

Consolidated financial statements 2016

Consolidated statement of financial position

as of 12/31/2016

in € million	Notes	12/31/2016	12/31/2015
ASSETS			
Non-current assets			
Property, plant and equipment	(10)	521.8	532.2
Goodwill	(11)	37.8	37.5
Other intangible assets	(12)	71.1	74.2
Investments in joint ventures	(13)	20.5	19.3
Other non-current financial assets	(14)	18.9	23.7
Other non-current assets	(15)	17.7	18.0
Deferred tax assets	(16)	144.8	146.1
		832.6	851.0
Current assets			
Inventories	(17)	365.3	403.9
Trade and other current receivables	(18)	399.1	390.0
Income tax receivables	(19)	9.3	5.9
Other current financial assets	(20)	3.0	4.0
Cash and cash equivalents	(21)	182.9	149.7
		959.6	953.5
		1,792.2	1,804.5
EQUITY AND LIABILITIES			
Equity			
Share capital	(22)	289.4	289.4
Group reserves	(23)	219.3	188.2
Equity attributable to shareholders of RHI AG		508.7	477.6
Non-controlling interests	(24)	15.3	13.8
		524.0	491.4
Non-current liabilities			
Non-current financial liabilities	(25)	350.6	438.0
Other non-current financial liabilities	(26)	43.5	51.3
Deferred tax liabilities	(16)	13.5	15.3
Personnel provisions	(27)	317.4	326.3
Other non-current provisions	(28)	4.5	4.3
Other non-current liabilities	(29)	6.9	7.9
		736.4	843.1
Current liabilities			
Current financial liabilities	(25)	165.1	109.6
Other current financial liabilities	(26)	6.5	8.5
Trade payables and other current liabilities	(30)	312.7	293.6
Income tax liabilities	(31)	18.4	25.3
Current provisions	(32)	29.1	33.0
		531.8	470.0
		1,792.2	1,804.5

Consolidated statement of profit or loss

from 01/01/2016 to 12/31/2016

in € million	Notes	2016	2015
Revenue	(33)	1,651.2	1,752.5
Cost of sales	(34)	(1,294.8)	(1,389.1)
Gross profit		356.4	363.4
Selling and marketing expenses	(35)	(105.2)	(112.1)
General and administrative expenses	(36)	(134.5)	(122.3)
Other income	(37)	92.3	76.0
Other expenses	(38)	(85.8)	(80.9)
Operating EBIT		123.2	124.1
Gain from derivatives from supply contracts	(57)	10.1	0.0
Loss from derivatives from supply contracts	(57)	0.0	(58.0)
Impairment losses	(39)	(8.6)	(31.2)
Income from restructuring	(40)	0.3	5.9
Restructuring costs	(41)	(8.9)	(3.3)
EBIT		116.1	37.5
Interest income	(42)	4.1	5.8
Interest expenses	(43)	(17.5)	(20.5)
Other net financial expenses	(44)	(7.8)	(4.6)
Net finance costs		(21.2)	(19.3)
Share of profit of joint ventures	(13)	10.9	9.2
Profit before income tax		105.8	27.4
Income tax	(45)	(29.9)	(9.8)
Profit after income tax		75.9	17.6
attributable to shareholders of RHI AG		74.0	16.0
attributable to non-controlling interests	(24)	1.9	1.6
in €			
Earnings per share (basic and diluted)	(54)	1.86	0.40

All items up to and including the operating EBIT do not include results from derivatives from supply contracts, impairment losses for cash-generating units and restructuring effects.

Consolidated statement of comprehensive income

from 01/01/2016 to 12/31/2016

in € million	Notes	2016	2015
Profit after income tax		75.9	17.6
Currency translation differences			
Unrealized results from currency translation	(6)	(1.9)	5.0
Deferred taxes thereon	(16)	(0.6)	(0.5)
Current taxes thereon		(1.9)	2.6
Reclassification reserves to profit or loss		(2.0)	(1.2)
Deferred taxes thereon	(16)	(0.1)	0.3
Current taxes thereon		(0.4)	0.0
Market valuation of cash flow hedges			
Unrealized results from fair value change	(57)	0.4	0.1
Deferred taxes thereon	(16)	(0.2)	0.0
Market valuation of available-for-sale financial instruments			
Unrealized results from fair value change	(56)	0.1	(1.0)
Deferred taxes thereon	(16)	0.0	0.4
Reclassification reserves to profit or loss	(56)	(0.1)	(4.2)
Deferred taxes thereon	(16)	0.0	0.3
Items that will be reclassified subsequently to profit or loss, if necessary		(6.7)	1.8
Remeasurement of defined benefit plans			
Remeasurement of defined benefit plans	(27)	(10.2)	13.1
Deferred taxes thereon	(16)	3.8	(4.4)
Share of other comprehensive income of joint ventures	(13)	(0.1)	0.0
Items that will not be reclassified to profit or loss		(6.5)	8.7
Other comprehensive income after income tax		(13.2)	10.5
Total comprehensive income		62.7	28.1
attributable to shareholders of RHI AG		60.5	25.8
attributable to non-controlling interests	(24)	2.2	2.3

Consolidated statement of cash flows

from 01/01/2016 to 12/31/2016

in € million	Notes	2016	2015
Profit after income tax		75.9	17.6
Adjustments for			
income tax		29.9	9.8
depreciation and amortization charges		65.1	69.3
impairment losses of property, plant and equipment and intangible assets		8.9	34.1
income from the reversal of investment subsidies		(1.0)	(0.9)
(reversals of impairment losses)/impairment losses on securities		(0.5)	0.6
losses/(gains) from the disposal of property, plant and equipment		0.3	(3.4)
gains from the disposal of securities and shares		(0.9)	(4.6)
losses from the disposal of subsidiaries		4.1	0.0
interest result		13.4	14.7
share of profit of joint ventures		(10.9)	(9.2)
other non-cash changes		(8.9)	63.7
Changes in			
inventories		29.0	24.5
trade receivables and receivables from long-term construction contracts		4.3	21.1
other receivables and assets		(10.0)	0.0
provisions		(25.2)	(24.4)
trade payables		26.9	0.2
prepayments received on orders ¹⁾		1.4	(7.1)
other liabilities ¹⁾		(1.5)	(2.2)
Cash flow from operating activities		200.3	203.8
Income tax paid less refunds		(37.6)	(28.4)
Net cash flow from operating activities	(48)	162.7	175.4
Cash inflows from the sale of subsidiaries net of cash		(4.6)	0.0
Investments in property, plant and equipment and intangible assets		(70.8)	(80.8)
Cash inflows from the sale of property, plant and equipment		3.5	4.8
Cash inflows from the sale of securities and shares		6.1	14.1
Dividends received from joint ventures		9.5	8.2
Investment subsidies received		0.4	0.7
Interest received		3.0	5.8
Net cash flow from investing activities	(49)	(52.9)	(47.2)
Dividend payments to shareholders of RHI AG		(29.9)	(29.9)
Dividend payments to non-controlling interests		(0.6)	(0.6)
Proceeds from non-current borrowings and loans		1.6	48.4
Repayments of non-current borrowings and loans		(29.0)	(118.6)
Changes in current borrowings		(5.8)	(3.4)
Interest payments		(17.0)	(20.3)
Net cash flow from financing activities	(50)	(80.7)	(124.4)
Total cash flow		29.1	3.8
Change in cash and cash equivalents		29.1	3.8
Cash and cash equivalents at beginning of year		149.7	151.1
Changes due to currency translation		4.1	(5.2)
Cash and cash equivalents at year-end	(52)	182.9	149.7
Total interest paid	(51)	17.5	20.8
Total interest received	(51)	3.2	5.8

1) Prior-year values adjusted to current presentation.

Consolidated statement of changes in equity

from 01/01/2016 to 12/31/2016

in € million	Share capital	Additional paid-in capital	Retained earnings
Notes	(22)	(23)	(23)
12/31/2015	289.4	38.3	284.5
Profit after income tax	-	-	74.0
Currency translation differences	-	-	-
Market valuation of cash flow hedges	-	-	-
Market valuation of available-for-sale financial instruments	-	-	-
Remeasurement of defined benefit plans	-	-	-
Share of other comprehensive income of joint ventures	-	-	-
Other comprehensive income after income tax	-	-	-
Total comprehensive income	-	-	74.0
Dividends	-	-	(29.9)
Other changes in equity	-	-	0.5
Transactions with shareholders	-	-	(29.4)
Reclassification due to disposal of defined benefit plans	-	-	1.9
12/31/2016	289.4	38.3	331.0

in € million	Share capital	Additional paid-in capital	Retained earnings
Notes	(22)	(23)	(23)
12/31/2014	289.4	38.3	307.9
Profit after income tax	-	-	16.0
Currency translation differences	-	-	-
Market valuation of cash flow hedges	-	-	-
Market valuation of available-for-sale financial instruments	-	-	-
Remeasurement of defined benefit plans	-	-	-
Other comprehensive income after income tax	-	-	-
Total comprehensive income	-	-	16.0
Dividends	-	-	(29.9)
Transactions with shareholders	-	-	(29.9)
Settlement of defined benefit plans after income tax	-	-	(5.5)
Income taxes on currency translation differences from net investments in foreign operations	-	-	(4.0)
Reclassifications	-	-	(9.5)
12/31/2015	289.4	38.3	284.5

Group reserves						
Accumulated other comprehensive income				Equity attributable to shareholders of RHI AG	Non-controlling interests	Total equity
Cash flow hedges	Available-for-sale financial instruments	Defined benefit plans	Currency translation			
(23)	(23)	(23)	(23)		(24)	
(0.9)	-	(91.9)	(41.8)	477.6	13.8	491.4
-	-	-	-	74.0	1.9	75.9
-	-	-	(7.2)	(7.2)	0.3	(6.9)
0.2	-	-	-	0.2	-	0.2
-	-	-	-	0.0	-	0.0
-	-	(6.4)	-	(6.4)	-	(6.4)
-	-	(0.1)	-	(0.1)	-	(0.1)
0.2	-	(6.5)	(7.2)	(13.5)	0.3	(13.2)
0.2	-	(6.5)	(7.2)	60.5	2.2	62.7
-	-	-	-	(29.9)	(0.7)	(30.6)
-	-	-	-	0.5	-	0.5
-	-	-	-	(29.4)	(0.7)	(30.1)
-	-	(1.9)	-	0.0	-	0.0
(0.7)	0.0	(100.3)	(49.0)	508.7	15.3	524.0

Group reserves						
Accumulated other comprehensive income				Equity attributable to shareholders of RHI AG	Non-controlling interests	Total equity
Cash flow hedges	Available-for-sale financial instruments	Defined benefit plans	Currency translation			
(23)	(23)	(23)	(23)		(24)	
(1.0)	4.5	(106.1)	(51.3)	481.7	12.2	493.9
-	-	-	-	16.0	1.6	17.6
-	-	-	5.5	5.5	0.7	6.2
0.1	-	-	-	0.1	-	0.1
-	(4.5)	-	-	(4.5)	-	(4.5)
-	-	8.7	-	8.7	-	8.7
0.1	(4.5)	8.7	5.5	9.8	0.7	10.5
0.1	(4.5)	8.7	5.5	25.8	2.3	28.1
-	-	-	-	(29.9)	(0.7)	(30.6)
-	-	-	-	(29.9)	(0.7)	(30.6)
-	-	5.5	-	0.0	-	0.0
-	-	-	4.0	0.0	-	0.0
-	-	5.5	4.0	0.0	-	0.0
(0.9)	0.0	(91.9)	(41.8)	477.6	13.8	491.4

Notes

to the consolidated financial statements 2016

PRINCIPLES AND METHODS

(1) General

RHI is a globally operating Austrian industrial group. The core activities of the RHI Group comprise the development and production as well as the sale, installation and maintenance of high-grade refractory products and systems which are used in industrial high-temperature processes exceeding 1,200 °C. RHI supplies customers in the steel, cement, lime, glass and nonferrous metals industries. In addition, RHI products are employed in the environment (waste incineration), energy (refractory construction) and chemicals (petrochemicals) sectors.

The ultimate parent undertaking of the Group is RHI AG, a stock corporation under Austrian law. The company is registered in the commercial register under the number FN 103123b at the Commercial Court of Vienna and has its legal domicile and head office in Wienerbergstraße 9, 1100 Vienna, Austria.

The shares of RHI AG are listed on the Prime Market and the lead index ATX of the Vienna Stock Exchange.

The consolidated financial statements are prepared as of the reporting date of the annual financial statements of RHI AG. The financial year of RHI AG corresponds to the calendar year. Insofar as financial years of companies included in the consolidated financial statements do not end on the reporting date of RHI AG on December 31 due to local legal requirements, interim financial statements are prepared for the purpose of consolidation. The reporting date of the Indian subsidiaries Orient Refractories Ltd., RHI Clasil Private Limited and RHI India Private Limited is March 31.

The consolidated financial statements for the period from January 1 to December 31, 2016 were drawn up pursuant to § 245a of the Austrian Commercial Code (UGB) in accordance with all International Financial Reporting Standards (IFRSs) mandatory at the time of preparation as adopted by the European Union (EU). The additional requirements of § 245a para. 1 UGB were taken into account.

The presentation in the consolidated statement of financial position distinguishes between current and non-current assets and liabilities. Assets and liabilities are classified as current if they are due within one year or within a longer normal business cycle. Inventories as well as trade receivables and trade payables are generally presented as current items. Deferred tax assets and liabilities as well as assets and provisions for pensions and termination benefits are generally presented as non-current items.

The consolidated statement of profit or loss is drawn up in accordance with the cost of sales method. Under this method, revenue is offset against the expenses incurred to generate it, which are allocated to the functions production, sales and administration.

The EBIT (earnings before interest and taxes) and the operating EBIT (EBIT adjusted for special influences) are shown separately in the statement of profit or loss as they are important key figures of measuring performance for the RHI Group. Special influences are related in particular to the measurement of individual long-term contractual obligations, effects from impairment tests at the level of cash-generating units or from restructuring due to massive capacity adjustments, significantly changed market strategies or comprehensive reorganization in administration. The presentation chosen is to convey a true view of the earnings situation, which is comparable over time, to the users of the RHI consolidated financial statements. Extraordinary effects in the current reporting year are related to the functional segment production with € (2.5) million (2015: € (86.6) million) and other expenses with € (4.6) million.

With the exception of specific items such as available-for-sale financial assets, derivative financial instruments and plan assets for defined benefit obligations, the consolidated financial statements are prepared in accordance

with the principle of historical acquisition and production costs. The measurement methods applied to the exceptions are described in the following.

The preparation of the consolidated financial statements in agreement with generally accepted accounting and valuation principles under IFRS, as adopted by the EU, requires the use of estimates and assumptions that influence the amount and presentation of assets and liabilities recognized as well as the disclosure of contingent assets and liabilities as of the reporting date and the recognition of income and expenses during the reporting period. Although these estimates reflect the best knowledge of the Management Board based on experience from comparable transactions, the actual values recognized at a later date may differ from these estimates.

All amounts in the notes and tables are shown in € million, unless indicated otherwise. For computational reasons, rounding differences may occur.

The Management Board of RHI AG completed and signed the present consolidated financial statements on March 10, 2017 and released them for distribution to the Supervisory Board. The Supervisory Board is responsible for reviewing the consolidated financial statements and for stating whether it approves the consolidated financial statements.

(2) Initial application of new financial reporting standards

In the financial year 2016, the following revised financial reporting standards including the resulting changes in other standards, which are also adopted by the EU, were applied for the first time:

Standard	Title	Publication (EU endorsement)	Mandatory application for RHI	Effects on RHI consolidated financial statements
Amendments of standards				
IAS 1	Disclosure Initiative	12/18/2014 (12/18/2015)	01/01/2016	No effect
IAS 16, IAS 38	Clarification of Acceptable Methods of Depreciation and Amortization	05/12/2014 (12/02/2015)	01/01/2016	No effect
IAS 16, IAS 41	Bearer Plants	06/30/2014 (11/23/2015)	01/01/2016	Not relevant
IAS 27	Equity Method in Separate Financial Statements	08/12/2014 (12/18/2015)	01/01/2016	Not relevant
IFRS 10, IFRS 12, IAS 28	Investment Entities: Applying the Consolidation Exception	12/18/2014 (09/22/2016)	01/01/2016	Not relevant
IFRS 11	Accounting for Acquisitions of Interests in Joint Operations	05/06/2014 (11/24/2015)	01/01/2016	No effect
Various	Annual Improvements to IFRSs 2010-2012 Cycle	12/12/2013 (12/17/2014)	01/01/2016	No effect
Various	Annual Improvements to IFRSs 2012-2014 Cycle	09/25/2014 (12/15/2015)	01/01/2016	No effect

The amendments to IAS 1 “Disclosure Initiative” are related to clarifications regarding the materiality of information in the components of the financial statements. Thus immaterial information need not be presented. This also applies when such information is required by other standards. Furthermore, new specifications regarding the presentation of subtotals and the structure of notes and notes regarding accounting principles have been added. Moreover, IAS 1 clarifies how to present shares of other comprehensive income of equity-accounted companies. RHI has maintained the reporting structure; in immaterial areas, reductions have been made.

(3) New financial reporting standards not yet applied

The IASB issued further standards, amendments to standards and interpretations, whose application is, however, not yet mandatory for the year 2016. They were not applied early on a voluntary basis.

The following accounting standards were adopted by the EU by the time of the preparation of the RHI consolidated financial statements:

Standard	Title	Publication (EU endorsement) ¹⁾	Mandatory application for RHI	Expected effects on RHI consolidated financial statements
New standards				
IFRS 9	Financial Instruments	07/24/2014 (11/22/2016)	01/01/2018	A reliable assessment of the effects is not possible at the moment.
IFRS 15	Revenue from Contracts with Customers	05/28/2014, 09/11/2015 (09/22/2016)	01/01/2018	A reliable assessment of the effects is not possible at the moment.

1) according to EU Endorsement Status Report of 02/21/2017

IFRS 9 “Financial Instruments”

IFRS 9 “Financial Instruments” includes new specifications regarding the classification and measurement of financial instruments and thus supersedes the current provisions of IAS 39 “Financial Instruments: Recognition and Measurement”.

IFRS 9 applies to financial years starting on or after January 1, 2018. At present, the RHI Group intends to initially apply the new standard IFRS 9 in the first quarter of 2018.

The classification of financial assets is on the one hand coupled with the business model of the company (hold, hold and sell, trade); on the other hand, the characteristics of the cash flows related to the financial instrument are included. In the classification of financial assets IFRS 9 distinguishes between the categories “amortized cost”, “fair value through other comprehensive income” (with or without reclassification to the statement of profit or loss) and “fair value through profit or loss”. Measurement at amortized cost is only possible if the financial asset is held within a business model whose objective is to hold the financial asset to collect the contractual cash flow. In addition, the contractual terms of the financial asset have to give rise to cash flows on specified dates that are solely payments of principal and interest on the principal amount outstanding.

For financial liabilities two measurement categories continue to exist: “amortized cost” and “fair value through profit or loss”. Financial liabilities are measured at fair value through profit or loss if they fall under the definition “held for trading” or they are designated in this measurement category at initial recognition. If the designation option is exercised, any profit or loss from changes in credit risk has to be recognized in other comprehensive income in the future.

IFRS 9 includes new impairment rules and places a strong focus on a future-oriented model of “expected credit losses”. The new rules are applicable in particular to financial assets measured at amortized cost, debt instruments on the asset side which are measured at fair value through other comprehensive income, as well as lease receivables and contract assets in accordance with IFRS 15. The general impairment model according to IFRS 9 distinguishes between three levels, with the amount of the impairment depending on the assignment of the financial instrument to one of the three levels. For financial instruments, whose credit risk has not increased significantly since initial recognition, a loss allowance has to be recognized in the amount of the credit losses whose occurrence is expected within the next 12 months (Level 1). If the credit risk has increased significantly, but there is no objective evidence of impairment, the loss allowance must be increased to the amount of the expected losses throughout the entire remaining term (Level 2). With the occurrence of objective evidence of impairment, the net carrying amount, i.e., the gross carrying amount adjusted for the loss allowance, is the decisive reference figure (Level 3). Simplified special rules exist for trade receivables as well as for contract

assets according to IFRS 15 which do not include a major financing component. In such cases, a loss allowance for full lifetime expected credit losses has to be formed at initial recognition and for the subsequent reporting dates. For trade receivables and for contract assets according to IFRS 15 which include a significant financing component as well as for lease receivables there is an option to elect the general or simplified recognition. Moreover, the new impairment rules will lead to extended disclosure requirements.

For the accounting of hedging relationships, the risk management target will be decisive in the future. The new model for hedging relationships is intended to establish a better connection between the risk management strategy, the reasons for concluding hedging transactions and hedge accounting in the financial statements. The assessment of hedge effectiveness will only be made prospectively and on a qualitative basis in the future provided that the high effectiveness can be demonstrated without a quantitative calculation. The obligation to demonstrate a minimum effectiveness within a range from 80% to 125% is replaced by a qualitative test. This test is to examine the economic correlation between the hedged item and the hedge and to ensure that the effects of the change in credit risk are not so significant that the change in value of the hedged item or the hedging instrument dominate. The designation of single risk components as hedged items is permitted under IFRS 9 insofar as the risk component can be identified independently and assessed reliably. Hedging aggregated risks or net positions is possible under IFRS 9. In addition, the disclosure requirements are extended.

The RHI Group is currently analyzing the details of the potential effects of IFRS 9. The initial application will lead to an adapted presentation of the measurement categories for financial assets as the IAS 39 measurement categories "loans and receivables" and "available-for-sale financial assets", which have so far been relevant for the Group, will be eliminated. Depending on the classification of the financial assets in the respective measurement categories of IFRS 9, an effect on measurement may result in certain cases. Due to the new rules with respect to impairment, it will be possible to expense expected losses earlier in some cases. A reliable estimate of the quantitative effects will only be possible after the completion of the detail analysis.

The classification of financial liabilities remains unchanged according to IFRS 9. Since the RHI Group has not designated any financial liabilities as fair value through profit or loss, a first preliminary evaluation does not show any effects of the application of the requirements of IFRS 9 with respect to the classification of financial liabilities.

RHI currently applies the provisions for hedge accounting for the hedging of future cash flows of financial liabilities carrying variable interest. Based on analyses performed so far, no significant effects on the accounting of such hedging relationships are expected from the initial application of IFRS 9.

IFRS 15 "Revenue from Contracts with Customers"

IFRS 15 provides uniform regulations for revenue recognition which are applicable to all contracts with customers. IFRS 15 supersedes IAS 18 "Revenue" and IAS 11 "Construction Contracts". The decisive factor for revenue recognition is no longer the transfer of significant risks and rewards, but rather, when the customer obtains power over the goods and services agreed and can benefit from them.

IFRS 15 introduces a five-step model to determine revenue recognition. According to this model, the contract with the customer and the separate performance obligations therein have to be identified. Then the transaction price must be determined and allocated to the performance obligations identified. Revenue must then be recognized separately for each performance obligation in the amount of the allocated pro-rata transaction price. For this purpose, criteria were defined which distinguish between satisfying a performance obligation either at a point in time or over time.

IFRS 15 is applicable to financial years starting on or after January 1, 2018. The RHI Group plans to apply the modified retrospective method. Under this method, IFRS 15 is applied to those contracts that are not yet complete as of January 1, 2018. The cumulative effect of the initial application will be recognized as an adjustment of the opening balance of group reserves in the item retained earnings. Currently the effects of the initial application of IFRS 15 on RHI's consolidated financial statements are being evaluated as part of a project. Based on the analyses performed so far, the possible effects are as follows:

By applying IFRS 15, additional separate performance obligations can be identified in supply contracts with customers. If contracts with customers for the delivery of products only include a single performance obligation, the Group expects that revenue is recognized when control over the asset is passed, which will consequently not result in any major effects on the consolidated financial statements.

If multiple independent performance obligations are identified in contracts with customers regarding the delivery of products, the transaction price has to be allocated to the components by reference to their relative standalone selling prices in the future. Accordingly, temporary shifts may occur in revenue recognition.

In addition to delivering products, the RHI Group also provides various services. When services represent separate performance obligations within a contract, a corresponding transaction price has to be allocated to the service component. This may influence the timing of revenue recognition. Moreover, it causes an increase in revenue from providing services at the expense of revenue from the sale of products.

In the Steel segment, multi-component contracts with variable payment arrangements are concluded in some cases. For such contracts, the transaction price depends on the customer's production performance (e.g. amount per ton of steel produced in the customer aggregate serviced). Pursuant to the current provisions on revenue recognition according to IAS 18, revenue for refractory products is recognized in the Group based on the production performance achieved by the customer. If the customer already obtains control over the refractory products with the installation of the refractory materials in the aggregate, revenue must be recognized at this time in accordance with IFRS 15. Since the consideration to be paid by the customer is completely variable, revenue in the Group must be determined on the basis of an estimate. In such cases, revenue from refractory products is recognized earlier in accordance with IFRS 15. In the consolidated statement of financial position, the receivables from the customer contract that has not yet been invoiced leads to the recognition of a contract asset. The RHI Group assumes that revenue will only be recognized earlier and thus may have an effect on the consolidated financial statements for those customer aggregates in which refractories with long service lives are applied. As far as other products or services apart from refractory products represent separate performance obligations in such multi-component contracts, a variable transaction price has to be allocated to the components by reference to their relative standalone selling prices. This may influence the timing of revenue recognition.

