Consolidated Financial Statements

Group's net assets, financial position and results of operations robust thanks to solid capital structure.

Total assets down considerably by € 9.5 billion to € 91.5 billion due to drop in residential property values.

Earnings per share down to € -7.80, the deciding factor in this trend being the non-cash earnings contribution made by the valuation of investment properties in the amount of € -10.7 billion.

Consolidated Income Statement

for the period from January 1 until December 31

in € million	Notes	2022 (adjusted)	2023
Revenue from property letting		4,747.4	4,706.9
Other revenue from property management		147.1	167.6
Revenue from property management	B10	**4,894.5**	**4,874.5**
Income from disposal of properties		3,242.4	867.7
Carrying amount of properties sold		-3,172.0	-808.0
Revaluation of assets held for sale		68.0	18.4
Profit from the disposal of properties	B11	**138.4**	**78.1**
Revenue from disposal of real estate inventories		588.4	354.0
Cost of sold real estate inventories		-460.9	-304.6
Profit from disposal of real estate inventories	B12	**127.5**	**49.4**
Net income from fair value adjustments of investment properties	B13	-1,177.6	-10,651.2
Capitalized internal expenses	B14	673.1	470.4
Cost of materials	B15	-2,445.8	-2,100.5
Personnel expenses	B16	-713.7	-766.3
Depreciation and amortization	D26	-1,180.2	-410.8
Other operating income	B17	190.1	242.9
Impairment losses on financial assets		-49.8	-27.6
Net income from the derecognition of financial assets measured at amortized cost		-2.9	-1.7
Other operating expenses	B18	-380.5	-434.0
Net income from investments accounted for using the equity method		-436.6	-75.7
Interest income	B19	115.5	227.8
Interest expenses	B20	-366.9	-810.2
Other financial result	B21	10.3	149.7
Earnings before tax		**-604.6**	**-9,185.2**
Income taxes	B22	29.8	2,577.1
Profit for the period from continuing operations		**-574.8**	**-6,608.1**
Profit for the period from discontinued operations		**-94.6**	**-148.1**
Profit for the period		**-669.4**	**-6,756.2**
Attributable to:			
Vonovia's shareholders		-643.8	-6,285.1
Non-controlling interests		-25.6	-471.1
Earnings per share from continuing operations (diluted) in €		**-0.72**	**-7.64**
Earnings per share from continuing operations (basic) in €		**-0.72**	**-7.64**
Earnings per share total (diluted) in €	C24	**-0.82**	**-7.80**
Earnings per share total (basic) in €	C24	**-0.82**	**-7.80**

Consolidated Statement of Comprehensive Income

for the period from January 1 until December 31

in € million	2022	2023
Profit for the period	**-669.4**	**-6,756.2**
Change in unrealized gains/losses	77.9	-136.7
Taxes on the change in unrealized gains/losses	-23.9	43.7
Net realized gains/losses	-5.0	43.9
Taxes due to net realized gains/losses	4.1	-12.2
Profit on cash flow hedges	**53.1**	**-61.3**
Changes in the period	-408.8	-0.5
Tax effect	11.7	–
Profit on currency translation differences	**-397.1**	**-0.5**
Items which will be recognized in profit or loss in the future	**-344.0**	**-61.8**
Changes in the period	-17.1	-28.5
Taxes on changes in the period	0.6	0.8
Profit on equity instruments at fair value in other comprehensive income	**-16.5**	**-27.7**
Change in actuarial gains/losses, net	165.8	-27.5
Tax effect	-52.2	10.4
Profit on actuarial gains and losses from pensions and similar obligations	**113.6**	**-17.1**
Items which will not be recognized in profit or loss in the future	**97.1**	**-44.8**
Other comprehensive income	**-246.9**	**-106.6**
Total comprehensive income	**-916.3**	**-6,862.8**
Attributable to:		
Vonovia's shareholders	-894.5	-6,390.1
thereof from continuing operations	-824.5	-6,263.6
thereof from discontinued operations	-70.0	-126.5
Non-controlling interests	-21.8	-472.7

Consolidated Balance Sheet

Assets

in € million	Notes	Dec. 31, 2022 (adjusted)	Dec. 31, 2023
Intangible assets	D26	1,659.5	1,423.7
Property, plant and equipment	D27	673.4	655.1
Investment properties	D28	92,300.1	81,120.3
Financial assets	D29	745.0	1,456.3
Investments accounted for using the equity method	D30	240.1	157.9
Other assets	D31	380.2	221.7
Deferred tax assets	D32	39.6	86.4
Total non-current assets		**96,037.9**	**85,121.4**
Inventories	D33	32.1	19.7
Trade receivables	D34	161.0	593.2
Financial assets	D29	768.2	1,007.8
Other assets	D31	621.0	660.3
Income tax receivables	D32	239.9	178.2
Cash and cash equivalents	D35	1,302.4	1,374.4
Real estate inventories	D36	2,156.3	1,957.7
Assets held for sale	D37	70.8	313.1
Assets from discontinued operations	D37	–	770.1
Total current assets		**5,351.7**	**6,874.5**
Total assets		**101,389.6**	**91,995.9**

Equity and Liabilities

in € million	Notes	Dec. 31, 2022 (adjusted)	Dec. 31, 2023
Subscribed capital		795.8	814.6
Capital reserves		5,151.6	2,681.2
Retained earnings		25,605.1	22,505.1
Other reserves		-221.0	-318.3
Total equity attributable to Vonovia shareholders		**31,331.5**	**25,682.6**
Non-controlling interests		3,107.3	4,262.0
Total equity	E38	**34,438.8**	**29,944.6**
Provisions	E39	655.7	606.9
Trade payables	E40	5.2	7.0
Non-derivative financial liabilities	E41	41,269.7	39,636.5
Derivatives	E42	–	59.2
Lease liabilities	E44	641.0	629.3
Liabilities to non-controlling interests	E45	220.0	167.7
Financial liabilities from tenant financing	E46	43.0	41.6
Other liabilities	E47	27.9	51.0
Deferred tax liabilities	B22	18,612.4	15,713.2
Total non-current liabilities		**61,474.9**	**56,912.4**
Provisions	E39	238.0	202.9
Trade payables	E40	563.3	486.4
Non-derivative financial liabilities	E41	3,790.0	3,260.6
Derivatives	E42	1.3	0.1
Put options	E43	270.9	316.2
Lease liabilities	E44	41.5	43.9
Liabilities to non-controlling interests	E45	15.9	30.7
Financial liabilities from tenant financing	E46	112.1	112.5
Current income taxes		241.3	260.0
Other liabilities	E47	201.6	283.6
Liabilities from discontinued operations	D37	–	142.0
Total current liabilities		**5,475.9**	**5,138.9**
Total liabilities		**66,950.8**	**62,051.3**
Total equity and liabilities		**101,389.6**	**91,995.9**

Consolidated Statement of Cash Flows

for the period from January 1 until December 31

in € million	Notes	2022	2023
Profit for the period		-669.4	-6,756.2
Net income from fair value adjustments of investment properties	B13	1,269.8	10,844.5
Revaluation of assets held for sale	B11	-68.0	-18.4
Depreciation and amortization	D26	1,279.1	464.7
Interest expenses/income and other financial result	B19/B20/B21	263.0	456.1
Income taxes	B22	-63.3	-2,622.8
Profit on the disposal of investment properties	B11	-70.4	-59.7
Results from disposals of other non-current assets		-1.6	-0.1
Other expenses/income not affecting cash		439.9	87.6
Change in working capital		-106.6	-340.2
Income tax paid		-188.2	-154.3
Cash flow from operating activities		**2,084.3**	**1,901.2**
Proceeds from disposals of investment properties and assets held for sale		3,033.6	588.4
Proceeds from disposals of other assets		75.7	651.6
Proceeds from the disposal of other financial assets		2,399.6	–
Payments for investments in investment properties	D28	-2,475.5	-1,103.7
Payments for investments in other assets	D26/D27/D29	-228.2	-716.7
Payments for acquisition of other financial assets		-1,900.0	-314.0
Interest received		33.0	68.5
Cash flow from investing activities		**938.2**	**-825.9**

in € million	Notes	2022	2023
Cash paid to shareholders of Vonovia SE	E38	-672.3	-372.9
Cash paid to non-controlling interests		-41.7	-40.5
Proceeds from issuing financial liabilities	E41	6,802.7	4,310.3
Cash repayments of financial liabilities	E41	-8,540.1	-6,191.2
Cash repayments of lease liabilities	E44	-41.6	-36.8
Payments for transaction costs in connection with capital measures	E41	-45.9	-2.7
Payments for other financing costs	E41	-12.6	0.8
Payments in connection with the disposal of shares in non-controlling interests		-52.6	-0.3
Proceeds for the sale of shares of ongoing consolidated companies	E38	–	2,091.6
Interest paid		-541.0	-719.3
Cash flow from financing activities	A4	**-3,145.1**	**-961.0**
Influence of changes in foreign exchange rates on cash and cash equivalents		-7.8	2.1
Net changes in cash and cash equivalents		**-130.4**	**116.4**
Cash and cash equivalents at the beginning of the period		1,432.8	1,302.4
Cash and cash equivalents at the end of the period (incl. discontinued operations)	D35	**1,302.4**	**1,418.8**
Less cash and cash equivalents from discontinued operations		–	44.4
Cash and cash equivalents at the end of the period*	D35	**1,302.4**	**1,374.4**

* Includes € 0.0 million (Dec. 31, 2022: € 200.6 million) in current securities classified as cash equivalents and total restricted cash of € 415.8 million (Dec. 31, 2022: € 104.1 million).

Consolidated Statement of Changes in Equity

in € million	Subscribed capital	Capital reserves	Retained earnings	Other reserves: Cash flow hedges	Other reserves: Equity instruments at fair value in other comprehensive income
As of Jan. 1, 2023	**795.8**	**5,151.6**	**25,605.1**	**41.2**	**63.9**
Profit for the period			**-6,285.1**		
Changes in the period			-16.4	-93.0	-26.8
Reclassification affecting net income				31.7	
Other comprehensive income			**-16.4**	**-61.3**	**-26.8**
Total comprehensive income			**-6,301.5**	**-61.3**	**-26.8**
Capital increase	18.8				
Premium on the issue of new shares		284.7			
Withdrawal from the capital reserves		-2,754.1	2,754.1		
Dividend distributed by Vonovia SE			-676.5		
Transactions with minority shareholders			1,076.6		
Changes recognized directly in equity		-1.0	47.3		-8.7
As of Dec. 31, 2023	**814.6**	**2,681.2**	**22,505.1**	**-20.1**	**28.4**
As of Jan. 1, 2022	**776.6**	**15,458.4**	**16,535.5**	**-11.9**	**80.7**
Profit for the period			**-643.8**		
Changes in the period			110.0	54.0	-16.8
Reclassification affecting net income				-0.9	
Other comprehensive income			**110.0**	**53.1**	**-16.8**
Total comprehensive income			**-533.8**	**53.1**	**-16.8**
Capital increase	19.2				
Premium on the issue of new shares		597.6			
Transaction costs in connection with the issue of shares		-0.7			
Withdrawal from the capital reserves		-10,903.8	10,903.8		
Dividend distributed by Vonovia SE			-1,289.2		
Changes recognized directly in equity		0.1	-11.2		
As of Dec. 31, 2022	**795.8**	**5,151.6**	**25,605.1**	**41.2**	**63.9**

Currency translation differences	Total	Equity attributable to Vonovia's shareholders	Non-controlling interests	Total equity
-326.1	**-221.0**	**31,331.5**	**3,107.3**	**34,438.8**
		-6,285.1	**-471.1**	**-6,756.2**
-0.5	-120.3	-136.7	-1.6	-138.3
	31.7	31.7		31.7
-0.5	**-88.6**	**-105.0**	**-1.6**	**-106.6**
-0.5	**-88.6**	**-6,390.1**	**-472.7**	**-6,862.8**
		18.8		18.8
		284.7		284.7
		0.0		0.0
		-676.5		-676.5
		1,076.6	1,669.2	2,745.8
	-8.7	37.6	-41.8	-4.2
-326.6	**-318.3**	**25,682.6**	**4,262.0**	**29,944.6**
57.4	**126.2**	**32,896.7**	**3,242.4**	**36,139.1**
		-643.8	**-25.6**	**-669.4**
-397.0	-359.8	-249.8	3.8	-246.0
	-0.9	-0.9		-0.9
-397.0	**-360.7**	**-250.7**	**3.8**	**-246.9**
-397.0	**-360.7**	**-894.5**	**-21.8**	**-916.3**
		19.2		19.2
		597.6		597.6
		-0.7		-0.7
				0.0
		-1,289.2		-1,289.2
13.5	13.5	2.4	-113.3	-110.9
-326.1	**-221.0**	**31,331.5**	**3,107.3**	**34,438.8**

Notes

(A): Principles of the Consolidated Financial Statements

1 General Information

Vonovia SE is incorporated and domiciled in Germany. The company has been registered in the commercial register in Bochum under HRB 16879 since 2017.
Its registered office is at Universitätsstrasse 133, 44803 Bochum, Germany. The company operates in the real estate sector.

The consolidated financial statements as of and for the year ended December 31, 2023, have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted in the EU. In addition, the supplementary commercial law provisions under Section 315e (1) of the German Commercial Code (HGB) have been observed. Changes due to the change in presentation of contract assets from ancillary costs and the development business, changes in presentation for provisions, which were moved to current liabilities, and changes in the presentation of the Care segment, as a discontinued operation, are set out in chapter → **[A2] Adjustment to Prior-year Figures.**

The consolidated financial statements have been prepared on the basis of amortized cost except for investment properties, assets held for sale, derivative financial instruments, plan assets and equity instruments at fair value in other comprehensive income. These are measured at their fair value. The income statement has been prepared using the nature of expense method.

These consolidated financial statements are presented in euros, which is the Group's functional currency. Unless stated otherwise, all figures are shown in million euros (€ million).

The following overview indicates the chapters on the individual topics containing disclosures on accounting policies, judgments and estimates:

Chapter	Accounting policies, judgments, estimates
A6	Currency translation
A7	Government grants
B	Profit for the period
B12	Profit on the disposal of properties
B22	Income taxes
C24	Earnings per share
D26	Intangible assets/goodwill
D27	Property, plant and equipment
D28	Investment properties
D29	Financial assets
D33	Inventories
D34	Trade receivables
D35	Cash and cash equivalents
D36	Real estate inventories
D37	Assets and lialities held for sale and discontinued operations
E38	Total equity
E39	Provisions
E41	Non-derivative financial liabilities
E44	Leases
E45	Liabilities to non-controlling interests
E46	Financial liabilities from tenant financing
F49	Share-based payment
G53	Additional financial instrument disclosures
G54	Information on the consolidated statement of cash flows

2 Adjustment to Prior-year Figures

Changes in Presentation

There were various changes in presentation in the 2023 fiscal year that also required adjustments to the prior-year figures.

The two tables below illustrate the changes as against the prior-year presentation in the balance sheet:

in € million	Dec. 31, 2022	Adjustment	Dec. 31, 2022 (adjusted)
Intangible assets	1,659.5		1,659.5
Property, plant and equipment	673.4		673.4
Investment properties	92,300.1		92,300.1
Financial assets	745.0		745.0
Investments accounted for using the equity method	240.1		240.1
Other assets	380.2		380.2
Deferred tax assets	39.6		39.6
Total non-current assets	**96,037.9**		**96,037.9**
Inventories	146.4	-114.3	32.1
Trade receivables	330.2	-169.2	161.0
Financial assets	768.2		768.2
Other assets	337.5	283.5	621.0
Income tax receivables	239.9		239.9
Cash and cash equivalents	1,302.4		1,302.4
Real estate inventories	2,156.3		2,156.3
Assets held for sale	70.8		70.8
Total current assets	**5,351.7**	**0.0**	**5,351.7**
Total assets	**101,389.6**	**0.0**	**101,389.6**

The change in presentation under assets relates to contract assets from ancillary costs (€ 114.3 million) and from the development business (€ 169.2 million). Starting in the 2023 fiscal year, these will be reported under other assets as opposed to under inventories or trade receivables as in the past.

in € million	Dec. 31, 2022	Adjustment	Dec. 31, 2022 (adjusted)
Subscribed capital	795.8		795.8
Capital reserves	5,151.6		5,151.6
Retained earnings	25,605.1		25,605.1
Other reserves	-221.0		-221.0
Total equity attributable to Vonovia shareholders	**31,331.5**		**31,331.5**
Non-controlling interests	3,107.3		3,107.3
Total equity	**34,438.8**		**34,438.8**
Provisions	655.7		655.7
Trade payables	5.2		5.2
Non-derivative financial liabilities	41,269.7		41,269.7
Derivatives	–		–
Lease liabilities	641.0		641.0
Liabilities to non-controlling interests	220.0		220.0
Financial liabilities from tenant financing	43.0		43.0
Other liabilities	27.9		27.9
Deferred tax liabilities	18,612.4		18,612.4
Total non-current liabilities	**61,474.9**		**61,474.9**
Provisions	549.7	-311.7	238.0
Trade payables	563.3		563.3
Non-derivative financial liabilities	3,790.0		3,790.0
Derivatives	1.3		1.3
Put options	270.9		270.9
Lease liabilities	41.5		41.5
Liabilities to non-controlling interests	15.9		15.9
Financial liabilities from tenant financing	112.1		112.1
Current income taxes	–	241.3	241.3
Other liabilities	131.2	70.4	201.6
Total current liabilities	**5,475.9**	**0.0**	**5,475.9**
Total liabilities	**66,950.8**	**0.0**	**66,950.8**
Total equity and liabilities	**101,389.6**	**0.0**	**101,389.6**

On the liabilities side, current provisions for bonuses and current provisions for personnel expenses amounting to € 70.4 million in total were reclassified from current provisions to other liabilities, as they are classed as accruals.

The new balance sheet line item “Current income taxes” comprises current tax liabilities and current income tax liabilities, which were recognized at € 241.3 million under current provisions in the previous year.

Disclosure of the Care Segment

As part of a strategic review of the Care segment, the management decided to discontinue and sell these operations. Endeavors to sell the Care segment have begun and it is expected to have been sold before December 2024.

The criteria for presentation as a disposal group held for sale are met. At the same time, the criteria for definition as a discontinued operation are also met. Accordingly, the majority of the segment is presented separately in the balance sheet as a disposal group held for sale/discontinued operation, and the results from the discontinued operation are shown separately in the income statement. Pursuant to IFRS 5, retrospective adjustments were made to presentation in the income statement; IFRS 5 does not provide for the restatement of the prior-year figures in the balance sheet.

The share of revenue from nursing care properties that are not part of the disposal group (2022: € 23.3 million) was reclassified from other revenue from property management to revenue from property letting, as these properties will make a long-term contribution to revenue in the Rental segment by being let to third parties. The other adjustments represent the profit share attributable to the disposal group to be hived off.

Intra-Group transactions were eliminated from the consolidated financial results in full. The eliminations were allocated to continuing operations and discontinued operations so as to take account of the decision not to continue these transactions after the disposal, as the Management Board considers this type of presentation to be useful.

For this purpose, the Management Board has eliminated the revenue resulting from transactions with continuing operations generated prior to the reclassification in the result from continuing operations, as no services will be exchanged between the continuing operations and the discontinued operations after the sale.

