
i.l. in liquidation

Current assets

(B) Cash and cash equivalents

Cash and cash equivalents are at RHI Magnesita N.V.'s free disposal.

Equity

(C) Share capital

The Company's authorised share capital amounts to €100,000,000, comprising 100,000,000 ordinary shares, each of €1 nominal value. As at 31 December 2023, RHI Magnesita N.V.'s issued and fully paid-in share capital consists of 47,130,338 ordinary shares (2022: 47,017,695 ordinary shares). For additional information on treasury shares see (D).

(D) Treasury shares

As at 31 December 2023, RHI Magnesita treasury shares amount to 2,347,367 (2022: 2,460,010).

(E) Additional paid-in capital

Additional paid-in capital comprises premiums on the issue of shares less issue costs by RHI Magnesita N.V.

(F) Legal, mandatory and other reserves

Cash flow hedges

The item cash flow hedges include gains and losses from the effective part of cash flow hedges less tax effects. Further information on hedge accounting is included in Note (36) and Note (37) of the Consolidated Financial Statements.

Currency translation

Currency translation includes the accumulated currency translation differences from translating the Financial Statements of foreign subsidiaries as well as unrealised currency translation differences from monetary items which are part of a net investment in a foreign operation, net of related income taxes. If foreign companies are deconsolidated, the currency translation differences are recognised in the Statement of Profit or Loss as part of the gain or loss from the sale of shares in subsidiaries. In addition, when monetary items cease to form part of a net investment in a foreign operation, the currency translation differences of these monetary items previously recognised in OCI are reclassified to profit or loss.

The cash flow hedge reserve and the currency translation reserve are legal reserves and are restricted for distribution.

Legal and mandatory reserve

The Articles of Association stipulate a mandatory reserve of €288,699,230.59 which was created in connection with the merger of RHI Refractories and Magnesita in 2017.

No distributions, allocations or additions may be made, and no losses of the Company may be allocated to the mandatory reserve.

Legal and mandatory reserves represent legal and statutory reserves in line with Chapter 7 'Decree on financial statements

formats' of the Dutch Civil Code.

Retained earnings

Retained earnings includes the result of the financial year and results that were earned by consolidated companies during prior periods, but not distributed. The difference between the purchase consideration or sale proceeds after tax and the relevant proportion of the non-controlling interest, measured by reference to the carrying amount of the interest's net assets at the date of acquisition or sale, is recognised in retained earnings too.

Net income recognised directly in equity represents the additions to consolidated companies and change of non-controlling interests without a change of control through the year (€181.8 million), netted of by other changes as described in the Group Consolidated Statement of Changes in Equity (€22.8 million) and by the defined benefit plan (€16.3 million).

Non-Current liabilities

(G) Non-current liabilities

in € million	31.12.2023	31.12.2022
Personnel provisions	0.1	0.1
Provisions for pensions	0.2	0.1
Total non-current liabilities	0.3	0.2

Current liabilities

(H) Current liabilities

in € million	31.12.2023	31.12.2022
Trade payables	1.2	1.2
Payables to group companies	4.7	0.4
Accrued liabilities	6.7	6.0
Total current liabilities	12.6	7.6

The current liabilities are due in less than one year. The fair value of other current liabilities approximates the book value, due to their short-term character.

(I) General and administrative expenses

in € million	2023	2022
External services/consulting expenses	(5.5)	(2.0)
Personnel expenses	(21.1)	(18.4)
Other expenses	(3.1)	(1.6)
Total general and administrative expenses	(29.7)	(22.0)

in € million	2023	2022
Wages and salaries	(18.7)	(16.5)
Social security charges	(1.4)	(1.1)
Pension contributions	(0.5)	(0.4)
Other employee costs	(0.5)	(0.4)
Total wages and salaries	(21.1)	(18.4)

(J) Net financial result

The 2023 net financial result amounts to €0.4 million (2022: €0.0 million).

(K) Net results from investments

In 2023, the full year results of the investments amount to a profit of €198.0 million (2022: €196.5 million) and are recognised in the Company Statement of Profit or Loss.

(L) Net result for the period

In 2023, there are no differences in the result between the Company Financial Statements and the Consolidated Financial Statements.

Proposed appropriation of result

It is proposed that, pursuant to Article 27 clause 1 of the Articles of Association of the Company, as approved in the AGM 2023, the result shown in RHI Magnesita N.V. income statement is appropriated as follows:

in € million	2023
Profit attributable to shareholders	164.6
In accordance with Article 27 clause 1 to be transferred to reserves	0.0
At the disposal of the General Meeting of Shareholders	164.6

For 2023, the Board of Directors will propose a final dividend of €1.25 per share for the shareholders of RHI Magnesita N.V. The proposed dividend is subject to approval by the Annual General Meeting in May 2024.

Other notes

Number of employees

The average number of employees of RHI Magnesita N.V. during 2023 amounts to 9 (2022: 8); all employees are working outside the Netherlands.

Off balance sheet commitments

RHI Magnesita N.V. as an ultimate parent company, provided a corporate guarantee of €2,008.4 million (2022: €1,549.4 million) for the borrowings of the Group. The Borrowings are as disclosed in Note (27). Additionally €20.0 million (2022: €20.1 million) of corporate guarantees are issued in favour of customers and suppliers of the Group.

The Company has issued a declaration of joint and several liability as referred to in section 403, Book 2 of the Dutch Civil Code in respect of one of its consolidated participations, namely RHI Magnesita Trading B.V.

Other information

Information regarding independent auditor's fees, the number of employees of RHI Magnesita Group and the remuneration of the Board of Directors is included in Note (41), (10) and (43) of the Consolidated Financial Statements.

The Company opened a branch (RHI Magnesita N.V.) in Vienna, Austria and, as of February 2020, started to employ staff in the branch office and undertake services.

Material events after the reporting date

There were no material events after the reporting date other than those disclosed in Note (44) of the Consolidated Financial

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