The initial application of IFRS 15 will lead to an adjustment of internal processes and of the IT landscape. A reliable estimate of the quantitative effects resulting from the application of the new IFRS 15 is not possible before completion of the project.

The following financial reporting standards were issued by the IASB, but had not yet been adopted by the EU at the time of the preparation of the RHI consolidated financial statements:

Standard	Title	Publication ¹⁾	Mandatory application for RHI	Expected effects on RHI consolidated financial statements
New standards and interpretations				
IFRS 14	Regulatory Deferral Accounts	01/30/2014	No EU endorsement	Not relevant
IFRS 16	Leases	01/13/2016	01/01/2019	Material effects expected
IFRIC 22	Foreign Currency Transactions and Advance Consideration	12/08/2016	01/01/2018	No effect
Amendments of standards				
IAS 7	Disclosure Initiative	01/29/2016	01/01/2017	Additional notes disclosures
IAS 12	Recognition of Deferred Tax Assets for Unrealized Losses	01/19/2016	01/01/2017	No effect
IAS 40	Transfers of Investment Properties	12/08/2016	01/01/2018	No effect
IFRS 2	Classification and Measurement of Share-based Payment Transactions	06/20/2016	01/01/2018	No effect
IFRS 4	Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts	09/12/2016	01/01/2018	Not relevant
IFRS 10, IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	09/11/2014	Postponed by EU	No effect
IFRS 15	Clarifications to IFRS 15 Revenue from Contracts with Customers	04/12/2016	01/01/2018	A reliable assessment of the effects is not possible at the moment.
Various	Annual Improvements to IFRSs 2014-2016 Cycle	12/08/2016	01/01/2017/ 01/01/2018	No effect

1) according to EU Endorsement Status Report of 02/21/2017

IFRS 16 “Leases”

The accounting standard IFRS 16, which was issued in January 2016, supersedes IAS 17 “Leases” and the related interpretations and is applicable to financial years beginning on or after January 1, 2019. Accounting for the lessor according to IFRS 16 is comparable to the current regulations. In contrast, accounting will change fundamentally for the lessee with the application of IFRS 16. In the future, most leases will have to be recognized as assets and liabilities in the statement of financial position of the lessee, regardless of whether they are considered operating or financing leases under the previous criteria of IAS 17.

According to IFRS 16, a lessee recognizes a right of use, which represents his right to use the underlying asset, and a liability from the lease, which reflects the obligation of lease payments. Exemptions are provided for short-term leases and assets of minor value. Moreover, the type of expenses related to these leases will change since IFRS 16 replaces the straight-line expenses for operating leases with a depreciation charge for rights of use and interest expenses for liabilities from the lease. In the consolidated statement of cash flows, there is a shift from cash flow from operating activities to cash flow from financing activities since the repayment of leasing liabilities must in any case be shown as cash flow from financing activities.

As a lessee, RHI can apply IFRS 16 based on the retrospective method or the modified retrospective method with optional simplification rules; the option chosen has to be applied consistently to all leases of the Group. Subject to adoption under EU law, RHI currently intends to initially apply IFRS 16 as of January 1, 2019. At present it is still undecided which transition method the Group will choose and whether the exemption options will be used.

RHI has started to assess the possible effects on the consolidated financial statements, but can currently not determine the precise effects of the application of IFRS 16 on the reported assets and liabilities. Due to the fact that obligations from rental and leasing contracts of € 66.7 million exist in the RHI Group as of December 31, 2016 (12/31/2015: € 66.0 million) (see note (61)), RHI expects a significant extension of the statement of financial position due to the initial application of IFRS 16. Together with the resulting shift between EBIT and net finance costs as well as the shift between cash flow from operating activities and financing activities, the Group expects a significant impact on the presentation of the asset, financial and earnings position.

IAS 7 “Statements of Cash Flow: Disclosure initiative”

The amendments to IAS 7 on the statement of cash flows require additional information on changes in financial liabilities. The additional information affects both cash and non-cash changes. In order to meet the new disclosure requirements, the RHI Group intends to present a reconciliation statement of financial statements at the beginning of the year and the end of the year.

(4) Group of consolidated companies

In addition to RHI AG as the parent company, the RHI consolidated financial statements include the financial statements of 77 subsidiaries (12/31/2015: 77).

As in the previous year, one joint venture is accounted for using the equity method.

Three (12/31/2015: three) subsidiaries and three (12/31/2015: four) other investments which are considered to be immaterial for the financial position and performance of the RHI Group due to their suspended or minimal business activities are not included in the consolidated financial statements.

The group of consolidated companies developed as follows:

	2016		2015	
	Full consolidation	Equity method	Full consolidation	Equity method
Number of consolidated companies				
Balance at beginning of year	78	1	80	1
Additions	2	0	0	0
Retirements and disposals	(2)	0	(2)	0
Balance at year-end	78	1	78	1

Changes in the group of consolidated companies in the reporting year 2016

On March 4, 2016, the subsidiary RHI United Offices Europe, S.L. (100%), based in Lugones, Spain, was established and included in the consolidated financial statements as of this date. On September 1, 2016, the subsidiary RHI United Offices America, S.A. de C.V. (100%), based in Monterrey, Mexico, was established. The purpose of these companies is the provision of internal administrative services.

With effect from May 12, 2016 the subsidiary RHI Rückversicherungs AG (100%) based in Vaduz, Liechtenstein, was liquidated.

As of June 6, 2016, all shares (100%) in RHI Monofrax, LLC, Wilmington, USA, were sold. The net assets disposed at the date of deconsolidation consist of the following items:

in € million	06/06/2016
Inventories	11.9
Trade and other current receivables	0.3
Cash and cash equivalents	4.6
Personnel provisions	(5.6)
Other non-current provisions	(0.7)
Trade payables and other current liabilities	(2.7)
Net assets disposed	7.8

The result from deconsolidation is determined as follows:

in € million	06/06/2016
Net assets disposed	(7.8)
Reclassification currency translation differences	3.7
Result from deconsolidation	(4.1)

The loss, taking into account the transaction-related costs of € 0.5 million incurred in the USA, was recognized under the item restructuring costs in the statement of profit or loss.

The selling price of USD 1 was paid in cash.

Changes in the group of consolidated companies in the previous year

With effect from January 1, 2015, the fully consolidated subsidiary Veitsch-Radex America Inc., Burlington, Canada, was merged with RHI Canada Inc., Burlington, Canada.

With effect from December 17, 2015, the subsidiary Magnesitwerk Aken Vertriebsgesellschaft mbH, Aken, Germany, was liquidated.

Companies of the RHI Group

The main operating companies of the RHI Group pursue the following core business activities:

Name and registered office of the company	Country of core activity	Core business activity
RHI AG, Austria	International	Sales, R&D, financing
Didier-Werke Aktiengesellschaft, Germany	Germany	Production
Magnesit Anonim Sirketi, Turkey	Turkey	Mining, production, sales
Orient Refractories Limited, India	India	Production, sales
RHI Canada Inc., Canada	Canada	Production, sales, provision of services
RHI GLAS GmbH, Germany	International	Sales
RHI Refractories (Dalian) Co., Ltd., PR China	PR China	Production
RHI US Ltd., USA	USA	Production, sales, provision of services
RHI-Refmex, S.A. de C.V., Mexico	Latin America	Sales
Veitsch-Radex GmbH & Co OG, Austria	Austria	Mining, production

The following list, which was drawn up in accordance with § 245a para. 1 UGB in conjunction with § 265 para. 2 UGB, shows all companies in which RHI holds a share of at least 20%:

Ser. no.	Name and registered office of the company	12/31/2016		12/31/2015	
		Share- holder	Share in %	Share- holder	Share in %
1.	RHI AG, Vienna, Austria				
	Fully consolidated subsidiaries				
2.	Betriebs- und Baugesellschaft mit beschränkter Haftung, Wiesbaden, Germany	7.	100.0	7.	100.0
3.	CJSC "RHI Podolsk Refractories", Moscow, Russia	27,74.	100.0	27,74.	100.0
4.	D.S.I.P.C.-Didier Société Industrielle de Production et de Constructions, Breuille, France	7.	100.0	7.	100.0
5.	Didier Belgium N.V., Evergem, Belgium	37,69.	100.0	37,69.	100.0
6.	Didier Vertriebsgesellschaft mbH, Wiesbaden, Germany	7.	100.0	7.	100.0
7.	Didier-Werke Aktiengesellschaft, Wiesbaden, Germany	1,27.	100.0	1,27.	100.0
8.	Dolomite Franchi S.p.A., Brescia, Italy	27.	100.0	27.	100.0
9.	Dutch Brasil Holding B.V., Arnhem, Netherlands	74.	100.0	74.	100.0
10.	Dutch MAS B.V., Arnhem, Netherlands	7.	100.0	7.	100.0
11.	Dutch US Holding B.V., Arnhem, Netherlands	74.	100.0	74.	100.0
12.	FE "VERA", Dnepropetrovsk, Ukraine	27.	100.0	27.	100.0
13.	Full Line Supply Africa (Pty) Ltd., Sandton, South Africa ¹⁾	47.	100.0	7.	100.0
14.	GIX International Limited, Newark, United Kingdom	79.	100.0	79.	100.0
15.	INDRESCO U.K. Ltd., Newark, United Kingdom	14.	100.0	14.	100.0
16.	INTERSTOP (Shanghai) Co., Ltd., Shanghai, PR China	73.	100.0	73.	100.0
17.	Latino America Refractories ApS, Hellerup, Denmark	79.	100.0	79.	100.0
18.	Liaoning RHI Jinding Magnesite Co., Ltd., Dashi-qiao City, PR China ²⁾	27.	83.3	27.	83.3
19.	LLC "RHI Wostok Service", Moscow, Russia	1,27.	100.0	1,27.	100.0
20.	LLC "RHI Wostok", Moscow, Russia	1,27.	100.0	1,27.	100.0
21.	Lokalbahn Mixnitz-St. Erhard Aktien-Gesellschaft, Vienna, Austria	60.	100.0	60.	100.0
22.	Magnesit Anonim Sirketi, Eskisehir, Turkey ³⁾	27.	100.0	27.	100.0
23.	Mezubag AG, Pfäffikon, Switzerland	73.	100.0	73.	100.0
24.	Orient Refractories Limited, New Delhi, India	11.	69.6	11.	69.6
25.	Premier Periclase Limited, Drogheda, Ireland	11.	100.0	11.	100.0
26.	Producción RHI México, S. de R.L. de C.V., Ramos Arizpe, Mexico	52,79.	100.0	52,79.	100.0
27.	Radex Vertriebsgesellschaft m.b.H., Leoben, Austria	76.	100.0	76.	100.0
28.	REFEL S.p.A., San Vito al Tagliamento, Italy	7.	100.0	7.	100.0
29.	Refractory Intellectual Property GmbH & Co KG, Vienna, Austria	1,30.	100.0	1,30.	100.0
30.	Refractory Intellectual Property GmbH, Vienna, Austria	1.	100.0	1.	100.0
31.	RHI Argentina S.R.L., San Nicolás, Argentina	11,79.	100.0	17,79.	100.0
32.	RHI Canada Inc., Burlington, Canada	79.	100.0	79.	100.0
33.	RHI Chile S.A., Santiago, Chile	14,79.	100.0	14,79.	100.0
34.	RHI Clasil Private Limited, Hyderabad, India ²⁾	79.	53.7	79.	53.7
35.	RHI Dinaris GmbH, Wiesbaden, Germany	69.	100.0	69.	100.0
36.	RHI Finance A/S, Hellerup, Denmark	1.	100.0	1.	100.0
37.	RHI GLAS GmbH, Wiesbaden, Germany	69.	100.0	69.	100.0
38.	RHI India Private Limited, Navi Mumbai, India	9,79.	100.0	9,79.	100.0
39.	RHI ITALIA S.R.L., Brescia, Italy	1.	100.0	1.	100.0
40.	RHI Marvo Feuerungs- und Industriebau GmbH, Gerbstedt, Germany	41.	100.0	41.	100.0
41.	RHI MARVO Feuerungs- und Industriebau GmbH, Kerpen, Germany	7.	100.0	7.	100.0
42.	RHI MARVO S.R.L., Ploiesti, Romania	27,74.	100.0	27,74.	100.0

Ser. no.	Name and registered office of the company	12/31/2016		12/31/2015	
		Shareholder	Share in %	Shareholder	Share in %
43.	RHI Monofrax, LLC, Wilmington, USA	-	-	70.	100.0
44.	RHI Normag AS, Porsgrunn, Norway	27.	100.0	27.	100.0
45.	RHI Refractories (Dalian) Co., Ltd., Dalian, PR China	27.	100.0	27.	100.0
46.	RHI Refractories (Site Services) Ltd., Newark, United Kingdom	15.	100.0	15.	100.0
47.	RHI Refractories Africa (Pty) Ltd., Sandton, South Africa ⁴⁾	27.	100.0	27.	100.0
48.	RHI Refractories Andino C.A., Puerto Ordaz, Venezuela	79.	100.0	79.	100.0
49.	RHI Refractories Asia Ltd., Hongkong, PR China	72.	100.0	72.	100.0
50.	RHI Refractories Asia Pacific Pte. Ltd., Singapore	1.	100.0	1.	100.0
51.	RHI Refractories Egypt LLC., Cairo, Egypt	27,74.	100.0	27,74.	100.0
52.	RHI Refractories España, S.L., Lugones, Spain	7,10.	100.0	7,10.	100.0
53.	RHI Refractories France SA, Breuillet, France ⁵⁾	72.	100.0	72.	100.0
54.	RHI Refractories Holding Company, Wilmington, USA	79.	100.0	79.	100.0
55.	RHI Refractories Ibérica, S.L., Lugones, Spain	72.	100.0	72.	100.0
56.	RHI Refractories Italiana s.r.l., Brescia, Italy	72.	100.0	72.	100.0
57.	RHI Refractories Liaoning Co., Ltd., Bayuquan, PR China ²⁾	27.	66.0	27.	66.0
58.	RHI Refractories Mercosul Ltda., Sao Paulo, Brazil	74,79.	100.0	74,79.	100.0
59.	RHI Refractories Nord AB, Stockholm, Sweden	72.	100.0	72.	100.0
60.	RHI Refractories Raw Material GmbH, Vienna, Austria	1,27.	100.0	1,27.	100.0
61.	RHI Refractories Site Services GmbH, Wiesbaden, Germany	7.	100.0	7.	100.0
62.	RHI Refractories UK Limited, Clydebank, United Kingdom	7.	100.0	7.	100.0
63.	RHI Refratários Brasil Ltda, Belo Horizonte, Brazil	9,79.	100.0	9,79.	100.0
64.	RHI Rückversicherungs AG, Vaduz, Liechtenstein	-	-	27.	100.0
65.	RHI Sales Europe West GmbH, Mülheim-Kärlich, Germany	7,72.	100.0	7,72.	100.0
66.	RHI Trading (Dalian) Co., Ltd., Dalian, PR China	27.	100.0	27.	100.0
67.	RHI United Offices America, S.A. de C.V., Monterrey, Mexico	52,68.	100.0	-	-
68.	RHI United Offices Europe, S.L., Lugones, Spain	52.	100.0	-	-
69.	RHI Urmitz AG & Co. KG, Mülheim-Kärlich, Germany	6,7.	100.0	6,7.	100.0
70.	RHI US Ltd., Wilmington, USA	11.	100.0	11.	100.0
71.	RHI-Refmex, S.A. de C.V., Ramos Arizpe, Mexico	52,79.	100.0	52,79.	100.0
72.	SAPREF AG für feuerfestes Material, Basel, Switzerland	79.	100.0	79.	100.0
73.	Stopinc Aktiengesellschaft, Hünenberg, Switzerland	7,27.	100.0	7,27.	100.0
74.	Veitscher Vertriebsgesellschaft m.b.H., Vienna, Austria	1.	100.0	1.	100.0
75.	Veitsch-Radex America LLC., Wilmington, USA	70.	100.0	70.	100.0
76.	Veitsch-Radex GmbH & Co OG, Vienna, Austria	1,77.	100.0	1,77.	100.0
77.	Veitsch-Radex GmbH, Vienna, Austria	1.	100.0	1.	100.0
78.	Veitsch-Radex Vertriebsgesellschaft m.b.H., Vienna, Austria	1.	100.0	1.	100.0
79.	VRD Americas B.V., Arnhem, Netherlands	1,27.	100.0	1,27.	100.0
80.	Zimmermann & Jansen GmbH, Düren, Germany	7.	100.0	7.	100.0
Subsidiaries not consolidated due to minor significance					
81.	Dr.-Ing. Petri & Co. Unterstüztungsgesellschaft m.b.H., Wiesbaden, Germany	7.	100.0	7.	100.0
82.	INTERSTOP do Brasil Equipamentos Metalurgicos Ltda i.L., Barueri, Brazil	73.	100.0	73.	100.0
83.	RHI Réfractaires Algérie E.U.R.L., Sidi Amar, Algeria	53.	100.0	53.	100.0
Equity-accounted joint ventures					
84.	MAGNIFIN Magnesiaprodukte GmbH & Co KG, St. Jakob, Austria	74,87.	50.0	74,87.	50.0

Ser. no.	Name and registered office of the company	12/31/2016		12/31/2015	
		Share- holder	Share in %	Share- holder	Share in %
Other immaterial investments, measured at cost					
85.	LLC "NSK Refractory Holding", Moscow, Russia	27.	49.0	27.	49.0
86.	LLC "NSK Refractory", Novokuznetsk, Russia	27.	49.0	27.	49.0
87.	MAGNIFIN Magnesiaprodukte GmbH, St. Jakob, Austria	74.	50.0	74.	50.0
88.	Società Dolomite Italiana SDI S.R.L. i.L., Brescia, Italy	-	-	8.	50.0

1) Formerly: RHI Refractories Africa (Pty) Ltd.

2) In accordance with IAS 32, fixed-term or puttable non-controlling interests are shown under liabilities.

3) Further shareholders are VRD Americas B.V., Lokalbahn Mixnitz St. Erhard AG and Veitscher Vertriebsgesellschaft mbH.

4) Formerly: Full Line Supply Africa (Pty) Ltd

5) Further shareholders are Didier-Werke AG, RHI Dinaris GmbH and RHI GLAS GmbH.

i.L. In liquidation

(5) Methods of consolidation

Subsidiaries

Subsidiaries are companies over which RHI AG exercises control. Control exists when the company has the power to decide on the relevant activities, is exposed to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The acquisition method is used to account for all business combinations. Under this method, the purchase price for the shares in a consolidated subsidiary is offset against the proportional share of net assets based on the fair value of the acquired assets and liabilities at the date of acquisition or when control is obtained. Intangible assets which were previously not recognized in the separate financial statements of the company acquired are also measured at fair value. Intangible assets identified when a company is acquired, including for example patents, brand names and customer relations, are only measured separately at the time of acquisition if they are identifiable and are in the control of the company and a future economic benefit is expected.

For the acquisition of companies in which less than 100% of the shares are acquired, IFRS 3 allows an accounting policy choice whereby either goodwill proportionate to the share held or goodwill including the share accounted for by non-controlling interests can be recognized. This accounting policy choice can be exercised anew for any company acquisition.

The measurement at the date of acquisition can be made on a preliminary basis in justified cases. If adjustments are necessary in favor or at the expense of assets and liabilities within twelve months of the acquisition, they will be made accordingly. These adjustments are presented in the notes.

The goodwill determined is allocated to the relevant cash-generating unit and tested for impairment at this level. In accordance with the provisions of IFRS 3, negative goodwill is immediately recognized to profit or loss in other income after renewed measurement of the identifiable assets, liabilities and contingent liabilities.

Shares in net assets of subsidiaries that are not attributable to RHI AG are shown separately under equity as non-controlling interests. The basis for non-controlling interests are the equity of the subsidiary concerned after adjustment to the accounting and measurement principles of the RHI Group and proportional consolidation entries.

Transaction costs which are directly related to business combinations are expensed as incurred. Conditional components of the purchase price are recorded at fair value at the date of initial consolidation.

When additional shares are acquired in companies which are already included in the consolidated financial statements as subsidiaries, the difference between the purchase price and the proportional carrying amount in the subsidiary's net assets is offset against shareholders' equity. Gains and losses from the sale of shares are also recorded in equity unless they lead to a loss of the controlling influence.

In the case of a step acquisition and the related obtaining of a controlling interest, the difference between the carrying amount and the fair value at the date of the initial full consolidation is realized through profit or loss.

Intragroup receivables and liabilities as well as income and expenses are fully eliminated.

Intragroup results related to intragroup deliveries of non-current assets and inventories as well as transfers of shares are eliminated.

In accordance with IAS 12, deferred taxes are calculated on temporary differences arising from the consolidation.

Subsidiaries are deconsolidated on the day control ends.

Joint ventures

Shares in joint ventures are accounted for using the equity method. A joint venture is a joint arrangement between the RHI Group and one or several other partners whereby the parties that have joint control over the arrangement have rights to the net assets of the arrangement.

At the date of acquisition, a positive difference between the acquisition costs and the share in the fair values of identified assets and liabilities of the joint venture is determined and recognized as goodwill. Goodwill is shown under the item shares in joint ventures in the statement of financial position.

The acquisition cost of investments accounted for using the equity method is increased or decreased each year to reflect the change in the equity of the individual joint venture that is attributable to the RHI Group. Unrealized intragroup results from transactions with these companies are offset against the carrying amount of the investment on a pro-rata basis during consolidation, if they are material.

RHI examines at every reporting date whether there are objective indications of an impairment of the shares in the joint ventures. If such indications exist, the required impairment is determined as the difference between the recoverable amount and the carrying amount of the joint venture and recognized in profit and loss in the item share of profit of joint ventures. If the reasons for a previously recognized impairment cease to exist, a reversal of impairment is recognized in profit or loss with the exception of goodwill.

The financial statements of the companies accounted for using the equity method are prepared in accordance with uniform accounting and measurement methods throughout the Group.

(6) Foreign currency translation

Functional currency and presentation currency

The consolidated financial statements are presented in euro, which represents the functional and presentation currency of RHI AG.

The items included in the financial statements of each Group company are valued based on the currency of the primary economic environment in which the company operates (functional currency).

Foreign currency transactions and balances

Foreign currency transactions in the individual financial statements of Group companies are translated into the functional currency based on the exchange rate in effect on the date 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 recognized in profit or loss under other income or expenses. Contrary to this, unrealized currency translation differences from monetary items which form part of a net investment in a foreign business are recognized in other comprehensive income in equity. Non-monetary items in foreign currency are carried at historical rates.

Group companies

The annual financial statements of foreign subsidiaries that have a functional currency differing from the Group presentation currency are translated into euros as follows:

Assets and liabilities are translated at the closing rate on the reporting date of the Group, while monthly income and expenses and consequently the profit 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 other comprehensive income 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 recognized as assets and liabilities of the respective subsidiary and translated at the closing rate.

The euro exchange rates of currencies important for the RHI Group are shown in the following table:

Currencies	1 € =	Closing rate		Average rate ¹⁾	
		12/31/2016	12/31/2015	2016	2015
Brazilian real	BRL	3.42	4.33	3.90	3.64
Pound sterling	GBP	0.86	0.74	0.81	0.73
Chilean peso	CLP	700.25	773.96	748.21	724.89
Chinese renminbi yuan	CNY	7.31	7.09	7.32	6.98
Indian rupee	INR	71.43	72.35	74.31	71.33
Canadian dollar	CAD	1.42	1.52	1.47	1.41
Mexican peso	MXN	21.77	19.00	20.48	17.56
Norwegian krone	NOK	9.09	9.62	9.31	8.94
Swiss franc	CHF	1.08	1.08	1.09	1.07
South African rand	ZAR	14.33	17.00	16.40	14.02
US dollar	USD	1.05	1.09	1.11	1.11

1) Arithmetic mean of the monthly closing rates

(7) Principles of accounting and measurement

Property, plant and equipment

Property, plant and equipment is measured at acquisition or production cost, less accumulated depreciation on a systematic basis and impairments. These assets are depreciated on a straight-line basis over the expected useful life. Depreciation is calculated pro rata temporis beginning in the month the asset is available for use, i.e. when the asset is at its designated location and ready for operations as intended by management.

Leased property, plant and equipment that qualifies as asset purchase financed with long-term funds is capitalized at the market value of the asset or the lower present value in accordance with IAS 17. The leased assets are depreciated on a systematic basis over the useful life. The payment obligations resulting from future lease instalments are discounted and recorded as liabilities. Current lease payments are apportioned between a finance charge and the amortization of the outstanding liability. As of the reporting date, the property, plant and equipment leased through finance leases is of small scale. All other leases are treated as operating leases. The lease payments resulting from operating leases are recorded as expenses.