Income Statement

The table below illustrates the changes as against the prior-year presentation in the income statement:

in € million	2022	Adjustment	2022 (adjusted)
Revenue from property letting	4,724.6	22.8	4,747.4
Other revenue from property management	427.2	-280.1	147.1
Revenue from property management	**5,151.8**	**-257.3**	**4,894.5**
Income from disposal of properties	3,242.4		3,242.4
Carrying amount of properties sold	-3,172.0		-3,172.0
Revaluation of assets held for sale	68.0		68.0
Profit from the disposal of properties	**138.4**		**138.4**
Revenue from disposal of real estate inventories	588.4		588.4
Cost of sold real estate inventories	-460.9		-460.9
Profit from disposal of real estate inventories	**127.5**		**127.5**
Net income from fair value adjustments of investment properties	-1,269.8	92.2	-1,177.6
Capitalized internal expenses	673.3	-0.2	673.1
Cost of materials	-2,501.5	55.7	-2,445.8
Personnel expenses	-863.8	150.1	-713.7
Depreciation and amortization	-1,279.1	98.9	-1,180.2
Other operating income	218.8	-28.7	190.1
Impairment losses on financial assets	-49.8		-49.8
Net income from the derecognition of financial assets measured at amortized cost	-2.6	-0.3	-2.9
Other operating expenses	-397.5	17.0	-380.5
Net income from investments accounted for using the equity method	-436.6		-436.6
Interest income	115.5		115.5
Interest expenses	-367.6	0.7	-366.9
Other financial result	10.3		10.3
Earnings before tax	**-732.7**	**128.1**	**-604.6**
Income taxes	63.3	-33.5	29.8
Profit for the period from continuing operations	**-669.4**	**94.6**	**-574.8**
Profit for the period from discontinued operations		-94.6	-94.6
Profit for the period	**-669.4**	**0.0**	**-669.4**
Attributable to:			
Vonovia's shareholders	-643.8		-643.8
Non-controlling interests	-25.6		-25.6
Earnings per share (diluted) in €	**-0.82**		**-0.82**
Earnings per share (basic) in €	**-0.82**		**-0.82**

Segment Report

In the 2023 fiscal year, Vonovia continued with the 2022 management system unchanged for the time being. Vonovia's business was managed via the five segments: Rental, Value-add, Recurring Sales, Development and Care. For detailed information, please refer to the chapter entitled Corporate Governance in Vonovia's published 2022 Annual Report.

At the end of the fourth quarter of 2023, the presentation of earnings contributions from the Development to hold sales channel was adjusted within the Development segment. In the 2023 annual financial statements, the earnings contributions from development to hold are recognized exclusively in net income from fair value adjustments of investment properties, i.e., outside of the Adjusted EBITDA Total. The adjusted presentation is due to the greater transparency and traceability of the key figures that are relevant to governance. Furthermore, the adjustment results in a more balanced presentation of the earnings situation in the Development segment now that market conditions have changed.

The majority of the current Care segment, which is to be discontinued, is presented as a discontinued operation. This means that the Care segment is no longer included in the segment reporting.

As part of a strategic review of the Care segment, the management decided to discontinue and sell these operations. Endeavors to sell the Care segment have since begun and it is expected to have been sold before December 2024. A small part of the segment, with a business volume of € 23.3 million in segment revenue, was transferred to the Rental segment. Specifically, this relates to rental income for 25 properties operated by third parties. The previous year's figures were adjusted accordingly:

in € million	Rental	Value-add	Recurring Sales	Develop-ment	Care Business	Segments total	Other*	Consolida-tion*	Group
Jan. 1–Dec. 31, 2022 changes									
Segment revenue	**23.3**			**-433.9**	**-280.1**	**-690.7**	**-0.5**	**433.9**	**-257.3**
thereof external revenue	23.3			–	-280.1	-256.8	-0.5		-257.3
thereof internal revenue				-433.9		-433.9		433.9	
Carrying amount of assets sold							-20.5		
Revaluation from disposal of assets held for sale									
Expenses for maintenance	-0.3				7.0	6.7			
Cost of development to sell									
Cost of development to hold**				340.6		340.6		-340.6	
Operating expenses	-2.2			0.1	188.5	186.4	9.5	–	
Ancillary costs							11.5		
Adjusted EBITDA Total	**20.8**			**-93.2**	**-84.6**	**-157.0**	**–**	**93.3**	**-63.7**
Non-recurring items									0.1
Period adjustments from assets held for sale									
Income from investments/amortization in other real estate companies									
Net income from fair value adjustments of investment properties									92.2
Depreciation and amortization (incl. depreciation on financial assets)									98.8
Net income from investments accounted for using the equity method									
Income from other investments									
Interest income									
Interest expenses									0.7
Other financial result									
EBT									**128.1**
Income taxes									**-33.5**
Profit from continuing operations									94.6
Profit from discontinued operations									-94.6
Profit for the period									

* The revenue for the Rental, Value-add, Recurring Sales and Development segments constitutes income that is regularly reported to the Management Board as the chief operating decision-maker and that reflects Vonovia's sustainable business. The revenue/costs in the "Other" and "Consolidation" columns are not part of the Management Board's segment management.
** Excluding capitalized interest on borrowed capital of € 2.5 million.

3 Consolidation Principles

Business Combinations

An entity shall account for each business combination by applying the acquisition method if it obtains control. All hidden reserves and charges of the company acquired are disclosed as part of the necessary remeasurement. Any excess of the cost of a business combination over the net fair value of the identifiable assets, liabilities and contingent liabilities, following the disclosure of hidden reserves and charges, is recognized as goodwill in the balance sheet. The consideration transferred at the time of the acquisition and the identifiable net assets that are acquired are measured at fair value as a general rule. Transaction costs are recognized as an expense immediately insofar as they do not relate to costs pertaining to the raising of capital or the issue of debt capital.

Subsidiaries

Subsidiaries are companies that are controlled by the Group. The Group controls a company if it is exposed to risks or has rights to variable returns from its involvement with the company and has the ability to use its power of control over the company to influence the level of these returns. In the process of full consolidation, the assets and liabilities of a subsidiary are included in the consolidated financial statements in their entirety. Subsidiaries are included in the consolidated financial statements from the date on which Vonovia SE obtains control until the day control ceases.

Non-controlling Interests

The equity of a subsidiary that is not attributable to Vonovia is shown as a separate component of equity under non-controlling interests. Non-controlling interests are measured based on their share of the identified net assets of the acquired company at the time of acquisition.

Changes in a parent's ownership interest in a subsidiary that do not result in the parent losing control of the subsidiary are equity transactions. Transaction costs that are directly attributable to these equity transactions are reported in retained earnings without affecting net income.

Loss of Control

If Vonovia loses control over a subsidiary, the assets and liabilities of the subsidiary in question as well as any corresponding non-controlling interests are derecognized. The result is recognized in the income statement. Any investment retained is recognized at fair value when control is lost.

Associates and Joint Arrangements

Associates and joint arrangements classified as joint ventures are accounted for using the equity method. An associate is an entity over which the investor has significant influence. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. If the arrangement involves rights to the assets and obligations for the liabilities of a joint arrangement instead, then these are recognized using quota consolidation.

Business Transactions Eliminated on Consolidation

The effects of the business transactions between the entities included in the Vonovia consolidated financial statements are eliminated.

Results from business transactions with companies accounted for using the equity method are only eliminated in line with the Group's share in the investee.

The financial statements of Vonovia SE and all subsidiaries are consistently prepared according to uniform accounting policies.

4 Scope of Consolidation and Business Combinations

All in all, and including Vonovia SE, 631 companies (December 31, 2022: 654) – thereof 426 (December 31, 2022: 429) domestic companies and 205 (December 31, 2022: 225) foreign companies – have been included in the consolidated financial statements as of December 31, 2023. In addition, 16 (December 31, 2022: 25) domestic companies and one (December 31, 2022: one) foreign company were included as joint ventures and nine domestic companies (December 31, 2022: five) and two (December 31, 2022: three) foreign companies were included as associates accounted for using the equity method.

Two domestic (December 31, 2022: three foreign) companies are no longer included in the scope of consolidation as they are no longer considered to be material. These companies are shown as non-consolidated affiliated companies.

For all subsidiaries included in the consolidated financial statements, the reporting date is December 31.

The → list of Vonovia shareholdings is appended to the Notes to the consolidated financial statements as an integral part thereof.

Companies that have made use of the exemption provision set out in Section 264 (3) of the German Commercial Code (HGB) are marked accordingly in the list of shareholdings.

The year-on-year changes in the consolidated companies as of December 31, 2023, result from four companies that were established, 22 mergers, two sales, two accruals and a liquidation.

The change in joint ventures in 2023 is due to three sales, one merger and five disposals resulting from the conversion of these joint ventures into what are now associates. The number of associates changed by five additions in 2023 due to conversions, one sale and one disposal due to a loss of control resulting from a reduction in the stake held.

The number of unconsolidated affiliated companies dropped in 2023 after one acquisition, the establishment of one company, and three sales.

5 Financial Reporting of Financial Assets and Financial Liabilities

Loans and Receivables

Loans and receivables are first recognized as incurred, other non-derivative financial assets as of the day of trading. The day of trading is the date on which Vonovia becomes a contracting party of the financial instrument. All financial instruments are initially measured at fair value, taking account of transaction costs. Trade receivables are stated at the transaction price. A financial asset is derecognized when the contractual rights to the cash flows from the financial asset expire, or the financial asset is transferred and Vonovia neither retains control nor retains material risks and rewards associated with ownership of the financial asset.

Loans and receivables are stated at amortized cost using the effective interest method.

Vonovia determines whether there is an objective indication of an impairment at the level of individual financial instruments if they are material, and, for financial instruments for which no impairments have been identified at the level of the individual financial instruments or such impairments are immaterial, grouped according to risk profile. Impairments are identified for individual financial instruments when the counterparty has defaulted or breached a contract or there are indications of risks of impairments due to a rating downgrade and general information (loss event). For groups of financial instruments with similar risks, historical default probabilities in relation to the time overdue are drawn upon (loss event). An impairment is calculated after the occurrence of a loss event as the difference between the carrying amount and the value of the discounted estimated future cash flow. The original effective interest rate is taken as the discount rate. Impairment losses are recognized with effect on net income and offset directly with the carrying amount of the financial instrument. Any interest income on impaired financial instruments is still recognized. If there are indications that the amount of the impairment loss will be smaller, this reduction is credited to the financial instrument affecting net income to the extent that the sum does not exceed the amortized cost that would have been recognized if the impairment had not occurred.

Derivative Financial Instruments and Put Options

Derivative financial instruments are stated at their fair value on the day of trading when they are recognized for the first time. The fair values of the derivative financial instruments are calculated using standard market valuation methods for such instruments on the basis of the market data available on the valuation date.

With derivatives that are not designated as a hedging instrument in the balance sheet, changes in the fair value are recognized in profit or loss with effect on net income.

Compared with IAS 39, the IFRS 9 regulations relating to hedge accounting include, among other things, an expanded range of eligible hedged items, changes regarding the posting approach for certain undesignated value components of hedging instruments, the abolition of the fixed effectiveness ranges and retrospective effectiveness testing as well as the first-time introduction of "recalibration." The less restrictive provisions compared with IAS 39 make it easier to reflect economic risk management in the balance sheet, which can, in turn, reduce artificial volatility in the income statement.

At the time of application of IFRS 9, Vonovia will opt to continue to apply the hedge accounting provisions set out in IAS 39 as opposed to the provisions of IFRS 9. Vonovia applies this accounting method to all hedge relationships.

Contracts concluded for the purpose of receiving or supplying non-financial items in accordance with the company's expected purchase, sale, or use requirements (own-use contracts) are not recognized as derivative financial instruments, but rather as pending transactions under IAS 37.

With derivatives designated as hedging instruments, the recognition of changes in the fair value depends on the type of hedge:

> With a fair value hedge, the changes in the fair value of the derivative financial instruments and of the underlying hedged items attributable to the hedged risk are recognized affecting net income.

> With a cash flow hedge, the unrealized gains and losses are initially recognized in other comprehensive income to the extent that the hedge is effective. Amounts accumulated in other comprehensive income are reclassified to the income statement at the same time the underlying hedged item affects net income. To the extent that the hedge is ineffective, the change in fair value is immediately recognized in net interest.

Embedded derivative financial instruments that are combined with a non-derivative financial instrument (host contract) to form a hybrid financial instrument are to be separated from the host contract pursuant to IFRS 9 as a general rule and accounted for separately if (i) its economic risks and characteristics are not closely related to those of the host contract, (ii) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative, and (iii) the hybrid instrument is not measured at fair value affecting net income with changes in fair value recognized in the income statement. As soon as the derivative is to be separated from its host contract, the individual components of the hybrid financial instrument are to be accounted for based on the provisions that apply to the individual financial instruments.

In order to measure interest rate swaps, future cash flows are calculated and then discounted. The calculated cash flows result from the contract conditions. The contract conditions regularly refer to the EURIBOR/STIBOR reference rates (3M and 6M EURIBOR/STIBOR). Discounting is based on market interest rate data as of the reporting date for comparable instruments (EURIBOR/STIBOR rate of the same tenor). The fair value contains the credit risk of the interest rate swaps and therefore allows for adjustments for the company's own credit risk or for the counterparty credit risk.

To measure the cross currency swaps, future cash flows are calculated and then discounted. The calculated cash flows result from the contract conditions and the forward rates (development of exchange rates expected by the market). Discounting is based on market interest rate data as of the reporting date for comparable instruments (EURIBOR rate of the same tenor). The fair value contains the credit risk of the cross currency swaps and therefore allows for adjustments for the company's own credit risk or for the counterparty credit risk.

The fair value of the purchase price liabilities from put options/rights to reimbursement granted to minority shareholders is generally based on the going concern value of the respective company; if a contractually agreed minimum purchase price is higher than this amount, this purchase price is recognized.

Equity Instruments to Be Recognized at Fair Value in Other Comprehensive Income

In general, the equity instruments to be recognized at fair value in other comprehensive income are shares in companies that were acquired with long-term strategic intentions.

These equity instruments to be recognized at fair value in other comprehensive income are initially stated at their fair value, plus the directly attributable transaction costs. Subsequent measurement is at fair value as a general rule. Changes in the fair value are recognized in other comprehensive income.

The fair value of equity instruments to be recognized at fair value in other comprehensive income is based on quoted market prices as of the reporting date where they are available. If no market price is available, the fair value is calculated using a discounted cash flow model. If these equity instruments are derecognized, the cumulative gain or loss recognized in other comprehensive income is transferred to retained earnings, not affecting net income. Interest on interest-bearing financial instruments of this category is calculated using the effective interest method. Dividends on equity instruments in this category are shown in the income statement.

6 Currency Translation

Accounting Policies

Foreign currency transactions involving Group companies are converted into the functional currency, in accordance with the temporal method, at the exchange rate that applies on the day of the transaction. Monetary balance sheet items denominated in a foreign currency are converted at the exchange rate that applies on each reporting date. Any exchange differences are recognized affecting net income. Non-monetary items that are measured in terms of historical cost are recorded on the reporting date at the exchange rate on the date they were first recognized. Non-monetary items that are measured at fair value are translated on the reporting date using the exchange rate on the date the fair value was determined. Exchange differences relating to non-monetary items are recognized affecting net income insofar as a profit or loss on the corresponding line item is also recognized affecting net income. Otherwise, they are disclosed in other comprehensive income.

The main foreign subsidiaries included in the consolidated financial statements operate their business independently in line with functional theory. The annual financial statements of those subsidiaries whose functional currency is not the euro are converted into the reporting currency using the modified closing rate method. The functional currency of individual foreign units is always the respective local currency. Any resulting exchange differences are disclosed as a separate item in other comprehensive income. When a foreign subsidiary leaves the scope of consolidation, the cumulative exchange differences are reversed and recognized in profit or loss.

Vonovia applies the concept of functional currency translation in accordance with IAS 21 “Effects of Changes in Foreign Exchange Rates” to its consolidated financial statements. The functional currency of Vonovia SE and the reporting currency of the Vonovia Group is the euro.

The exchange rates of the currencies relevant to the Vonovia Group have developed as follows:

	Closing rate		Average for period	
Basis: € 1	Dec. 31, 2022	Dec. 31, 2023	2022	2023
SEK — Swedish krona	11.12	11.10	10.63	11.48
USD — US dollar	1.07	1.11	1.05	1.08

7 Government Grants

Accounting Policies

Government grants are recognized when there is reasonable assurance that the relevant conditions will be fulfilled and that the grants will be awarded.

Government grants that do not relate to investments are regularly recognized as income in the periods in which the relevant expenses are incurred.

Expenses subsidies granted in the form of rent, interest and other expenses subsidies are recorded as income in the periods in which the expenses are incurred and shown within other revenue from property management.

Low-interest loans are government grants that are recognized at their present value within the non-derivative financial liabilities on the basis of the market interest rate at the time the loans are taken out. The difference between face value and present value is recognized as deferred income with an effect on net income over the maturity term in the line with the fixed-interest-rate period of the corresponding loans.

Where the low-interest loans are granted in the context of capitalized modernization measures, the deferred income item is reversed in proportion to depreciation, or, with investment properties that are measured based on the fair value model, over 12.5 years.

The companies that belong to the Group receive government grants in the form of construction subsidies, expenses subsidies, expenses loans and low-interest loans. In the 2023 fiscal year, Vonovia was granted low-interest loans of € 580.6 million (2022: € 109.7 million).

8 Changes in Accounting Policies, Estimates, Assumptions, Options and Judgments

Changes to Key Accounting Methods

As of January 1, 2023, the Group did not have to apply any interest rate benchmark reform.

Approach to the Interest Rate Benchmark Reform and Associated Risks

General Information

A fundamental reform of the main interest rate benchmarks is under way across the globe, including the replacement of some "Interbank Offered Rates" (IBORs) with alternative, almost risk-free interest rates (referred to as the "IBOR reform").

Group financial instruments are exposed to IBORs that are not being replaced or reformed as part of these market-wide initiatives. The biggest risk for the Group in connection with the IBOR as of December 31, 2023, was the link to the EURIBOR and STIBOR. As these are expected to remain valid until at least 2025, no changes had to be made to the financial instruments in the period leading up to December 31, 2023, meaning that no new interest rate benchmarks have to be reflected here.

The LIBOR administrator regulated and licensed by the UK Financial Conduct Authority (FCA), the ICE Benchmark Administration (IBA), ceased publication of the USD LIBOR at the end of June 2023. The Group does not hold any financial instruments that are subject to the USD LIBOR.

The IBOR risks to which the Group was exposed as of December 31, 2023, largely relate to corporate bonds and loans linked to the EURIBOR/STIBOR. As explained above, the Group has not had to make any changes to the contractual terms for risks resulting from a link to the EURIBOR/STIBOR.

The EURIBOR calculation method changed in the course of 2019.

In July 2019, the Belgian Financial Services and Markets Authority approved the EURIBOR in accordance with the European Union Benchmarks Regulation. This allows market participants to keep using the EURIBOR for both existing and new contracts for the time being. Vonovia is keeping an eye on current developments related to the introduction of a potential EURIBOR successor, the ESTR-based EFTERM.

Derivatives

The Group holds interest rate swaps and other derivatives designated in hedging relationships to hedge cash flows for risk management purposes. The variable amounts of the interest rate swaps are linked to EURIBOR/STIBOR.

Hedge Accounting

The Group's hedged items and hedging instruments are linked to the EURIBOR as of the reporting date. These reference rates are quoted daily and the IBOR cash flows are exchanged with the counterparties as usual.

Changes in Accounting Policies Due to New Standards and Interpretations

The following new or amended standards and interpretations became mandatory for the first time in the 2023 fiscal year. With the exception of the adjustments explained below related to IAS 12, this did not have any material effects on Vonovia's consolidated financial statements.

> IFRS 17 "Insurance Contracts"
> IAS 1 "Presentation of Financial Statements"
> IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors"
> IAS 12 "Income Taxes"

IAS 12/International Tax Reform Pillar 2

The Organization for Economic Cooperation and Development (OECD) has launched a project, BEPS (Base Erosion and Profit Shifting), to combat unfair tax competition at international level and tax loopholes, particularly in light of our digitalized economy. A two-pillar solution was developed as part of this international tax reform, with the second pillar (Pillar 2) addressing global effective minimum taxation, in particular.

The implementation status of the Pillar 2 tax regulations in terms of their transposition into national law varies considerably from country to country. The IASB published amendments to IAS 12 in May 2023 in order to avoid inconsistent accounting during this transition phase, as well as to provide users of financial statements with information that would be as useful as possible for their decisions regarding the expected impact of the tax reform. These were adopted by the EU in November 2023 and already apply for the 2023 reporting year.

In addition to a mandatory exception from the recognition of deferred taxes in connection with the Pillar 2 rules, the amendments include, in particular, extended disclosures in the notes. While the exception is designed explicitly as a temporary one, the IASB has not yet set any expiration date.

Vonovia is applying the extended regulations set out in IAS 12 as planned as of the 2023 fiscal year. The impact on the Group and the required disclosures in the notes are set out in note → **[B22] Income Taxes**.

New Standards and Interpretations Not Yet Applied

Application of the following standards, interpretations and amendments to existing standards was not yet mandatory for the 2023 fiscal year. Vonovia also did not choose to apply them in advance. It is expected that the application of the new or amended standards and interpretations will have no material effects on Vonovia's consolidated financial statements. Their application will be mandatory for the fiscal years following the dates stated in the following table:

Relevant New Standards, Interpretations and Amendments to Existing Standards and Interpretations		Effective date for Vonovia
Amendments to Standards		
IFRS 16	"Leases"	Jan. 1, 2024
IAS 1	"Presentation of Financial Statements"	Jan. 1, 2024
IAS 7	"Statement of Cash Flows"	Jan. 1, 2024*
IAS 21	"The Effects of Changes in Foreign Exchange Rates"	Jan. 1, 2025*

* Not yet endorsed.

Estimates and Assumptions

To a certain extent, the preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the reporting date as well as reported amounts of income and expenses during the reporting year. The actual amounts may differ from the estimates as the business environment may develop differently than assumed. In this case, the assumptions and, where necessary, the carrying amounts of the assets or liabilities affected are prospectively adjusted accordingly. Specific estimates and assumptions relating to individual elements of financial statements are also explained in the corresponding notes to the consolidated financial statements.

Assumptions and estimates are reviewed on an ongoing basis and are based on experience and other factors, including expectations regarding future events that appear reasonable under the given circumstances.

The estimates and assumptions that may have a material risk of causing an adjustment to the carrying amounts of assets and liabilities mainly relate to the determination of the fair value of investment properties.

The best evidence of fair value of investment properties is current prices in an active market for comparable residential properties. As such information is not completely available, however, Vonovia uses standard valuation techniques.

A detailed description of the discounted cash flow (DCF) method used can be found in chapter → **[D28] Investment Properties.**

In accordance with IAS 40 in conjunction with IFRS 13, the respective market values of the investment properties owned by Vonovia are determined. Changes in certain market conditions such as prevailing rent levels and vacancy rates may affect the valuation of investment properties. Any changes in the fair value of the investment portfolio are recognized as part of the profit for the period in the income statement and can thus substantially affect Vonovia's results of operations.

The statement of financial liabilities at amortized cost using the effective interest method takes the expected contractual cash flows into account. In some cases, the agreements do not have any fixed maturity terms. As a result, the cash flows included in the valuation are subject to management assumptions in terms of amount and term.

As explained in chapter → **[D26] Intangible Assets**, Vonovia checks for goodwill impairments on an annual basis, or if there is any reason to suspect such impairments. The next step involves determining the recoverable amount of the group of cash-generating units (CGU). This corresponds to either the fair value less costs of sale or the value in use, whichever is higher. Determining the value in use includes adjustments and estimates regarding the forecast and discounting of the future cash flow. Although the management believes that the assumptions used to determine the recoverable amount are appropriate, any unforeseeable changes in these assumptions could result in impairment losses, with a detrimental impact on the net assets, financial position and results of operations.

When determining the volume of current and deferred taxes, the Group takes into account the effects of uncertain tax items and whether additional taxes and interest may be due. This assessment is made on the basis of estimates and assumptions about future events. New information may become available that causes the Group to change its discretionary decisions regarding the appropriateness of existing tax liabilities; such changes to tax liabilities will affect the tax expense in the period in which such a change is made.

Deferred tax assets are recognized to the extent that it can be demonstrated that it is probable that future taxable profits will be available against which the temporary difference can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that there will be sufficient future taxable profits to realize the tax benefit in the future.

In connection with the application of IFRS 15, it is assumed with respect to determining progress in relation to revenue recognition over time that the costs incurred appropriately reflect the progress as a share of total costs.

Additional estimates and assumptions mainly relate to the uniform definition of useful lives, the assumptions made on the value of land and buildings, the recognition and measurement of provisions as well as the realization of future tax benefits.

Climate risks have an impact on Vonovia's business model and strategy. They are addressed in particular by the climate path that the company has mapped out, but also by appropriate estimates and assumptions in key items of the company's net assets, financial position and results of operations. Climate risks can have a potentially negative impact and result in increased estimation uncertainties.

Physical climate risks refer to longer-term shifts in general climatic conditions. Climate events such as floods, earthquakes, extreme weather events, etc. could have an impact on our real estate portfolio and require specific crisis management measures. Climate transition risks describe the effects that can arise for companies due to the process of transformation towards a more sustainable economic system.

As part of its sustainability strategy, Vonovia has made a commitment to climate protection targets and a virtually carbon-neutral housing stock by 2045. Based on our current knowledge and expectations regarding future developments, this will not have any impact on Vonovia's balance sheet. This relates, among other things, to the fair values of investment properties, specific useful lives and the value of assets, as well as provisions for environmental risks, for which no significant need for adjustment emerges.

Options and Judgments

Options exercised and judgments made by Vonovia's management in the process of applying the entity's accounting policies that may have a significant effect on the amounts recognized in the consolidated financial statements include the following:

> The group of investments accounted for using the equity method is determined by assessing significant influence or whether there is joint control.
> Determining whether the acquisition of investment properties as part of a business combination constitutes the acquisition of a "business" or the acquisition of an individual asset or group of assets can involve discretionary judgments.
> Vonovia measures investment properties at fair value. If management had opted to use the acquisition costs model as permitted under IAS 40, the carrying amounts of the investment properties as well as the corresponding income and expense items in the income statement would differ significantly.
> The criteria for assessing in which category a financial asset is to be classified may involve discretionary judgments.
> Within the scope of revenue recognition in accordance with IFRS 15, discretionary decisions relating to the expected revenue, the total costs of a project and the degree of completion may be necessary. These have an impact on the amount and timing of revenue.
> When accounting for leases in accordance with IFRS 16, the assessment of the exercise or non-exercise of unilaterally granted termination or renewal options may involve discretionary judgment, particularly if there is no economic incentive for the exercise or non-exercise of options.
> The need to include information concerning the future in the valuation of expected defaults results in discretionary decisions regarding the impact that changes in economic factors will have on the expected defaults.
> The decision on how to define a group of cash-generating units to which goodwill is allocated may involve discretionary judgments.
> Allocating the goodwill to the group of individual cash-generating units may also involve discretionary judgments. The parameters used in the impairment test, such as the determination of undiscounted cash flows, the weighted average cost of capital and the growth rate, may also involve discretionary judgments. Due to a lack of any detailed definition of the term "operation" (IAS 36.86), the disposal of goodwill within the context of real estate sales may involve discretionary decisions.
> Defining a disposal group when selling properties can involve a discretionary decision. Due to a lack of any detailed definition of the term "a separate major line of business or geographical area of operations" (IFRS 5), classification as a discontinued operation may involve discretionary decisions. Assessing whether a sale is deemed to be highly probable within the space of a year can also involve a discretionary decision.
> At the moment, there are no definitive provisions on how to reflect a mandatory acquisition of non-controlling interests following the acquisition of control as part of a voluntary public takeover offer. In general, the acquisition of shares as part of a public offer during the second offer period is based on exactly the same conditions as those that applied in the first offer period, and the two acquisitions are closely related in terms of content and timing. This means that, even if it is executed in two offer periods, the acquisition constitutes one and the same transaction (linked transaction). Following the completion of the later acquisition, the original purchase price allocation is to be adjusted with retroactive effect from the acquisition date, resulting in a change in the consideration transferred, the fair value of net assets transferred and, consequently, the resulting goodwill.

9 Subsequent Events

On January 11, 2024, Vonovia issued a twelve-year bond worth GBP 400 million and with a coupon of 5.5%.

On January 24, 2024, Vonovia issued a five-year bond worth CHF 150 million and with a coupon of 2.565%.

With entry in the commercial register of Bochum on January 23, 2024, the cross-border merger of Vonovia Finance B.V., Amsterdam (entered in the Netherlands Chamber of Commerce under no. 58224416) was completed by absorption and backdated to January 1, 2024.

Section (B): Profit for the Period

Accounting Policies

Revenue from property management includes income from the rental of investment properties and assets held for sale, which is recognized, net of discounts, over the duration of the contracts when the remuneration is contractually fixed or can be reliably determined and collection of the related receivable is probable.

In Vonovia's financial statements, the corresponding income for all the services for **ancillary costs** performed by the end of the year is also recognized in the year in which the service is performed. This amount is recognized on a non-netted basis using the principal method, in particular due to Vonovia's business model, which provides for a large proportion of services relevant to ancillary costs being performed by Vonovia itself as Vonovia is considered by the tenant to be the primary party responsible for providing the service. For all services that it does not perform itself, Vonovia also bears an inventory risk due to the settlement method (based on rentable area), as is standard practice in the real estate sector.

In cases involving **property sales** and project developments for sale, the profit is recognized over time or at a specific point in time, depending on the contractual structure. As far as any remaining obligations are concerned, a provision is recognized for the probable risk.

Expenses are recognized when they arise or at the time they are incurred. Interest is recognized as income or expense in the period in which it is incurred using the effective interest method.

10 Revenue from Property Management

in € million	2022 (adjusted)	2023
Rental income	3,191.3	3,259.6
Ancillary costs	1,556.1	1,447.3
Revenue from property letting	**4,747.4**	**4,706.9**
Other revenue from property management	147.1	167.6
	4,894.5	**4,874.5**

11 Profit on the Disposal of Properties

in € million	2022	2023
Income from the disposal of properties	195.4	369.1
Carrying amount of properties sold	-126.2	-310.6
Profit from the disposal of investment properties	**69.2**	**58.5**
Income from the sale of assets held for sale	3,047.0	498.6
Retirement carrying amount of assets held for sale	-3,045.8	-497.4
Change in value from properties sold	68.0	18.4
Profit from the disposal of assets held for sale	**69.2**	**19.6**
	138.4	**78.1**

The fair value adjustment of residential properties held for sale, for which a purchase contract had been signed but for which transfer of title had not yet taken place as of December 31, 2023, led to a gain of € 18.4 million (2022: € 68.0 million).

In the previous year, the assets held for sale had been dominated primarily by the disposal of properties as part of the Berlin Deal (for more information, please refer to note → [D37] Assets and Liabilities Held for Sale in the 2022 Annual Report).

12 Profit on Disposal of Real Estate Inventories

Accounting Policies

Revenue from disposal of real estate inventories is realized either over time or at a specific point in time as soon as the customer obtains control over the asset in question. If, upon conclusion of the certified purchase agreement, control within the meaning of IFRS 15.35 (c) passes to the customer before or during the construction phase, the revenue is to be recognized as of this point in time based on the degree of completion of the construction project. Disclosure of the contract assets that fall within the scope of IFRS 15 occurs on a net basis with the corresponding advance payments received under trade receivables.

Contractual balances with an expected term of less than one year are not adjusted to reflect the time value of money.

No separate agreements are reached, in the contracts on the sale of apartments as part of the development business, on extraordinary rights of return or rescission, meaning that such rights are based on the relevant legal provisions. The same applies to warranty commitments, which are not to be treated as a separate contractual component within the meaning of IFRS 15 as a result. Existing warranty claims are always accounted for in line with the provisions of IAS 37.

In accordance with IFRS 15.94, costs for the initiation of the contracts with customers are recognized as an expense as soon as they are incurred, as the depreciation period generally would not amount to more than a year. The costs relate primarily to brokerage commission.

In cases involving **revenue recognition over time**, the percentage of completion/progress made has to be assessed. Vonovia uses the cost-to-cost method, as an input-based procedure, for this purpose. The progress made is determined based on the ratio of the capitalized contract costs incurred up until the reporting date to the estimated total contract costs that can be capitalized.

Revenue from the disposal of real estate inventories amounting to € 354.0 million (2022: € 588.4 million) comprises € 206.5 million (2022: € 407.6 million) in period-related revenue from the disposal of real estate inventories together with € 147.5 million (2022: € 180.8 million) in time-related revenue from the disposal of real estate inventories. As of the reporting date, contract assets of € 70.1 million (2022: € 169.2 million) are recognized within miscellaneous other assets in connection with the period-related revenue recognition. As of the reporting date, this amount includes advance payments received of € 76.4 million (2022: € 172.6 million). The previous year was dominated by the transfer of benefits and encumbrances for a project in Berlin in connection with the sale to an individual investor (global exit).

A transaction price of € 45.4 million (2022: € 93.3 million) is allocated to the remaining performance obligations that had not yet been satisfied (in full) at the end of the current reporting period. These amounts are expected to be recognized, affecting net income, within the next two fiscal years, with an amount of € 39.2 million attributable to 2024 and an amount of € 6.2 million to 2025.

13 Net Income from Fair Value Adjustment of Investment Properties

Investment properties are generally measured by the in-house valuation department according to the fair value model. The fair value for the nursing care properties are calculated by independent experts using a DCF method and are adjusted, where appropriate, based on findings from market observation and transactions. Any gains or losses from a change in fair value are recognized in the income statement affecting net income.

The measurement of the investment properties led to a valuation loss of € -10,651.2 million in the 2023 fiscal year (2022: € -1,177.6 million) (see → [D28] Investment Properties). This includes € -14.8 million (2022: € 22.6 million) for the measurement of right-of-use assets (IFRS 16).

The figure also includes the valuation result from buildings under construction (new construction/development to hold) that were completed during the reporting period and were moved to the Rental portfolio. A fair value measurement is performed for the first time when the properties are completed. This resulted in a valuation effect of € 14.2 million in the 2023 fiscal year (2022: € 90.8 million).

14 Capitalized Internal Expenses

Capitalized internal expenses in the fiscal year amount to € 470.4 million (2022: € 673.1 million) and mainly relate to the expenses of the Group's own craftsmen's organization contained in the capitalized modernization costs as well as the management costs for major modernization projects.

15 Cost of Materials

in € million	2022 (adjusted)	2023
Expenses for ancillary costs	1,568.0	1,385.5
Expenses for maintenance and modernization	722.4	533.4
Other cost of purchased goods and services	155.4	181.6
	2,445.8	**2,100.5**

16 Personnel Expenses

in € million	2022 (adjusted)	2023
Wages and salaries	591.0	628.2
Social security, pensions and other employee benefits	122.7	138.1
	713.7	**766.3**

The personnel expenses include expenses for severance payments in the amount of € 17.2 million (2022: € 11.5 million), allocations to the provisions for pre-retirement part-time work arrangements in the amount of € 13.5 million (2022: € 3.3 million) and expenses for the long-term incentive plan (LTIP) at € 4.5 million (2022: € -1.1 million) (see → **[E39] Provisions**).

In the fiscal year under review, employers' contributions to statutory pension insurance amounted to € 52.1 million (2022: € 51.3 million).

As of December 31, 2023, Vonovia had a workforce of 11,977 employees (December 31, 2022: 12,117). 3,474 employees were female as of December 31, 2023 (December 31, 2022: 3,220), and 8,503 were male (December 31, 2022: 8,897). The average figure for the year was 11,954 employees (2022: 12,077). Vonovia also employed 632 apprentices as of December 31, 2023 (December 31, 2022: 617).

17 Other Operating Income

in € million	2022 (adjusted)	2023
Compensation paid by insurance companies	87.2	90.9
Reversal of provisions	23.4	67.3
Compensation for damages and cost reimbursements	15.8	17.8
Income from previous years	9.1	7.2
Disposal of other property, plant and equipment	3.8	5.1
Dunning and debt collection fees	4.3	4.8
Miscellaneous	46.5	49.8
	190.1	**242.9**

18 Other Operating Expenses

in € million	2022 (adjusted)	2023
Consultants' and auditors' fees	84.8	100.7
Vehicle and traveling costs	38.4	39.6
Advertising costs	33.0	28.9
Communication costs and work equipment	27.4	25.5
Rents, leases and ground rents	19.5	23.1
Impairment losses on real estate inventories		21.6
Additions to provisions	7.8	19.7
Losses and reimbursements of ancillary costs	2.6	14.7
Administrative services	15.1	14.1
Non-capitalizable expenses from real estate development	13.1	13.0
Unrecognized insured losses	10.5	10.5
Other taxes	0.7	9.3
Expenses from previous years	5.1	7.8
Seminar fees	5.8	6.8
Other contribution and fees	5.1	6.6
Impairment losses on receivables	2.5	6.0
Sales incidentals	4.0	5.8
Costs of sale associated with real estate inventories	4.8	4.9
Legal and notary costs	2.4	3.7
Miscellaneous	97.9	71.7
	380.5	**434.0**

As the biggest item, miscellaneous included expenses for process adjustments and standardization as part of the integration of Deutsche Wohnen in the amount of € 21.4 million (2022: € 37.8 million), as well as a large number of smaller individual items.

19 Interest Income

in € million	2022 (adjusted)	2023
Income from non-current securities and non-current loans	50.1	60.6
Interest income from partial redemptions and repurchases of bonds	32.9	127.6
Interest received and similar income	5.5	22.9
Other interest and similar income	27.0	16.7
	115.5	**227.8**

The income from non-current securities and non-current loans relates primarily to income from loans extended to the QUARTERBACK Immobilien Group.

The interest income from partial repayments and buybacks of bonds corresponds, in the reporting year, to bonds with maturities starting in 2024 with a face value of around € 1.1 million.

Other interest and similar income in the reporting year includes income of € 0.3 million (2022: € 4.8 million) from the discounting of provisions.

20 Interest Expenses

in € million	2022 (adjusted)	2023
Interest expense from non-derivative financial liabilities	565.0	765.1
Swaps (current interest expense for the period)	10.7	-49.3
Effects from the valuation of non-derivative financial instruments	-77.8	-12.8
Effects from the valuation of swaps	-152.5	52.4
Capitalization of interest on borrowed capital re Development	-25.6	-0.6
Prepayment penalties and commitment interest	12.6	8.9
Interest accretion to provisions	11.3	22.3
Interest from leases	17.5	19.9
Other financial expenses	5.6	4.3
	366.8	**810.2**

The interest expenses mainly relate to interest expense on financial liabilities. The prepayment penalties include the fees for the unscheduled repayment of loans during the fixed interest period. The effects from the valuation of swaps reflect the opposing development in the interest rate environment in the reporting periods.

A reconciliation of net interest to net interest to be classified in accordance with IFRS 9 is shown in the following table:

in € million	2022 (adjusted)	2023
Interest income	115.5	227.8
Interest expense	-366.8	-810.2
Net interest	**-251.3**	**-582.4**
Less:		
Net interest from provisions for pensions in acc. with IAS 19	7.0	17.5
Net interest from other provisions in acc. with IAS 37	-0.6	4.5
Net interest from leases	17.5	19.9
Net interest to be classified	**-227.4**	**-540.5**

The net interest classified pursuant to IFRS 9 is as follows:

in € million	2022 (adjusted)	2023
Financial assets measured at (amortized) cost	110.7	227.5
Derivatives measured at FV through P&L	141.8	-3.1
Financial liabilities measured at (amortized) cost	-479.9	-764.9
Classification of net interest	**-227.4**	**-540.5**

21 Other Financial Result

in € million	2022 (adjusted)	2023
Income from other investments	21.2	22.1
Transaction costs	-1.4	-3.6
Purchase price liabilities from put options/rights to reimbursement	-9.3	37.9
Result from derivative valuation in connection with equity instruments	–	90.0
Miscellaneous other financial result	-0.2	3.3
	10.3	**149.7**

The income from investments includes financial income resulting from the deferred collection of profits from the investments in AVW GmbH & Co. KG, Hamburg, in the amount of € 14.4 million (2022: € 11.7 million) and WoWi Media GmbH & Co. KG, Hamburg, in the amount of € 1.1 million (2022: € 1.1 million), both in connection with housing-related services in the Value-add segment.