The production costs of internally generated assets comprise direct costs as well as a proportional share of capitalizable production overheads and borrowing costs. If financing can be specifically allocated to an investment, the actual borrowing costs are capitalized as production costs. If no direct connection can be made, the average rate on borrowed capital of the Group is used as the capitalization rate due to the central funding of the Group.

Expected demolition and disposal costs at the end of an asset's useful life are capitalized as part of acquisition cost and recorded as a provision. The criteria for this treatment are a legal or constructive obligation towards a third party and the ability to prepare a reliable estimate.

Real estate, land and plant under construction are not depreciated on a systematic basis. Depreciation of other material property, plant and equipment is based on the following useful lives in the RHI Group:

Factory and office buildings	15 to 50 years
Land improvement	8 to 30 years
Crusher machines and mixing facilities	8 to 20 years
Presses	10 to 12 years
Tunnel, rotary and shaft kilns	50 years
Other calcining and drying kilns	20 to 30 years
Cars, other plant, furniture and fixtures	3 to 35 years

The residual carrying amounts and economic useful lives are reviewed regularly and adjusted if necessary.

Depletion is recorded on raw material deposits of the volume actually mined in proportion to the estimated volume.

When components of plant or equipment have to be replaced at regular intervals, the relevant replacement costs are capitalized as incurred if the criteria set forth in IAS 16 have been met. The carrying amount of the replaced components is derecognized. Regular maintenance and repair costs are expensed as incurred.

Gains or losses from the disposal of property, plant and equipment, which result as the difference between the net realizable value and the carrying amount, are recognized as income or expense in the statement of profit or loss.

Goodwill

Goodwill is recognized as an asset in accordance with IFRS 3. It is tested for impairment at least once each year, or when events or a change in circumstances indicate that the asset could be impaired.

In accordance with IFRS 3, negative goodwill is recognized through profit or loss immediately after a new assessment of the identified assets, liabilities and contingent liabilities.

Other intangible assets

Research costs are expensed in the year incurred and included under general and administrative expenses.

Development costs also represent expenses in the period. They are recognized under general and administrative expenses. They are only capitalized if the allocable costs of the intangible asset can be measured reliably during its development period. Moreover, capitalization requires that the product or process development can be clearly defined, is feasible in technical, economic and capacity terms and is intended for own use or sale. In addition, future cash inflows which cover not only normal costs but also the related development costs must be expected. Capitalized development costs are amortized on a straight-line basis over the expected useful life, however, over a maximum of ten years, and recognized in cost of sales.

The development costs for internally generated software are expensed as incurred if their primary purpose is to maintain the functionality of existing software. Expenses that can be directly and conclusively allocated to individual programs and represent a significant extension or improvement over the original condition of the software are capitalized as production costs and added to the original purchase price of the software. These direct costs include the personnel expenses for the development team as well as an adequate, proportional share of overheads. Software is predominantly amortized on a straight-line basis over a period of four years.

Purchased intangible assets are measured at acquisition cost, which also includes acquisition-related costs, less accumulated amortization and impairments. Intangible assets with a finite useful life are amortized on a straight-line basis over the expected period of useful life. The following table shows the most important useful lives:

Patents	7 to 18 years
Brand rights	20 years
Land use rights	50 or 65 years
Customer relations	6 years

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

Property, plant and equipment and intangible assets, including goodwill, are tested for impairment if there is any indication that the value of these items may be impaired. Intangible assets with an indefinite useful life and goodwill are tested for impairment at least annually.

An asset is considered to be impaired if its recoverable amount is less than the carrying amount. The recoverable amount of an asset is the higher of its fair value less costs of disposal and its value in use (present value of future cash flows). If the carrying amount is higher than the recoverable amount, an impairment loss equivalent to the resulting difference is recognized in the statement of profit or loss. If the reason for an impairment loss recognized in the past for property, plant and equipment and for other intangible assets ceases to exist, a reversal of impairment on the amortized acquisition and production costs is recognized to profit or loss.

In the case of impairments related to cash-generating units (CGU) which contain goodwill, existing goodwill is initially reduced. If the required impairment exceeds the carrying amount of the goodwill, the difference is apportioned proportionately to the remaining non-current tangible and intangible assets of the CGU. Reversals of impairment losses recognized on goodwill are not permitted and are therefore not considered. The effects of impairment tests at the CGU level are shown separately in the statement of profit or loss.

If there is an indication for an impairment of a specific asset, only this specific asset will be tested for impairment. The recoverable amount is determined through fair value. If the fair value is lower than the carrying amount, an impairment loss is recorded in the operating EBIT or, in the case of restructuring, in the restructuring costs.

Cash-generating units (CGU)

In the RHI Group the individual assets do not generate cash inflows independent of one another; therefore, no recoverable amount can be presented for individual assets. As a result, the assets are combined in CGUs, which largely generate independent cash inflows. These units are combined in strategic business units and reflect the market presence and the market appearance and are as such responsible for cash inflows.

The organizational 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 RHI products and, as an important added value, the combination of this specific technical knowledge and the technical services provided to customers are also incorporated in these units. The sales know-how is reflected in long-standing customer relationships or knowledge of the customer's production facilities and processes. Product knowledge is manifested in the application-oriented knowledge of chemical, physical and thermal properties of RHI products. The services offered extend over the life cycle of RHI products at the customer's plant, from the appropriate installation and support of optimal operations, to environmentally sound disposal with the customer or the sustainable reuse in RHI's production process. These factors determine cash inflow to a significant extent and consequently form the basis for the CGU structures of RHI.

The CGUs of the strategic business unit Steel are Linings and Flow Control. These two units are determined according to the production stages in the process of steel production.

In the Industrial Division, each industry segment (cement/lime, nonferrous metals and environment, energy, chemicals) with the exception of glass forms a separate CGU. The glass segment and the related plants were also considered to be one CGU up to and including 2014. In the year 2015, the Management Board of the RHI Group decided to initiate a structured selling process for the Falconer plant of the US subsidiary RHI Monofrax, LLC. Consequently, the related cash flows were assessed for this plant and it was treated as a separate CGU Industrial/Monofrax. It was sold to the German private equity fund Callista and deconsolidated in the second quarter of 2016.

The global market environment in the glass industry is still characterized by low willingness to invest, high excess capacities and progressing market consolidation in the USA and Europe. As part of the plant concept, the Management Board of the RHI Group is evaluating whether a structured selling process will be initiated for another two companies or they continue to operate within the Group. These two companies are REFEL S.p.A., based in Italy, and CJSC "RHI Podolsk Refractories", based in Russia. In this context, the related cash flows for these plants were determined, which enables a separate consideration. Therefore, the plants of the subsidiaries REFEL S.p.A. and CJSC "RHI Podolsk Refractories" are presented as a separate CGU "Industrial/Fused Cast" in the impairment test 2016, removed from the CGU Industrial/Glass.

In the Raw Materials Division, all raw material producing facilities with the exception of Norway are combined in one CGU. The plant in Porsgrunn, Norway, was not included in the raw materials unit, but treated as a separate CGU because a management team was installed specifically for the coordination and implementation of the optimization measures due to the dimension and the special situation at the Porsgrunn plant. This organization goes beyond plant management and also includes sub-tasks of the administration processes.

The business units of the RHI Group to which cash flows are allocated are shown in the table below:

		RHI Group		
		Steel	Industrial	Raw Materials
CGU	Linings		Glass	Raw Materials Production
	Flow Control		Fused Cast	Norway
			Cement/Lime	
			Nonferrous Metals	
			Environment, Energy, Chemical	
			Monofrax (deconsolidated 2016)	

As in the previous year, 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 detailed planning of the first five years is congruent with the strategic business and financial planning. Based on the detailed planning period, it is 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. In the impairment test 2016 the terminal value is based on a growth rate derived from the difference of the current and the possible degree of utilization of the assets.

The net cash flows are discounted using the weighted average cost of capital (WACC). The weighted average cost of capital is calculated taking into account comparable companies (peer group); the corresponding parameters are derived from capital market information. In addition, country-specific risk premiums are considered in the weighted average cost of capital.

The weighted average cost of capital before tax is determined per legal unit and weighted according to the share of revenue of the legal units. The weighted interest rates range between 6.4% and 8.0% in the year 2016. In the previous year, the interest rates determined on the same basis ranged between 6.3% and 9.7%.

Composition of estimated future cash flows

The estimates of future cash flows include forecasts of the cash flows from continued use. If assets are disposed at the end of their useful life, the related cash flows are also included in the forecasts.

A simplified statement of cash flows serves to determine the cash flows on the basis of strategic business and financial planning. The forecasts include cash flows from future maintenance investments. Expansion investments are only taken into account in the future cash flows when there has been a significant cash outflow or significant payment obligations have been entered into due to services received and it is sufficiently certain that the investment measure will be completed. All other expansion investments are not considered; this applies in particular to expansion investments that have been decided on but not begun.

Future cash flows from financing and for income taxes are generally not included. For reasons of practicability, the expected cash flows also include tax payments, therefore the values in use are determined using an after-tax weighted average cost of capital. The after-tax weighted average cost of capital is iteratively reconciled to an implicit pre-tax weighted average cost of capital, which is indicated in the notes. If the result before tax is negative in the detailed planning period, tax inflows (tax refunds) are considered regardless of whether tax loss carryforwards exist.

With respect to pension obligations, a differentiation is made between earned entitlements and entitlements yet to be earned. Provisions for pensions do not reduce the carrying value of a CGU; accordingly, pension payouts are not included in the recoverable amounts. Expected additions to provisions for pensions are considered cash-effective with respect to service cost. The interest expense related to pension obligations represents a financing expense and is consequently not considered in the forecast of cash flows.

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

Basis for Planning

CGU Steel/Linings

The basis for strategic market planning is the forecast for world steel production, which is prepared by an independent institution (CRU, London, United Kingdom). This forecast is analyzed by experts in the RHI Group and, if necessary, revised and adjusted for internal analyses and evaluations. As in the previous year, RHI assumed a more conservative development of the global steel market for strategic business planning in the year 2016. This results in moderate annual average volume growth of 0.7% in the detailed planning period, with the price level remaining stable. The cost items are planned in detail for the first year of the detailed planning period taking into account cost developments for the individual types of costs at the respective sites, and adjusted for the other years in accordance with the estimates available. Overall, this leads to a gross operating margin between 19.4% and 20.0% in the planning period. As in 2015, the planning does not take into account expansion investments in 2016. As in the previous year, goodwill of € 9.4 million is allocated to the CGU Steel/Linings as of December 31, 2016. The relevant capital costs before tax amount to 7.6% (12/31/2015: 9.5%) and the assumed growth for the terminal value is 0.9% (12/31/2015: 0.3%). An increase in the interest rate by 41%, combined with a 40% reduction of profitability and a reduction of the growth rate to 0.0% would have the effect that the recoverable amount corresponds exactly to the carrying amount of this unit.

CGU Steel/Flow Control

The forecast for world steel production is also the basis for strategic market planning in the CGU Steel/Flow Control. The CGU Steel/Flow Control builds on the same strategic marketing planning of world steel production as the CGU Steel/Linings. In this unit, RHI expects increasing revenue growth with an annual growth rate of 3.5% in the detailed planning period, with the growth being driven primarily by the development in India and the increasing demand for specialized customer solutions. Cost planning is carried out the same way as in the CGU Steel/Linings. The gross operating margin resulting from revenue and cost planning ranges between 23.9% and 24.4% in the detailed planning period. This year's planning also does not include expansion investments. At December 31, 2016, goodwill of € 27.1 million (12/31/2015: € 26.7 million) is allocated to the CGU Steel/Flow Control, as well as an intangible asset of indefinite useful life of € 1.8 million, unchanged compared with the previous year. This asset is related to a brand name that has been acquired. The Group plans to continue using this brand name without a change. A weighted average cost of capital before tax of 8.0% (12/31/2015: 9.7%) was applied. The growth assumed for the terminal value amounts to 0.9% (12/31/2015: 0.3%). In this unit, an increase in the interest rate by 10%, combined with a 14% reduction of profitability, as well as reduction of the growth rate of to 0.0% would cause the recoverable amount to correspond precisely to the carrying amount of this unit.

CGU Raw Materials/Norway

This unit comprises the activities of the plant in Porsgrunn, Norway. At this site, RHI produces high-grade fused magnesia, which represents an important pillar in the strategic raw material supply of the Group. As raw material prices have dropped significantly in the past, the company's high-grade products stand in direct competition with the products available in the market. External purchases are thus possible at any time and the company's own production is adjusted accordingly. Increasing demand in the area of marketing intermediate products and by-products was taken into account in strategic planning. Production costs for the first year in the detailed planning period are planned for every single phase in the production process for individual cost types and subsequently adjusted for the following years in accordance with the defined plan of measures. In the CGU Raw Materials/Norway, a weighted average cost of capital before tax of 6.5% (12/31/2015: 7.3%) was applied. The growth rate assumed for the terminal value amounts to 0.9% (12/31/2015: 0.3%).

CGU Industrial/Glass

As in the previous year, the market of the CGU Industrial/Glass is characterized by global excess capacities in the area of non-basic products. Nevertheless, RHI assumes in the planning period that investments in the glass industry will now increase after the subdued investment activities of the past years and that an increasing number of projects will consequently be won in the medium term, especially in the flat glass segment. However, this slight increase in volume will be compensated by longer service lives/repairs. Here, RHI will continue to grow in the area of service and repairs. All of this will lead to annual revenue growth of 3.2% in the detailed planning period, with constant volumes and generally stable prices. In the CGU Industrial/Glass, the cost items for the first year of the detailed planning period are also planned taking into account cost developments for the individual types of cost at the respective sites and adjusted for the subsequent years in accordance with existing estimates. Consequently, average gross margins between 19.8% and 21.1% are realized in the long term. A weighted average cost of capital before tax of 7.0% (12/31/2015: 8.9%) was applied. The growth assumed for the terminal value amounts to 0.9% (12/31/2015: 0.3%).

CGU Industrial/Fused Cast

Since 2016, the plants in San Vito, Italy, and Sherbinska in Russia have been presented as a separate CGU and have thus been removed from the CGU Industrial/Glass. These plants produce fused cast products. The weighted average cost of capital before tax applied amounts to 6.4%. The growth rate assumed for the terminal value amounts to 0.9%.

Result of impairment test

Based on the impairment test conducted in the financial year 2016, the recoverability of the assets was demonstrated in all CGUs with the exception of the CGU Raw Materials/Norway and the CGU Industrial/Fused Cast.

The carrying amount of the CGU Raw Materials/Norway was already fully written down in the previous years. The recoverable amount of the CGU Raw Materials/Norway was determined on the basis of a value in use and is negative as of December 31, 2016 as in the previous year. In 2015 an impairment loss of € 23.2 million was recognized for the CGU Raw Materials/Norway, of which € 10.4 million was related to buildings, € 7.7 million to technical plant and machinery and € 5.1 million to other plant, furniture and fixtures.

The amount recognized in the item impairment losses in the statement of profit or loss for the CGU Industrial/Fused Cast amounts to € 8.0 million, of which land and buildings account for € 3.7 million, technical plant and machinery for € 2.9 million, other plant, furniture and fixtures for € 1.0 million, plant under construction to € 0.3 million and intangible assets for € 0.1 million. The recoverable amount of this CGU was determined on the basis of the value in use and is negative as of December 31, 2016. In the previous year, the CGU Industrial/Fused Cast was included in the CGU Industrial/Glass.

In the year 2015, the impairment losses for the former CGU Industrial/Monofrax amounted to € 8.0 million, of which land and buildings accounted for € 1.5 million, technical plant and machinery for € 5.3 million, other plant, furniture and fixtures for € 0.8 million, plant under construction to € 0.2 million and intangible assets for € 0.2 million.

As in the previous year, no reversals of impairments were made in the financial year 2016.

Other financial assets and liabilities

Financial assets and liabilities are initially recognized when the Group becomes a party to the contractual provisions of a financial instrument. Financial assets are derecognized when the contractual rights to payments from the financial assets no longer exist or significant risks and rewards related to the ownership of the financial assets are transferred. Financial liabilities are derecognized when the contractual obligations are settled, withdrawn or have expired.

The item other financial assets in the consolidated statement of financial position of RHI includes shares in non-consolidated subsidiaries and other investments, securities, financial receivables and positive fair values of derivative financial instruments.

The item other financial liabilities includes negative fair values of derivative financial instruments.

Shares in non-consolidated subsidiaries, investments in other companies and securities are classified entirely as "available for sale" in the RHI Group. Available-for-sale financial assets are initially measured at fair value including any related transaction expenses. Subsequent measurement reflects fair value, with changes in fair value being recorded in other comprehensive income. The accumulated gains and losses from fair value measurement that are recorded under other comprehensive income are reclassified to the statement of profit or loss with the disposal of the financial assets. Impairments are charged to profit or loss. Impairment losses on equity instruments recognized to profit and loss are reversed through other comprehensive income. Reversals of impairment for debt instruments are recognized to profit and loss. Available-for-sale financial assets of minor significance are measured at cost. If there are indications that fair value is lower, the lower value is recognized.

Financial receivables are measured at amortized cost applying the effective interest method. Any doubt concerning the collectability of the receivables is reflected in the use of the lower present value of the expected future cash flows. Foreign currency receivables are translated at the closing rate.

Derivative financial instruments, which are not part of an effective hedging relationship in accordance with IAS 39, must be classified as held for trading in accordance with IFRS and measured at fair value through profit or loss. In the RHI Group, this measurement category includes derivatives related to purchase obligations, forward exchange contracts as well as embedded derivatives in open orders that are denominated in currencies other than the functional currency.

Derivative financial instruments relating to purchase obligations concern a long-term power supply contract which provides for the purchase of fixed amounts of electricity at fixed prices and for which the so-called own-use exemption (exemption for own use in accordance with IAS 39.5) was for the first time not applied anymore in the consolidated financial statements 2015. The measurement is made taking into account quoted electricity prices in the futures market. Based on the fixed amounts of electricity, the cash flows for the entire term of the contract are initially determined as the difference between forward rates and contractually fixed prices and discounted at the reporting date using a cost of borrowing rate corresponding to the term. The measurement effects resulting from this electricity derivative are shown as gain or loss from derivatives from supply contracts in the statement of profit or loss.

The measurement of forward exchange contracts and embedded derivatives in open orders denominated in a currency other than the functional currency is made on a case-by-case basis at the respective forward rate on the reporting date. These forward rates are based on spot rates, and also include forward premiums and discounts. Unrealized valuation gains or losses and results from the realization are recognized to the statement of profit or loss under other income or expenses. The underlying transactions for the derivatives are carried at amortized cost.

For derivative financial instruments, which are incorporated in an effective hedging relationship in accordance with IAS 39, the provisions regarding hedge accounting are applied. RHI has concluded derivative financial instruments in the form of interest rate swaps to protect the cash flow risk of financial liabilities carrying variable interest. The hedging transactions are shown as part of cash flow hedge accounting. The interest rate swaps as hedging instruments are measured at fair value, which corresponds to the amount which RHI would receive or have to pay on the reporting date when the financial instrument is terminated. The fair value is calculated using the interest rates and yield curves relevant on the reporting date. The effective part of the fair value changes is initially recorded in other comprehensive income as an unrealized gain or loss. Only at the time of the realization of the underlying transaction, the contribution of the hedging instrument is shown in the statement of profit or loss. Ineffective parts of the fair value changes of cash flow hedges are recognized immediately in the statement of profit or loss.

Deferred taxes

Deferred taxes are recognized on temporary differences between the tax base and the IFRS carrying amount of assets and liabilities, tax-loss carryforwards and consolidation entries.

Deferred tax assets are recognized on temporary differences insofar as it is probable that sufficient deferred tax liabilities exist or that sufficient taxable income before the reversal of temporary differences is available for the settlement of deductible temporary differences in the planning period of five years.

Deferred taxes are recognized on temporary differences relating to shares in subsidiaries and joint ventures, unless the parent company is in a position to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse. No temporary differences are recognized for financial instruments which were issued by subsidiaries to non-controlling interests and which are classified as a financial liability in accordance with IFRS.

The RHI Group accounts for deferred tax assets for unused tax loss carryforwards to the extent that it is probable that a taxable income will be available within the planning period of five years, against which the loss carryforwards can be used.

The calculation of deferred taxes is based on the tax rate expected in the individual countries at the time of realization and generally reflects the enacted or substantively enacted tax rate on the reporting date. As in the previous year, deferred taxes of the Austrian Group companies are determined at the corporation tax rate of 25%. Tax rates from 12.5% to 37.9% (12/31/2015: 9.0% to 37.6%) were applied to foreign companies.

Deferred tax assets and liabilities are offset if there is an enforceable right to offset current tax receivables against current tax liabilities, and if the deferred taxes are due from/to the same tax authorities.

Inventories

Inventories are stated at acquisition or production cost, or at net realizable value as of the reporting date. The determination of acquisition cost of purchased inventories is based on the moving average price method. Finished goods and work in process are valued at fixed and variable production cost. The net realizable 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 realizable value.

Long-term construction contracts

Construction contracts are accounted for using the percentage of completion method if the criteria defined in IAS 11 have been met.

Under the percentage of completion method, production costs incurred plus an appropriate mark-up for profit based on the stage of completion are recognized under receivables from construction contracts and under revenue. The stage of completion is based on the expenses incurred as a percentage of the expected total expenses for the contract. Any expected losses on a contract are covered by provisions, which also reflect identifiable risks. Prepayments received from customers are deducted from contract receivables. Any resulting negative balance on a construction contract is recorded as a liability from construction contracts.

Trade and other current receivables

Receivables are initially measured at fair value and subsequently carried at amortized cost minus any valuation allowances. These valuation allowances are determined on an individual basis and reflect any recognizable risk of default. Specific cases of default lead to the derecognition of the relevant receivables.

Receivables denominated in foreign currencies are translated using the closing rate.

Emission certificates

Emission certificates acquired for a consideration are carried at cost and recognized to profit and loss in cost of sales when used up, written down to fair value or sold. In the case of a shortfall, a provision is recognized equivalent to the fair value of the lacking emission certificates.

Emission certificates allocated free of charge are not accounted for. Proceeds from the sale of these rights are recognized under revenue.

Cash and cash equivalents

Cash on hand, checks received and cash at banks with an original term of a maximum of three months are shown under cash and cash equivalents. Moreover, shares in money market funds, which are only exposed to insignificant value fluctuations due to their high credit rating and investments in extremely short-term money market instruments and can be converted to defined cash amounts within a few days at any time, are also recorded under cash equivalents under IAS 7.

Cash and cash equivalents denominated in foreign currencies are translated at the closing rate.

Financial liabilities

Liabilities to financial institutions

Liabilities to financial institutions are measured at fair value less directly attributable transaction costs at initial recognition. In subsequent measurements these liabilities are measured at amortized cost applying the effective interest method. Liabilities to financial institutions in foreign currency are translated at the closing rate.

Liabilities to fixed-term or puttable non-controlling interests

Capital shares of non-controlling interests in subsidiaries with a fixed term are recognized under financial liabilities in the consolidated statement of financial position in accordance with IAS 32. The liabilities are measured at amortized cost. The share of profit attributable to non-controlling interests is recognized under interest expenses in the statement of profit or loss. Dividend payments to non-controlling interests reduce liabilities.

Furthermore, the RHI Group has entered into purchase obligations with non-controlling shareholders of a subsidiary. Based on these agreements, the shareholders receive the right to tender their shares at any time on previously defined conditions. In this case, IAS 32 provides for carrying a liability in the amount of the probable future exercise price. The difference between the estimated liability and the carrying amount of the non-controlling interest was recognized to equity at the time of the initial recognition without affecting profit or loss. Subsequently, the liability is measured at amortized cost and changes are recorded in net finance costs.

Provisions

Provisions are recognized when the Group incurs a legal or constructive obligation as a result of past events, and 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.

Non-current provisions are measured at their discounted settlement value as of the reporting date if the discount effect is material.

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

Provisions for pensions

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

Defined contribution plans limit the company's obligation to the agreed amount of contributions to earmarked pension plans. The related expenses are shown in the functional areas and thus in EBIT. No provisions are necessary.

Defined benefit plans require the company to provide the agreed amount of benefits to active and former employees and their dependents, with a differentiation made between pension systems financed through provisions and pension systems financed by funds.

For pension plans financed through external funds, the pension obligation according to the projected unit credit method is netted out against the fair value of the plan assets. If the plan assets are not sufficient to cover the obligation, the net obligation is recognized under provisions for pensions. However, if the plan assets exceed the obligations, the asset recognized is limited to reductions of future contribution payments to the plan and is shown under other non-current assets.

The present value of defined benefit obligations for current pensions, future pension benefits and similar obligations and the related expenses are calculated separately for each plan annually by independent qualified actuaries in accordance with the provisions of IAS 19. The present value of future benefits is based on the length of service, expected wage/salary developments and pension adjustments.

The expense to be recognized in a period includes the 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 are required to calculate these obligations, above all the interest rate used for discounting, but also the rates of increases in wages/salaries and pensions as well as the retirement starting age and probability of employee turnover and actual claims. The calculation is based on local biometric parameters.

Interest rates chosen on the basis of the interest on high-quality corporate bonds issued with adequate maturities and currencies are applied to determine the present value of pension obligations. In countries where there is no 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 were based on an average of past years, which is also considered to be realistic for the future.

The fluctuation probabilities were estimated specific to age or according to seniority.

The retirement age used for the calculation is based on the respective statutory provisions of the country concerned. The calculation is based on the earliest possible retirement age according to the current statutory provisions of the respective country, among other things depending on gender and date of birth.

For pension commitments that limit claims to the amount of plan assets, the present value of the obligation equals the total amount of plan assets.

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

Provisions for termination benefits

Provisions for termination benefits are primarily related to obligations to employees whose employment is subject to Austrian law.

Employees who joined an Austrian company before December 31, 2002 receive a one-off lump-sum termination benefit as defined by Austrian labor legislation if the employer terminates the employment relationship or when the employee retires. The amount of 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 twelve monthly salaries. These obligations are measured in accordance with IAS 19 using the projected unit credit method applying an accumulation period of 25 years. Remeasurement gains and losses are recorded directly to other comprehensive income after considering tax effects and shown in the statement of comprehensive income.

For employees who joined an Austrian company after December 31, 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 regular contributions are treated like defined contribution pension plans and included under personnel expenses of the functional areas.

Other personnel provisions

Other personnel provisions include provisions for service anniversary bonuses, payments to semi-retirees, share-based payments 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 uninterrupted years of service with the same company. Obligations related to service anniversary bonuses exist in Austrian and German Group companies. Under IAS 19 service anniversary bonuses are treated as other long-term employee benefits. 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 in the period incurred.

Local labor 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.

For cash-settled share-based payments for the members of the Management Board of RHI AG, a provision is recorded for the services received and measured at fair value on the date of receipt. Until the debt is settled, its fair value is recalculated at each reporting date and on the settlement date. All changes in fair value are recognized to profit or loss in general and administrative expenses.

Obligations for lump-sum settlements are based on company agreements in individual companies.

Provisions for warranties

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

Provisions for restructuring

Provisions for restructuring are created insofar as 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.

Trade payables and other current liabilities

These liabilities are initially recognized at fair value, and subsequently measured at amortized cost.

Liabilities denominated in foreign currencies are translated at the closing rate.

Government grants

Government grants to promote investments are recognized as deferred income and released through profit or loss over the useful life of the relevant asset distributed on a straight-line basis.

Grants that were granted as compensation for expenses or losses are recognized to profit or loss in the periods in which the subsidized expenses are incurred. In the RHI Group, they mainly include grants for research and employee development. Grants for research are recorded as income in general and administrative expenses.

Revenue and expenses

Revenue comprises the sale of products and services less rebates and other sales deductions.

Revenue is realized when ownership and risk are transferred to the customer or when a service is performed, the consideration has been contractually defined or can otherwise be determined and the RHI Group can therefore expect to collect the related receivable. If formal acceptance by the customer is agreed, the related revenue is only recognized after this acceptance has been received.

Revenue on construction contracts is realized according to the percentage of completion method, if the requirements of IAS 11 have been met.

Expenses are recognized to the statement of profit or loss when a service is consumed or the costs are incurred.

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

Dividends from investments that are not accounted for using the equity method are recognized to profit and loss at the time the legal claim arises.

Income taxes are recognized according to the local regulations applicable to each company. Current and deferred income taxes are recognized in the statement of profit or loss unless they are related to items which were recorded directly in equity or in other comprehensive income. In such a case, income taxes are also recorded in equity or other comprehensive income.

Since the financial year 2005, RHI AG has headed a corporate tax group in accordance with § 9 KStG (Austrian Corporation Tax Act). A tax compensation agreement has been in force since January 1, 2016 between the head of the group and seven Austrian group members. Prior to that, profit and loss transfer agreements were in place. According to the group and tax compensation agreement, the members of the group have to pay a positive tax compensation of 20% of the taxable profit to the head of the group if the result is positive, as long as tax loss carry forwards exist with the head of the group; subsequently 25% of the taxable profit have to be paid. In the case of a tax loss of the group member, the head of the group has to pay a negative tax compensation to the member of the group, with a rate of 12.5% being applied if the loss can be utilized within the group. In the case of a loss in the tax group, a tax loss of a group member is retained and offset against future taxable profits of the group member. When the contract is terminated, a compensation payment is agreed for unused tax losses of a group member, which are allocated to the head of the group.

In Germany, Didier-Werke Aktiengesellschaft, Wiesbaden, acts as the head of a tax corporation group. The seven subsidiary companies are obliged to transfer their profit or loss to Didier-Werke Aktiengesellschaft based on a profit and loss transfer agreement.

(8) Segment reporting

The RHI Group comprises the operating segments Steel, Industrial and Raw Materials. This segmentation of the business activities is geared to internal control and reporting.

The segmentation into Steel and Industrial represents a grouping by the main customer industries. The Steel segment specializes in supporting customers in the steel-producing and steel-processing industry. The Industrial segment serves customers in the glass, cement/lime, nonferrous metals and environment, energy, 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.

The operating activities of the segment Raw Materials primarily consist of supplying Group companies with raw materials. This includes mining magnesite and dolomite in mines owned by the Group and raw material production based on seawater, processing and finishing raw materials as well as purchasing and selling raw materials. Within the Group, raw materials are carried at market price. The globally located manufacturing sites, which process the raw materials, are combined in one organizational unit. The allocation of manufacturing cost variances of the production plants to the Steel and Industrial Divisions is based on the supply flow.

The research activities of the RHI Group are managed centrally. R&D costs are allocated directly to the three segments.

The Shared Service Center costs of the Group are allocated to the three operating segments according to the agreed Service Level Agreements. The allocation of expenses of Group management is based on external revenue.

Statements of profit or loss up to EBIT are available for each segment. The operating EBIT (EBIT adjusted for special effects) serves the Management Board of the RHI Group for internal management and as an indicator of sustainable earnings power of a business as presented in the statement of profit or loss. The profit of joint ventures is allocated to the segments. Net finance costs and income taxes are managed on a group basis and are not allocated.

Segment assets include trade receivables and inventories, which are available to the operating segments and are reported to the management for control and measurement, as well as property, plant and equipment, goodwill and other intangible assets, which are allocated to the segments based on the capacity of the assets provided to the segments. Investments in joint ventures are allocated to the segments. All other assets are not allocated. The recognition of segment assets is determined on the basis of the accounting and measurement methods applied to the IFRS consolidated financial statements.

Data on revenue by country are disclosed by the sites of the customers. Data on non-current assets (property, plant and equipment and intangible assets) are disclosed on the basis of the respective locations of the companies of the RHI Group.

(9) Discretionary decisions, assumptions and estimates

The RHI Group used forward-looking assumptions and estimates, especially with respect to business combinations, non-current assets, valuation adjustments to inventories and receivables, provisions and income taxes to a certain extent in the application of accounting and measurement methods.

The estimates are based on comparable values in the past, plan data and other findings regarding transactions to be accounted. The actual values may ultimately deviate from the assumptions and estimates made. The resulting changes in value of assets, liabilities, revenue and expenses are accounted for in the reporting period in which the change is made and in the affected future reporting periods.

Business combinations (initial consolidation)

Estimates relating to the calculation of fair values of acquired assets, liabilities and contingent liabilities are required within the context of business combinations.

If intangible assets are identified, discretionary estimates are necessary for the determination of fair values by means of discounted cash flows, especially regarding the duration and amount of future cash flows, as well as for the determination of an adequate discount rate. When determining the fair value of land, buildings and technical plant, above all the estimate of comparability of the reference objects with the objects subject to valuation is discretionary.

When making discretionary decisions in the context of purchase price allocations on major company acquisitions, RHI consults with independent experts who accompany the execution of the discretionary decisions and record it in expert documents.

Impairment of intangible assets with finite useful lives and property, plant and equipment

Intangible assets with a finite useful life and property, plant and equipment must be tested for impairment when events or a change in circumstances indicate that the carrying amount of an asset may not be recoverable. The carrying amounts of these assets amounted to € 591.1 million at December 31, 2016 (12/31/2015: € 604.6 million). In accordance with IAS 36, such impairment losses are determined through comparisons with the discounted future cash flows expected from the related assets of the cash-generating units (CGU).

As part of the annual planning process, the impairment test is conducted for the CGUs defined in the RHI Group, thus taking into account all changes resulting from updates of strategic planning. Sensitivity analyses are also performed as part of the impairment test. In their calculation one of the main parameters is changed as follows: increase in the discount rate by 10%, reduction in the form of the contribution margin by 10% and reduction of the growth rate in terminal value by 50%. In all CGUs these simulations do not result in impairments.

Likewise, in all CGUs a reduction of the discount rate by 10%, an increase in profitability in the form of the contribution margin by 10% and an increase in the growth rate in terminal value by 50% do not result in reversals impairments. For the carrying amount of the impaired CGU Industrial/Glass, the sensitivity analysis at December 31 of the previous year shows the following results:

in € million	Change in assumption	Impairment loss	Change in assumption	Reversal of impairment loss
Discount rate	+10%	(7.8)	(10)%	3.9
Profitability	(10)%	(8.6)	+10%	3.9
Growth rate	(50)%	(1.4)	+50%	1.8

Impairment of goodwill

The effect of an adverse change by plus 10% in the estimated interest rates as of December 31, 2016 or by minus 10% in the contribution margin would not result in an impairment charge to the goodwill recognized (carrying amount 12/31/2016: € 37.8 million, 12/31/2015: € 37.5 million).

Impairment of other intangible assets with indefinite useful life

The effect of an adverse change by plus 10% in the estimated interest rate as of December 31, 2016 or by minus 10% in the contribution margin would not result in an impairment charge to intangible assets with indefinite useful lives recognized (carrying amount at 12/31/2016 and 12/31/2015: € 1.8 million).

Provisions for pensions and termination benefits

The present value of pension and termination benefit obligations depends on a number of factors, which are based on actuarial assumptions such as interest rates, future salary and pension increases as well as life expectancy. Due to the long-term orientation of these obligations, these assumptions are subject to significant uncertainties.

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, however, 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	12/31/2016		12/31/2015	
		Pension plans	Termination benefits	Pension plans	Termination benefits
Present value of the obligations	-	289.2	58.5	304.9	60.1
Interest rate	+0.25	(7.6)	(1.6)	(8.0)	(1.6)
	(0.25)	8.0	1.6	8.4	1.6
Salary increase	+0.25	0.6	1.5	0.6	1.5
	(0.25)	(0.6)	1.4	(0.6)	(1.4)
Pension increase	+0.25	5.0	-	5.0	-
	(0.25)	(4.9)	-	(4.8)	-
Life expectancy	+1 year	12.9	-	10.8	-
	(1) year	(13.2)	-	(10.7)	-

These changes would have no immediate effect on the result of the period as remeasurement gains and losses are recorded in other comprehensive income without impact on profit or loss.

The assumptions regarding the interest rate are reviewed quarterly; all other assumptions are reviewed at the end of the year.

Other provisions

The recognition and measurement of other provisions totaling € 33.6 million (12/31/2015: € 37.3 million) were based on the best possible estimates using the information available at the reporting date. The estimates take into account the underlying legal relationships 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 day may deviate from actual cash outflows. As soon as additional information is available, the estimates made are reviewed and provisions are also adjusted.

Income taxes

The calculation of income taxes of RHI AG and its subsidiaries is based on the tax laws applicable in the individual countries. Due to their complexity, the tax items presented in the financial statements may be subject to deviating interpretations by local finance authorities.

When determining the amount of the capitalizable deferred tax claims, an estimate of the management is required regarding the amount of future taxable income and the expected time. Should the future taxable profit deviate by 10% from the assumption made on the reporting date within the planning period defined for the accounting and measurement of deferred taxes, the net position of deferred tax assets amounting to € 131.3 million (12/31/2015: € 130.8 million) would have to be increased by € 1.8 million (12/31/2015: € 1.0 million) or reduced by € 1.7 million (12/31/2015: € 0.6 million).

Other items

With respect to the other items of the statement of financial position, RHI currently assumes that no material effects on the financial position and performance would result for the following financial years due to changes in the estimates and assumptions.

NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(10) Property, plant and equipment

Property, plant and equipment developed as follows in the year 2016 and in the previous year:

in € million	Real estate, land and buildings	Raw material deposits	Technical equipment, machinery	Other plant, furniture and fixtures	Prepayments made and plant under construction	Total
Cost at 12/31/2015	448.0	31.8	877.0	286.3	49.2	1,692.3
Currency translation	0.2	0.0	(6.0)	(0.2)	(0.1)	(6.1)
Disposals of consolidated companies	(4.2)	0.0	(15.4)	(2.3)	0.0	(21.9)
Additions	5.9	0.3	13.7	7.6	32.8	60.3
Retirements and disposals	(5.3)	0.0	(11.0)	(4.2)	(0.7)	(21.2)
Reclassifications	9.1	0.0	19.6	7.0	(37.4)	(1.7)
Cost at 12/31/2016	453.7	32.1	877.9	294.2	43.8	1,701.7
Accumulated depreciation 12/31/2015	282.1	24.2	633.5	220.1	0.2	1,160.1
Currency translation	0.9	0.0	(3.9)	0.5	0.0	(2.5)
Disposals of consolidated companies	(4.2)	0.0	(15.4)	(2.3)	0.0	(21.9)
Depreciation charges	7.8	0.3	32.3	14.3	0.0	54.7
Impairment losses	4.0	0.0	2.9	1.0	0.9	8.8
Retirements and disposals	(5.1)	0.0	(10.1)	(4.0)	0.0	(19.2)
Reclassifications	0.1	0.0	0.0	0.0	(0.2)	(0.1)
Accumulated depreciation 12/31/2016	285.6	24.5	639.3	229.6	0.9	1,179.9
Carrying amounts at 12/31/2016	168.1	7.6	238.6	64.6	42.9	521.8

in € million	Real estate, land and buildings	Raw material deposits	Technical equipment, machinery	Other plant, furniture and fixtures	Prepayments made and plant under construction	Total
Cost 12/31/2014	441.1	31.8	863.1	280.7	43.2	1,659.9
Currency translation	0.0	0.0	6.8	1.1	0.1	8.0
Additions	4.0	0.0	14.9	9.6	48.3	76.8
Retirements and disposals	(3.4)	0.0	(33.8)	(13.9)	(0.1)	(51.2)
Reclassifications	6.3	0.0	26.0	8.8	(42.3)	(1.2)
Cost at 12/31/2015	448.0	31.8	877.0	286.3	49.2	1,692.3
Accumulated depreciation 12/31/2014	263.8	23.9	615.0	212.9	0.1	1,115.7
Currency translation	(1.2)	0.0	2.2	(0.1)	0.0	0.9
Depreciation charges	9.4	0.3	34.2	15.0	0.0	58.9
Impairment losses	13.3	0.0	14.5	5.9	0.2	33.9
Retirements and disposals	(3.2)	0.0	(32.6)	(13.5)	0.0	(49.3)
Reclassifications	0.0	0.0	0.2	(0.1)	(0.1)	0.0
Accumulated depreciation 12/31/2015	282.1	24.2	633.5	220.1	0.2	1,160.1
Carrying amounts at 12/31/2015	165.9	7.6	243.5	66.2	49.0	532.2

The additions to property, plant and equipment include capitalized borrowing costs of € 0.4 million (2015: € 0.3 million). The average capitalization rate amounted to 1.5% in the financial year 2016 (2015: 1.5%).

The item prepayments made and plant under construction includes plant under construction with a carrying amount of € 41.7 million (12/31/2015: € 48.4 million), with the modification of the smelter at the site in Radenthein, Austria, representing the largest investment project under construction of the financial year 2016.

As in the previous year, there are no restrictions on the sale of property, plant and equipment.

(11) Goodwill

Goodwill developed as follows:

in € million	2016	2015
Cost at beginning of year	40.1	38.6
Currency translation	0.1	1.5
Cost at year-end	40.2	40.1
Accumulated impairment at beginning of year	(2.6)	(2.5)
Currency translation	0.2	(0.1)
Accumulated impairment at year-end	(2.4)	(2.6)
Carrying amount at year-end	37.8	37.5

(12) Other intangible assets

Other intangible assets changed as follows in the financial year 2016:

in € million	Internally generated intangible assets	Other intangible assets	Total
Cost at 12/31/2015	42.2	130.5	172.7
Currency translation	(0.2)	(0.2)	(0.4)
Disposals of consolidated companies	(1.1)	(1.5)	(2.6)
Additions	5.0	1.0	6.0
Retirements and disposals	0.0	(17.5)	(17.5)
Reclassifications	0.0	1.7	1.7
Cost at 12/31/2016	45.9	114.0	159.9
Accumulated amortization 12/31/2015	25.5	73.0	98.5
Currency translation	(0.3)	0.1	(0.2)
Disposals of consolidated companies	(1.1)	(1.5)	(2.6)
Amortization charges	3.5	6.9	10.4
Impairment losses	0.1	0.0	0.1
Retirements and disposals	0.0	(17.5)	(17.5)
Reclassifications	0.0	0.1	0.1
Accumulated amortization 12/31/2016	27.7	61.1	88.8
Carrying amounts at 12/31/2016	18.2	52.9	71.1

Other intangible assets changed as follows in the previous year:

in € million	Internally generated intangible assets	Other intangible assets	Total
Cost 12/31/2014	37.7	130.5	168.2
Currency translation	0.1	4.9	5.0
Additions	4.7	1.1	5.8
Retirements and disposals	(0.3)	(7.2)	(7.5)
Reclassifications	0.0	1.2	1.2
Cost at 12/31/2015	42.2	130.5	172.7
Accumulated amortization 12/31/2014	22.3	71.9	94.2
Currency translation	0.1	1.1	1.2
Amortization charges	3.2	7.2	10.4
Impairment losses	0.2	0.0	0.2
Retirements and disposals	(0.3)	(7.2)	(7.5)
Accumulated amortization 12/31/2015	25.5	73.0	98.5
Carrying amounts at 12/31/2015	16.7	57.5	74.2

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

Other intangible assets include in particular acquired patents, trademark rights, software, customer relations of the Indian company Orient Refractories Ltd. and land use rights. The land use rights have a carrying amount of € 23.4 million (12/31/2015: € 24.0 million) and a remaining useful life of 30 to 61 years.

As in the previous year, there are no restrictions on the sale of intangible assets.

(13) Investments in joint ventures

As in the previous year, the RHI Group holds a share of 50% in MAGNIFIN Magnesiaprodukte GmbH & Co KG, a company based in St. Jakob, Austria. The company's core business activity is the production and sale of halogen-free flame retardants for plastics. The investment in MAGNIFIN is treated as a financial investment.

MAGNIFIN is set up as an independent vehicle. RHI has a residual interest in the net assets of the company and accordingly classified its share as a joint venture. The share for which no listed market price is available is accounted for using the equity method in the RHI consolidated financial statements.

MAGNIFIN generated revenue amounting to € 40.0 million in the financial year 2016 (2015: € 37.8 million). Profit before income tax amounts to € 20.9 million (2015: € 18.1 million) and includes depreciation charges on property, plant and equipment and amortization charges on intangible assets of € 1.7 million (2015: € 2.0 million), interest income of € 0.0 million (2015: € 0.1 million) and interest expenses of € 0.3 million (2015: € 0.3 million).

Total comprehensive income including other comprehensive income before income tax of € (0.3) million (2015: € 0.0 million) amounts to € 20.6 million (2015: € 18.1 million).

Income taxes on the share of profit of MAGNIFIN amounting to € 2.8 million (2015: € 2.4 million) are recognized by the head of the tax group, RHI AG, due to the legal form of the joint venture and transferred to Veitscher Vertriebsgesellschaft m.b.H. in accordance with the provisions of the tax compensation agreement.

The net assets of MAGNIFIN at the two reporting dates are shown in the table below:

in € million	12/31/2016	12/31/2015
Non-current assets	9.9	8.0
Current assets (without cash and cash equivalents)	12.9	11.7
Cash and cash equivalents	16.7	17.2
Non-current personnel provisions	(4.0)	(3.9)
Current provisions	(1.1)	(1.1)
Trade payables and other current liabilities	(3.2)	(3.2)
Net assets	31.2	28.7

The development of the carrying amount of the share in this joint venture in the RHI consolidated financial statements is shown below:

in € million	2016	2015
Proportional share of net assets at beginning of year	14.4	13.4
Share of profit	10.9	9.2
Share of other comprehensive income (remeasurement losses)	(0.1)	0.0
Dividends received	(9.5)	(8.2)
Other changes in value	(0.1)	0.0
Proportional share of net assets at year-end	15.6	14.4
Goodwill	4.9	4.9
Carrying amount of investments in joint ventures	20.5	19.3

(14) Other non-current financial assets

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

in € million	12/31/2016	12/31/2015
Available-for-sale investments	0.4	0.5
Available-for-sale securities and shares	15.8	20.9
Other non-current financial receivables	2.7	2.3
Other non-current financial assets	18.9	23.7

At December 31, 2016 accumulated impairments on investments, securities and shares of € 2.0 million (12/31/2015: € 2.5 million) are recognized.

(15) Other non-current assets

Other non-current assets include the following items:

in € million	12/31/2016	12/31/2015
Stripping costs	8.3	10.1
Receivables from other taxes	6.7	5.3
Plan assets from overfunded pension plans	2.1	2.1
Prepaid expenses	0.6	0.5
Other non-current assets	17.7	18.0

Prepaid expenses for stripping costs arising from mining raw materials in a surface mine are shown in non-current assets due to the planned use of the mine.

Receivables from other taxes are related to input tax credits, which are expected to be utilized in the medium term.

(16) Deferred taxes

The net position of deferred taxes of the Group, derived from items of the statement of financial position, is calculated as follows:

in € million	12/31/2016	12/31/2015
Deferred tax assets	144.8	146.1
Deferred tax liabilities	(13.5)	(15.3)
Net position	131.3	130.8

The following table shows the development of the Group's net position:

in € million	2016	2015
Net position at beginning of year	130.8	113.6
Currency translation	1.9	(1.5)
Changes recognized in profit or loss	(3.0)	23.6
Tax rate changes recognized in profit or loss	(1.3)	(1.0)
Changes recognized in other comprehensive income	2.9	(3.9)
Net position at year-end	131.3	130.8

The change in net position classified according to the type of temporary differences and tax loss carryforwards is shown below:

in € million	Tax loss carryforwards	Non-current assets	Personnel provisions	Other provisions	Inventories, other	Total
12/31/2015	71.6	(16.3)	51.9	3.1	20.5	130.8
Currency translation	1.1	0.9	(0.4)	0.0	0.3	1.9
Changes recognized in profit or loss	(11.0)	0.2	(2.6)	0.1	10.3	(3.0)
Tax rate changes recognized in profit or loss	0.2	(1.0)	0.0	0.0	(0.5)	(1.3)
Changes recognized in other comprehensive income	(0.1)	0.0	3.8	0.0	(0.8)	2.9
12/31/2016	61.8	(16.2)	52.7	3.2	29.8	131.3

in € million	Tax loss carryforwards	Non-current assets	Personnel provisions	Other provisions	Inventories, other	Total
12/31/2014	68.0	(24.1)	58.3	4.0	7.4	113.6
Currency translation	(0.3)	(1.9)	(0.1)	0.0	0.8	(1.5)
Changes recognized in profit or loss	2.8	11.1	(1.9)	(0.9)	12.5	23.6
Tax rate changes recognized in profit or loss	0.2	(1.4)	0.0	0.0	0.2	(1.0)
Changes recognized in other comprehensive income	0.9	0.0	(4.4)	0.0	(0.4)	(3.9)
12/31/2015	71.6	(16.3)	51.9	3.1	20.5	130.8

As of December 31, 2016, subsidiaries which generated tax losses in the past year or the previous year recognized net deferred tax assets on temporary differences and on tax loss carryforwards of € 32.3 million (12/31/2015: € 21.4 million). These assets are considered to be unimpaired because the companies concerned are expected to generate taxable income in the future. This assessment is based on measures implemented in

2016, which will lead to an increase in taxable income in the future. On the one hand, a subsidiary was sold; on the other hand, the financing of a subsidiary was optimized.

Tax loss carryforwards totaled € 383.7 million in the RHI Group as of December 31, 2016 (12/31/2015: € 420.4 million). A significant portion of the tax loss carryforwards originates in Austria and can be carried forward indefinitely. The annual offset of the Austrian tax loss carryforwards is limited to 75% of the respective tax profit. No deferred taxes were recognized for tax loss carryforwards of € 156.9 million (12/31/2015: € 144.1 million). The main part of the non-capitalized tax losses can be carried forward indefinitely. € 25.8 million (12/31/2015: € 10.7 million) will lapse at the earliest in the year 2022 if not used by then.