It also comprises financial income from investments in other residential real estate companies in the amount of € 5.8 million (2022: € 7.9 million).

Net income from the valuation of derivatives in connection with equity instruments can be attributed to the valuation of a call option that Vonovia received as part of the sale of a minority stake in the Südewo portfolio.

22 Income Taxes

Accounting Policies

Income taxes for the current and prior fiscal years are recognized as current income tax liabilities to the extent that they have not yet been paid. The current tax expense is determined on the basis of the taxable income for the fiscal year.

Deferred tax assets and liabilities are recognized using the liability method under the temporary concept, providing for all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax assets are only recognized for temporary differences and on loss carryforwards to the extent that there are deferred tax liabilities that can be netted against them – regarding deferred tax assets on loss carryforwards taking the minimum taxation into account – or, based on the predictable profits in the foreseeable future, it can be verified that they will be realized.

Deferred tax assets and liabilities are not recognized where the temporary difference arises from initial recognition of goodwill in connection with a business combination or the initial recognition (other than a business combination) of other assets and liabilities in a transaction that neither affects taxable income nor net income.

The carrying amount of a deferred tax asset is reviewed at each reporting date. If necessary, the carrying amount of the deferred tax asset is reduced to the extent that it is no longer offset by deferred tax liabilities that can be netted against it or that it is no longer probable that sufficient taxable profit will be available in the future.

Deferred taxes are measured at the tax rates that apply, or are expected to apply, to the period when the tax asset is realized or the liability is settled based on the current legislation in the countries in question. As in 2022, the combined tax rate of corporate income tax and trade tax of 33.1% was used to calculate domestic deferred taxes for 2023. The corporate income tax rate for the companies based in Austria is 23.0% based on the expectation announced for 2024, while the rate for companies based in Sweden is 20.6%.

Deferred tax assets and liabilities are netted against each other only if Vonovia has a legally enforceable right to set off the recognized amounts, when the same tax authority is involved and when the realization period is the same. In accordance with the regulations of IAS 12 "Income Taxes," deferred tax assets and liabilities are not discounted.

in € million	2022 (adjusted)	2023
Current income tax	191.0	228.8
Prior-year current income tax	-12.1	16.6
Deferred tax – temporary differences	-285.2	-2,959.3
Deferred tax – unutilized loss carryforwards	76.5	136.8
	-29.8	**-2,577.1**

For the 2023 fiscal year, the combined tax rate of corporate income tax and solidarity surcharge for domestic companies is 15.8% (2022: 15.8%). Including trade tax at a rate of about 17.3% (2022: 17.3%), the combined domestic tax rate is 33.1% in 2023 (2022:33.1%). The corporate income tax rate for the companies based in Austria is 24.0% (2022: 25.0%), while the rate for the companies in Sweden comes to 20.6% (2022: 20.6%). The income generated by Vonovia Finance B.V. is subject to Dutch tax law; current taxes of € 1.4 million (2022: € 2.4 million) were incurred there. The other companies that hold properties and are based in the Netherlands have limited corporation tax liability in Germany. These companies, together with the other foreign companies, pay tax that is of a negligible amount from the Group's perspective in the countries in which they are domiciled.

For deductible temporary differences (excl. loss carryforwards) in the amount of € 90.9 million (December 31, 2022: € 88.2 million), no deferred corporate income taxes or deferred trade taxes were recognized, because they are not likely to be used in the future.

As of December 31, 2023, there were corporate income tax loss carryforwards amounting to € 4,290.2 million (December 31, 2022: € 4,549.9 million), as well as trade tax loss carryforwards amounting to € 2,548.3 million (December 31, 2022: € 2,850.2 million), for which deferred tax assets have been recognized to the extent that their realization is sufficiently probable. As of December 31, 2023, there were corporate income tax loss carryforwards abroad amounting to € 348.1 million (December 31, 2022: € 435.6 million), as well as trade tax loss carryforwards amounting to € 14.4 million (2022: € 15.3 million), for which deferred tax assets have been recognized to the extent that their realization is sufficiently probable. The drop in tax loss carryforwards resulted from current tax gains at individual companies and the associated utilization of the loss carryforwards.

No deferred taxes were recognized in the balance sheet for domestic and foreign corporate income tax loss carryforwards amounting to € 1,461.5 million (December 31, 2022: € 1,342.7 million). Of this amount, € 25.9 million arose for the first time in the 2023 fiscal year (2022: € 23.4 million). Under current tax law, these loss carryforwards are not subject to restrictions either with regard to time or the amount of the loss carryforward. The fact that no deferred tax assets were recognized on the new corporate income tax loss carryforwards results in a tax effect of € 4.2 million (2022: € 3.7 million). In addition, there are further trade tax loss carryforwards subject to no restrictions with regard to how they can be carried forward in the amount of € 728.5 million in total (December 31, 2022: € 624.4 million). These did not give rise to any deferred tax assets. Of this amount, € 21.2 million arose for the first time in the 2023 fiscal year (2022: € 22.2 million) and the resulting tax effect is € 3.5 million (2022: € 3.7 million).

The remeasurement of deferred tax assets on temporary differences and loss carryforwards from the previous year led to tax expense amounting to € 31.6 million in the 2023 fiscal year (2022: income of € 8.2 million). The increase is mainly due to the remeasurement of the tax loss carryforward of a company that was included in a tax group for income tax purposes in 2023.

Deferred taxes on interest carryforwards are recognized if the interest carryforward is likely to be able to be used in the future. Due to the Group's capital structure, no interest carryforwards are likely to be able to be used in the future. As a result, no deferred tax assets have been recognized on domestic interest carryforwards in the amount of € 1,598.0 million (December 31, 2022: € 1,340.7 million). € 257.3 million of this amount arose for the first time in the reporting year (2022: € 223.9 million). The fact that no deferred tax assets were recognized on the new interest carryforward generated a tax effect of € 87.6 million in Germany (2022: € 71.4 million). Sweden has had a regulation similar to the German interest threshold since 2019. As a result, no deferred tax assets have been recognized on interest carryforwards in the amount of € 162.3 million in Sweden (2022: € 144.7 million). Of this amount, € 33.0 million (2022: € 32.7 million) arose for the first time in the reporting year. The fact that no deferred taxes were recognized generated a tax effect of € 6.8 million in Sweden (2022: € 6.7 million).

A reconciliation between disclosed effective income taxes and expected tax expense, which is the product of the accounting profit for the period multiplied by the average tax rate applicable in Germany, is shown in the table below.

in € million	2022	2023
Earnings before tax	-604.6	-9,185.2
Income tax rate in %	33.1	33.1
Expected tax expense	-200.1	-3,044.9
Trade tax effects	-1.6	170.8
Non-deductible operating expenses	149.6	236.5
Tax-free income	-42.4	-171.9
Change in the deferred tax assets on loss carryforwards and temporary differences	-8.2	31.6
New loss and interest carryforwards not recognized and utilization of interest carryforwards	22.3	102.1
Prior-year income tax and taxes on guaranteed dividends	-224.6	-20.2
Tax effect from goodwill impairment	316.3	45.9
Differing foreign tax rates	-38.4	89.3
Other tax effects (net)	-2.7	-16.3
Effective income taxes	**-29.8**	**-2,577.1**
Effective income tax rate in %	**4.9**	**28.1**

The deferred taxes refer to temporary differences in balance sheet items and unutilized loss carryforwards as follows:

in € million	Dec. 31, 2022	Dec. 31, 2023
Intangible assets	6.2	10.7
Investment properties	75.7	76.0
Inventories	142.0	116.3
Assets held for sale	0.0	5.9
Property, plant and equipment	42.3	8.3
Financial assets	6.0	2.5
Other assets	55.3	156.8
Provisions for pensions	65.4	64.3
Other provisions	45.3	55.0
Liabilities	242.4	268.1
Loss carryforwards	1,042.9	906.3
Deferred tax assets	**1,723.5**	**1,670.2**

in € million	Dec. 31, 2022	Dec. 31, 2023
Intangible assets	32.8	10.6
Investment properties	19,795.5	16,817.3
Inventories	61.1	136.5
Assets held for sale	34.9	58.3
Property, plant and equipment	48.1	9.1
Financial assets	5.1	54.5
Other assets	188.4	135.2
Provisions for pensions	2.9	0.5
Other provisions	78.0	15.4
Liabilities	49.5	59.6
Deferred tax liabilities	**20,296.3**	**17,297.0**
Excess deferred tax liabilities	**18,572.8**	**15,626.8**

Deferred tax assets and liabilities are netted against each other when the same company and the same tax authority are involved and the realization period is the same. As a result, the following deferred tax assets and liabilities are stated:

in € million	Dec. 31, 2022	Dec. 31, 2023
Deferred tax assets	39.6	86.4
Deferred tax liabilities	18,612.4	15,713.2
Excess deferred tax liabilities	**18,572.8**	**15,626.8**

The drop in deferred tax liabilities can be attributed primarily to investment properties.

The change in deferred taxes is as follows:

in € million	2022	2023
Excess deferred tax liabilities as of Jan. 1	18,674.1	18,572.8
Deferred tax expense in income statement	-208.7	-2,822.5
Deferred tax due to first-time consolidation and deconsolidation	156.5	0.2
Change in deferred taxes recognized in other comprehensive income due to equity instruments measured at fair value	-0.6	-0.8
Change in deferred taxes recognized in other comprehensive income on actuarial gains and losses from pensions and similar obligations	52.2	-10.6
Change in deferred taxes recognized in other comprehensive income on derivative financial instruments	19.8	-31.5
Balance sheet reclassification to assets and liabilities held for sale with regard to discontinued operations	–	-23.2
Deferred taxes recognized in the capital reserve on capital procurement costs of capital increases	0.1	-0.3
Currency translation differences	-77.1	-6.3
Reclassification to result from discontinued operations	-44.1	-51.3
Other	0.6	0.3
Excess deferred tax liabilities as of Dec. 31	**18,572.8**	**15,626.8**

No deferred tax liabilities are recognized for profits accumulated at subsidiaries of € 50,966.9 million (December 31, 2022: € 57,216.9 million), as these profits are to remain invested for an indefinite period or are not subject to taxation. In the event of distribution or disposal of the subsidiaries, 5% of the distributed amounts or the capital gains would be subject to German taxation so that there would normally be an additional tax obligation.

The BEPS (Base Erosion and Profit Shifting) Pillar 2 regulations (Minimum Tax Directive Implementation Act (MinBestRL-UmsG)) had already been transposed into German law (German Minimum Tax Act (MinStG)) by the balance sheet date, but had not yet entered into force. The Group falls within the scope of these regulations.

Vonovia carried out an initial indicative analysis as of the reporting date to identify the general impact of the legislation and the jurisdictions from which the Group is exposed to potential effects in connection with a Pillar 2 top-up tax.

The first step involved checking whether the CbCR (Country-by-Country Reporting) safe harbor regulations were relevant. If a country was not exempt from the Pillar 2 calculation based on a review of the safe harbor regulations, the effective tax rate was calculated on a simplified basis.

This initial indicative analysis did not identify any countries in connection with which Vonovia would be affected by a Pillar 2 top-up tax. As a result, Vonovia currently assumes that the Pillar 2 top-up tax does not apply. This means that the average effective Group tax rate would not have changed had the Pillar 2 legislation already been in force on the balance sheet date.

The Group monitors progress made in the legislative process in every country in which Vonovia operates.

Vonovia applies the exception provided for in IAS 12, based on which no deferred tax assets or liabilities are recognized in connection with OECD Pillar 2 income taxes and no disclosures are made in this regard either.

Section (C): Other Disclosures on the Results of Operations

23 Segment Reporting

Vonovia is an integrated residential real estate company with operations across Europe. The company's strategy is focused on sustainably increasing the value of the company. This is achieved by managing the company's own portfolio sustainably and with a view to enhancing its value, investing in existing residential properties in order to create value, building new residential buildings and selling individual apartments as well as by engaging in active portfolio management and offering property-related services. For the purposes of managing the company, we make a distinction between four segments **Rental, Value-add, Recurring Sales** and **Development at the end of 2023.** We also report the **Other** segment, which is not relevant from a corporate management perspective, in our segment reporting. This includes the sale, only as and when the right opportunities present themselves, of entire buildings or land (Non Core/Other) that are likely to have below-average development potential in terms of rent growth in the medium term and are located in areas that can be described as peripheral compared with Vonovia's overall portfolio and in view of future acquisitions. Ancillary costs are also reported under "Other."

The majority of the current Care segment, which is to be discontinued, is presented as a discontinued operation. As part of the strategic review of the Care business area, the management had already adopted a plan to sell the Care segment back in the 2021 fiscal year. Endeavors to sell the Care segment have since begun and it is expected to have been sold before December 2024. A small part of the Care segment, with a business volume of € 23.3 million in segment revenue, was transferred to the Rental segment. Specifically, this relates to rental income for 25 properties operated by third parties. The previous year's figures were adjusted accordingly.

The **Rental** segment combines all of the business activities that are aimed at the value-enhancing management of our own residential real estate. It includes our property management activities in Germany, Austria and Sweden. The consolidation of our property management activities in Germany, Austria and Sweden to form one single reporting segment is based on the similarities that we see in the property management business in these three countries. This applies to the way in which services are provided and the individual service processes that form part of the property management business as well as to the customers in the residential rental market and the type of customer acquisition used.

Overall, the residential rental market in all three countries is characterized by a shortage of housing and is regulated by statutory requirements, resulting in return expectations that are similar in the long term.

The **Value-add** segment bundles all of the housing-related services that we have expanded our core rental business to include. These services include both the maintenance and modernization work on our residential properties and services that are closely related to the rental business. We allocate the activities relating to the craftsmen's and residential environment organization, the condominium administration business, the cable TV business, metering services, energy supplies and our insurance services to the Value-add segment.

The **Recurring Sales** segment includes the regular and sustainable disposals of individual condominiums and single-family houses from our portfolio. The consolidation of our sales activities in Germany and Austria to form one single reporting segment is based on the similarities that we see in the property management business in these two countries. It does not include the sale of entire buildings or land (Non Core/Other). These properties are only sold as and when the right opportunities present themselves, meaning that the sales do not form part of the Recurring Sales segment. We report these opportunistic sales in the **Other** column of the segment report.

The **Development** segment combines cross-country development activities and includes the project development of new residential buildings. The consolidation of our development activities in Germany, Austria and Sweden to form one single reporting segment is based on the similarities that we see in the business in these three countries. The business covers the value chain starting with the purchase of land without any development plan/dedicated purpose and ending with the completion and sale of new buildings and new construction measures on our own properties. These properties are either incorporated into our own portfolio or sold to third parties.

In the previous years, the Adjusted EBITDA of the Development segment included the fair value step-up for properties that were completed in the reporting period and had been added to our own portfolio. At the end of the fourth quarter of 2023, the presentation of contributions to earnings made by the Development to hold sales channel was adjusted within the Development segment. Details are set out in the Notes under Adjustment to Prior-year Figures. In the future, all earnings contributions made by Development to hold will be recognized in the valuation results, i.e., outside of segment revenue and Adjusted EBITDA.

This brings the management approach into the IFRS standard governing the measurement of investment properties (IAS 40). The previous year's figures were adjusted accordingly.

Planning and controlling systems ensure that resources are efficiently allocated and their successful use is monitored on a regular basis. Reporting to the chief decision-makers and thus the assessment of economic performance as well as the allocation of resources are performed on the basis of this segmentation. Asset and liability items are not reported separately by segment. Internal reporting is based on the IFRS reporting standards in general.

As chief decision-makers of Vonovia, the Management Board members monitor the contribution made by the segments to the company's performance on the basis of the segment revenue as well as the Adjusted EBITDA.

The following table shows the segment information for the reporting period:

in € million	Rental	Value-add	Recurring Sales	Develop-ment	Segments total	Other*	Consolida-tion*	Group
Jan. 1–Dec. 31, 2023								
Segment revenue (continuing operations)**	**3,253.4**	**1,224.7**	**319.3**	**353.7**	**5,151.1**	**2,001.0**	**-1,055.9**	**6,096.2**
thereof external revenue	3,253.4	130.9	319.3	353.7	4,057.3	2,001.0	37.9	6,096.2
thereof internal revenue		1,093.8			1,093.8		-1,093.8	
Carrying amount of assets sold**			-258.9		-258.9	-552.8		
Revaluation from disposal of assets held for sale			19.5		19.5	5.2		
Expenses for maintenance	-426.2				-426.2			
Cost of Development to sell				-300.9	-300.9			
Operating expenses	-425.5	-1,119.2	-16.5	-39.6	-1,600.8	-80.1	1,073.6	
Ancillary costs						-1,385.5		
Adjusted EBITDA total (continuing operations)	**2,401.7**	**105.5**	**63.4**	**13.2**	**2,583.8**	**-12.2**	**17.7**	**2,589.3**
Non-recurring items								-147.9
Period adjustments from assets held for sale								-6.3
Income from investments/amortization in other real estate companies								5.8
Net income from fair value adjustments of investment properties								-10,651.2
Depreciation and amortization (incl. depreciation on financial assets)								-444.4
Net income from investments accounted for using the equity method								-75.7
Income from other investments								-22.1
Interest income								227.8
Interest expenses								-810.2
Other financial result								149.7
EBT								**-9,185.2**
Income taxes								**2,577.1**
Profit from continuing operations								**-6,608.1**
Profit from discontinued operations								-148.1
Profit for the period								**-6,756.2**

* The revenue for the Rental, Value-add, Recurring Sales and Development segments constitutes income that is regularly reported to the Management Board as the chief operating decision-maker and that reflects Vonovia's sustainable business. The revenue/costs in the "Other" and "Consolidation" columns are not part of the Management Board's segment management.
** Incl. cost of sold real estate inventories in the Recurring Sales segment.

in € million	Rental	Value-add	Recurring Sales	Develop-ment	Segments total	Other*	Consolida-tion*	Group
Jan. 1–Dec. 31, 2022 (adjusted)								
Segment revenue (continuing operations)**	3,186.7	1,272.0	543.4	564.1	5,566.2	4,282.8	-1,123.7	8,725.3
thereof external revenue	3,186.7	119.6	543.4	564.1	4,413.8	4,282.8	28.7	8,725.3
thereof internal revenue		1,152.4			1,152.4	–	-1,152.4	
Carrying amount of assets sold***			-471.1		-471.1	-2,721.4		
Revaluation from disposal of assets held for sale			79.5		79.5	40.8		
Expenses for maintenance	-443.9				-443.9			
Cost of Development to sell				-440.4	-440.4			
Operating expenses	-488.5	-1,145.3	-16.7	-33.7	-1,684.2	3.0	1,128.4	
Ancillary costs						-1,568.0		
Adjusted EBITDA total (continuing operations)**	2,254.3	126.7	135.1	90.0	2,606.1	37.2	4.7	2,648.0
Non-recurring items								-127.4
Period adjustments from assets held for sale								-52.3
Finance income from investments in other real estate companies								7.9
Net income from fair value adjustments of investment properties								-1,177.6
Depreciation and amortization (incl. depreciation on financial assets)								-1,204.3
Net income from investments accounted for using the equity method								-436.6
Income from other investments								-21.2
Interest income								115.5
Interest expenses								-366.9
Other financial result								10.3
EBT								**-604.6**
Income taxes								29.8
Profit from continuing operations								**-574.8**
Profit from discontinued operations								-94.6
Profit for the period								**-669.4**

* The revenue for the Rental, Value-add, Recurring Sales and Development segments constitutes income that is regularly reported to the Management Board as the chief operating decision-maker and that reflects Vonovia's sustainable business. The revenue/costs in the "Other" and "Consolidation" columns are not part of the Management Board's segment management.
** Previous year's values (2022) adjusted to current key figure and segment definition -> [A2] Adjustment to Prior-year Figures.
*** Incl. cost of sold real estate inventories in the Recurring Sales segment.