In addition, no deferred tax assets were recognized for temporary differences totaling € 2.2 million (12/31/2015: € 3.7 million) as it is not sufficiently probable that they can be used. The deductible temporary differences can be carried forward indefinitely.

Taxable temporary differences of € 109.3 million (12/31/2015: € 100.4 million) were not recognized on shares in subsidiaries because the corresponding distributions of profit or the sale of the investments are not expected in the foreseeable future.

The maturity structure of deferred taxes is shown in the table below:

in € million	12/31/2016			12/31/2015		
	Current	Non-current	Total	Current	Non-current	Total
Deferred tax assets	39.0	105.8	144.8	27.7	118.4	146.1
Deferred tax liabilities	0.0	13.5	13.5	0.1	15.2	15.3

(17) Inventories

Inventories as presented in the statement of financial position consist of the following items:

in € million	12/31/2016	12/31/2015
Raw materials and supplies	74.5	78.3
Unfinished products and unfinished services	99.4	120.3
Finished products and goods	184.9	197.2
Prepayments made	6.5	8.1
Inventories	365.3	403.9

The inventories recognized as of December 31, 2016 totaled € 365.3 million (12/31/2015: € 403.9 million), of which € 2.7 million (12/31/2015: € 4.0 million) are carried at net realizable value.

The impairment losses recorded in the financial year 2016, netted out against reversals of impairment losses, amount to € 1.1 million. In the previous year, reversals of impairment losses, netted out against impairment losses, amounting to € 2.6 million had to be recognized due to higher turnover rates compared with 2014 and the commissioning of facilities for the recovery of magnesite fine tailings and the related utilization of existing raw materials deposits.

As in the previous year, there are no restrictions on the disposal of inventories.

(18) Trade and other current receivables

Trade and other current receivables as presented in the statement of financial position are classified as follows:

in € million	12/31/2016	12/31/2015
Trade receivables	309.0	304.4
Receivables from long-term construction contracts	7.8	15.7
Receivables from other taxes	65.9	49.7
Prepaid expenses	2.8	2.6
Receivables from joint ventures	1.0	1.6
Receivables employees	0.8	1.0
Receivables from personnel welfare foundation	0.8	0.8
Other current receivables	11.0	14.2
Trade and other current receivables	399.1	390.0
thereof financial assets	312.1	308.4
thereof non-financial assets	87.0	81.6

Receivables from long-term construction contracts consist of the following components:

in € million	12/31/2016	12/31/2015
Contract costs incurred up to the reporting date	10.0	24.1
Profits recognized by the reporting date	0.8	1.1
Prepayments received	(3.0)	(9.5)
Receivables from long-term construction contracts	7.8	15.7

Receivables from other taxes include input tax credits and receivables from energy tax refunds, research, education and apprentice subsidies.

As in the previous year, trade receivables with a total nominal value of € 34.0 million were assigned for financial liabilities as of December 31, 2016.

Accumulated valuation allowance to trade and other current receivables developed as follows:

in € million	2016	2015
Accumulated valuation allowance at beginning of year	30.1	25.8
Currency translation	0.4	0.4
Addition	7.4	8.6
Use	(0.3)	(0.5)
Reversal	(2.4)	(4.2)
Accumulated valuation allowance at year-end	35.2	30.1

(19) Income tax receivables

Income tax receivables amounting to € 9.3 million (12/31/2015: € 5.9 million) are mainly related to tax prepayments and deductible withholding taxes.

(20) Other current financial assets

This item of the statement of financial position consists of the following components:

in € million	12/31/2016	12/31/2015
Derivatives in open orders	1.1	2.3
Forward exchange contracts	0.4	0.0
Other current financial receivables	1.5	1.7
Other current financial assets	3.0	4.0

(21) Cash and cash equivalents

This item of the statement of financial position consists of the following components:

in € million	12/31/2016	12/31/2015
Cash at banks	179.9	149.3
Money market funds	0.4	0.0
Checks	2.5	0.3
Cash on hand	0.1	0.1
Cash and cash equivalents	182.9	149.7

(22) Share capital

The fully paid-in capital of RHI AG amounts to € 289,376,212.84. As in the previous year, it consists of 39,819,039 zero par value bearer shares. One share grants a rounded calculated share of € 7.27 in capital stock, as in the previous year. All shares grant the same rights.

The shareholders are entitled to payment of the dividend adopted and generally have one voting right per share at the Annual General Meeting. There are no RHI shares with special control rights. No limitations regarding the voting rights of RHI shares, including from agreements between shareholders, are known to the company, with the exception of the voting rights of MSP Foundation.

At March 10, 2017, the following investors with significant shareholdings were known to RHI: MSP Foundation, a foundation under Liechtenstein law, directly holds and its founder, Martin Schlaff, indirectly holds more than 25% via MSP Foundation of the voting rights of RHI AG. Pursuant to the stipulations of the Austrian Takeover Act, a limitation of voting rights of 26% applies. In addition, Chestnut Beteiligungsgesellschaft mbH and Silver Beteiligungsgesellschaft mbH each hold more than 5% of the voting rights. The voting rights of Chestnut Beteiligungsgesellschaft mbH and Silver Beteiligungsgesellschaft mbH are jointly exercised; consequently, the joint share in voting rights held by the two companies exceed 10%.

Employee stock ownership plan "4 plus 1"

With a resolution of the Annual General Meeting of RHI AG on May 4, 2016, the Management Board was authorized in accordance with § 65 para. 1 (4) as well as para. 1a and para. 1b AktG to acquire, during a period of validity of 30 months starting on May 4, 2016, up to 12,000 no-par bearer shares of the company by purchasing such shares both on an exchange and by off-market transactions, in each case at the stock exchange price of the day this authorization is exercised. The acquisition cannot be effected for the purpose of trading in treasury shares. The authorization may be exercised in full or in part or even in several tranches by the company, by a subsidiary (§ 228 para. 3 UGB) or for the account of the company by third parties. The Management Board of RHI AG can decide to purchase such shares on an exchange, but the Supervisory Board subsequently has to be informed of this decision. The off-market acquisition of shares is subject to prior approval by the Supervisory Board. In accordance with § 65 para. 1b AktG the Management Board was authorized for a period of five years starting on May 4, 2016 to adopt another type of sale than on an exchange or via public offer for the sale or use of treasury shares, with the consent of the Supervisory Board, applying the provisions regarding the exclusion of

shareholders' subscription rights mutatis mutandis, and to determine the conditions of the sale. This authorization may be exercised fully or partially or in several partial amounts by the company, a subsidiary (§ 228 para. 3 UGB) or for the account of the company by third parties for the purpose of carrying out an employee stock ownership program for employees and executives of RHI AG as well as members of the management, executives and employees of Group companies of RHI AG as part of the continuation of the voluntary employee stock ownership plan "4 plus 1". Employees receive one RHI share free of charge for four RHI shares they have purchased themselves. In the year 2016, 7,998 (2015: 7,294) shares were acquired over the stock exchange for the employee stock ownership plan and issued to employees. As of December 31, 2016 and December 31, 2015, no treasury shares were held by RHI AG.

Authorized capital 2015

The Management Board was authorized by resolution of the Annual General Meeting of RHI AG on May 8, 2015, in accordance with § 169 AktG (Stock Corporation Act), to increase share capital with the consent of the Supervisory Board until May 7, 2020 by up to another € 57,875,236.75 by issuing up to 7,963,807 new ordinary bearer shares (no par shares) for a cash contribution – also in several tranches – and to determine the issue price, the issue conditions and further details regarding the execution of the capital increase in agreement with the Supervisory Board, to offer the new shares to shareholders by means of indirect subscription rights in accordance with § 153 para. 6 AktG if need be. By December 31, 2016 no capital increase of share capital out of the authorized capital was carried out.

(23) Group reserves

Additional paid-in capital

Additional paid-in capital comprises premiums on the issue of shares and convertible bonds by RHI AG and has not changed in comparison with December 31, 2015. The difference to the additional paid-in capital as shown the financial statements of RHI AG is attributable to deviating regulations in the Austrian Commercial Code with respect to the accounting of convertible bonds. Due to legal regulations, additional paid-in capital cannot be distributed and can only be reversed to cover losses.

Retained earnings

The item retained earnings includes the result of the financial year and results that were earned by consolidated companies during prior periods, but not distributed. Distributable profit and dividends are generally related to the accumulated profit of RHI AG, which is determined in accordance with Austrian commercial law.

Accumulated other comprehensive income

The item cash flow hedges 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.

Unrealized fair value changes of available-for-sale securities and shares in other investments are recognized in the item available-for-sale financial instruments. Deferred tax effects are deducted, unless gains from the sale of these financial instruments are treated as tax free under the applicable tax law.

The item defined benefit plans includes 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 as well as unrealized 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 recognized 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 which are part of a net investment in a foreign operation are paid back, the currency translation differences of these monetary items previously recognized in other comprehensive income are reclassified to profit or loss.

(24) Non-controlling interests

Non-controlling interests hold a share of 30.4% in the listed company Orient Refractories Ltd. (in the following "ORL"), based in New Delhi, India. ORL is allocated to the Steel segment. The summarized financial information of ORL shown below corresponds to the amounts before intercompany elimination.

Based on the net assets of the company, the carrying amount of the non-controlling interests is determined as follows:

in € million	12/31/2016	12/31/2015
Non-current assets	28.9	30.6
Current assets	44.4	33.4
Non-current liabilities	(8.2)	(9.1)
Current liabilities	(14.8)	(9.4)
Net assets	50.3	45.5
Percentage of non-controlling interests	30.4%	30.4%
Carrying amount of non-controlling interests	15.3	13.8

The aggregate statement of profit or loss and statement of comprehensive income are shown below:

in € million	2016	2015
Revenue	68.6	62.0
Operating expenses, net finance costs and income tax	(62.2)	(56.7)
Profit after income tax	6.4	5.3
thereof attributable to non-controlling interests of ORL	1.9	1.6

in € million	2016	2015
Profit after income tax	6.4	5.3
Other comprehensive income	0.8	2.3
Total comprehensive income	7.2	7.6
thereof attributable to non-controlling interests of ORL	2.2	2.3

The following table shows the summarized statement of cash flows of ORL:

in € million	2016	2015
Net cash flow from operating activities	7.9	10.4
Net cash flow from investing activities	(0.5)	(1.6)
Net cash flow from financing activities	(2.3)	(2.9)
Total cash flow	5.1	5.9

Net cash flow from financing activities includes dividend payments to non-controlling interests amounting to € 0.6 million (2015: € 0.6 million).

Accumulated other comprehensive income attributable to non-controlling interests is solely related to currency translation differences. The development is shown in the following table:

in € million	2016	2015
Accumulated other comprehensive income at beginning of year	(0.2)	(0.9)
Unrealized results from currency translation	0.3	0.7
Accumulated other comprehensive income at year-end	0.1	(0.2)

(25) Financial liabilities

Financial liabilities include all interest-bearing liabilities of the RHI Group due to financial institutions, fixed-term and puttable non-controlling interests in Group companies and other lenders at the respective reporting date.

The financial liabilities have the following contractual remaining terms:

in € million	Total 12/31/2016	Remaining term		
		up to 1 year	2 to 5 years	over 5 years
"Schuldscheindarlehen"	253.5	55.0	139.5	59.0
Export credits and one-time financing	154.5	29.0	116.9	8.6
Utilized other credit lines	65.9	65.9	0.0	0.0
Accrued interest	1.6	1.6	0.0	0.0
Liabilities to financial institutions	475.5	151.5	256.4	67.6
Liabilities to fixed-term or puttable non-controlling interests	32.5	9.1	1.9	21.5
Other financial liabilities	7.7	4.5	3.1	0.1
Financial liabilities	515.7	165.1	261.4	89.2

in € million	Total 12/31/2015	Remaining term		
		up to 1 year	2 to 5 years	over 5 years
"Schuldscheindarlehen"	253.5	0.0	156.5	97.0
Export credits and one-time financing	183.5	29.0	145.0	9.5
Utilized other credit lines	71.6	71.6	0.0	0.0
Accrued interest	1.6	1.6	0.0	0.0
Liabilities to financial institutions	510.2	102.2	301.5	106.5
Liabilities to fixed-term or puttable non-controlling interests	31.3	7.4	1.7	22.2
Other financial liabilities	6.1	0.0	6.0	0.1
Financial liabilities	547.6	109.6	309.2	128.8

Of the liabilities to financial institutions recognized at December 31, 2016 € 34.0 million were secured by assignment of receivables, unchanged in comparison with the previous year. In case the loan agreement is not met, the bank is entitled to inflows from the receivables assigned.

The indicator net debt factor (see note (59) for its calculation) represents the covenants in the most important loan agreements. If the value of 3.8 is exceeded, the loan conditions are renegotiated. Compliance with the covenants is reviewed on a quarterly basis.

For liabilities of € 383.0 million (12/31/2015: € 407.0 million), lenders have a termination option in the case of a change of control. In the event that certain reasons for termination exist, the lenders may declare the loan due

with immediate effect and demand immediate repayment of the principal including interest, as well as the payment of other amounts payable that may have been incurred.

Taking into account interest swaps, 61% (12/31/2015: 62%) of the liabilities to financial institutions carry fixed interest and 39% (12/31/2015: 38%) 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	12/31/2016 Carrying amount in € million	Interest terms fixed until	Effective annual interest rate	Currency	12/31/2015 Carrying amount in € million
2017	EURIBOR + margin	EUR	125.1	2016	EURIBOR + margin	EUR	123.2
	Variable interest rate + margin	EUR	34.0		Variable interest rate + margin	EUR	34.0
	Floating interest rate + margin	EUR	3.4		Floating interest rate + margin	EUR	6.8
	LIBOR + margin	USD	10.2		LIBOR + margin	USD	9.1
	Interbank rate + margin	Var.	11.6		Interbank rate + margin	Var.	20.3
	0.69%	EUR	50.0	2017	0.69%	EUR	50.0
2018	1.13%	EUR	30.0	2018	1.13%	EUR	30.0
2019	1.49%	EUR	16.0	2019	1.49%	EUR	16.0
	3.25%	EUR	15.0		3.25%	EUR	20.0
	0.68%	EUR	15.0		0.68%	EUR	20.0
	3.15%	EUR	12.0		3.15%	EUR	16.0
	0.72%	EUR	10.7		0.72%	EUR	14.3
	1.46% + margin	EUR	10.0		1.46% + margin	EUR	10.0
	1.42% + margin	EUR	3.0		1.42% + margin	EUR	3.0
2020	3.15% + margin	EUR	24.5	2020	3.15% + margin	EUR	32.5
	3.90%	EUR	13.6		3.90%	EUR	13.6
2021	1.97%	EUR	17.0	2021	1.97%	EUR	17.0
2022	4.50%	EUR	6.0	2022	4.50%	EUR	6.0
2023	0.35% + margin	EUR	13.8	2023	0.35% + margin	EUR	13.8
2024	3.00%	EUR	53.0	2024	3.00%	EUR	53.0
			473.9				508.6

In some cases, the terms to maturity of the contracts are substantially longer than the period during which interest terms are fixed.

(26) Other financial liabilities

Other financial liabilities include the negative fair value of derivative financial instruments and consist of the following items:

in € million	12/31/2016			12/31/2015		
	Current	Non-current	Total	Current	Non-current	Total
Liabilities from derivatives from supply contracts	5.9	43.1	49.0	8.0	50.0	58.0
Liabilities from interest rate swaps	0.5	0.4	0.9	0.0	1.3	1.3
Liabilities from derivatives in open orders	0.1	0.0	0.1	0.0	0.0	0.0
Liabilities from forward exchange contracts	0.0	0.0	0.0	0.5	0.0	0.5
Other financial liabilities	6.5	43.5	50.0	8.5	51.3	59.8

Additional explanations on derivative financial instruments are provided under note (57).

(27) Personnel provisions

Personnel provisions include the following provisions:

in € million	12/31/2016	12/31/2015
Pensions	236.8	246.1
Termination benefits	58.5	60.1
Other personnel provisions	22.1	20.1
Personnel provisions	317.4	326.3

Provisions for pensions

The net debt from pension obligations in the consolidated statement of financial position is derived as follows:

in € million	12/31/2016	12/31/2015
Present value of pension obligations	289.2	304.9
Fair value of plan assets	(56.4)	(63.8)
Funded status	232.8	241.1
Asset ceiling	1.9	2.8
Net debt from pension obligations	234.7	243.9
thereof assets from overfunded pension plans	2.1	2.1
thereof provisions for pensions	236.8	246.1

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

in € million	12/31/2016	12/31/2015
Active beneficiaries	71.2	76.6
Vested terminated beneficiaries	17.9	21.7
Retirees	200.1	206.6
Present value of pension obligations	289.2	304.9

The calculation of pension obligations is based on the following actuarial assumptions:

in %	12/31/2016	12/31/2015
Interest rate	1.9%	2.5%
Future salary increase	2.2%	2.0%
Future pension increase	1.3%	1.5%

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 European currency area 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. 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 December 31, taking into account the expected future cash flows which were determined based on the current personal and commitment data.

As in the previous year, the calculation in Austria was based on the Pagler & Pagler AVÖ 2008 P biometric calculation principles for salaried employees. In Germany, the Heubeck 2005 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 € 124.4 million (12/31/2015: € 128.5 million) of the present value of pension obligations and for € 26.3 million (12/31/2015: € 26.1 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 company pension subsidy is limited to 75% of the final remuneration including a pension pursuant to the General Social Insurance Act (ASVG). RHI 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 January 1, 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 € 123.4 million (12/31/2015: € 120.2 million) of the present value of pension obligations and for € 0.7 million (12/31/2015: € 0.7 million) of 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 twelve 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. There is no defined contribution model on a voluntary basis. Individual commitments have been made, with major part of them being retired beneficiaries.

The defined benefit plan in the United Kingdom was terminated in the previous year. The pension benefits were settled by the acquisition of individual policies of an external insurance company. For the complete settlement of the benefits, additional contributions amounting to € 3.0 million were paid. The expenses resulting from settlement amounted to € 0.1 million.

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

in € million	2016	2015
Net debt from pension obligations at beginning of year	243.9	266.8
Currency translation	(2.2)	(0.2)
Disposals of consolidated companies	(5.6)	0.0
Pension cost	9.3	9.3
Remeasurement losses/(gains)	9.0	(8.2)
Benefits paid	(17.2)	(17.5)
Employers' contributions to external funds	(2.5)	(6.3)
Net debt from pension obligations at year-end	234.7	243.9

The present value of pension obligations developed as follows:

in € million	2016	2015
Present value of pension obligations at beginning of year	304.9	353.1
Currency translation	(2.8)	5.9
Disposals of consolidated companies	(11.5)	0.0
Current service cost	3.5	4.0
Past service cost	0.0	(1.0)
Losses on settlement	0.0	0.1
Interest cost	6.8	8.1
Remeasurement losses/(gains)		
from changes in demographic assumptions	(0.3)	0.0
from changes in financial assumptions	10.3	(8.7)
due to experience adjustments	(1.1)	(0.3)
Benefits paid	(21.0)	(23.8)
Employee contributions to external funds	0.4	0.4
Disposal due to settlement	0.0	(32.9)
Present value of pension obligations at year-end	289.2	304.9

The development of plan assets is shown in the table below:

in € million	2016	2015
Fair value of plan assets at beginning of year	63.8	87.9
Currency translation	(0.5)	6.3
Disposals of consolidated companies	(5.9)	0.0
Interest income	1.1	2.0
Administrative costs (paid from plan assets)	(0.1)	(0.1)
Income on plan assets less interest income	(1.1)	0.2
Benefits paid	(3.8)	(6.3)
Employers' contributions to external funds	2.5	6.3
Employee contributions to external funds	0.4	0.4
Disposal due to settlement	0.0	(32.9)
Fair value of plan assets at year-end	56.4	63.8

The changes in the asset ceiling are shown below:

in € million	2016	2015
Asset ceiling at beginning of year	2.8	1.6
Currency translation	0.1	0.2
(Gains)/losses from changes in asset ceiling less interest	(1.0)	1.0
Asset ceiling at year-end	1.9	2.8

At December 31, 2016 the weighted average duration of pension obligations amounts to 11 years (12/31/2015: 11 years).

The following amounts were recorded in the statement of profit or loss:

in € million	2016	2015
Current service cost	3.5	4.0
Negative past service cost	0.0	(1.0)
Losses on settlement	0.0	0.1
Interest cost	6.8	8.1
Interest income	(1.1)	(2.0)
Administrative costs (paid from plan assets)	0.1	0.1
Pension expense recognized in profit or loss	9.3	9.3

The remeasurement results recognized in other comprehensive income are shown in the table below:

in € million	2016	2015
Accumulated remeasurement losses at beginning of year	102.4	116.7
Reclassification due to settlement of defined benefit plans	0.0	(6.1)
Reclassification due to disposal of defined benefit plans	1.9	0.0
Remeasurement losses/(gains) on present value of pension obligations	8.9	(9.0)
Income on plan assets less interest income	1.1	(0.2)
(Gains)/losses from changes in asset ceiling less interest	(1.0)	1.0
Accumulated remeasurement losses at year-end	113.3	102.4

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

in € million	12/31/2016			12/31/2015		
	Active market	No active market	Total	Active market	No active market	Total
Insurances	0.0	38.8	38.8	0.0	39.0	39.0
Equity instruments	5.0	0.0	5.0	9.6	0.0	9.6
Debt instruments	0.0	8.2	8.2	1.5	9.2	10.7
Cash and cash equivalents	0.0	0.3	0.3	0.2	0.2	0.4
Other assets	0.2	3.9	4.1	0.3	3.8	4.1
Fair value of plan assets	5.2	51.2	56.4	11.6	52.2	63.8

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 of the Group or assets utilized by the RHI Group.

RHI 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 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 2017 RHI expects employer contributions to external plan assets to amount to € 2.4 million and direct payments to entitled beneficiaries to amount to € 15.1 million. In the previous year, employer contributions of € 3.2 million and direct pension payments of € 18.9 million had been expected for the financial year 2016.

Provisions for termination benefits

Provisions for termination benefits were based on the following weighted average measurement assumptions:

in %	12/31/2016	12/31/2015
Interest rate	1.8%	2.3%
Future salary increase	2.9%	2.8%

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 the financial year and the previous year:

in € million	2016	2015
Provisions for termination benefits at beginning of year	60.1	66.0
Currency translation	0.0	(0.1)
Current service cost	1.5	1.7
Interest cost	1.3	1.4
Remeasurement losses/(gains)		
from changes in financial assumptions	2.9	(3.7)
due to experience adjustments	(1.7)	(1.2)
Benefits paid	(5.6)	(4.0)
Provisions for termination benefits at year-end	58.5	60.1

Payments for termination benefits are expected to amount to € 1.9 million in the year 2017. In the previous year, the payments for termination benefits expected for the year 2016 amounted to € 2.5 million.

The following remeasurement gains and losses were recognized in other comprehensive income:

in € million	2016	2015
Accumulated remeasurement losses at beginning of year	22.3	27.2
Remeasurement losses/(gains) ¹⁾	1.3	(4.9)
Accumulated remeasurement losses at year-end	23.6	22.3

1) Including € 0.1 million (2015: € 0.0 million) from a joint venture accounted for using the equity method

At December 31, 2016 the weighted average duration of termination benefit obligations amounts to 11 years (12/31/2015: 11 years).

Other personnel provisions

Other personnel provisions consist of the following items:

in € million	12/31/2016	12/31/2015
Service anniversary bonuses	18.3	18.1
Semi-retirements	1.7	1.5
Share-based payments	1.4	0.3
Lump-sum settlements	0.7	0.2
Other personnel provisions	22.1	20.1

The measurement of provisions for service anniversary bonuses is based on an average weighted interest rate of 1.5% (12/31/2015: 2.1%) and takes into account salary increases of 3.8% (12/31/2015: 4.1%).

The discount rate of provisions for semi-retirement amounts to 0.0% as of December 31, 2016 (12/31/2015: 0.1%).

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

in € million	12/31/2016	12/31/2015
Present value of semi-retirement obligations	5.1	4.6
Fair value of plan assets	(3.4)	(3.1)
Provisions for semi-retirement obligations	1.7	1.5

External plan assets are beyond the reach of all creditors and exclusively serve to meet semi-retirement obligations.

(28) Other non-current provisions

The development of non-current provisions is shown in the table below:

in € million	2016
Provisions at beginning of year	4.3
Disposals of consolidated companies	(0.7)
Use	(0.1)
Addition	1.8
Reclassifications	(0.8)
Provisions at year-end	4.5

The provisions of € 4.5 million recognized at December 31, 2016 are primarily due to provisions for obligations related to a lease contract and to contracts for the procurement of raw materials and logistics services. Currently, these provisions are expected to be used in a period from two to four years.

(29) Other non-current liabilities

Other non-current liabilities of € 6.9 million (12/31/2015: € 7.9 million) include deferred income for subsidies received from third parties amounting to € 4.7 million (12/31/2015: € 5.3 million) and liabilities to employees.

(30) Trade payables and other current liabilities

Trade payables and other current liabilities included in the statement of financial position consist of the following items:

in € million	12/31/2016	12/31/2015
Trade payables	202.1	177.4
Prepayments received on orders	14.9	14.0
Liabilities employees	51.8	53.7
Taxes other than income tax	16.5	17.1
Customers with credit balances	6.0	3.8
Payables from commissions	5.9	7.8
Liabilities to subsidiaries	0.1	0.1
Other current liabilities	15.4	19.7
Trade payables and other current liabilities	312.7	293.6
thereof financial liabilities	217.3	196.9
thereof non-financial liabilities	95.4	96.7

The item liabilities employees primarily consists of obligations for wages and salaries, payroll taxes and employee-related duties, performance bonuses, unused vacation and flexitime credits.

(31) Income tax liabilities

Income tax liabilities amounting to € 18.4 million (12/31/2015: € 25.3 million) primarily include income taxes for the current year and previous years which have not yet been definitively audited by domestic and foreign tax authorities. Taking into account a multitude of factors, including the interpretation, commenting and case law regarding the respective tax laws as well as past experiences, adequate liabilities have been recognized as far as apparent.

(32) Current provisions

The development of current provisions is shown in the table below:

in € million	Demolition/disposal costs, environmental damages	Warranties	Guarantees provided	Restructuring costs, other	Total
12/31/2015	9.3	10.6	7.4	5.7	33.0
Currency translation	0.0	0.3	0.0	0.1	0.4
Use	(1.2)	(4.6)	(3.7)	(2.7)	(12.2)
Reversal	0.0	(2.2)	(0.5)	(1.0)	(3.7)
Addition	0.1	7.0	0.1	3.4	10.6
Reclassifications	0.0	0.0	0.0	0.8	0.8
Reclassification from current liabilities	0.0	0.0	0.0	0.2	0.2
12/31/2016	8.2	11.1	3.3	6.5	29.1

The item demolition and disposal costs, environmental damages includes provisions for the estimated demolition and disposal costs of plant and buildings of the former site in Duisburg, Germany amounting to € 2.8 million (12/31/2015: € 3.4 million). It is assumed that these provisions will be used up within in the next twelve months. Furthermore, provisions for recultivation and expected refurbishment costs resulting from environmental damage at other locations exist at the two reporting dates.

Provisions for warranties include provisions for claims arising from warranties and other similar obligations from the sale of refractory products and provisions for onerous contracts.

Provisions for guarantees provided include obligations from sureties and guarantees to banks and insurance companies in the country and abroad. The exact due date of the cash outflow is uncertain at present.

The item restructuring costs, other includes provisions for restructuring costs as well as provisions for the share-based remuneration program of the members of the Management Board of RHI AG of € 0.7 million (12/31/2015: € 0.1 million), which are paid in February, furthermore, provisions for process risks as well as several provisions, which are individually immaterial and cannot be allocated to one of the above-mentioned categories.

Provisions for restructuring costs amount to € 2.1 million as of December 31, 2016 (12/31/2015: € 2.0 million) and primarily consist of benefit obligations to employees due to termination of employment, and costs of lease obligations of the former site in Kretz. A large part of these costs is expected to be paid within twelve months.

In the context of the legal proceedings to review the cash compensation of the former minority shareholders of Didier-Werke AG, Wiesbaden, Germany, a provision amounting to € 0.6 million is in place at December 31, 2016 (12/31/2015: € 1.2 million). With a decision of January 17, 2017, the Frankfurt Higher Regional Court followed the amount of the adequate cash compensation according to an expert opinion and has set the compensation at € 102.37 per no-par share of Didier-Werke AG. This amount carries an interest rate of five percentage points above the base rate since August 26, 2010. In addition, RHI has to bear the court costs, costs of the legal counsel and the out-of-court costs of the claimant. No appeals are permitted. The decision is final. Further provisions were created for expected expenses related to further ongoing or probable legal disputes. The provision amounts, which are of minor importance individually, were determined on the basis of information and cost estimates made by the lawyers of the Group companies. It is currently uncertain when precisely the cash outflow is due.

NOTES TO THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

(33) Revenue

Revenue is essentially generated by product deliveries. The distribution of revenue by product group, division and country is given in the explanations to segment reporting under note (53).

Revenue includes revenues from long-term construction contracts amounting to € 58.7 million (2015: € 83.7 million).

(34) 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, amortization 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.

(35) Selling and marketing expenses

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

(36) 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-capitalizable development costs.

Research and development expenses totaled € 23.9 million (2015: € 23.4 million), of which development costs amounting to € 4.8 million (2015: € 4.6 million) were capitalized. Income from research grants amounted to € 4.0 million (2015: € 3.2 million) in the reporting year 2016. Amortization and impairment of development costs amounting to € 3.4 million (2015: € 3.0 million) are recognized under cost of sales.

For the planned combination of RHI and Magnesita, which is described under note (62), external costs amounting to € 12.1 million were incurred in the financial year 2016. They are primarily related to legal advisory costs and the fee for the consulting investment bank.

(37) Other income

The individual components of other income are:

in € million	2016	2015
Foreign exchange gains	85.0	67.7
Gains from derivative financial instruments	2.7	2.3
Income from the disposal of non-current assets	0.9	3.9
Miscellaneous income	3.7	2.1
Other income	92.3	76.0

Income from the disposal of non-current assets predominantly includes income from the sale of land.

Miscellaneous income primarily consists of other revenue and other operating income related to prior periods.

(38) Other expenses

Other expenses include:

in € million	2016	2015
Foreign exchange losses	(76.9)	(64.3)
Losses from derivative financial instruments	(6.8)	(14.6)
Losses from the disposal of non-current assets	(0.5)	(0.8)
Miscellaneous expenses	(1.6)	(1.2)
Other expenses	(85.8)	(80.9)

The net foreign currency effects amount to € 8.1 million (2015: € 3.4 million). The net amount of gains and losses from derivative financial instruments in the operating EBIT amounts to € (4.1) million (2015: € (12.3) million). This amount includes realized effects from forward exchange contracts of € (3.6) million (2015: € (13.3) million).

(39) Impairment losses

CGU Industrial/Fused Cast

The plants San Vito, Italy, and Sherbinska, Russia, have been presented as a separate CGU since 2016 and have thus been removed from the CGU Industrial/Glass. These plants produce fused cast products. The production of such fused cast products is associated with high fixed costs, which combined with low capacity utilization burden the achievable margins. As part of the plant concept, the Management Board of the RHI Group is evaluating whether a structured selling process will be initiated for these plants or they will continue to operate within the Group. The impairment on the existing property, plant and equipment and intangible assets recognized in 2016 amounts to € 8.0 million.

CGU Industrial/Monofrax

In the previous year an impairment on the property, plant and equipment and intangible assets of this CGU amounting to € 8.0 million was recognized.

CGU Raw Materials/Norway

The investments made in 2016 totaling € 0.6 million were fully written down. In the previous year, an impairment of € 23.2 million was recognized.

(40) Income from restructuring

Duisburg plant, Germany

The liquidation of the provisions created for the closure of the plant in Duisburg, Germany, in the previous years resulted in income of € 0.3 million in 2016 (2015: € 4.3 million), of which the Steel Division accounts for € 0.2 million (2015: € 2.4 million) and the Industrial Division for € 0.1 million (2015: € 1.9 million). The former production site itself was sold in early 2016. The transfer of ownership is subject to the buyer of the property paying the consideration in full.

Kretz site, Germany

At the site in Kretz, Germany, magnesite raw materials were treated at a leased plant until 2014. As part of the optimization of the raw material treatment throughout the Group, the Management Board of RHI AG decided to terminate operations at this site because significant investments would have been necessary due to additional official regulations. The lease was terminated with effect from December 31, 2015. Provisions were formed for all payments still due. The employees of this site were transferred to other sites of the RHI Group or given notice in the year 2015. No income from restructuring or restructuring costs were recognized in the reporting year. In the previous year, income of € 1.6 million was recognized and fully allocated to the Raw Materials Division.

(41) Restructuring costs

Sale RHI Monofrax LLC, USA

The sale and deconsolidation of RHI Monofrax LLC, Wilmington, USA, resulted in expenses amounting to € 4.6 million in 2016, which are recognized in the restructuring costs of the Industrial Division. For further details regarding this deconsolidation please refer to note (4) on the changes in the consolidated group.

Porsgrunn plant, Norway

The high-grade products manufactured at this site stand in direct competition with products available in the market. Due to the massive drop in raw material prices, external purchases were increased and the capacities for our own production restricted accordingly. This results in expenses amounting to € 4.2 million in the Raw Materials Division, which comprise personnel costs of € 1.4 million and costs from purchase contracts for the delivery of raw material and provision of logistics services of € 2.8 million.

Clydebank plant, United Kingdom

As part of the plant concept, the Management Board of RHI AG decided in 2015 to concentrate the activities of the two Scottish plants for isostatically pressed products at the site in Bonnybridge. The Clydebank site was closed at the end of the year 2016. This resulted in personnel costs of € 0.1 million in 2016 (2015: personnel costs of € 0.4 million, impairment losses on buildings of € 1.4 million and impairment losses on technical plant and machinery of € 1.5 million). These costs are allocated to the Steel Division in their entirety in both years. The recoverable amount (fair value less cost of disposal, level 3 pursuant to IFRS 13) amounts to € 1.1 million at December 31, 2016 (12/31/2015: € 1.3 million) .

(42) Interest income

This item includes interest on cash at banks and similar income amounting to € 2.9 million (2015: € 1.4 million), interest income on financial receivables amounting to € 0.2 million (2015: € 0.2 million) and interest income on available-for-sale securities and shares amounting to € 1.0 million (2015: € 4.2 million), of which € 0.4 million (2015: € 4.0 million) is accounted for by impaired securities.

(43) Interest expenses

This item includes interest expenses for “Schuldscheindarlehen” and bank loans less capitalized interest on borrowings, interest from interest rate swaps, tax-related interest, interest expenses attributable to non-controlling interests totaling € 3.4 million (2015: € 3.3 million) and other interest and similar expenses.

(44) Other net financial expenses

Other net financial expenses consist of the following items:

in € million	2016	2015
Interest income on plan assets	1.1	2.0
Interest expense on provisions for pensions	(6.8)	(8.1)
Interest expense on provisions for termination benefits	(1.3)	(1.4)
Interest expense on other personnel provisions	(0.4)	(0.5)
Net interest expense personnel provisions	(7.4)	(8.0)
Gains from the disposal of securities and shares	0.9	4.6
Reversal of impairment losses/(impairment losses) on securities	0.5	(0.6)
Expenses from the valuation of put options	(1.8)	(0.6)
Other net financial expenses	(7.8)	(4.6)

(45) Income tax

Income tax consists of the following items:

in € million	2016	2015
Current tax expense	25.6	32.4
Deferred tax expense/(income) relating to temporary differences	(6.5)	(19.6)
tax loss carryforwards	10.8	(3.0)
	4.3	(22.6)
Income tax	29.9	9.8

The current tax expense of the year 2016 includes tax expenses for previous periods of € 1.8 million (2015: € 4.0 million) and income from income tax relating to other periods of € 8.2 million (2015: € 0.9 million). Of this total, € 6.3 million are attributable to the reversal of a provision related to a tax audit in Turkey. On the one hand, this was possible because of the completion of the audit in the third quarter of 2016; on the other hand, a change in legislation was used for the subsequent years.

In addition to the income taxes recognized in the statement of profit or loss, tax income totaling € 1.1 million (2015: tax expense of € 1.9 million), which is attributable to other comprehensive income was also recognized in other comprehensive income. Tax income totaling € 0.5 million (2015: tax expense of € 0.6 million) was reclassified from other comprehensive income to the statement of profit or loss.

The reasons for the difference between the arithmetic income tax expense, which would result from the application of the Austrian corporate tax rate of 25% on the profit before income tax, and the income tax reported are shown below:

in € million	2016	2015
Profit before income tax	105.8	27.4
Arithmetic tax expense with tax rate of 25% (2015: 25%)	26.5	6.9
Different foreign tax rates	1.2	(0.6)
Expenses not deductible for tax purposes, non-creditable taxes	12.5	8.4
Income not subject to tax and tax advantages	(2.2)	(3.9)
Non-capitalized tax losses and temporary differences of the financial year	2.1	5.8
Utilization of previously unrecognized loss carryforwards and temporary differences	(0.6)	(3.3)
Capitalization of previously unrecognized loss carryforwards and temporary differences	(0.5)	(6.2)
Change in valuation allowance on deferred tax assets	1.4	0.9
Deferred tax expense due to tax rate changes	1.3	1.0
Deferred income tax relating to prior periods	(4.4)	(2.1)
Current income tax relating to prior periods	(6.4)	3.1
Other	(1.0)	(0.2)
Recognized tax expense	29.9	9.8
Effective tax rate (in %)	28.3%	35.8%

Deferred tax expense due to tax rates changes is primarily attributable to a reduction of the tax rate in Norway in both reporting years (applicable tax rate 12/31/2016: 24.0%, 12/31/2015: 25.0%, 12/31/2014: 27.0%).

(46) Expense categories

The presentation of the consolidated statement of profit or loss is based on the cost of sales method. The following table shows a classification by expense category for the financial year 2016 and the previous year:

in € million	Cost of sales	Selling and marketing expenses	General and administrative expenses	Other income/expenses	Gain derivatives/impairment loss	Income/costs from restructuring	Total 2016
Changes in inventories, own work capitalized	22.6	0.0	(4.8)	0.0	0.0	0.0	17.8
Cost of materials	781.4	0.4	2.7	0.0	0.0	1.2	785.7
Personnel costs	253.5	58.4	85.3	0.0	0.0	1.5	398.7
Depreciation charges ¹⁾	60.5	0.5	4.2	0.2	8.6	0.0	74.0
Other income	(14.7)	0.0	(8.2)	(92.3)	0.0	0.0	(115.2)
Other expenses	191.5	45.9	55.3	85.6	(10.1)	5.9	374.1
Total	1,294.8	105.2	134.5	(6.5)	(1.5)	8.6	1,535.1

in € million	Cost of sales	Selling and marketing expenses	General and administrative expenses	Other income/expenses	Losses derivatives/impairment losses	Income/costs from restructuring	Total 2015
Changes in inventories, own work capitalized	8.7	0.0	(4.6)	0.0	0.0	0.0	4.1
Cost of materials	857.9	0.5	2.5	0.0	0.0	0.0	860.9
Personnel costs	267.1	59.5	81.5	0.0	0.0	0.4	408.5
Depreciation charges ¹⁾	64.4	0.7	4.2	0.0	31.2	2.9	103.4
Other income	(10.9)	0.0	(7.2)	(76.0)	0.0	0.0	(94.1)
Other expenses	201.9	51.4	45.9	80.9	58.0	(5.9)	432.2
Total	1,389.1	112.1	122.3	4.9	89.2	(2.6)	1,715.0

1) Including impairment losses on property, plant and equipment and intangible assets

Cost of materials includes expenses for raw materials and supplies, and purchased goods of € 620.3 million (2015: € 669.2 million) as well as expenses for services received, especially energy, amounting to € 165.4 million (2015: € 191.7 million).

Amortization charges of intangible assets are largely recognized in cost of sales.

(47) Personnel costs

Personnel costs consist of the following components:

in € million	2016	2015
Wages and salaries	305.8	312.5
Pensions		
Defined benefit plans	3.6	3.2
Defined contribution plans	3.1	3.1
Termination benefits		
Defined benefit plans	1.5	1.7
Defined contribution plans	1.9	1.9
Other expenses	4.1	3.0
Fringe benefits	78.7	83.1
Personnel expenses (without interest expenses)	398.7	408.5

Personnel costs do not include amounts resulting from the interest accrued on personnel provisions. They amount to € 7.4 million (2015: € 8.0 million) and are recorded in net finance costs.

NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

The statement of cash flows shows how cash and cash equivalents of the Group change through cash inflows and cash outflows during the reporting year. In accordance with IAS 7, cash flows from operating activities, from investing activities and from financing activities are distinguished. Cash flows from investing and financing activities are determined on the basis of cash payment, while cash flow from operating activities is derived from the consolidated financial statements using the indirect method.

The respective monthly changes in items of the statement of financial position of companies that report in foreign currencies are translated at the closing rate of the previous month and adjusted for effects arising from changes in the group of consolidated companies or in other businesses. Therefore, the statement of cash flows cannot be derived directly from changes in items of the consolidated statement of financial position. As in the statement of financial position, cash and cash equivalents are translated at the closing rate. The effects of changes in exchange rates on cash and cash equivalents are shown separately.

(48) Net cash flow from operating activities

Net cash flow from operating activities is derived indirectly based on profit after income tax. Profit after income tax is adjusted for results which are allocable to the cash flows from investing or financing activities and for non-cash expenses and income. Other non-cash expenses and income include in particular the net interest expenses for defined benefit pension plans amounting to € 7.4 million (2015: € 8.0 million), net remeasurement gains of monetary foreign currency positions and derivative financial instruments of € 21.9 million (2015: net remeasurement losses of € 61.3 million) and non-cash funding of provisions for restructuring amounting to € 1.0 million (2015: reversal of € 2.0 million). Taking into account the change in funds tied up in working capital as well as other operating assets and liabilities and income taxes paid, the result is net cash flow from operating activities.

(49) Net cash flow from investing activities

Net cash flow from investing activities shows the cash inflows and outflows for disposals of and additions to non-current assets. The cash outflows for investments in property, plant and equipment and intangible assets differ from the additions to assets primarily through additions to assets already capitalized, which will have a cash effect in the following year.

Cash effects from business combinations or the sale of companies (net change in cash and cash equivalents from initial consolidations and deconsolidations) are shown separately. In the reporting year 2016, no acquisitions of companies were carried out. The sale of the subsidiary RHI Monofrax, LLC, Wilmington, USA, as of June 6, 2016 led to a cash outflow of € 4.6 million.

Interest and dividends received are included under cash flow from investing activities.

(50) Net cash flow from financing activities

Net cash flow from financing activities includes outflows from dividend payments and interest payments. In contrast, interest on borrowings capitalized in accordance with IAS 23 is included in cash flow from investing activities, and tax-related interest is recognized in cash flow from operating activities.

The interest expenses recognized in the consolidated statement of profit or loss include non-cash accrued interest of € 1.6 million (2015: € 1.6 million).

Inflows resulting from the proceeds and repayments of loans and other financial liabilities are classified as non-current or current according to the term of financing.

(51) Total interest paid and interest received

Total interest paid amounts to € 17.5 million in the reporting period (2015: € 20.8 million), of which € 0.0 million (2015: € 0.2 million) are included in cash flow from operating activities, € 0.5 million (2015: € 0.3 million) in cash flow from investing activities and € 17.0 million (2015: € 20.3 million) in cash flow from financing activities.

Total interest received amounts to € 3.2 million for the financial year 2016 (2015: € 5.8 million), of which € 0.2 million (2015: € 0.0 million) are included in cash flow from operating activities and € 3.0 million (2015: € 5.8 million) in cash flow from investing activities.

(52) Cash and cash equivalents

Cash and cash equivalents as presented in the consolidated statement of cash flows correspond to the cash and cash equivalents recognized in the statement of financial position. They include restricted cash totaling € 19.8 million at December 31, 2016 (12/31/2015: € 21.9 million). Restricted cash is related to cash and cash equivalents at subsidiaries (mainly in China, India and South Africa) to which the company only has limited access due to foreign exchange and capital transfer controls. € 13.5 million (12/31/2015: € 8.4 million) are accounted for by a subsidiary with non-controlling interests. At December 31, 2015, the RHI Group was not authorized to use cash amounting to € 2.0 million due to a pending lawsuit. The proceedings were completed in the financial year 2016.

OTHER DISCLOSURES

(53) Segment reporting

Segment reporting by operating company division

The following tables show the financial data for the operating segments for the year 2016 and the previous year:

in € million	Steel	Industrial	Raw Materials	Reconcil- iation	Group 2016
External revenue	1,071.4	538.6	41.2	0.0	1,651.2
Internal revenue	0.0	0.0	224.8	(224.8)	0.0
Segment revenue	1,071.4	538.6	266.0	(224.8)	1,651.2
Operating EBIT	76.2	44.5	2.5	0.0	123.2
Gain from derivatives from supply contracts	0.0	0.0	10.1	0.0	10.1
Impairment losses	0.0	(8.0)	(0.6)	0.0	(8.6)
Income from restructuring	0.2	0.1	0.0	0.0	0.3
Restructuring costs	(0.1)	(4.6)	(4.2)	0.0	(8.9)
EBIT	76.3	32.0	7.8	0.0	116.1
Net finance costs	0.0	0.0	0.0	(21.2)	(21.2)
Share of profit of joint ventures	0.0	0.0	10.9	0.0	10.9
Profit before income tax					105.8
Depreciation and amortization charges	(31.3)	(16.5)	(17.3)	0.0	(65.1)
Segment assets 12/31/2016	645.4	269.6	397.8	458.9	1,771.7
Investments in joint ventures 12/31/2016	0.0	0.0	20.5	0.0	20.5
					1,792.2
Investments in property, plant and equipment and intangible assets (according to non-current assets statement)	28.7	16.7	20.9	0.0	66.3

in € million	Steel	Industrial	Raw Materials	Reconcil- iation	Group 2015
External revenue	1,099.9	614.6	38.0	0.0	1,752.5
Internal revenue	0.0	0.0	234.6	(234.6)	0.0
Segment revenue	1,099.9	614.6	272.6	(234.6)	1,752.5
Operating EBIT	64.3	65.0	(5.2)	0.0	124.1
Loss from derivatives from supply contracts	0.0	0.0	(58.0)	0.0	(58.0)
Impairment losses	0.0	(8.0)	(23.2)	0.0	(31.2)
Income from restructuring	2.4	1.9	1.6	0.0	5.9
Restructuring costs	(3.3)	0.0	0.0	0.0	(3.3)
EBIT	63.4	58.9	(84.8)	0.0	37.5
Net finance costs	0.0	0.0	0.0	(19.3)	(19.3)
Share of profit of joint ventures	0.0	0.0	9.2	0.0	9.2
Profit before income tax					27.4
Depreciation and amortization charges	(31.5)	(18.2)	(19.6)	0.0	(69.3)
Segment assets 12/31/2015	647.0	291.3	429.6	417.3	1,785.2
Investments in joint ventures 12/31/2015	0.0	0.0	19.3	0.0	19.3
					1,804.5
Investments in property, plant and equipment and intangible assets (according to non-current assets statement)	44.5	21.7	16.4	0.0	82.6

Revenue amounting to € 183.9 million (2015: € 197.1 million) was realized with one customer in 2016, which is included in the Steel segment. No other single customer contributed 10% or more to consolidated revenue in 2016 or 2015. Companies which are known to be part of a group are treated as one customer.

Segment assets include the external receivables and inventories which are reported to the management for control and measurement and which are available to operating segments, as well as property, plant and equipment, goodwill and other intangible assets which are allocated to the segments based on the capacity of the assets provided to the segments. Shares in joint ventures are allocated to the segments. All other assets are recognized under reconciliation.

When allocating revenue to product groups, a distinction is made between shaped products (e.g. hydraulically pressed bricks, fused cast bricks, isostatically pressed products) and unshaped products (e.g. repair mixes, construction mixes and castables) as well as other revenue. Other includes revenue from the provision of services as well as the sale of non-Group refractory products.

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

in € million	Steel	Industrial	Raw Materials	Group
Shaped products	675.6	403.8	0.0	1,079.4
Unshaped products	314.8	61.5	40.9	417.2
Other	81.0	73.3	0.3	154.6
Revenue	1,071.4	538.6	41.2	1,651.2

In 2015, revenue by was classified by product group as follows:

in € million	Steel	Industrial	Raw Materials	Group
Shaped products	695.6	462.3	0.0	1,157.9
Unshaped products	304.6	58.3	37.8	400.7
Other	99.7	94.0	0.2	193.9
Revenue	1,099.9	614.6	38.0	1,752.5

Segment reporting by country

Revenue is classified by customer sites as follows:

in € million	2016	2015
Austria	36.9	37.0
All other countries		
India	170.7	186.2
USA	151.2	164.9
Germany	142.7	142.0
Mexico	113.6	106.7
Italy	93.2	92.2
PR China	88.9	103.3
Canada	60.8	93.2
Russia	49.1	57.5
Saudi Arabia	41.5	47.2
Other countries, each below € 39.3 million (2015: € 45.3 million)	702.6	722.3
Revenue	1,651.2	1,752.5

The carrying amounts of property, plant and equipment and intangible assets are classified as follows by the respective sites of the Group companies:

in € million	12/31/2016	12/31/2015
Austria	206.5	195.8
All other countries		
PR China	128.3	142.1
Germany	87.9	86.9
India	64.2	64.7
Turkey	34.1	34.8
Mexico	28.4	30.8
Other countries, each below € 20.8 million (12/31/2015: € 21.5 million)	81.3	88.8
Property, plant and equipment and intangible assets	630.7	643.9

(54) Earnings per share

In accordance with IAS 33, earnings per share are calculated by dividing the profit or loss attributable to the shareholders of RHI AG by the weighted average number of shares outstanding during the financial year.