To show the development of operating performance and to ensure comparability with previous periods, we calculate adjusted EBITDA for each of our segments: Rental, Value-add, Recurring Sales and Development. The sum of these key figures produces the Group's Adjusted EBITDA Total (continuing operations).

The adjustments made include items that are not related to the period, items that recur irregularly and items that are atypical for business operation. The non-recurring items include the expenses for pre-retirement part-time work arrangements and severance payments, the development of new fields of business and business processes, acquisition projects including integration costs, research and development and expenses for refinancing and equity increases (where not treated as capital procurement costs).

In the 2023 fiscal year, the **non-recurring items** eliminated in the Adjusted EBITDA Total (continuing operations) came to € 147.9 million (2022: € 127.4 million). The change is mainly attributable to positive non-recurring items in the previous year, as well as higher expenses for pre-retirement part-time work arrangements and one-off effects linked to the Südewo transaction in the 2023 reporting period.

The following table gives a detailed list of the non-recurring items:

in € million	Jan. 1– Dec. 31, 2022**	Jan. 1– Dec. 31, 2023
Transactions*	113.1	70.0
Personnel matters	-3.1	35.1
Business model optimization	12.2	34.9
Research & development	4.2	6.8
Refinancing and equity measures	1.0	1.1
Total non-recurring items	**127.4**	**147.9**

* Including one-time expenses in connection with acquisitions, such as HR measures relating to the integration process and other follow-up costs.

** Previous year's values (2022) adjusted to current key figure and segment definition -> [A2] Adjustment to Prior-year Figures.

The breakdown of non-Group revenue from contracts with customers (pursuant to IFRS 15.114f.) and its allocation to the segments referred to above is as follows:

in € million	Rental	Value-add	Recurring Sales	Development	Other	Total
Jan. 1-Dec. 31, 2023						
Revenue from ancillary costs (IFRS 15)					1,169.3	1,169.3
Income from the disposal of real estate inventories			4.5	348.6	0.9	354.0
Other revenue from contracts with customers	37.3	129.5		0.8		167.6
Revenue from contracts with customers	**37.3**	**129.5**	**4.5**	**349.4**	**1,170.2**	**1,690.9**
thereof period-related				206.5		206.5
thereof time-related	37.3	129.5	4.5	142.9	1,170.2	1,484.4
Revenue from rental income (IFRS 16)	3,253.4	1.1		5.1		3,259.6
Revenue from ancillary costs (IFRS 16)**					278.0	278.0
Other revenue	**3,253.4**	**1.1**	**-**	**5.1**	**278.0**	**3,537.6**
Revenue	**3,290.7**	**130.6**	**4.5**	**354.5**	**1,448.2**	**5,228.5**
Jan. 1-Dec. 31, 2022 (adjusted)*						
Revenue from ancillary costs (IFRS 15)					1,334.5	1,334.5
Income from the disposal of real estate inventories			27.7	560.7		588.4
Other revenue from contracts with customers	27.8	118.4	-	0.8		147.0
Revenue from contracts with customers	**27.8**	**118.4**	**27.7**	**561.5**	**1,334.5**	**2,069.9**
thereof period-related				407.6		407.6
thereof time-related	27.8	118.4	27.7	153.9	1,334.5	1,662.3
Revenue from rental income (IFRS 16)	3,186.7	1.2		3.5		3,191.4
Revenue from ancillary costs (IFRS 16)*					221.6	221.6
Other revenue	**3,186.7**	**1.2**	**-**	**3.5**	**221.6**	**3,413.0**
Revenue	**3,214.5**	**119.6**	**27.7**	**565.0**	**1,556.1**	**5,482.9**

* According to current definition.
** Includes land tax and buildings insurance.

External revenue and non-current assets, excluding financial instruments, deferred taxes, post-employment benefits and rights under insurance contracts, are distributed among Vonovia's country of origin and other countries as follows. The revenue and the assets are allocated based on the registered office of the unit providing the service.

in € million	Revenue Jan. 1–Dec. 31, 2022*	Revenue Jan. 1–Dec. 31, 2023	Assets Dec. 31, 2022**	Assets Dec. 31, 2023
Germany	4,644.2	4,643.6	84,426.0	73,702.5
Austria***	474.4	236.6	3,512.8	3,148.9
Sweden	360.6	348.3	7,074.3	6,569.3
Other countries	3.7	0.0	0.2	0.0
Total	**5,482.9**	**5,228.5**	**95,013.3**	**83,420.7**

* Previous year's values (2022) adjusted to current key figure and segment definition -> [A2] Adjustment to Prior-year Figures.
** Previous year adjusted to exclude financial assets.
*** Revenue in Austria in 2022 incl. Global Exit (Gäblerstrasse).

24 Earnings per Share

Accounting Policies

The basic **earnings per share** are calculated by dividing the profit for the period attributable to the shareholders by the weighted average number of ordinary shares in circulation during the reporting period. The diluted earnings per share are obtained by adjusting the profit for the period and the number of outstanding shares on the basis of the assumption that convertible instruments will be converted, options or warrants will be exercised or ordinary shares will be issued under certain conditions. Potential ordinary shares will only be included in the calculation if the conversion into ordinary shares would reduce the earnings per share.

in € million	2022	2023
Profit for the period attributable to Vonovia's shareholders (in € million)	-643.8	-6,285.1
Weighted average number of shares	788,254,448	806,251,614
Earnings per share (basic and diluted) in €	**-0.82**	**-7.80**

At the end of the reporting period, no diluting financial instruments were in circulation. The basic earnings per share correspond to the diluted earnings per share.

25 Management Board's Proposal for the Appropriation of Profit

The Management Board and the Supervisory Board propose to the Annual General Meeting that, of the profit of Vonovia SE for the 2023 fiscal year of € 750,000,000.00, an amount of € 733,180,498.20 on the 814,644,998 shares of the share capital as of December 31, 2023 (corresponding to € 0.90 per share) be paid as a dividend to the shareholders, and that the remaining amount of € 16,819,501.80 be carried forward to the new account or be used for other dividends on shares carrying dividend rights at the time of the Annual General Meeting and which go beyond those as of December 31, 2023.

As in the previous fiscal years, including 2022, the dividend for the 2023 fiscal year, payable after the Annual General Meeting in May 2024, will again include the option of a non-cash dividend in shares, to the extent that the Management Board and the Supervisory Board consider this to be in the interests of the company and its shareholders.

Section (D): Assets

26 Intangible Assets

in € million	Concessions, industrial property rights, license and similar rights	Self-developed software	Customer relationships and non-competition clause	Trademark rights	Goodwill	Total
Cost						
As of Jan. 1, 2023	138.1	10.9	54.4	152.6	9,304.3	9,660.3
Additions	10.4	4.2				14.6
Disposals	-5.6					-5.6
Changes in value from currency translation					3.3	3.3
Transfers	-1.9		-0.8			-2.7
Transfer into discontinued operations	-5.2		-42.4	-86.0		-133.6
As of Dec. 31, 2023	135.8	15.1	11.2	66.6	9,307.6	9,536.3
Accumulated amortization						-
As of Jan. 1, 2023	107.6	7.7	25.1	86.0	7,774.4	8,000.8
Amortization in reporting year	13.5	2.4	0.1	66.6		82.6
Amortization in reporting year for discontinued operations	0.3		6.5			6.8
Impairment					138.2	138.2
Disposals	-5.4					-5.4
Changes in value from currency translation					3.3	3.3
Transfers	-2.7					-2.7
Transfer into discontinued operations	-4.2		-20.8	-86.0		-111.0
As of Dec. 31, 2023	109.1	10.1	10.9	66.6	7,915.9	8,112.6
Carrying amounts						-
As of Dec. 31, 2023	26.7	5.0	0.3	-	1,391.7	1,423.7
Cost						
As of Jan. 1, 2022	143.5	8.1	57.5	152.6	9,372.1	9,733.8
Additions	12.9	2.9				15.8
Disposals	-20.0		-3.1			-23.1
Changes in value from currency translation		-0.1			-67.8	-67.9
Transfers	1.7					1.7
As of Dec. 31, 2022	138.1	10.9	54.4	152.6	9,304.3	9,660.3
Accumulated amortization						-
As of Jan. 1, 2022	99.0	6.0	18.0	-	6,887.9	7,010.9
Amortization in reporting year	20.7	1.7	7.8	86.0		116.2
Impairment					954.3	954.3
Disposals	-13.0		-0.7			-13.7
Changes in value from currency translation					-67.8	-67.8
Transfers	0.9					0.9
As of Dec. 31, 2022	107.6	7.7	25.1	86.0	7,774.4	8,000.8
Carrying amounts						-
As of Dec. 31, 2022	30.5	3.2	29.3	66.6	1,529.9	1,659.5

Accounting Policies

Acquired other intangible assets are stated at amortized cost. **Internally generated other intangible assets** are stated at amortized cost provided that the requirements of IAS 38 for the capitalization of internally generated intangible assets are met. Acquired trademark rights that are identified have an indefinite useful life and are subject to regular impairment testing. All of Vonovia's miscellaneous other intangible assets have definite useful lives and are amortized on a straight-line basis over their estimated useful lives. Software and licenses are amortized on the basis of a useful life of three years.

In accordance with IAS 36 "Impairment of Assets," other intangible assets are tested for impairment whenever there is an indication of an impairment. Impairment testing is performed at least once a year. An impairment loss is recognized when an asset's recoverable amount is less than its carrying amount. If the recoverable amount cannot be determined for the individual asset, the impairment test is conducted on the cash generating unit (CGU) to which the asset belongs. Impairment losses are recognized as expenses in the income statement affecting net income.

An impairment loss recognized for prior periods is reversed if there has been a change in the estimates used to determine the asset's (or the CGU's) recoverable amount since the last impairment loss was recognized. The carrying amount of the asset (or the CGU) is increased to the newly estimated recoverable amount. The carrying amount is limited to the amount that would have been determined if no impairment loss had been recognized in prior years for the asset (or the CGU).

Customer Relationships and Similar Values

Customer relationships for activities in the Care segment with definite useful lives of between five and six years were allocated to the assets of the discontinued operations in the fiscal year under review.

The acquired "BUWOG" brand name for the development business was written off in full in the amount of € 66.6 million as part of an (ad hoc) impairment test conducted in the second quarter of 2023 for the Development segment. Information on the approach to impairment testing can be found in the subchapter → **"Goodwill"**.

Goodwill

Accounting Policies

Goodwill results from a business combination and is defined as the amount by which the total consideration for shares in a company or group of companies exceeds the pro rata net assets acquired. The net assets are the total of the identifiable assets acquired that are valued at fair value in accordance with IFRS 3 as well as the assumed liabilities and contingent liabilities.

Goodwill is not subject to amortization, but rather is subjected to impairment testing on an annual basis. It is also tested for impairment whenever events or circumstances indicating an impairment arise.

The impairment testing of goodwill is performed at the level of cash generating units (CGUs) or a group of CGUs. A CGU is the smallest group of assets which generates cash inflows that are largely independent of the cash inflows generated by other assets or other groups of assets. Goodwill purchased as part of a business combination is allocated to the CGUs or groups of CGUs that are expected to produce benefits resulting from the synergy effects of the combination.

At Vonovia, each property meets the requirements for classification as a CGU as a general rule. As part of operational management, these properties are grouped first of all to form geographically structured business units and then to form regional business areas. Since the regional business areas are the lowest level within the company at which goodwill is monitored for internal management purposes, the impairment test is performed at business area level and, as a result, in accordance with IAS 36.80 for a group of CGUs. The acquired assets are allocated to the business areas based on the geographical location of the properties. A further group of CGUs for which goodwill is monitored for internal management purposes relates to the Value-add Business segment. The third group of CGUs, to which goodwill was allocated and monitored for management purposes, relates to the Development segment. As a result of the acquisition of Deutsche Wohnen SE, the Care segment was added as a further CGU, which was also monitored for internal management purposes. The corresponding balance sheet items are presented as a discontinued operation and have been reclassified to the assets of discontinued operations.

The group of CGUs to which goodwill has been allocated are tested for impairment on a regular basis. This involves comparing the recoverable amount with the carrying amount of the group of CGUs. The recoverable amount of the group of CGUs is either its value in use or fair value less costs of sale, whichever is higher. When calculating the value in use, the estimated future cash flows are discounted to their cash value. Discount rates before tax are used that reflect the current market assessment of the interest rate effect and the specific risks associated with the regional business areas and the Value-add, Development and Care segments.

If goodwill has been allocated to a group of CGUs and its carrying amount exceeds the recoverable amount, the goodwill is to be written down in the amount of the difference in the first instance. Any need for impairment in excess of this amount is distributed among the other assets in the group of CGUs in proportion to their carrying amount. The individual fair value less costs to sell, value in use or zero must not be undercut in this regard.

Impairment losses that have been realized as part of the valuation of goodwill are not reversed in the following years.

Groups of Cash-Generating Units

in € million	Value-add segment	Development segment	Group
Goodwill as of Dec. 31, 2022	1,391.7	138.2	1,529.9
Impairment	–	-138.2	-138.2
Goodwill as of Dec. 31, 2023	1,391.7	0.0	1,391.7
Trademark rights as of Dec. 31, 2022	–	66.6	66.6
Impairment	–	-66.6	-66.6
Trademark rights as of Dec. 31, 2023	–	0.0	0.0

The carrying amount of goodwill came to € 1,391.7 million as of December 31, 2023. This means that goodwill has dropped by € 138.2 million compared with December 31, 2022. The change is due to the impairment of € 138.2 million in the second quarter of 2023 identified as part of the (ad hoc) impairment test performed in the second quarter of 2023. The increased cost of capital in the Development business area and adjusted cash flow planning in the Development business area to reflect the current market situation were classified as triggering events within the meaning of IAS 36. The impairment test conducted as of June 30, 2023, resulted in the goodwill for the Development business area of € 138.2 million being written off in full.

In addition, trademark rights in the Development business area classified as having an indefinite useful life in the amount of € 66.6 million were also written off in full. This led to an impairment of € 204.8 million in the second quarter of 2023 for goodwill and trademark rights.

In accordance with IAS 36.19, first the value in use was calculated based on the Management Board-approved detailed plan with a planning period of five years. This was derived from the five-year plan at Group level approved by the Management Board and acknowledged by the Supervisory Board. The assumptions used to calculate the value in use match the assumptions used for the purposes of the impairment test at the end of 2022.

The main parameters for calculating the value in use are the sustainable rate of increase, the average total cost of capital (WACC) and the expected cash flows.

Parameters for WACC Calculation for the Development Segment

	Dec. 31, 2022	Jun. 30, 2023
Risk-free interest rate in %	2.00	2.50
Market risk premium in %	7.00	7.00
Levered beta	0.92	0.90
Country-specific premium in %	0.12	0.19
WACC (before tax) in %	8.13	9.92

For the purposes of the regular annual impairment test on goodwill as of December 31, 2023, the five-year plan for the Value-add segment for the fiscal years from 2024 to 2028 was taken as a basis. This also forms part of the five-year plan for the Group as a whole as approved by the Management Board and acknowledged by the Supervisory Board. The plan is based on assessments regarding the development of the operating business areas in terms of future revenue, expenses and margins, and taking current market developments into account.

The regular annual impairment test was performed for the Value-add group of CGUs as of December 31, 2023. The value of the goodwill for the Value-add group of CGUs was ultimately confirmed. Developments in the Value-add segment are characterized primarily by the extension of existing business areas (craftsmen's organization, multimedia, management of residential property, smart metering, energy service, etc.). On the other hand, there is an increase in operating expenses, taking into account the rate of inflation. The development in these values is in line with past experiences of business model development.

The cash flows from the last detailed planning year were derived to calculate the perpetual annuity.

A constant growth rate of 1.0% was assumed for the Value-add group of CGUs.

The weighted average cost of capital before tax is based on the risk-free interest rate calculated as a three-month average using the Svensson method, a market risk premium and a levered beta. The levered beta and the equity ratios used are determined on the basis of a peer comparison. The main parameters are shown in the following table:

Parameters for WACC Calculation for the Value-add Segment

	Dec. 31, 2022	Dec. 31, 2023
Risk-free interest rate in %	2.00	2.75
Market risk premium in %	7.00	7.00
Levered beta	0.76	0.73
WACC (before tax) in %	6.10	7.12

An increase in the cost of capital would result in the following need for impairment:

	Value-add segment
Goodwill and trading rights as of Dec. 31, 2023 in € million	1,391.7
Headroom in € million	101.6
Impairment starts with an increase of the WACC in percentage points	0.18
Full impairment in the event of an increase in the WACC in %	8.51
Goodwill and trading rights as of Dec. 31, 2022 in € million	1,391.7
Headroom in € million	830.6
Impairment starts with an increase of the WACC in percentage points	1.19
Full impairment in the event of an increase in the WACC in %	10.18

In the event of a drop of 0.25 percentage points in the planned sustainable growth rate, there would be impairment losses of € 19.2 million in the Value-add segment.

In the previous year, a drop of 0.25 percentage points in the planned sustainable growth rate would not have resulted in any impairment losses in the Value-add segment.

27 Property, Plant and Equipment

in € million	Owner-occupied properties	Technical equipment, plant and machinery	Other equipment, fixtures, furniture and office equipment	Total
Cost				
As of Jan. 1, 2023	283.8	171.1	573.2	1,028.1
Additions	1.9	24.8	90.9	117.6
Capitalized modernization costs	1.6	19.7	0.4	21.7
Disposals	-10.4	-3.3	-49.4	-63.1
Transfer from investment properties	45.1	0.8	–	45.9
Transfer to investment properties	-48.5	–	–	-48.5
Other transfers	–	3.2	2.3	5.5
Transfer into discontinued operations	0.0	-9.9	-41.5	-51.4
As of Dec. 31, 2023	273.5	206.4	575.9	1,055.8
Accumulated depreciation				
As of Jan. 1, 2023	27.3	66.7	260.7	354.7
Depreciation in reporting year for continuing operations	4.4	14.9	75.0	94.3
Depreciation in reporting year for discontinued operations	0.0	0.8	1.7	2.5
Impairment	10.2	–	–	10.2
Reversal of impairments	-0.2	–	–	-0.2
Disposals	-5.7	-1.2	-32.2	-39.1
Other transfers	–	4.6	-3.8	0.8
Transfer into discontinued operations	0.0	-4.0	-18.5	-22.5
As of Dec. 31, 2023	36.0	81.8	282.9	400.7
Carrying amounts				
As of Dec. 31, 2023	237.5	124.6	293.0	655.1
Cost				
As of Jan. 1, 2022	273.3	83.7	590.9	947.9
Additions	4.1	23.1	113.0	140.2
Capitalized modernization costs	4.9	5.4	1.0	11.3
Disposals	-0.6	-2.6	-80.9	-84.1
Transfer from investment properties	31.5	–	–	31.5
Transfer to investment properties	-29.4	–	–	-29.4
Other transfers	–	61.7	-50.2	11.5
Revaluation from currency effects	–	-0.2	-0.6	-0.8
As of Dec. 31, 2022	283.8	171.1	573.2	1,028.1
Accumulated depreciation				
As of Jan. 1, 2022	21.9	39.5	232.4	293.8
Depreciation in reporting year	4.5	13.5	87.1	105.1
Impairment	1.6	–	–	1.6
Reversal of impairments	-0.2	–	–	-0.2
Disposals	-0.6	-0.9	-55.7	-57.2
Other transfers	–	14.7	-2.8	11.9
Revaluation from currency effects	0.1	-0.1	-0.3	-0.3
As of Dec. 31, 2022	27.3	66.7	260.7	354.7
Carrying amounts				
As of Dec. 31, 2022	256.5	104.4	312.5	673.4

Accounting Policies

Items of property, plant and equipment are carried at amortized cost less accumulated depreciation and are depreciated over their respective estimated useful lives on a straight-line basis. In accordance with IAS 36 "Impairment of Assets," impairment tests are performed whenever there is an indication of an impairment.