	2016	2015
Share of shareholders of RHI AG in profit after income tax (in € million)	74.0	16.0
Weighted average number of shares	39,819,039	39,819,039
Earnings per share (in €)	1.86	0.40

There are no options for the issue of new shares or other circumstances that may lead to diluting effects. Therefore, the basic and diluted earnings per share are identical.

(55) Dividend payments and proposed dividend

In accordance with the Stock Corporation Act, the dividend payable to the shareholders of RHI AG is based on the accumulated profit as shown in the annual financial statements of RHI AG, which are prepared in accordance with the Austrian Commercial Code. Accumulated profit developed as follows in the financial year 2016:

in € million	2016
Accumulated profit carried forward	613.6
Dividend payments	(29.9)
Profit for the year	114.7
Accumulated profit 12/31/2016	698.4
Proposed dividend	(29.9)
Profit carryforward	668.5

Based on a resolution adopted by the 37th Annual General Meeting on May 4, 2016, dividends totaling € 29.9 million were paid out in the financial year 2016 for the year 2015, which corresponded to a dividend of € 0.75 per share.

At the 38th Annual General Meeting on May 5, 2017, the Management Board will propose a dividend of € 0.75 per share for the financial year 2016, which corresponds to a dividend payment of € 29.9 million. The proposed dividend is subject to the approval by the Annual General Meeting and was not recognized as a liability in the consolidated financial statements 2016.

Dividend payments to the shareholders of RHI AG have no income tax consequences for RHI AG.

(56) 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 accordance with IFRS 13. In addition, carrying amounts are shown aggregated according to measurement category.

in € million	IAS 39	Level	(Amor- tized) cost	Fair value		12/31/2016 ²⁾	
	Mea- surement category ¹⁾			recognized in profit/loss	recognized in equity	Carrying amount	Fair value
Available-for-sale investments	FAAC	-	0.4	-	-	0.4	-
Available-for-sale securities	AfS	1	-	-	15.3	15.3	15.3
Available-for-sale shares	FAAC	-	0.5	-	-	0.5	-
Other non-current financial receivables	LaR	-	2.7	-	-	2.7	-
Trade and other current receivables	LaR	-	312.1	-	-	312.1	-
Other current financial receivables	LaR	-	1.5	-	-	1.5	-
Financial assets held for trading	FAHfT	2	-	1.5	-	1.5	1.5
Cash and cash equivalents	LaR	-	182.9	-	-	182.9	-
Financial assets						516.9	
Non-current financial liabilities	FLAAC	2	350.6	-	-	350.6	372.1
Interest derivatives designated as cash flow hedges	-	2	-	-	0.9	0.9	0.9
Current financial liabilities	FLAAC	2	165.1	-	-	165.1	165.8
Financial liabilities held for trading	FLHfT	2	-	49.1	-	49.1	49.1
Trade payables and other current liabilities	FLAAC	-	217.3	-	-	217.3	-
Financial liabilities						783.0	
Aggregated according to measurement category							
Loans and receivables	LaR		499.2	-	-	499.2	
Available for sale financial instruments	AfS		-	-	15.3	15.3	
Financial assets at cost	FAAC		0.9	-	-	0.9	
Financial assets held for trading	FAHfT		-	1.5	-	1.5	
Financial liabilities measured at amortized cost	FLAAC		733.0	-	-	733.0	
Financial liabilities held for trading	FLHfT		-	49.1	-	49.1	

in € million	IAS 39	Level	(Amor- tized) cost	Fair value		12/31/2015 ²⁾	
	Mea- surement category ¹⁾			recognized in profit/loss	recognized in equity	Carrying amount	Fair value
Available-for-sale investments	FAAC	-	0.5	-	-	0.5	-
Available-for-sale securities	AfS	1	-	-	20.4	20.4	20.4
Available-for-sale shares	FAAC	-	0.5	-	-	0.5	-
Other non-current financial receivables	LaR	-	2.3	-	-	2.3	-
Trade and other current receivables	LaR	-	308.4	-	-	308.4	-
Other current financial receivables	LaR	-	1.7	-	-	1.7	-
Financial assets held for trading	FAHfT	2	-	2.3	-	2.3	2.3
Cash and cash equivalents	LaR	-	149.7	-	-	149.7	-
Financial assets						485.8	
Non-current financial liabilities	FLAAC	2	438.0	-	-	438.0	461.3
Interest derivatives designated as cash flow hedges	-	2	-	-	1.3	1.3	1.3
Current financial liabilities	FLAAC	2	109.6	-	-	109.6	110.1
Financial liabilities held for trading	FLHfT	2	-	58.5	-	58.5	58.5
Trade payables and other current liabilities	FLAAC	-	196.9	-	-	196.9	-
Financial liabilities						804.3	
Aggregated according to measurement category							
Loans and receivables	LaR		462.1	-	-	462.1	
Available for sale financial instruments	AfS		-	-	20.4	20.4	
Financial assets at cost	FAAC		1.0	-	-	1.0	
Financial assets held for trading	FAHfT		-	2.3	-	2.3	
Financial liabilities measured at amortized cost	FLAAC		744.5	-	-	744.5	
Financial liabilities held for trading	FLHfT		-	58.5	-	58.5	

1) FAAC: Financial assets at cost

AfS: Available for sale financial instruments

LaR: Loans and receivables

FAHfT: Financial assets held for trading

FLAAC: Financial liabilities measured at amortized cost

FLHfT: Financial liabilities held for trading

2) The items trade and other non-current receivables and payables also include non-financial assets and liabilities; they are therefore not considered in the table of financial instruments. The reconciliation to the respective items of the statement of financial position is provided in notes ((18) and (30).

In the RHI Group especially securities and derivative financial instruments are measured at 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 favorable market if there is no main market. RHI 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.

RHI 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 available-for-sale securities is based on price quotations at the reporting date (Level 1). Due to the sale of securities in the year 2016, income of € 0.1 million (2015: income of € 1.3 million), which was previously recognized in other comprehensive income, had to be reclassified to the statement of profit or loss.

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 financial assets and liabilities held for trading corresponds 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, as well as the market value of a long-term power supply contract, which had to be classified as a derivative financial instrument for the first time in the financial year 2015. These financial assets and liabilities held for trading are measured based on quoted forward rates (Level 2).

The available-for-sale shares in a residential property company (Level 3), which are not listed, were sold in their entirety in the second quarter of 2015; the measurement performed was already based on the selling price. The development of Level 3 fair values in the financial year 2015 is presented below:

in € million	01/01/ - 12/31/2015
Fair values at beginning of year	2.2
Unrealized results from fair value change recognized in other comprehensive income	0.7
Reclassification to statement of profit or loss due to disposal	(2.9)
Fair values at year-end	0.0

RHI takes into account reclassifications in the measurement hierarchy at the end of the reporting period in which the changes occur. There were no shifts between the different measurement levels in the two reporting periods.

Financial liabilities are carried at amortized cost in the statement of financial position; the fair values of the financial liabilities are only shown in the notes. They are calculated at the present value of the discounted future cash flows using yield curves that are currently observable (Level 2).

Available-for-sale investments of € 0.4 million (12/31/2015: € 0.5 million) and available-for-sale shares of € 0.5 million (12/31/2015: € 0.5 million) are equity instruments carried at cost for which there is no quoted price on an active market. It was not possible to derive a fair value based on comparable transactions. These investments and shares are immaterial in comparison with the total position of the Group.

The financial receivables roughly correspond to the fair value as due to the amount of the existing receivables 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.

The remaining terms of trade and other current receivables and liabilities as well as cash and cash equivalents are predominantly short. Therefore, the carrying amounts of these items approximate fair value at the reporting date.

At the two reporting dates, no contractual netting agreement of financial assets and liabilities were in place.

Net results by measurement category in accordance with IAS 39

The effect of financial instruments on the income and expenses recognized in the reporting years 2016 and 2015 is shown in the following table, classified according to the measurement categories defined in IAS 39:

in € million	2016	2015
Net gain on available-for-sale financial assets		
recognized in the statement of profit or loss	2.4	8.2
recognized in other comprehensive income	0.1	(1.0)
reclassified from other comprehensive income to the statement of profit or loss	(0.1)	(4.2)
	2.4	3.0
Net loss from loans and receivables as well as financial liabilities at amortized cost	(13.1)	(19.7)
Net gain/loss on financial assets and financial liabilities classified as held for trading	6.0	(70.3)

The net gain on available-for-sale financial assets recognized in the statement of profit or loss includes income from securities and shares, income from the disposal of securities and shares, income realized from changes in market value originally recognized in other comprehensive income as well as income from reversals of impairment losses and impairment losses.

The net loss arising from loans and receivables as well as financial liabilities includes interest income and expenses, changes in valuation allowances and losses on derecognition, foreign exchange gains and losses as well as expenses related to the measurement of put options.

The net result of financial assets held for trading and financial liabilities includes unrealized results from the measurement of a long-term commodity futures contract as well as changes in the market value and realized results of forward exchange contracts and embedded derivatives in open orders in a currency other than the functional currency of RHI.

Net finance costs include interest income amounting to € 3.1 million (2015: € 5.8 million) and interest expenses of € 17.0 million (2015: € 19.4 million), which result from financial assets and liabilities which are not carried at fair value through profit or loss.

(57) Derivative financial instruments

Commodity futures

The RHI Group concluded a commodity futures contract for electricity for the fusion plant in Porsgrunn, Norway, based on the business plan in November 2011. At the end of 2015, incidents at this site led to a more conservative estimate of future production volumes. In addition, the grade concept for finished products provides for increased use of external raw materials as a result of the plummeting raw material prices. In the current reporting year the production portfolio at the Porsgrunn plant was changed. As the so-called own-use exemption (exemption for own use in accordance with IAS 39.5) no longer applies, the long-term energy supply contract had to be qualified as a financial instrument in accordance with IAS 39 for the first time as of December 31, 2015.

The measurement of the entire term of the contract until the end of the year 2023 at market price level leads to a financial liability of € 49.0 million at December 31, 2016 (12/31/2015: € 58.0 million). The corresponding present value of the cash flows for the agreed electricity supply totals € 97.5 million at December 31, 2016 (12/31/2015: € 103.2 million); the present value of the cash flow at market price amounts to € 48.5 million (12/31/2015: € 45.2 million).

Interest rate swaps

RHI AG has concluded interest rate swaps to hedge the cash flow risk of financial liabilities carrying variable interest rates. Financial liabilities carrying variable interest in the amount of the nominal value of the interest rate swaps were designated as hedged items. The cash flow changes of the hedged items, which result from the changes of the variable interest rates, are balanced out by the cash flow changes of the interest rate swaps. These hedging measures pursue the objective to transform variable-interest financial liabilities into fixed-interest financial liabilities, thus hedging the cash flow from the financial liabilities. Credit risks are not part of the hedge.

The term of two hedging relationships with a nominal volume of € 25.7 million at the reporting date (12/31/2015: € 34.3 million) ends in the financial year 2019. The interest payments from the underlying transaction and the compensation payments from the two interest rate swaps are made quarterly at the end of the quarter.

A hedging relationship with a nominal value of € 50.0 million (12/31/2015: € 50.0 million) runs until the July 31, 2017. The interest and compensation payments for this hedging relationship are due semi-annually at the end of January and at the end of July. The interest expenses are recognized accordingly on a period basis.

Fixed interest rates amount to roughly 0.7% as in the previous year; the variable interest rates are based on the EURIBOR.

The effectiveness of a hedging relationship is tested on a prospective and retrospective basis. The conditions of the interest rate swaps correspond to the conditions of the underlying transaction. In the two reporting years no hedge ineffectiveness had to be recognized through profit or loss.

The fair values of the interest rate swaps totaled € (0.9) million at the reporting date (12/31/2015: € (1.3) million).

Forward exchange contracts

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

Purchase	Sale	12/31/2016		12/31/2015	
		Nominal value in million	Fair value in € million	Nominal value in million	Fair value in € million
EUR	ZAR	ZAR 100.0	(0.1)	-	-
EUR	USD	USD 90.0	0.4	USD 24.0	0.0
EUR	CNY	EUR 21.7	0.1	EUR 25.7	(0.2)
EUR	CAD	CAD 10.0	0.0	CAD 10.0	0.0
MXN	USD	USD 10.0	0.0	USD 5.0	(0.1)
EUR	INR	EUR 8.9	0.0	EUR 6.3	(0.1)
NOK	EUR	EUR -	-	EUR 11.5	(0.1)
INR	USD	USD -	-	USD 0.2	0.0
Forward exchange contracts			0.4		(0.5)

(58) Financial risk management

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

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

Credit risks

The maximum credit risk from recognized financial assets amounts to € 516.9 million (12/31/2015: € 485.8 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 by the fact that business transactions are generally only carried out with contractual partners with a good credit rating.

In order to counteract the default risk related to these transactions, receivables from customers are hedged as far as possible through credit insurance and collateral arranged through banks (guarantees, letters of credit), even if the contractual partner has a top class credit rating. Credit and default risks are monitored continuously, and provisions are formed for risks that have occurred and for identifiable risks.

In the following, the credit risk from trade receivables is shown classified by customer industry, by foreign currency and by term.

This credit risk, which is hedged by existing credit insurance, letters of credit and bank guarantees, is shown by customer segment in the following table:

in € million	12/31/2016	12/31/2015
Segment Steel	208.6	203.4
Segment Industrial	96.0	96.0
Segment Raw Materials	4.4	5.0
Trade receivables	309.0	304.4
Credit insurance and bank guarantees	(181.5)	(184.4)
Net credit exposure	127.5	120.0

The following table shows the carrying amounts of receivables denominated in currencies other than the functional currencies of the Group companies. The carrying amounts of the receivables in the functional currency of the respective Group company are included under other functional currencies:

in € million	12/31/2016	12/31/2015
US dollar	50.1	48.2
Pound sterling	2.9	4.3
Other currencies	9.3	7.9
Other functional currencies	246.7	244.0
Trade receivables	309.0	304.4

The classification of receivables by days outstanding is shown below:

in € million	12/31/2016	12/31/2015
Neither impaired nor past due at reporting date	217.4	197.7
Not impaired at reporting date and past due in the following time frames		
Less than 30 days	20.5	25.7
Between 30 and 59 days	7.2	7.8
Between 60 and 89 days	2.7	3.4
More than 90 days	12.8	14.2
Impaired at reporting date	81.6	84.6
Valuation allowances	(33.2)	(29.0)
Trade receivables	309.0	304.4

With respect to receivables that were neither impaired nor overdue, there were no indications at the reporting date that the debtors would be unable to meet their payment obligations. No valuation allowance was recognized for overdue receivables amounting to € 43.2 million at the reporting date (12/31/2015: € 51.1 million) and impaired receivables of € 48.8 million (12/31/2015: € 55.6 million) because the risk of default is essentially covered by credit insurance, bank guarantees and letters of credit.

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 RHI. The liquidity requirements resulting from budget and medium-term planning are secured by concluding appropriate financing agreements. As of December 31, 2016, the RHI Group has a credit facility of € 310.8 million (12/31/2015: € 339.1 million) at its disposal, which is unused and available immediately, as well as unused credit lines from the sale of receivables amounting to € 6.8 million (12/31/2015: € 7.2 million). These lines of credit were concluded with different Austrian and international banks in order to ensure independence of banks. The companies of the RHI Group are integrated into a clearing process managed by Central Treasury and provided with financing limits in order to minimize the need of borrowings for the Group as a whole.

Non-derivative financial instruments

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 12/31/2016	Cash outflows	Remaining term		
			up to 1 year	2 to 5 years	over 5 years
Liabilities to financial institutions					
fixed interest	214.6	237.6	26.0	140.6	71.0
variable interest	260.9	267.5	133.5	132.3	1.7
Liabilities to fixed-term or puttable					
non-controlling interests	32.5	182.2	9.1	13.0	160.1
Other financial liabilities	7.7	7.8	4.5	3.2	0.1
Trade payables and other current liabilities	217.3	217.3	217.3	0.0	0.0
Non-derivative financial liabilities	733.0	912.4	390.4	289.1	232.9

in € million	Carrying amount 12/31/2015	Cash outflows	Remaining term		
			up to 1 year	2 to 5 years	over 5 years
Liabilities to financial institutions					
fixed interest	231.5	260.4	22.9	147.2	90.3
variable interest	278.7	289.7	89.0	176.8	23.9
Liabilities to fixed-term or puttable non-controlling interests ¹⁾	31.3	164.4	7.4	12.1	144.9
Other financial liabilities	6.1	6.2	0.1	6.0	0.1
Trade payables and other current liabilities	196.9	196.9	196.9	0.0	0.0
Non-derivative financial liabilities	744.5	917.6	316.3	342.1	259.2

1) Values adjusted for contractually agreed indexing of cash flows.

Derivative financial instruments

The remaining terms of derivative financial instruments based on expected undiscounted cash flow as of December 31, 2016 and December 31, 2015 are shown in the table below:

in € million	Carrying amount 12/31/2016	Cash flows	Remaining term		
			up to 1 year	2 to 5 years	over 5 years
Receivables from derivatives with net settlement					
Financial assets held for trading	1.5	1.5	1.5	0.0	0.0
Liabilities from derivatives with net settlement					
Interest derivatives designated as cash flow hedges	0.9	0.9	0.7	0.2	0.0
Financial liabilities held for trading	49.1	51.9	6.1	31.0	14.8

in € million	Carrying amount 12/31/2015	Cash flows	Remaining term		
			up to 1 year	2 to 5 years	over 5 years
Receivables from derivatives with net settlement					
Financial assets held for trading	2.3	2.3	2.3	0.0	0.0
Liabilities from derivatives with net settlement					
Interest derivatives designated as cash flow hedges	1.3	1.3	0.8	0.5	0.0
Financial liabilities held for trading	58.5	65.7	8.6	32.1	25.0

Foreign currency risks

Foreign currency risks arise especially where business transactions (operating activities, investments, financing) are conducted in a currency other than the functional currency of a company. They are monitored at the group level and analyzed with respect to hedging options. 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 according to IFRS 7 are created through financial instruments which are denominated in a currency other than the functional currency (in the following: foreign currency) and are monetary in nature. Important primary monetary financial instruments include trade receivables and payables, cash and cash equivalents as well as financial liabilities as shown in the statement of financial position. Equity instruments are not of a monetary nature and therefore not linked to a foreign currency risk in accordance with IFRS 7.

The majority of foreign currency financial instruments in the RHI Group result from operating activities, above all from intragroup financing transactions, unless the foreign exchange effects recognized to profit or loss on monetary items, which represent part of a net investment in a foreign operation in accordance with IAS 21, are eliminated or hedged through forward exchange contracts. Significant provisions denominated in foreign currencies are also included in the analysis of risk.

The following table shows the foreign currency positions in the major currencies as of December 31, 2016:

in € million	USD	EUR	MXN	CHF	Other	Total
Financial assets	207.4	64.8	0.1	0.5	30.9	303.7
Financial liabilities, provisions	(156.2)	(37.8)	(14.2)	(6.9)	(17.2)	(232.3)
Net foreign currency position	51.2	27.0	(14.1)	(6.4)	13.7	71.4

The foreign currency positions as of December 31 of the previous year are structured as follows:

in € million	USD	EUR	MXN	CHF	Other	Total
Financial assets	261.7	39.7	0.2	0.7	25.7	328.0
Financial liabilities, provisions	(162.8)	(54.1)	(17.0)	(15.1)	(14.2)	(263.2)
Net foreign currency position	98.9	(14.4)	(16.8)	(14.4)	11.5	64.8

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 foreign Group companies into the Group currency, the euro.

A 10% appreciation or devaluation of the relevant functional currency against the following major currencies as of December 31, 2016 would have had the following effect on profit or loss and equity (both excluding income tax):

in € million	Appreciation of 10%		Devaluation of 10%	
	Gain/(loss)	Equity	Gain/(loss)	Equity
US dollar	(4.8)	(5.6)	5.9	6.9
Euro	(2.8)	7.7	2.7	(10.1)
Swiss franc	0.6	0.6	(0.7)	(0.7)
Other currencies	(0.1)	(1.2)	0.0	1.4

The hypothetical effect on profit or loss at December 31, 2015 can be summarized as follows:

in € million	Appreciation of 10%		Devaluation of 10%	
	Gain/(loss)	Equity	Gain/(loss)	Equity
US dollar	(9.0)	(13.1)	11.1	16.0
Euro	0.9	11.4	(1.9)	(14.7)
Swiss franc	1.3	1.3	(1.6)	(1.6)
Other currencies	0.4	(0.5)	(0.6)	0.7

Interest rate risks

The interest rate risk in the RHI Group is primarily related to financial instruments carrying variable interest rates, which may lead to fluctuations in results and cash flows. The RHI Group is predominantly exposed to interest risks in the euro area. At December 31, 2016, interest rate hedges amounting to € 75.7 million (12/31/2015: € 84.3 million) existed; a variable interest rate was converted into a fixed interest rate through an interest rate swap.

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

The RHI Group measures fixed-interest financial assets and financial liabilities at amortized 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 financial instruments designated as hedges as a part of cash flow hedges to protect against interest rate-related payment fluctuations have an effect on equity and are therefore included in the equity-related sensitivity analysis. If the market interest rate as of December 31, 2016 had been 25 basis points higher or lower, equity would have been € 0.2 million (12/31/2015: € 0.3 million) higher or lower taking into account tax effects.

Changes in market interest rates have an effect on the interest result of primary, variable interest financial 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. A change in the level of the market interest rate as of December 31, 2016 by 25 basis points would have no impact on the interest result. In the previous year, the interest result would have been € 0.1 million lower or higher.

Other market price risk

RHI holds certificates in an investment fund amounting to € 15.3 million (12/31/2015: € 20.4 million) to cover the legally required protection of personnel provisions of Austrian Group companies. The market value of these certificates is influenced by fluctuations of the worldwide volatile stock and bond markets.

In the financial year 2015, an energy supply contract with a term until the year 2023 had to be classified as a derivative financial instrument in accordance with IAS 39 for the first time. The fair value of the financial liability amounts to € 49.0 million at December 31, 2016 (12/31/2015: € 58.0 million). If the quoted forward prices at December 31, 2016 had been 20% higher or lower, EBIT would have been € 9.7 million (12/31/2015: € 9.0 million) higher or lower. In contrast, if the borrowing cost relevant for discounting had been 25 basis points higher or lower at the reporting date, EBIT would have been € 0.4 million (12/31/2015: € 0.6 million) higher or lower.

(59) Capital management

The objectives of the capital management strategy of the RHI Group are to secure going concern in the long term by creating a solid capital base to finance future growth, to increase company value on a sustained basis and to generate adequate returns to enable attractive dividend payments to the shareholders and to service debt. In the case of growth through acquisitions, temporary deviations may occur in the key figures presented in the following. The objective is in any case the long-term compliance with the ratios described and the sustainable value increase of the company.

The RHI Group manages its capital structure through internal targets with respect to net financial debt, equity ratio, and net gearing ratio through careful monitoring and assessment of the overall economic framework conditions, the requirements and risks related to operations and taking into account fixed strategic projects.

The capital structure key figures at the reporting date are shown below:

	12/31/2016	12/31/2015
Net debt (in € million)	332.8	397.9
Net debt factor	1.8	2.8
Net gearing ratio (in %)	63.5%	81.0%
Equity ratio (in %)	29.2%	27.2%

Net financial debt, which reflects financial liabilities net of cash and cash equivalents, is controlled centrally by RHI in coordination with Corporate Treasury. The main task of the Corporate Treasury department is to secure liquidity to support business operations on a sustained basis, to use banking and financial services efficiently and to limit financial risks while at the same time optimizing earnings and costs. Due to central controlling, optimum effectiveness is accomplished by utilizing central and local instruments and opportunities.

The key performance indicator for net debt in the RHI Group is the net debt factor, which reflects the ratio of net financial liabilities to EBITDA (earnings before interest, taxes, depreciation and amortization taking into account the reversal of investment subsidies). EBITDA amounts to € 189.1 million (2015: € 140.0 million). The net debt factor is a measure of the ability of a company to repay its debt and amounts to 1.8 for the current financial year. At December 31 of the previous year, it was 2.8. RHI's target is to keep the debt factor below 3.0.

The net gearing ratio is the ratio of net financial debt to equity; it amounts to 63.5% for the current financial year. In the previous year, the net gearing ratio amounted to 81.0%. RHI's internal objective provides for a balanced capital structure with a minimum equity ratio of 30%. The target regarding the net gearing ratio is subsequently derived from the equity ratio.