Subsequent costs of replacing part of an item of property, plant and equipment are capitalized provided it is probable that future economic benefits associated with the item will flow to Vonovia and the cost can be estimated reliably.

The properties used by the company itself are subject to depreciation over a term of 50 years, with fixtures, furniture and office equipment subject to depreciation over a period of 3–13 years and technical equipment, plant and machinery over a period of 5–20 years.

Carrying amounts of owner-occupied properties amounting to € 92.0 million as of December 31, 2023 (December 31, 2022: € 79.5 million) are encumbered with land charges in favor of various lenders.

28 Investment Properties

in € million	
As of Jan. 1, 2023	**92,300.1**
Additions	228.7
Capitalized modernization costs	820.5
Grants received	-66.0
Transfer to property, plant and equipment	-45.9
Transfer from property, plant and equipment	48.5
Transfer to down payments made	-1.6
Transfer from down payments made	161.9
Transfer from real estate inventories	649.8
Transfer to real estate inventories	-384.5
Transfer from assets held for sale	0.9
Transfer to assets held for sale	-740.4
Transfer to discontinued operations	-619.4
Other transfers	-14.2
Disposals	-319.5
Net income from fair value adjustments of investment properties	-10,844.2
Impairment of investment properties measured at cost	-68.4
Revaluation of assets held for sale	18.4
Revaluation from currency effects	-4.4
As of Dec. 31, 2023	**81,120.3**
As of Jan. 1, 2022	**94,100.1**
Additions	961.8
Capitalized modernization costs	1,248.9
Grants received	-12.1
Transfer to property, plant and equipment	-31.5
Transfer from property, plant and equipment	29.4
Transfer to down payments made	-417.2
Transfer from down payments made	105.0
Transfer from real estate inventories	143.3
Transfer to real estate inventories	-1,450.1
Transfer to assets held for sale	-416.5
Other transfers	-8.4
Disposals	-153.7
Net income from fair value adjustments of investment properties	-1,269.8
Revaluation of assets held for sale	68.0
Revaluation from currency effects	-597.1
As of Dec. 31, 2022	**92,300.1**

Accounting Policies

When Vonovia acquires properties, whether through a business combination or as part of a separate transaction, the intended use determines whether such properties are classified as investment properties or as owner-occupied properties.

Investment properties are properties that are held for the purpose of earning rental income or for capital appreciation or both and are not owner-occupied or held for sale in the ordinary course of business. Investment properties include undeveloped land, land and land rights including buildings and land with hereditary building rights of third parties. Investment properties also include right-of-use assets from rented, developed and undeveloped land (hereditary building rights) and from rented residential and commercial properties (interim leasing) within the meaning of IFRS 16 that are classified as investment properties.

Investment properties are initially measured at cost. Related transaction costs, such as fees for legal services or real estate transfer taxes, are included in the initial measurement. If properties are purchased as part of a business combination and if the transaction relates to a "business," then IFRS 3 applies as far as recognition is concerned. Transaction costs are recognized as an expense.

Following initial recognition, investment properties are measured at fair value. Any change therein is recognized as affecting net income in the income statement. If, during the land or project development phase, reliable measurement at fair value is not possible due to the lack of marketability and the lack of comparable transactions, recognition is at acquisition cost. In such cases, the cost model is continued until a reliable measurement can be carried out, but at the latest until the property in question is completed.

Investment properties are transferred to property, plant and equipment when there is a change in use evidenced by the commencement of owner-occupation. The properties' deemed cost for subsequent measurement corresponds to the fair value at the date of reclassification.

The values as of December 31, 2023, include assets of € 304.1 million (December 31, 2022: € 663.7 million) that are measured at cost, as their fair value cannot be reliably calculated on a continuing basis. In the reporting period, a need for impairment identified as part of the ad hoc goodwill impairment test resulted in impairment losses of € 47.6 million being recognized on these project developments. These were reported under depreciation and amortization losses.

The additions in the 2023 reporting year include € 291.2 million (2022: € 572.4 million) in production costs for new construction activities.

The total amount reported for investment properties as of December 31, 2023, includes right-of-use assets from recognized hereditary building rights and interim leasing arrangements in the amount of € 1,798.5 million (December 31, 2022: € 2,019.8 million). In this respect, we also refer to chapter → **[E44] Leases**.

The majority of € 1,798.0 million is attributable to right-of-use assets from hereditary building rights (December 31, 2022: € 2,016.8 million). This includes right-of-use assets amounting to € 124.1 million (December 31, 2022: € 97.3 million) relating to the Spree-Bellevue (Spree-Schlange) property in Berlin, which comprises the leasehold land and the rented properties. The properties have been leased from the fund company DB Immobilienfonds 11 Spree-Schlange von Quistorp KG until 2044. The lease agreement includes an obligation to pay compensation for loss of use as agreed by contract. At the end of 2028, each fund subscriber is entitled to return their share to the property fund at a fixed redemption price. If all of the fund investors make use of this option, Vonovia is obliged to acquire the properties at a fixed purchase price after deduction of borrowings. If more than 75% of the shares are returned in this way, Vonovia has a call option for the purchase of all fund shares.

For the investment properties encumbered with land charges in favor of various lenders, see chapter → **[E41] Non-derivative Financial Liabilities**.

Directly Attributable Operating Expenses

Rental income from investment properties amounted to € 3,259.6 million during the fiscal year (2022: € 3,191.4 million). Operating expenses directly relating to these properties amounted to € 395.3 million during the fiscal year (2022: € 415.5 million). These include expenses for maintenance, ancillary costs that cannot be passed on to the tenants, personnel expenses from the caretaker and craftsmen's organizations, and capitalized internal expenses from charges passed on from the internal craftsmen's organization. The capitalized internal expenses relate to the work performed by the Group's own craftsmen's organization and the management costs for major modernization projects.

Long-term Leases

Vonovia as a lessor has concluded long-term leases on commercial properties. These are non-cancelable leases. The minimum future lease receipts from these leases are due as follows:

in € million	Dec. 31, 2022	Dec. 31, 2023
Total minimum lease payments	95.6	167.4
Due within 1 year	29.3	49.0
Due in 1 to 5 years	59.9	104.6
Due after 5 years	6.4	13.8

Fair Values

Accounting Policies

The **fair values** of the portfolio of residential properties were determined on the basis of the International Valuation Standard Committee's definition of market value. Portfolio premiums and discounts, which can be observed when portfolios are sold in market transactions, were not included. Nor were time restrictions in the marketing of individual properties. Vonovia determines fair value in accordance with the requirements of IAS 40 in conjunction with IFRS 13.

Vonovia, in principle, measures its portfolio on the basis of the discounted cash flow (DCF) method. Under the DCF methodology, the expected future income and costs of a property are forecast over a detailed period of ten years and discounted to the date of valuation as the net present value. Due to the particular market situation in Austria and in order to reflect the extensive Austrian rent restrictions, a sales scenario involving the recurring sales of apartments is assumed for a subportfolio. In order to present these sales in the correct accounting period, the detailed period for the Austrian DCF model has been extended to 100 years.

The income in the DCF model mainly comprises expected rental income (current net rent excl. ancillary costs, current incl. rent in Sweden, market rents as well as their development) taking vacancy losses and also sales revenues for an Austrian subportfolio into account. The expected rental income is derived for each location from the latest rent indices and rent tables (including Value AG, IVD, the Austrian Economic Chambers [WKÖ]) as well as from studies on spatial prosperity (Federal Institute for Research on Building, Urban Affairs and Spatial Development [BBSR], Prognos, Value AG, the Federal Statistical Office of Germany, the Austrian statistical office, Statistik Austria, etc.). In Sweden, rents and rent increases are defined as part of negotiations with the Swedish tenants' association ("Hyresgästföreningen") and are reflected accordingly in the valuation model. The expected sales revenues in Austria are derived from historical sale prices as well as market data (e.g., WKÖ, EHL).

On the cost side, maintenance expenses and administrative costs are taken into account. In Germany, these are taken into account in accordance with the II. Berechnungsverordnung. The II. Berechnungsverordnung (BV) is the German Regulation on Calculations for Residential Buildings in accordance with the Second Housing Construction Law, which stipulates how economic viability calculations for homes are to be performed. These cost approaches are also transferred to the Austrian market. Further cost items are, for example, ground rents, non-allocable ancillary costs, rent losses and, in Austria, selling costs. In the Swedish valuation model, further expenses to be borne by the owner are also taken into account in the DCF model due to the inclusive rents that are a special feature of this market. All cost items are inflated in the reporting period. Modernization measures carried out in the housing stocks are factored in by decreasing the current maintenance expenses and adjusting market rents.

On this basis, the forecast cash flows are calculated on an annual basis and discounted to the date of valuation as the net present value. Furthermore, the terminal value of the property at the end of the ten-year period is determined using the expected stabilized net operating income and again discounted to the date of valuation as the net present value. The discount rate applied reflects the market situation, location, type of property, special property features (e.g., hereditary building rights, rent restrictions), the yield expectations of a potential investor and the risk associated with the forecast future cash flows of the property. The present value calculated in this way is reconciled to the market value by deducting standard market transaction costs, such as real estate transfer taxes, agent and notary costs. As the detailed period in the Austrian DCF model has been extended to 100 years in order to present the sales scenarios in the correct accounting period, no terminal value is applied here.

The commercial properties in the portfolio are mainly small commercial units for the supply of the local residential environment. Different cost approaches are used to those for residential properties, and discount rates were adjusted to reflect the market specifics.

The valuation is, in principle, performed on the basis of homogeneous valuation units. These meet the criteria of economically cohesive and comparable land and buildings. They include:

- Geographical location (identity of the microlocation and geographical proximity)
- Comparable types of use, building class, construction year class and condition of property
- Same property features such as rent restrictions, hereditary building rights and full or part ownership

The Vonovia portfolio also contains project developments, existing areas with construction potential and land areas with inheritable building rights granted, as well as nursing care facilities. Project developments for subsequent management within its own portfolio are measured using the cost approach until the construction work is complete – subject to a review of the values applied if triggering events occur. Once the construction work is complete, measurement is at fair value using the DCF procedure described above. Existing areas with construction potential are valued using a comparable method on the basis of the local standard land value evaluated. Deductions are taken into account in particular for the readiness for construction and potential use as well as for likelihood of development and the development situation. Inheritable building rights granted are valued in the same way as the property portfolio using a DCF method. The input parameters here are the duration and amount of ground rent and the value of the land. The right-of-use assets from leasehold contracts are recognized at their fair value. The fair value of the leasehold contracts corresponds to the present value of the standard market leasehold fee payments up until the end of the term of the hereditary building right in question. These are calculated based on the current amount of the ground rent. In order to calculate the present value, the leasehold fee payments are discounted using a property-specific interest rate.

Vonovia determines the fair values of its real estate portfolio in Germany, Sweden and Austria in its in-house valuation department on the basis of the methodology described above.

In addition to the internal valuation, Vonovia's real estate portfolio was also valued by the independent property appraisers CBRE GmbH, Jones Lang LaSalle SE and Savills Sweden AB. The market value resulting from the external report was consistent with the internal valuation result.

The fair value for the nursing care properties was calculated by the independent expert W&P Immobilienberatung GmbH using a DCF method.

The contractually fixed remuneration for the valuation report is not linked to the valuation results.

The real estate portfolio of Vonovia is to be found in the items investment properties, property, plant and equipment (owner-occupied properties), real estate inventories, contract assets and assets held for sale. The fair value of the portfolio comprising residential buildings, commercial properties, garages and parking spaces, project developments and undeveloped land, hereditary building rights granted and nursing care facilities was € 83,927.7 million as of December 31, 2023 (December 31, 2022: € 94,694.5 million). This corresponds to a net initial yield for the real estate portfolio of 2.8% (total portfolio including Sweden and Austria; December 31, 2022: 2.5%). For Germany, this results in an in-place rent multiplier of 25.1 for the portfolio (December 31, 2022: 29.2) and a fair value per m² of € 2,297 (December 31, 2022: € 2,590 per m²). The in-place rent multiplier and fair value for the Austrian portfolio come to 22.5 and € 1,612 per m² (December 31, 2022: 25.8 and

€ 1,742 per m²), with the figures for Sweden coming to 17.9 and € 2,088 per m² (December 31, 2022: 20.1 and € 2,248 per m²). We report the net rents excluding ancillary expenses, as well as other key indicators relevant to the valuation of our portfolio in the Portfolio Structure section of the management report, broken down by regional market.

The material valuation parameters for the investment properties (Level 3) in the real estate portfolio are as follows as of December 31, 2023, broken down by regional markets:

	Valuation results*		
Regional market	Fair value (in € million)	thereof investment properties (in € million)	thereof other asset classes (in € million)
Dec. 31, 2023			
Berlin	23,881.0	23,782.6	98.4
Rhine Main Area	6,610.7	6,587.0	23.7
Southern Ruhr Area	5,168.6	5,157.5	11.1
Rhineland	5,045.8	5,022.0	23.9
Dresden	5,031.5	4,902.7	128.9
Hamburg	3,229.2	3,221.0	8.2
Hanover	2,886.6	2,868.0	18.6
Kiel	2,774.6	2,759.5	15.1
Munich	2,743.7	2,736.8	6.9
Stuttgart	2,249.5	2,243.1	6.5
Northern Ruhr Area	2,044.6	2,038.7	6.0
Leipzig	1,890.6	1,863.4	27.2
Bremen	1,439.3	1,435.6	3.6
Westphalia	1,091.3	1,086.3	4.9
Freiburg	727.1	717.2	9.9
Other strategic locations	3,394.9	3,387.1	7.8
Total strategic locations	**70,209.1**	**69,808.4**	**400.6**
Non-strategic locations	409.0	390.8	18.2
Vonovia Germany	**70,618.1**	**70,199.3**	**418.9**
Vonovia Sweden**	6,402.5	6,402.5	0.0
Vonovia Austria**	2,771.6	2,724.3	47.2

* Fair value of the developed land excl. € 4,135.4 million for development, undeveloped land, inheritable building rights granted and other; € 1,343.1 million of this amount relates to investment properties. The investment properties balance sheet item also includes the present value in connection with payments for right-of-use assets in the amount of € 451.1 million.
** The valuation methods used for the portfolio in Austria and Sweden use and provide valuation parameters that are only partially comparable.

Valuation parameters for investment properties (Level 3)						
Management costs residential (€/residential unit p. a.)	Maintenance costs total residential (€/m² p. a.)	Market rent residential (€/m² per month)	Market rent increase residential	Stabilized vacancy rate residential	Discount rate total	Capitalized interest rate total
307	16.67	8.62	2.3%	0.9%	4.9%	2.8%
331	16.30	10.17	2.2%	1.2%	5.1%	3.2%
326	14.39	7.79	1.8%	2.6%	4.8%	3.3%
328	15.86	9.16	2.1%	1.7%	5.2%	3.4%
295	15.97	7.20	2.1%	2.2%	5.1%	3.3%
317	15.97	9.24	2.1%	1.2%	5.0%	3.2%
316	15.85	8.11	2.0%	2.0%	5.2%	3.5%
319	16.65	8.47	2.0%	1.6%	5.4%	3.7%
318	16.44	13.07	2.3%	0.6%	5.2%	3.1%
333	16.86	9.98	2.2%	1.3%	5.3%	3.4%
328	14.95	6.93	1.6%	3.2%	5.1%	3.9%
312	16.87	7.29	2.0%	2.7%	4.9%	3.2%
325	14.99	7.61	2.0%	2.0%	4.9%	3.2%
324	14.81	7.99	2.0%	2.0%	5.4%	3.7%
331	16.73	9.42	2.0%	0.9%	4.9%	3.1%
324	16.02	8.16	2.0%	2.5%	5.3%	3.6%
316	**16.05**	**8.53**	**2.1%**	**1.7%**	**5.0%**	**3.2%**
341	16.96	7.99	1.9%	2.2%	6.0%	4.2%
317	**16.06**	**8.53**	**2.1%**	**1.7%**	**5.1%**	**3.2%**
373	14.03	10.23	2.2%	1.6%	6.1%	4.0%
n.a.	21.04	6.32	1.7%	2.5%	6.1%	n.a.

Regional market	Valuation results* Fair value (in € million)	thereof investment properties (in € million)	thereof other asset classes (in € million)
Dec. 31, 2022			
Berlin	27,793.9	27,424.6	369.3
Rhine Main Area	7,545.4	7,452.2	93.2
Southern Ruhr Area	5,509.3	5,499.1	10.1
Rhineland	5,631.7	5,624.8	6.9
Dresden	5,769.2	5,730.4	38.9
Hamburg	3,653.7	3,648.7	5.0
Hanover	3,211.9	3,209.0	2.9
Kiel	3,137.3	3,132.0	5.3
Munich	3,062.1	3,047.6	14.5
Stuttgart	2,514.2	2,509.5	4.7
Northern Ruhr Area	2,227.0	2,219.7	7.4
Leipzig	2,161.3	2,160.0	1.3
Bremen	1,559.5	1,557.0	2.5
Westphalia	1,235.8	1,234.5	1.3
Freiburg	802.1	800.5	1.6
Other strategic locations	3,750.2	3,740.5	9.7
Total strategic locations	**79,564.5**	**78,990.1**	**574.4**
Non-strategic locations	504.6	496.5	8.1
Vonovia Germany	**80,069.1**	**79,486.6**	**582.5**
Vonovia Sweden**	6,876.3	6,876.3	-
Vonovia Austria**	3,026.5	2,972.0	54.6

* Fair value of the developed land excl. € 4,722.5 million for development, undeveloped land, inheritable building rights granted and other; € 2,502.2 million of this amount relates to investment properties. The investment properties balance sheet item also includes the present value in connection with payments for right-of-use assets in the amount of € 463.0 million.
** The valuation methods used for the portfolio in Austria and Sweden use and provide valuation parameters that are only partially comparable.

The inflation rate applied to the valuation procedure comes to 2.0%. For the Austrian portfolio, a sales strategy with an average selling price of € 2,426 per m² was assumed for 48.9% of the portfolio.

Net income from the valuation of investment properties amounted to € -10,651.2 million in the 2023 fiscal year (December 31, 2022: € -1,177.6 million).

Sensitivity Analyses

The sensitivity analyses performed on Vonovia's real estate portfolio show the impact of value drivers dependent upon market developments. Those influenced in particular are the market rents and their development, the amount of recognized administrative and maintenance expenses, cost increases, the vacancy rate and interest rates. The effect of possible fluctuations in these parameters is shown separately for each parameter according to regional market in the following.

Interactions between the parameters are possible but cannot be quantified owing to the complexity of the interrelationships. The vacancy and market rent parameters, for example, can influence each other. If rising demand for housing is not met by adequate supply developments, then this can result in lower vacancy rates and, at the same time, rising market rents. If, however, the rising demand is compensated for by a high vacancy reserve in the location in question, then the market rent level does not necessarily change.

Changes in the demand for housing can also impact the risk associated with the expected cash flows, which is then reflected in adjusted discounting and capitalized interest rates. The effects do not, however, necessarily have to have a favorable impact on each other, for example, if the changes in the demand for residential real estate are overshadowed by macroeconomic developments.

Valuation parameters for investment properties (Level 3)						
Management costs residential (€ per residential unit p. a.)	Maintenance costs total residential (€/m² p. a.)	Market rent residential (€/m² per month)	Market rent increase residential	Stabilized vacancy rate residential	Discount rate total	Capitalized interest rate total
287	15.92	8.24	2.0%	1.0%	4.1%	2.3%
311	15.74	9.92	1.9%	1.1%	4.4%	2.8%
305	13.74	7.43	1.6%	2.6%	4.2%	3.0%
308	15.21	8.89	1.8%	1.7%	4.5%	3.0%
276	15.29	6.93	1.8%	2.3%	4.3%	2.9%
297	15.45	8.95	1.7%	1.2%	4.2%	2.7%
296	15.27	7.87	1.7%	2.0%	4.4%	3.1%
299	15.92	8.06	1.7%	1.7%	4.5%	3.1%
298	15.63	12.45	2.0%	0.6%	4.4%	2.7%
312	16.03	9.67	1.9%	1.2%	4.6%	3.0%
307	14.35	6.73	1.3%	3.3%	4.4%	3.6%
292	16.26	7.07	1.7%	3.1%	4.1%	2.7%
304	14.38	7.42	1.8%	2.0%	4.3%	2.9%
303	14.31	7.72	1.7%	2.0%	4.5%	3.2%
309	16.58	9.03	1.7%	0.9%	4.2%	2.7%
303	15.44	7.91	1.7%	2.5%	4.5%	3.2%
296	**15.39**	**8.22**	**1.8%**	**1.7%**	**4.3%**	**2.7%**
323	16.11	7.64	1.6%	2.6%	5.0%	3.6%
296	**15.40**	**8.21**	**1.8%**	**1.7%**	**4.3%**	**2.7%**
379	12.83	9.78	2.1%	1.5%	5.6%	3.6%
n.a.	21.34	5.88	1.7%	2.6%	5.5%	n.a.

In addition, factors other than demand can have an impact on these parameters. Examples include changes in the portfolio, in seller and buyer behavior, political decisions and developments on the capital market. Due to the effect that changes in inflation will have on future rent increases in Sweden, it has been assumed, for the purposes of calculating sensitivities, that one-third of any change in inflation will spill over into rental growth.

The table below shows the percentage impact on values in the event of a change in the valuation parameters. The absolute impact on values is calculated by multiplying the percentage impact by the fair value of the investment properties.

	Change in value as a % under varying parameters		
	Management costs residential	Maintenance costs residential	Cost increase/inflation
Regional market	-10%/10%	-10%/10%	-0.5%/+0.5% points
Dec. 31, 2023			
Berlin	0.6/-0.6	1.9/-1.9	5.2/-5.3
Rhine Main Area	0.5/-0.5	1.6/-1.6	3.6/-3.7
Southern Ruhr Area	0.9/-0.9	2.4/-2.4	5.5/-5.5
Rhineland	0.6/-0.6	1.9/-1.9	4.1/-4.2
Dresden	0.8/-0.8	2.4/-2.4	5.4/-5.4
Hamburg	0.6/-0.6	1.8/-1.8	4.2/-4.3
Hanover	0.7/-0.7	2.2/-2.2	4.7/-4.8
Kiel	0.8/-0.8	2.2/-2.3	4.5/-4.6
Munich	0.4/-0.4	1.2/-1.2	3.2/-3.4
Stuttgart	0.6/-0.5	1.7/-1.7	3.5/-3.7
Northern Ruhr Area	1.2/-1.1	3.1/-3.1	5.9/-5.9
Leipzig	0.8/-0.8	2.7/-2.7	6.0/-6.0
Bremen	0.9/-0.9	2.4/-2.4	5.8/-5.8
Westphalia	0.8/-0.8	2.3/-2.3	4.8/-4.8
Freiburg	0.6/-0.6	1.9/-1.9	4.2/-4.3
Other strategic locations	0.8/-0.8	2.3/-2.3	4.6/-4.7
Total strategic locations	0.7/-0.7	2.0/-2.0	4.8/-4.9
Non-strategic locations	0.7/-0.7	2.2/-2.2	3.9/-4.0
Vonovia Germany	**0.7/-0.7**	**2.0/-2.0**	**4.8/-4.9**
Vonovia Sweden*	0.6/-0.6	1.7/-1.7	4.5/-4.8
Vonovia Austria*	n.a./n.a.	0.4/-0.4	0.3/-0.4

* The valuation methods used for the portfolio in Austria and Sweden use and provide valuation parameters that are only partially comparable.

Change in value as a % under varying parameters			
Market rent residential	Market rent increase residential	Stabilized vacancy rate residential	Discounting and capitalized interest rates total
-2%/+2%	-0.2%/+0.2% points	-1%/+1% points	-0.25%/+0.25% points
-2.4/2.4	-8.7/10.4	1.5/-1.8	10.3/-8.6
-2.4/2.3	-7.1/8.2	1.2/-1.6	8.6/-7.3
-2.6/2.6	-7.8/9.1	2.0/-2.0	8.5/-7.3
-2.4/2.4	-7.2/8.3	1.7/-1.7	8.4/-7.2
-2.6/2.5	-7.5/8.7	1.9/-1.9	8.5/-7.3
-2.4/2.3	-7.5/8.8	1.3/-1.7	9.0/-7.6
-2.5/2.5	-7.2/8.4	1.9/-1.9	8.1/-7.0
-2.5/2.5	-6.9/7.8	1.9/-1.9	7.5/-6.5
-2.1/2.1	-7.3/8.5	0.8/-1.5	9.5/-8.0
-2.4/2.4	-6.8/7.9	1.5/-1.6	8.1/-7.0
-2.8/2.8	-7.0/8.0	2.3/-2.3	7.0/-6.1
-2.5/2.5	-7.9/9.2	2.0/-2.0	8.8/-7.5
-2.5/2.5	-8.0/9.4	1.9/-2.0	8.8/-7.6
-2.4/2.4	-6.9/7.9	1.8/-1.9	7.4/-6.5
-2.5/2.4	-7.6/8.9	1.2/-1.7	8.9/-7.5
-2.6/2.5	-7.0/8.0	1.8/-1.9	7.7/-6.7
-2.4/2.4	**-7.8/9.1**	**1.6/-1.8**	**9.0/-7.6**
-2.3/2.3	-6.0/6.8	1.7/-1.7	6.9/-6.1
-2.4/2.4	**-7.8/9.1**	**1.6/-1.8**	**9.0/-7.6**
-2.8/2.8	-7.8/8.9	0.6/-1.1	7.1/-6.2
-0.5/0.4	-0.9/1.0	0.9/-1.0	4.0/-3.7

	Change in value as a % under varying parameters		
	Management costs residential	Maintenance costs residential	Cost increase/inflation
Regional market	-10%/10%	-10%/10%	-0.5%/+0.5% points
Dec. 31, 2022			
Berlin	0.7/-0.7	2.2/-2.2	6.5/-6.4
Rhine Main Area	0.6/-0.6	1.7/-1.7	4.1/-4.2
Southern Ruhr Area	1.0/-1.0	2.6/-2.6	6.2/-6.2
Rhineland	0.7/-0.7	2.0/-2.0	4.7/-4.8
Dresden	0.9/-0.9	2.7/-2.7	6.4/-6.3
Hamburg	0.7/-0.7	2.1/-2.1	5.2/-5.3
Hanover	0.8/-0.8	2.4/-2.4	5.4/-5.4
Kiel	0.9/-0.9	2.5/-2.5	5.5/-5.5
Munich	0.4/-0.4	1.4/-1.4	3.9/-4.0
Stuttgart	0.6/-0.6	1.8/-1.8	4.1/-4.2
Northern Ruhr Area	1.2/-1.2	3.4/-3.4	6.6/-6.6
Leipzig	0.9/-0.9	3.0/-3.0	7.4/-7.2
Bremen	0.9/-0.9	2.6/-2.6	6.6/-6.4
Westphalia	0.9/-0.9	2.6/-2.6	5.7/-5.8
Freiburg	0.7/-0.6	2.2/-2.2	5.1/-5.1
Other strategic locations	0.8/-0.8	2.5/-2.5	5.3/-5.3
Total strategic locations	0.7/-0.8	2.3/-2.3	5.7/-5.7
Non-strategic locations	0.8/-0.8	2.4/-2.4	4.7/-4.8
Vonovia Germany	**0.8/-0.8**	**2.3/-2.3**	**5.7/-5.7**
Vonovia Sweden*	0.7/-0.7	1.6/-1.7	4.7/-5.1
Vonovia Austria*	n.a.	0.4/-0.4	0.4/-0.5

* The valuation methods used for the portfolio in Austria and Sweden use and provide valuation parameters that are only partially comparable.

Contractual Obligations

In connection with major acquisitions, Vonovia entered into contractual obligations or assumed such obligations indirectly via acquired companies, among other things in the form of Social Charters, which could limit its ability to freely sell parts of its portfolio, increase rents or terminate existing rent agreements for certain units and which, in the event of a breach, could give rise to substantial contractual penalties in some cases.

In many cases, in the event that all or part of a portfolio is transferred or individual residential units are sold, the aforementioned obligations are to be assumed by the buyers, who are in turn subject to the obligation to pass them on to any future buyers. After a certain period of time, the obligations often cease to apply either in full or in part.

All contractual obligations that have a material impact on the market value were taken into account accordingly in the valuation.

Under financing agreements, Vonovia may be subject to fundamental restrictions regarding mandatory investments for maintenance or improvements, or on the use of excess property disposal proceeds, such restrictions being particularly in the form of mandatory minimum capital repayments.

Although the non-current financial liabilities are subject to certain covenants, Vonovia is not subject to any restrictions regarding how it can use its investment properties.

Excess cash from property management is restricted to a certain extent.

Change in value as a % under varying parameters			
Market rent residential	Market rent increase residential	Stabilized vacancy rate residential	Discounting and capitalized interest rates total
-2%/+2%	-0.2%/+0.2% points	-1%/+1% points	-0.25%/+0.25% points
-2.6/2.5	-10.3/12.7	1.6/-1.8	12.5/-10.1
-2.4/2.4	-8.0/9.5	1.0/-1.6	10.0/-8.3
-2.6/2.6	-8.6/10.2	2.1/-2.1	9.5/-8.0
-2.5/2.5	-8.1/9.5	1.7/-1.8	9.6/-8.1
-2.6/2.6	-8.6/10.2	1.9/-2.0	9.9/-8.3
-2.5/2.4	-8.7/10.6	1.3/-1.8	10.7/-8.8
-2.5/2.5	-8.0/9.4	1.9/-1.9	9.2/-7.8
-2.6/2.5	-7.9/9.3	1.9/-1.9	8.9/-7.6
-2.2/2.2	-8.4/10.1	0.8/-1.5	11.1/-9.1
-2.4/2.4	-7.8/9.1	1.5/-1.7	9.3/-7.9
-2.8/2.8	-7.7/8.9	2.3/-2.3	7.8/-6.7
-2.6/2.7	-9.1/11.1	2.0/-2.0	10.6/-8.8
-2.5/2.5	-8.7/10.4	2.0/-2.0	9.8/-8.2
-2.5/2.5	-7.9/9.3	1.9/-2.0	8.8/-7.5
-2.5/2.5	-8.6/10.3	1.2/-1.8	10.3/-8.5
-2.6/2.6	-7.8/9.1	1.9/-1.9	8.7/-7.5
-2.5/2.5	**-9.0/10.8**	**1.6/-1.9**	**10.7/-8.8**
-2.3/2.3	-6.7/7.8	1.7/-1.8	8.0/-6.9
-2.5/2.5	**-8.9/10.8**	**1.6/-1.9**	**10.6/-8.8**
-2.9/2.8	-8.8/10.2	0.6/-1.2	8.3/-7.1
-0.4/0.4	-1.0/1.1	0.9/-0.9	4.4/-4.0

29 Financial Assets

in € million	Dec. 31, 2022 non-current	Dec. 31, 2022 current	Dec. 31, 2023 non-current	Dec. 31, 2023 current
thereof due between 2 and 3 years	165.5	49.4	906.2	4.5
Loans to associated companies	109.7	672.1	149.5	664.8
Other current financial receivables from financial transactions	–	–	–	318.1
Other investments	396.1	–	317.3	–
Other non-current loans	11.5	44.1	21.6	18.1
Loans to other investments	33.1	–	38.0	–
Receivables from finance leases	21.1	2.6	13.4	2.3
Non-consolidated subsidiaries	2.5	–	4.4	–
Securities	5.5	–	5.9	–
	745.0	**768.2**	**1,456.3**	**1,007.8**

Accounting Policies

Financial assets are recognized in the balance sheet when Vonovia becomes a contracting party of the financial instrument. A financial asset is derecognized when the contractual rights to the cash flows from a financial asset expire, or the financial asset is transferred and Vonovia neither retains control nor retains material risks and rewards associated with ownership of the financial asset.

In accordance with IFRS 9, the **classification of financial assets** takes into account both the business model in which financial assets are held and the characteristics of the cash flows of the assets in question. These criteria determine whether the assets are measured at amortized cost using the effective interest method or at fair value.

With regard to the business model criterion, all financial investments at Vonovia are to be assigned to the "hold to collect" model pursuant to IFRS 9.4.1.2(a). Whenever financial investments are categorized as equity instruments, Vonovia has exercised the irrevocable option to state future changes to the fair value in other comprehensive income in equity. Gains and losses recognized in other comprehensive income are never reclassified from total equity to the income statement on their disposal.

The carrying amount of financial assets corresponds to maximum risk of loss as of the reporting date.

The increase in financial assets is due primarily to the initial recognition of two new derivatives in the form of long-term options to buy back shares. The first call option arose in the amount of € 374.0 million in connection with the sale of shares in the Südewo portfolio in the first half of 2023 and was adjusted to € 464.0 million, affecting net income, as of the reporting date. The second call option was added to this at the end of the year. It arose in the context of the sale of shares in the northern Germany portfolio and was recognized in the amount of € 374.0 million upon initial recognition.

In a sensitivity analysis, the WACC, as the main influencing factor, was changed by +0.5%/-0.5% for the call options, which would result in a change in equity affecting net income of € -97.0 million/€ +114.0 million. In addition, positive market values from interest rate derivatives in the amount of € 68.2 million (December 31, 2022: € 165.5 million) were reported under non-current derivatives.

The loans to associates relate exclusively to loan receivables from the QUARTERBACK Immobilien Group that are recognized after taking account of an expected credit loss. The loans were granted in line with standard market conditions. The change is due to loan repayments and, on the other hand, new loans taken out with a maturity of more than twelve months.

Other current financial receivables from financial transactions include time deposits and short-term financial investments in highly liquid money market funds that have an original term of more than three months.

Other investments comprise shares in Vesteda Residential Fund FGR, Amsterdam, in the amount of € 165.9 million (December 31, 2022: € 188.2 million) and shares in Gropyus AG, Vienna, in the amount of € 78.7 million (December 31, 2022: € 32.1 million). The investment in OPPCI JUNO, Paris, was sold in the first quarter of 2023.

The loans to other investments not yet due largely relate to a loan to the property fund DB Immobilienfonds 11 Spree-Schlange von Quistorp KG.

The receivables from finance leases are mainly due to the rental of certain broadband cable networks. There were receivables of € 15.7 million (December 31, 2022: € 23.7 million) and interest income of € 0.7 million on the reporting date (December 31, 2022: € 1.1 million). The debt maturity profile of the receivables is as follows:

in € million	Dec. 31, 2022	Dec. 31, 2023
Nominal value of outstanding lease payments	28.2	17.2
thereof due within one year	3.5	2.6
thereof due between 1 and 2 years	3.6	2.2
thereof due between 2 and 3 years	3.0	2.2
thereof due between 3 and 4 years	3.0	2.1
thereof due between 4 and 5 years	3.0	2.1
thereof due after more than 5 years	12.1	6.0
plus unguaranteed residual values	0.2	0.2
less unrealized financial income	-4.7	-1.7
Present value of outstanding lease payments	**23.7**	**15.7**

30 Financial Assets Accounted for Using the Equity Method

As of the reporting date, Vonovia held interests in 17 joint ventures and eleven associates (December 31, 2022: 26 joint ventures and eight associates).

The capital increase implemented at the Adler Group on April 29, 2023, means that Vonovia's stake in the Adler Group has fallen to 15.88%. As a result, Vonovia no longer has a significant influence and the interest was classified as an "other non-current equity investment."

Vonovia also holds 40% of the non-listed QUARTERBACK Immobilien AG with registered office in Leipzig, which was classed as an associate as of December 31, 2023. QUARTERBACK Immobilien AG is a project developer with operations throughout Germany focusing on the central German region. The investment strengthens Vonovia's development business.

Vonovia also holds interests in eleven (December 31, 2022: eleven) non-listed financial investments of QUARTERBACK Immobilien AG, with equity interests of between 44% and 50% (QUARTERBACK property companies), that were classified as joint ventures.

The 40% interest in the non-listed QUARTERBACK Immobilien AG and QUARTERBACK Immobilien AG's eleven non-listed financial investments was adjusted on the basis of the financial information as of December 31, 2023, that was available on the preparation cut-off date.

in € million	Dec. 31, 2022 QUARTER-BACK Immobilien AG	Dec. 31, 2023 QUARTER-BACK Immobilien AG	Dec. 31, 2022 QUARTER-BACK-Objektge-sellschaften	Dec. 31, 2023 QUARTERBACK-Objektge-sellschaften
Non-current assets	764.0	752.3	229.5	235.0
Current assets				
Cash and cash equivalents	104.9	90.1	21.1	16.1
Other current assets	1,510.3	1,494.5	589.3	480.3
Total non-current assets	1,615.2	1,584.6	610.4	496.4
Total non-current liabilities	841.6	595.7	86.6	139.1
Total current liabilities	1,186.2	1,537.1	510.3	409.0
Non-controlling interests	42.5	39.5	12.0	10.9
Equity (100%)	**308.9**	**164.6**	**231.0**	**172.3**
Group share in %	40%	40%	44% to 50%	44% to 50%
Group share of net assets	123.6	65.8	106.6	79.9
Group adjustments	-49.5	-51.3	-5.4	7.7
Carrying amount of share in joint venture	**74.1**	**14.5**	**101.2**	**87.6**
Revenues	311.1	427.5	59.0	101.6
Change in inventories	302.2	94.5	17.7	6.9
Interest income	20.6	6.0	8.4	7.8
Depreciation and amortization	-4.3	-6.1	-0.2	-0.2
Interest expenses	-78.2	-101.6	-23.2	-28.6
Income taxes	-18.1	37.9	-0.6	6.6
Total gain and comprehensive income for the fiscal year (100%)	**7.8**	**-147.4**	**-3.1**	**-58.6**

The at-equity adjustment of the investments in the QUARTERBACK Group results in a negative result of € 73.2 million as of December 31, 2023 (2022: € 8.5 million).

A regular impairment test was performed on the interest in QUARTERBACK Immobilien AG as of December 31, 2023. No further need for impairment arose.

In addition to these investments, Vonovia also holds interests in 16 (December 31, 2022: 21) other entities that are accounted for using the equity method and are currently of minor importance; quoted market prices are not available.

The further drop in the number of entities that are accounted for using the equity method is due, on the one hand, to the sale of the shares in B & O Service Berlin GmbH as of June 30, 2023, the sale of the shares in DWA Beteiligungs-gesellschaft mbH and KIWI.KI GmbH as of November 9, 2023, and the sale of the shares in Funk Schadensmanagement GmbH as of December 6, 2023. On the other hand, Vonovia purchased the remaining shares in Deutsche KIWI.KI GmbH. Following the increase in the stake in Deutsche KIWI.KI GmbH to 100% in the first half of 2023, the company was merged with Deutsche Wohnen Technology GmbH.

The following table shows, in aggregated form, the carrying amount and the share of profit and other comprehensive income of these companies:

in € million	Dec. 31, 2022	Dec. 31, 2023
Carrying amount of shares in companies accounted for using the equity method	64.8	55.8
Group share of net income from companies not accounted for using the equity method	10% to 50%	10% to 50%
Pro rata total comprehensive income	**-6.6**	**-2.5**

The interests were adjusted for these entities provided that corresponding financial information was available.

With regard to the other 17 entities, Vonovia has no significant financial obligations or guarantees with respect to joint ventures and associates.