RHI controls the operating business via the profitability indicator ROACE (Return on Average Capital Employed). This indicator describes the interest on the capital employed in operating business or for an investment. In the RHI Group, ROACE designates the ratio of the net operating profit after taxes (NOPAT) to the average capital employed in the reporting period. Subsequently, the comparison of this profitability key figure with the cost of capital of RHI enables statements with respect to changes in shareholder value. The objective of the RHI Group is a ROACE which exceeds the weighted average cost of capital (WACC) by at least 500 basis points.

in € million	12/31/2016	12/31/2015
Ø Working capital		
Ø Inventories	384.6	416.5
Ø Trade receivables	306.7	317.7
Ø Receivables from long-term construction contracts	11.8	11.4
Ø Trade payables	(189.8)	(176.6)
Ø Prepayments received on orders	(14.5)	(17.3)
	498.8	551.7
Ø Assets		
Ø Property, plant and equipment	527.0	538.2
Ø Goodwill and other intangible assets	110.3	110.9
	637.3	649.1
Average capital employed	1,136.1	1,200.8
EBIT	116.1	37.5
Taxes	(29.9)	(9.8)
Net operating profit after taxes	86.2	27.7
Return on average capital employed (in %)	7.6%	2.3%
Ø RHI WACC (in %)	5.6%	6.7%

The ROACE amounts to 7.6% in the reporting year and exceeds the profitability of 2.3% in the previous year. This is above all attributable to special effects, which were higher in the previous year and were primarily related to expenses from derivatives of supply contracts and to impairments of the cash-generating units Raw Materials/Norway and Industrial/Monofrax. Adjusted for these effects, ROACE amounts to 8.0% for the current financial year and to 7.6% for the previous year.

In the reporting year 2016 and in the previous year, all externally imposed capital requirements were met.

RHI AG is subject to minimum capital requirements of the Austrian Stock Corporation Act. The articles of association do not stipulate capital requirements.

(60) Contingent liabilities

At December 31, 2016, warranties, performance guarantees and other guarantees amount to € 32.0 million (12/31/2015: € 34.3 million), and are exclusively accounted for by third parties. The terms of contingent liabilities range between 2 months and 3 years, depending on the type of liability. Based on experiences of the past, the probability that contingent liabilities are used is considered to be low.

In addition, contingent liabilities from sureties of € 0.7 million (12/31/2015: € 0.9 million) were recorded, of which € 0.3 million (12/31/2015: € 0.3 million) are related to contingent liabilities to creditors from joint ventures.

Individual proceedings and lawsuits which result from ordinary activities are pending as of December 31, 2016 or can potentially be exercised against RHI in the future. The related risks were analyzed with a view to their probability of occurrence. This analysis showed that the proceedings and lawsuits, both individually and overall, have no significant negative influence on the financial position and performance of the RHI Group.

(61) Other financial obligations

Other financial obligations consist of the following items:

in € million	Total	Remaining term		
	12/31/2016	up to 1 year	2 to 5 years	over 5 years
Obligations from rental and leasing contracts	66.7	13.8	32.6	20.3
Capital commitments	2.5	2.5	0.0	0.0
Other financial obligations	69.2	16.3	32.6	20.3

in € million	Total	Remaining term		
	12/31/2015	up to 1 year	2 to 5 years	over 5 years
Obligations from rental and leasing contracts	66.0	13.0	35.7	17.3
Capital commitments	1.6	1.6	0.0	0.0
Other financial obligations	67.6	14.6	35.7	17.3

Other financial obligations are exclusively due to third parties. They are shown at nominal value.

Rental and leasing obligations for property, plant and equipment of € 21.8 million (2015: € 23.8 million) are recognized in the statement of profit or loss of the financial year 2016.

The conditions of the most important operating rental and leasing agreements can be summarized as follows:

At the company's head office in Vienna a rental agreement exists, which ends on October 28, 2020. Both contracting parties are entitled to terminate the rental agreement prematurely with a notice period of six months. However, the landlord may only exercise this right under certain conditions. The rent is adjusted to the consumer price index.

Another rental contract for offices has a term until April 30, 2020. The tenant has a two-time optional right to extend the contract by three years each. The annual rent is coupled to the development of the consumer price index.

At one production site, the area for operating a plant has been leased for the long term. The related contract ends in April 2062 and includes an extension option for another 30 years. The rent is subject to adaptation to inflation.

The Group also rents numerous mining vehicles, diggers, forklifts and the like by cancelable leasing agreements. The contracts have terms ranging from 2 to 7 years; most of them do not include a purchasing option after the contract ends.

In addition to the aforementioned financial obligations, the RHI Group also has long-term purchase obligations related to the supply with raw materials, especially for electricity, natural gas, strategic basic and non-basic raw materials as well as for the transport of raw materials within the Group. This results in other financial obligations of the nominal value of € 193.3 million at the reporting date (12/31/2015 adjusted: € 255.0 million). The remaining terms of the contracts amount to up to eight years. Purchases from these arrangements are recognized 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. A power supply contract with a remaining term of seven years is accounted for in accordance with IAS 39. As market prices on the reporting date were lower than the contractually agreed prices, this leads to a financial liability amounting to € 49.0 million (12/31/2015: € 58.0 million). This power supply contract is included in the total value of € 193.3 million at December 31, 2016 with a nominal value of € 103.0 million (12/31/2015: € 116.3 million).

(62) Planned combination with Magnesita

RHI AG ("RHI") and the controlling shareholders of Magnesita Refratários S.A. ("Magnesita"), investment vehicles affiliated with GP Investments ("GP") and Rhône Capital ("Rhône," and together with GP, "Magnesita's Controlling Shareholders") reached an agreement on October 5, 2016 to combine the operations of RHI and Magnesita to create a leading refractory company to be named RHI Magnesita. Accordingly, RHI's Management Board agreed on October 5, 2016 to sign a share purchase agreement ("SPA") with Magnesita's Controlling Shareholders regarding the acquisition of a controlling stake of at least 46%, but no more than 50% plus one share of the total share capital in Magnesita (the "Transaction") pending RHI's Supervisory Board approval. At its meeting on October 13, 2016, the Supervisory Board of RHI AG gave its approval to the resolutions proposed by the Management Board regarding this Transaction. The purchase price for the 46% stake will be paid in cash amounting to € 118 million and 4.6 million new shares to be issued by RHI Magnesita, a new RHI entity to be established in the Netherlands and listed in London. The exchange ratio applied in the Transaction is 0.19 newly issued RHI Magnesita shares for 1 Magnesita share. Based on RHI's six-month volume weighted average price of € 19.52 as of October 4, 2016, the implied value of the 46% stake amounts to € 208 million, implying a value for Magnesita's entire share capital of € 451 million. The calculation is based on 10 million newly issued RHI Magnesita shares and 52,631,881 Magnesita shares.

As a result of the Transaction, GP will become a relevant shareholder of RHI Magnesita. The combined company's corporate governance will be constituted on a one-tier board structure while GP will be represented on the board of directors. All RHI Magnesita shares issued as a result of the Transaction and subsequent mandatory tender offer will be subject to a minimum 12-month lock-up period. The completion of the Transaction is amongst others subject to (i) approvals by the relevant competition authorities, (ii) the migration of RHI to the Netherlands, (iii) the listing of RHI Magnesita's shares in the premium segment of the Official List on the Main Market of the London Stock Exchange and (iv) RHI's shareholders not having exceeded statutory withdrawal rights in an amount of more than € 70 million in connection with organizational changes preceding RHI's migration from Austria. The migration and the preceding organizational changes in Austria require qualified approval by RHI's shareholders' meeting. As a consequence of the Transaction, RHI Magnesita will become the ultimate holding company of RHI Group while the shareholders of RHI will cease to hold shares in RHI and instead hold RHI Magnesita shares. Following registration of the corporate restructurings, RHI's shares cease to be listed on the Vienna Stock Exchange. The place of effective management of RHI Magnesita will be Austria. If the Transaction is terminated for reasons not under the control of Magnesita's Controlling Shareholders, an aggregate break fee of up to € 20 million is payable by RHI to Magnesita's Controlling Shareholders.

Following completion of the Transaction, which is expected for 2017, a mandatory tender offer will be launched by RHI Magnesita or one of its affiliates for the remaining shares in Magnesita ("Offer"). The Offer will include the option to sell shares on the same payment terms as the Transaction as well as a cash-only alternative amounting to € 8.19 per Magnesita share (subject to certain adjustments according to the SPA). As part of the Offer, a maximum number of 5.0 to 5.4 million RHI Magnesita shares will be issued, depending on the stake acquired within the Transaction, thereby resulting in an aggregate number of no more than 10.0 million newly issued shares to finance the acquisition. If some or all of Magnesita's other shareholders elect not to receive RHI Magnesita shares in the Offer, Magnesita's Controlling Shareholders have committed to purchase at least 1.5 to 1.9 million and at most 3.4 million additional new RHI Magnesita shares, thereby increasing their total number of RHI Magnesita shares to a maximum of 8.0 million. RHI Magnesita may decide to combine the Offer with a delisting offer and/or a voluntary offer to exit Magnesita from the "Novo Mercado" listing segment. The Offer will follow applicable Brazilian laws and regulations. Any RHI Magnesita shares that are not taken up in the Offer by Magnesita's shareholders may be either placed into the market or with institutional investors.

The Transaction will be financed by additional debt and the issuance of 4.6 to 5.0 million RHI Magnesita shares to Magnesita's Controlling Shareholders. At the same time, Magnesita will continue to finance itself on a standalone basis without credit support from RHI Group. Before or at completion of the Transaction, Magnesita is expected to adopt RHI's accounting practices, which could lead to significant, however substantially non-cash adjustments in Magnesita's book equity value.

The planned combination of RHI and Magnesita was submitted in the US and approved by the Federal Trade Commission in November. Currently, further applications with antitrust authorities, among others in Europe and Brazil, are being prepared or implemented.

(63) Expenses for the Group auditor

The expensed fee for the activity of the Group auditor PwC Wirtschaftsprüfung GmbH in the financial year 2016 (2015: Deloitte Audit Wirtschaftsprüfung GmbH) amounts to € 0.3 million (2015: € 0.3 million). The fee included € 0.2 million (2015: € 0.2 million) for the audit of the consolidated financial statements and the annual financial statements of RHI AG, and € 0.1 million (2015: € 0.1 million) for other certification services. The fees for other certification services include the remuneration for the audit of the annual financial statements of Austrian subsidiaries subject to statutory audits.

(64) Annual average number of employees

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

	2016	2015
Salaried employees	3,544	3,739
Waged workers	4,134	4,296
Number of employees on annual average	7,678	8,035

(65) Notes on related party transactions

Related companies include subsidiaries that are not fully consolidated, joint ventures and MSP Foundation, Liechtenstein (until 12/28/2015: MS Private Foundation, Austria) as a shareholder of since it exercises significant influence based on its share of more than 25% in RHI AG. In accordance with IAS 24, the personnel welfare foundation of Stopinc AG, Hünenberg, Switzerland, also has to be considered a related company.

Related persons are persons holding a key position in the Group (active members of the Management Board and the Supervisory Board of RHI AG) and their close relatives.

Related companies

In the financial year 2016, the Group charged electricity and stock management costs amounting to € 3.3 million (2015: € 3.4 million) and interest of € 0.1 million (2015: € 0.1 million) to the joint venture MAGNIFIN Magnesiaprodukte GmbH & Co KG, St. Jakob, Austria. In the previous year, the Group also realized income from property sales of € 0.7 million to MAGNIFIN. In the reporting period, the Group purchased raw materials in the amount of € 1.9 million (2015: € 1.9 million). Furthermore, the Group received dividend payments of € 9.5 million (2015: € 8.2 million). At December 31, 2016 receivables from MAGNIFIN amount to € 1.0 million (12/31/2015: € 1.6 million); there are no liabilities (12/31/2015: less than € 0.1 million). Neither in the reporting period nor in the previous financial year were valuation allowances recorded for receivables from this company. The balance at the end of the financial year is unsecured and will be paid in cash. To secure a pension claim of a former employee of MAGNIFIN, RHI has assumed a surety amounting to € 0.3 million (12/31/2015: € 0.3 million). A resulting cash outflow is not expected. No guarantees were received.

Business transactions with non-consolidated subsidiaries are not listed as they are of minor significance.

In the financial years 2016 and 2015 no transactions were carried out between the RHI Group and MSP Foundation (2015: MS Private Foundation), 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 recognized as a defined benefit plan and is included in note (27). At December 31, 2016 current account receivables of € 0.8 million (12/31/2015: € 0.8 million) from the personnel welfare foundation exist, for which an interest of 2.5% (2015: 2.5%) is charged. In the past reporting period, employer contributions amounting to € 0.5 million (2015: € 0.5 million) were made to the personnel welfare foundation. The overfunding of the pension plan is recognized as a non-current asset of € 2.1 million (12/31/2015: € 2.1 million).

Related persons

Remuneration of key management personnel of the Group, which is subject to disclosure in accordance with IAS 24, comprises the remuneration of the active Management Board and Supervisory Board of RHI AG.

The expenses for the remuneration of the Management Board in the financial year 2016 recognized in the statement of profit or loss totals € 10.1 million (2015: € 4.1 million). The expenses not including non-wage labor costs amount to € 9.4 million (2015: € 3.8 million), of which € 4.6 million (2015: € 3.4 million) were related to current benefits (fixed, variable and other earnings), € 2.9 million (2015: € 0.0 million) to benefits related to the termination of employment and € 1.9 million (2015: € 0.4 million) to share-based remuneration. At December 31, 2016, liabilities for performance-linked variable earnings and share-based payments for active members of the Management Board of € 1.6 million (12/31/2015: € 1.2 million) are recognized as liabilities. There are no obligations arising from post-employment benefits and legally required termination benefits towards active members of the Management Board.

In addition to the variable remuneration, the members of the Management Board of RHI AG active in 2016 and 2015 are also entitled to share-based payments. This program is a performance-linked and share-based compensation model, in which the vesting period per tranche extends over the respective financial year. At the beginning of the program, a portion of the annual salary is defined for the members of the Management Board, which is translated into a number of virtual shares using a reference price. The relevant reference price for the remuneration program of the respective financial year corresponds to the average RHI share price from December 1 of the previous year to January 31 of the current reporting year. The actual, vested entitlement to virtual shares depends on the level of target achievement; financial criteria (operating EBIT, ROACE, adjusted for external costs related to the planned combination of RHI and Magnesita) determine 70% and other criteria 30% of the entitlement. The equivalent value of the number of virtual shares determined per tranche will be paid in cash in the three equal portions in the following three financial years. This equivalent value in cash is determined on the basis of the average share price of the respective period from December 1 of the reporting year to January 31 of the following year.

The effects of this compensation program on the consolidated financial statements are shown in the table below:

	Number of virtual shares		Provision in € million		Expense in € million	
	12/31/2016	12/31/2015	12/31/2016	12/31/2015	12/31/2016	12/31/2015
Compensation program 2016	73,042	0	1.7	0.0	1.8	0.0
Compensation program 2015	14,781	22,171	0.4	0.4	0.1	0.4
Total	87,823	22,171	2.1	0.4	1.9	0.4

In the financial year 2016 a payment of € 0.1 million was made for the first time for the compensation program 2015.

For members of the Supervisory Board (capital representatives), remuneration totaling € 0.3 million (2015: € 0.3 million) was recognized through profit or loss in the year 2016.

Employee representatives in the Supervisory Board, who are employed by the RHI Group, do not receive compensation for their activity in the Supervisory Board. For their activity as employees in the company and the activity of their close relatives employed with RHI, expenses of € 0.8 million (2015: € 0.8 million) are recognized. This group of persons received 176 (2015: 148) RHI shares in the reporting year as part of the employee stock ownership plan "4 plus 1".

No advance payments or loans were granted to members of the Management Board or Supervisory Board. The RHI Group did not enter into contingent liabilities on behalf of the Management Board and Supervisory Board.

In the previous year, the company had an obligation to pay one member of the Management Board a compensation of up to € 1.8 million in the case of a public takeover bid.

Directors Dealings reports are published on the websites of RHI AG and of the Austrian Financial Market Authority. All members of the Management Board and the Supervisory Board are covered by D&O insurance at RHI.

Detailed and individual information on the remuneration of the Management Board and the Supervisory Board is presented in the Corporate Governance Report 2016 of the RHI Group.

Earnings of former members of the Management Board amounted to € 1.2 million (2015: € 1.1 million).

(66) Corporate bodies of RHI AG

Members of the Management Board

Stefan Borgas, Vienna, Chairman (since December 1, 2016)
Franz Struzl, Vienna, Chairman (until November 30, 2016)
Wolfgang Ruttenstorfer, Vienna, Chairman (on interim basis from June 26, 2016 to November 30, 2016)
Barbara Potisk-Eibensteiner, Hagenbrunn
Franz Buxbaum, Bad Vöslau (until December 31, 2016)
Thomas Jakowiak, Vienna (since January 1, 2016)
Gerd Schubert, Vienna (since January 1, 2017)
Reinhold Steiner, Trofaiach

Members of the Supervisory Board

Herbert Cordt, Vienna, Chairman
Helmut Draxler, Vienna, Deputy Chairman
Wolfgang Ruttenstorfer, Vienna, Deputy Chairman (until June 25, 2016; from December 1, 2016)
Hubert Gorbach, Frastanz
Alfred Gusenbauer, Vienna
Gerd Peskes, Düsseldorf, Germany
Stanislaus Prinz zu Sayn-Wittgenstein-Berleburg, Munich, Germany
David A. Schlaff, Vienna

Employee representatives:

Walter Geier, Leoben
Christian Hütter, Vienna
Roland Rabensteiner, Veitsch
Franz Reiter, St. Jakob in Haus

(67) Material events after the reporting date

After the reporting date on December 31, 2016, there were no events of special significance which may have a material effect on the financial position and performance of the RHI Group.

Vienna, March 10, 2017

Management Board
Der Vorstand



Stefan Borgas
CEO



Barbara Potisk-Eibensteiner
CFO



Gerd Schubert
COO
CTO R&D



Thomas Jakowiak
CSO Industrial Division



Reinhold Steiner
CSO Steel Division

We draw attention to the fact that the English translation of this auditor's report according to Section 274 of the Austrian Commercial Code (UGB) is presented for the convenience of the reader only and that the German wording is the only legally binding version.

Auditor's Report

Report on the Consolidated Financial Statements

Audit Opinion

We have audited the consolidated financial statements of RHI AG, Vienna, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at December 31, 2016, the separate consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity for the fiscal year then ended, and the notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements comply with legal requirements and give a true and fair view of the financial position of the Group as at December 31, 2016, and of its financial performance and cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRSs) as adopted by the EU and the additional requirements under Section 245a Austrian Commercial Code.

Basis for Opinion

We conducted our audit in accordance with Austrian generally accepted auditing standards. Those standards require the application of the International Standards on Auditing (ISAs). Our responsibilities under those provisions and standards are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements" section of our report. We are independent of the Group in accordance with Austrian Generally Accepted Accounting Principles and professional requirements, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Matter

The consolidated financial statements of RHI AG, Vienna, for the fiscal year ended December 31, 2015 were audited by another auditor who issued an unqualified auditor's report dated March 4, 2016 on these consolidated financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the fiscal year. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have structured key audit matters as follows:

- Descriptions of individual key audit matters
- Audit approach
- Reference to related disclosures

1. Deferred tax assets on tax loss carry-forwards and other deductible temporary differences

- Description of the individual key audit matter

The RHI Group capitalized deferred tax assets in a total amount of EUR 144.8m, which mainly include deferred tax assets on tax loss carry-forwards in the amount of EUR 61.8m and deductible temporary differences arising on provisions for employee benefits in the amount of EUR 52.7m. Deferred tax assets are capitalized based on the assumption that sufficient taxable income will be generated within a planning period of at least 5 years against which loss carry-forwards and other deductible temporary differences can be offset. These assumptions are based on estimates of the current and the planned taxable results and any future measures implemented by the companies concerned that will have an effect on tax.

- Audit approach

We:

- Identified, for significant companies, the process used to determine the future taxable results that serve as the basis for the calculation of deferred tax assets,
- Performed plausibility checks for significant companies to evaluate if the budgeted figures used are plausible when compared to our knowledge of the planned course of business,
- Received tax advisor confirmation letters to confirm the existence and accuracy of the tax loss carry-forwards,
- Analyzed and confirmed the accounting assumptions on the possibility to utilize tax loss carry-forwards and deductible temporary differences, and
- Audited the presentation and the disclosures in the notes to the consolidated financial statements.

- Reference to related disclosures

For further related information, we refer to the notes to the consolidated financial statements of the RHI Group item (7) on principles of accounting and measurement on deferred taxes, item (9) with regard to discretionary decisions, assumptions and estimates on income taxes, and item (16) concerning deferred taxes.

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

- Description of the individual key audit matter

The RHI Group capitalized property, plant and equipment in the amount of EUR 521.8m, goodwill in the amount of EUR 37.8m and intangible assets in the amount of EUR 71.1m. These assets form cash-generating units (or CGUs for short) to the extent that they independently generate cash inflows. If and to the extent to which these CGUs include goodwill or intangible assets with indefinite useful lives or show signs for impairment, the carrying amount and the recoverable amount are compared. Annual planning process data is used to make assumptions on the discount rate, profitability as well as growth rates, and sensitivity analyses are carried out with regard to any accounting effects.

- Audit approach

We:

- Surveyed the process applied to identify and define cash-generating units, to calculate the recoverable amount, to test for impairment, to calculate the capital cost rate and the growth rate, as well as the calculation model,
- Reconciled the assumed future cash flows used in the budget planning with the information included in the forecast made by the management board and brought to the attention of the supervisory board,

- Drew on our pool of internal experts to perform plausibility checks with regard to the calculations and the calculation model. These experts recomputed the calculations and verified that the calculation model complies with the generally applicable international accounting principles,
 - Drew on our pool of internal experts to reconcile the parameters used, e.g. the applied interest rates and growth rates that serve as the basis of the calculation, and critically assessed the results, and
 - Audited the presentation and the disclosures in the notes to the consolidated financial statements.
- Reference to related disclosures

For further related information, we refer to the notes to the consolidated financial statements of the RHI Group item (7) on principles of accounting and measurement on the impairment of property, plant and equipment, goodwill and other intangible assets, and item (9) with regard to discretionary decisions, assumptions and estimates on the impairment of intangible assets with finite useful lives and property, plant and equipment, as well as on the impairment of goodwill and the impairment of other intangible assets with indefinite useful life.

Responsibilities of Management and the Audit Committee for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU, and the additional requirements under Section 245a UGB, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The audit committee is responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Austrian generally accepted auditing standards, which require the application of ISAs, will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Austrian generally accepted auditing standards, which require the application of ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risks of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the audit committee with a statement that we have complied with all relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the audit committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

Comments on the Management Report for the Group

Pursuant to the Austrian Commercial Code, the management report for the Group is to be audited as to whether it is consistent with the consolidated financial statements and as to whether the management report for the Group was prepared in accordance with the applicable legal requirements.

Management is responsible for the preparation of the management report for the Group in accordance with the Austrian Commercial Code.

We conducted our audit in accordance with Austrian Standards on Auditing for the audit of the management report for the Group.

Opinion

In our opinion, the management report for the Group was prepared in accordance with the applicable legal requirements, includes accurate disclosures pursuant to Section 243a UGB and is consistent with the consolidated financial statements.

Statement

Based on the findings during the audit of the consolidated financial statements and due to the obtained understanding concerning the Group and its circumstances no material misstatements in the management report for the Group came to our attention.

Other information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements, the management report for the Group and the auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsible Engagement Partner

Responsible for the proper performance of the engagement is Mr. Aslan Milla, Austrian Certified Public Accountant.

Vienna, March 10, 2017

PwC Wirtschaftsprüfung GmbH

signed:

Aslan Milla
Austrian Certified Public Accountant

This report is a translation of the original report in German, which is solely valid. Publication and sharing with third parties of the consolidated financial statements together with our auditor's opinion is only allowed if the consolidated financial statements and the management report for the Group are identical with the German audited version. This audit opinion is only applicable to the German and complete consolidated financial statements with the management report for the Group. For deviating versions, the provisions of Section 281 (2) UGB apply.

**Statement of the Management Board
in accordance with § 82 (4) of the
Austrian Stock Exchange Act**

Statement of the Management Board in accordance with § 82 (4) of the Austrian Stock Exchange Act

We confirm to the best of our knowledge that the consolidated financial statements, which were prepared in accordance with International Financial Reporting Standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and that the Group management report gives a true and fair view of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties the Group faces.

Vienna, March 10, 2017

Management Board



Stefan Borgas
CEO



Barbara Potisk-Eibensteiner
CFO



Gerd Schubert
COO
CTO R&D



Thomas Jakowiak
CSO Industrial Division



Reinhold Steiner
CSO Steel Division