31 Other Assets

	Dec. 31, 2022 (adjusted)		Dec. 31, 2023	
in € million	non-current	current	non-current	current
Advance payments for real estate projects	363.0	104.5	203.5	318.6
Right to reimbursement for transferred pensions	2.6	–	2.5	–
Receivables from insurance claims	1.6	29.3	1.5	63.2
Contract assets development	–	169.2	–	70.1
Contract assets relating to ancillary cost bills	–	114.3	–	46.2
Miscellaneous other assets	13.0	203.7	14.2	162.2
	380.2	**621.0**	**221.7**	**660.3**

The advance payments made for real estate projects include ongoing project developments by third parties (forward deals) in which the purchase price is paid in installments during the project development phase.

The right to reimbursement for transferred pensions is in connection with the indirect obligation shown under provisions for pensions arising from pension entitlements transferred to former affiliated companies of the Viterra Group.

The receivables from insurance claims include the recognition of the excess of the fair value of plan assets over the corresponding pension obligations amounting to € 1.5 million (December 31, 2022: € 1.6 million).

The contract assets from ancillary costs comprise the excess of ancillary cost payments made during the year and the payments made by tenants in advance before billing. The value in the 2022 fiscal year reflects the higher energy prices and the increase in other ancillary costs.

Miscellaneous other assets include the entitlement to the additional purchase price payment as part of the ongoing judicial review proceedings in connection with the control agreement concluded in 2014 between Deutsche Wohnen SE and GSW Immobilien AG in the amount of € 67.8 million (2022: € 66.0 million).

32 Income Tax Receivables

The income tax receivables disclosed relate to corporate income tax and trade tax receivables for the current fiscal year and prior years as well as capital gains tax.

The drop in the income tax receivables disclosed in the 2023 fiscal year can be traced back to the settlement of reimbursement claims by the tax authorities, in some cases in a far from insignificant amount, and to adjusted tax prepayments.

33 Inventories

Accounting Policies

Inventories are valued at cost or at their net realizable value, whichever is lower.

Inventories largely include repair materials for our craftsmen's organization.

34 Trade Receivables

The trade receivables break down as follows:

in € million	Impaired: Gross amount	Impaired: Impairment losses	Not impaired: Neither impaired nor past due at the end of the reporting period	Not impaired – Overdue in the following time bands as of the reporting date: less than 30 days	between 30 and 90 days	between 91 and 180 days	between 181 and 360 days	more than 360 days	Carrying amount: Corresponds to maximum risk of loss*
Receivables from the sale of investment properties	1.2	-1.2	309.0	15.0	1.1	1.2	–	1.0	327.3
Receivables from the sale of real estate inventories	–	–	117.6	0.1	0.5	0.6	1.3	1.4	121.5
Receivables from property letting	151.5	-52.5	–	–	–	–	–	–	99.0
Receivables from other supplies and services	25.3	-5.8	21.2	3.1	0.5	0.5	0.6	–	45.4
As of Dec. 31, 2023	**178.0**	**-59.5**	**447.8**	**18.2**	**2.1**	**2.3**	**1.9**	**2.4**	**593.2**
Receivables from the sale of investment properties	1.4	-1.3	33.1	10.2	2.5	0.8	0.5	–	47.2
Receivables from the sale of real estate inventories	–	–	18.2	0.1	4.8	3.8	0.3	0.3	27.5
Receivables from property letting	102.1	-57.2	–	–	–	–	–	–	44.9
Receivables from other supplies and services	9.5	-2.8	31.6	2.2	0.1	0.1	0.7	–	41.4
As of Dec. 31, 2022 (adjusted)	**113.0**	**-61.3**	**82.9**	**12.5**	**7.4**	**4.7**	**1.5**	**0.3**	**161.0**

* The maximum default risk on the receivables from the sale of properties is limited to the margin and the transaction unwinding costs as the title to the properties remains with Vonovia as security until receipt of payment.

Accounting Policies

Impairment losses on financial assets are determined based on the expected credit loss model. The guiding principle of the model is to reflect the general pattern of deterioration or improvement in the credit quality of financial instruments, taking losses that are already expected into account.

The IFRS 9 approach includes the following measurement levels:

> Level 1: Twelve-month expected credit losses (ECLs), which applies to all items (from initial recognition) as long as there is no significant deterioration in credit quality.
> Level 2: Lifetime ECLs (homogeneous debtor portfolios), which applies when a significant increase in credit risk has occurred on an individual or a collective basis of financial instruments.
> Level 3: Lifetime ECLs (based on an individual assessment): If an individual assessment of assets produces objective indications of a need for impairment, then an assessment of the entire maturity of the financial instrument is decisive.

The simplified impairment approach is used with regard to **trade receivables** (e. g., rent receivables, receivables from ancillary costs, receivables from the sale of properties) and for **contract assets** pursuant to IFRS 15. This means that there is no need to track the changes in credit risk. Instead, Vonovia has to set up loan loss provisions in the amount of the lifetime expected credit losses both at the time of initial recognition and on each following reporting date.

The carrying amounts of current trade receivables correspond to their fair values.

In principle, all impaired trade receivables are due and payable. As regards the trade receivables that are neither impaired nor past due, there was no indication on the reporting date that the debtors would not meet their payment obligations.

Receivables from the sale of properties arise on economic transfer of ownership. The due date of the receivable may, however, depend on the fulfillment of contractual obligations. Some purchase contracts provide for the purchase price to be deposited in an escrow account. Impairment losses for doubtful debts are recorded up to the amount of the posted proceeds from sales.

Vonovia's receivables from property letting generally arise at the beginning of the month, are of a short-term nature and result from claims in relation to tenants relating to operating business activities. Due to the (subsequent) measurement at amortized cost, an impairment test has to be performed. The receivables fall under the scope of the calculation of expected credit losses.

In accordance with the general provisions set out in IFRS 9, expected credit losses are to be recognized using the simplified approach for current trade receivables without any significant financing component.

Vonovia uses a credit loss matrix when calculating expected credit losses for trade receivables. The matrix is based on historical default rates and takes current expectations into account, including macroeconomic indicators (e.g., GDP). The matrix can be used to calculate the expected credit losses for various homogeneous portfolios.

In order to create portfolios for the purpose of assessing the probability of default, the individual clusters of receivables need to have homogeneous credit risk characteristics. As far as receivables from its operating business activities are concerned, i.e., the letting of rental properties, Vonovia makes a distinction between receivables from existing tenants and receivables from former tenants. Both portfolios include current receivables that are exposed to a low level of volatility, as the company's core operating business is hardly exposed to any major fluctuations.

Calculation Method for Receivables from Former Tenants
The calculation of the probability of default is based on the results of an analysis of the historical probability of default. Cash flows relating to outstanding receivables over the last three years have been analyzed and an average amount of incoming payments for the year in question was calculated on a monthly basis. The average monthly incoming payments were compared against the average monthly receivables for the year in question. Ultimately, Vonovia has been able to collect approx. 4.5% of the average receivables over the last three years. This means that Vonovia sets up risk provisions corresponding to a rounded total of 95% for its receivables from former tenants.

The loss given default comprises the following:

The receivables of former tenants that are being analyzed (amount of the receivable at the time of default) are corrected to reflect retained deposits that serve as security for Vonovia. This is already taken into account as part of the calculation method used for the probability of default.

The average receivables taken as a basis do not include receivables subject to specific valuation allowances that were written off in full.

Receivables from Existing Tenants
When it comes to determining the probability of default with regard to receivables associated with ongoing lease agreements, Vonovia analyzes those receivables that have actually been derecognized over the last three years.

This is performed systematically by way of a receivables management system according to the aspects receivables relating to ancillary expenses, those connected to the product, rent adjustments and payment difficulties.

Impairment losses on trade receivables developed as follows:

in € million	
Impairment losses as of Jan. 1, 2023	**61.3**
Addition	17.0
Utilization	-17.3
Reversal	-1.5
Impairment losses as of Dec. 31, 2023	**59.5**
Impairment losses as of Jan. 1, 2022	**60.2**
Addition	28.1
Utilization	-24.7
Reversal	-2.3
Impairment losses as of Dec. 31, 2022	**61.3**

Within the impairment losses on receivables from property letting, the risk provisions are generally taken into account as follows: For existing tenants, a risk provision corresponding to between 18% and 40% of the receivables, in a total amount of € 10.7 million (December 31, 2022: € 7.5 million), was set up depending on the term. In cases involving payment difficulties, the provision corresponded to between 40% and 95% of the receivables and amounted to € 9.7 million in total (December 31, 2022: € 18.2 million).
The risk provisions for former tenants correspond to 95% of the receivables and amount to € 32.1 million in total (December 31, 2022: € 31.5 million).

For contracts with customers who are assigned to Vonovia's development business, the payment terms pursuant to Section 3 (2) of the Real Estate Agent and Commercial Contractor Regulation (MaBV) generally apply in Germany. Customers also have a contractual obligation to present a financing commitment issued by a credit institution for the entire purchase price. Otherwise, Vonovia is entitled to withdraw from the agreement. In Austria, the installment plan pursuant to Section 10 (2) of the Austrian Property Development Contract Act (BTVG) is normally applied, with customers obliged to pay the entire purchase price into an escrow account. Due to the structure of the standard payment terms in the development business, no separate impairment losses are taken into account on corresponding receivables from customer contracts.

For example, receivables are derecognized if tenants die and have no heirs, if they move to an unknown location or move abroad, if execution is impossible for the court bailiff, in cases involving bankruptcy or if a settlement was reached.

The following table shows the expenses for the full derecognition of receivables as well as income from the receipt of derecognized receivables:

in € million	2022 (adjusted)	2023
Expenses for the derecognition of receivables	8.9	8.2
Income from the receipt of derecognized receivables	6.0	6.5

35 Cash and Cash Equivalents

Accounting Policies

Cash and cash equivalents include cash on hand, checks and deposits at banking institutions as well as marketable securities with an original term of up to three months.

Cash and cash equivalents are measured using the general impairment approach in accordance with IFRS 9.

Cash and cash equivalents include cash on hand, checks and deposits at banking institutions totaling € 1,374.4 million (December 31, 2022: € 1,101.8 million), as well as current securities in the previous year in the amount of € 200.6 million.

€ 415.8 million (December 31, 2022: € 104.1 million) of the bank balances are restricted with regard to their use.

36 Real Estate Inventories

Accounting Policies

Properties from the sales-related development business and land and buildings intended for sale are reported within real estate inventories. The **sales-related development business** refers to subsidized or independently financed condominiums that are under construction or have already been completed. These properties are not held with the aim of generating rental income or achieving increases in value within the meaning of IAS 40, but rather are developed and constructed to be sold at a later date. These development projects are recognized depending on whether there is a customer contract for the residential units that are intended for sale. If this is not the case, the valuation is performed, due to the intention to sell according to IAS 2 at amortized cost or at net realizable value, whichever is lower, with a corresponding disclosure under real estate inventories.

Recognized real estate inventories in the amount of € 1,957.7 million (December 31, 2022: € 2,156.3 million) concern development projects. These are projects to construct residential units planned for sale that are currently being built or that have been completed but have not yet been sold.

37 Assets and Liabilities Held for Sale and Discontinued Operations

Accounting Policies

Assets **held for sale** include those non-current assets that can, and are extremely likely to be, sold at standard conditions in their current state. A sale is deemed to be highly probable if there is a commitment to a plan to sell the asset, an active program to locate a buyer and complete the plan has been initiated, the asset is being actively marketed for sale at a reasonable price, and a sale is expected to be completed within one year of the date on which the asset is classified as held for sale.

This item not only includes individual non-current assets that are to be sold, but also groups of assets (disposal groups). Discontinued operations are reported separately as an item in their own right. In cases involving disposal groups and discontinued operations, all liabilities to be sold together with the corresponding assets as part of one and the same transaction are also reclassified to the items “Liabilities associated with assets classified as held for sale” or “Liabilities of discontinued operations.”

Vonovia accounts for investment properties as assets held for sale when notarized purchase contracts have been signed or a declaration of intent to purchase has been signed by both parties as of the reporting date but transfer of title will, under the contract, not take place until the subsequent reporting period. Initially they are recognized at the contractually agreed selling price and subsequently at fair value following deductions for costs to sell, if the latter is lower.

A **discontinued operation** refers to a scenario in which a separate major line of business or a geographical area of operations is classed as held for sale, or if a business activity is part of a single coordinated plan for such a sale. A line of business has to be distinct from the other activities for accounting purposes before it can be classified as a discontinued operation. The result from the discontinued operations are presented separately from the continuing operations in the consolidated income statement. The comparative year is restated as if the discontinued operation had been classified as such from the start of that year.

Assets Held for Sale

The assets held for sale include only properties for which notarized purchase contracts had already been signed as of the reporting date as part of Vonovia’s ordinary sales activities totaling € 313.1 million. The value as of December 31, 2022, was € 70.8 million.

Discontinued Operations

As part of the strategic review, the management decided to sell the Care segment. The sale process has begun and it is expected to have been concluded before December 2024. Accordingly, the majority of the Care segment is presented as discontinued operations.

Impairment Losses on the Disposal Group

At present, the management expects the group to be sold at the relevant carrying amounts.

As a result, the valuation of the disposal group at the lower of carrying amount and fair value less costs to sell has not produced any valuation effects.

As of December 31, 2023, the disposal group comprised the following assets and liabilities:

in € million	Dec. 31, 2023
Intangible assets	22.6
Property, plant and equipment	28.9
Investment properties	619.4
Other assets	40.3
Total non-current assets of discontinued operations	**711.2**
Inventories	0.9
Trade receivables	9.0
Other assets	2.0
Income tax receivables	2.6
Cash and cash equivalents	44.4
Total current assets of discontinued operations	**58.9**
Total assets of discontinued operations	**770.1**

in € million	Dec. 31, 2023
Provisions	30.7
Non-derivative financial liabilities	35.6
Lease liabilities	3.6
Deferred tax liabilities	23.2
Total non-current liabilities of discontinued operations	**93.1**
Provisions	1.0
Trade payables	11.2
Non-derivative financial liabilities	0.8
Lease liabilities	1.0
Current income taxes	11.4
Other liabilities	23.5
Total current liabilities of discontinued operations	**48.9**
Total liabilities of discontinued operations	**142.0**

The earnings contribution from discontinued operations is comprised as follows.

in € million	2022	2023
Revenue from property letting	0.5	0.6
Other revenue from property management	256.8	266.7
Revenue from property management	**257.3**	**267.3**
Net income from fair value adjustments of investment properties	-92.2	-193.3
Capitalized internal expenses	0.2	-
Cost of materials	-55.7	-55.4
Personnel expenses	-150.1	-164.3
Depreciation and amortization	-98.9	-53.9
Other operating income	28.7	27.3
Net income from the derecognition of financial assets measured at amortized cost	0.3	0.4
Other operating expenses	-17.0	-20.7
Interest expenses	-0.7	-1.2
Earnings before tax	**-128.1**	**-193.8**
Income taxes	33.5	45.7
Profit for the period from discontinued operations	**-94.6**	**-148.1**

As of December 31, 2023, Vonovia had 3,825 employees (December 31, 2022: 3,798) working in the business area belonging to the discontinued operations. 2,949 were female as of December 31, 2023 (December 31, 2022: 2,934) and 876 were male (December 31, 2022: 864). The average figure for the year was 3,869 employees (2022: 3,801). As of December 31, 2023, Vonovia had 385 apprentices (December 31, 2022: 305) working in the business area belonging to the discontinued operations.

Cumulative Income or Expenses Included in Other Comprehensive Income

Taking into account deferred tax effects, the cumulative result from the measurement of actuarial gains and losses in connection with the disposal group in the amount of € -12.8 million is included in other comprehensive income. € 1.1 million of the gains and losses are attributable to Vonovia's shareholders and € 0.2 million to non-controlling shareholders.

Earnings per Share

The earnings per share attributable to the profit for the period of the discontinued operations came to € -0.16 (2022: € -0.10) for the 2023 fiscal year. Due to the small amount of cumulative income and expenses included in other comprehensive income, this also matches the earnings per share for total comprehensive income.

Cash Flows from the Discontinued Operation

Key Data from the Statement of Cash Flows

in € million	2022	2023
Cash flow from operating activities	62.3	57.1
Cash flow from investing activities	-41.3	-43.2
Cash flow from financing activities	-10.7	-11.1
Net changes in cash and cash equivalents of discontinued operations	10.3	2.8
Cash and cash equivalents at the beginning of the period	**31.3**	**41.6**
Cash and cash equivalents at the end of the period of discontinued operations	**41.6**	**44.4**

Section (E): Capital Structure

38 Total Equity

Accounting Policies

Other comprehensive income includes changes in total comprehensive income not affecting net income except that resulting from capital transactions with equity holders (e.g., capital increases or dividend distributions). Vonovia includes under this item unrealized gains and losses from the fair value measurement of equity instruments and derivative financial instruments that are designated as cash flow hedges. The item also includes actuarial gains and losses from defined benefit pension commitments as well as certain currency translation differences.

The other reserves contain cumulative changes in equity not affecting income. At Vonovia, the effective portion of the net change in the fair value of cash flow hedging instruments, the equity instruments at fair value as well as currency translation differences are recognized in other comprehensive income.

The other reserves from cash flow hedges and from currency translation differences can be reclassified. When the underlying hedged item of the cash flow hedge affects net income, the reserves attributable thereto are reclassified to profit or loss. If a foreign business is disposed of, the reserves attributable thereto are reclassified.

Development of the Subscribed Capital

in €	
As of Jan. 1, 2023	**795,849,997.00**
Capital increase against non-cash contributions on June 13, 2023 (scrip dividend)	18,795,001.00
As of Dec. 31, 2023	**814,644,998.00**

Development of the Capital Reserves

in €	
As of Jan. 1, 2023	**5,151,544,376.12**
Premium from capital increase for scrip dividend on June 13, 2023	284,744,265.15
Transaction costs on the issue of new shares (after allowing for deferred taxes)	-572,376.86
Withdrawal from capital reserve	-2,754,094,202.92
Other changes not affecting net income	-383,429.66
As of Dec. 31, 2023	**2,681,238,631.83**

Dividend

The Annual General Meeting held on May 17, 2023, resolved to pay a dividend for the 2022 fiscal year in the amount of € 0.85 per share, or € 676,472,497.45 in total.

As in previous years, shareholders were offered the option of choosing between being paid the dividend in cash or being granted new shares. During the subscription period, shareholders holding a total of 44.87% of the shares carrying dividend rights opted for the scrip dividend instead of the cash dividend. As a result, 18,795,001 new shares were issued using the company's authorized capital pursuant to Section 5.1 of the Articles of Association ("2022 authorized capital") at a subscription price of € 16.15, i.e., a total amount of € 303,539,266.15. The total amount of the dividend distributed in cash therefore came to € 372,933,231.30.

Authorized Capital

After being used in connection with the capital increase in 2023, the 2022 authorized capital fell by € 18,795,001.00 from € 233,000,000.00 to € 214,204,999.00 as of December 31, 2023. Shareholder subscription rights for the 2022 authorized capital can be excluded.

Retained Earnings

Retained earnings of € 19,751.0 million (December 31, 2022: € 25,605.1 million) were reported as of December 31, 2023. This figure includes actuarial gains and losses of € -3.4 million (December 31, 2022: € 22.7 million), which cannot be reclassified and therefore may no longer be recognized in profit or loss in subsequent reporting periods.

Other Reserves

Changes in other comprehensive income during the period in the amount of € -120.3 million (2022: € -359.8 million) are mainly the result of the development of cash flow hedges in the amount of € -93.0 million(2022: € 54.0 million).

Non-controlling Interests

Shares of third parties in Group companies are recognized under non-controlling interests.

On May 31, 2023, Vonovia sold shares of 34.5%, or calculated approximately 27.6%, in a selected portfolio to Apollo Capital Management L.P. for € 986.8 million (Südewo transaction). This resulted in the addition of non-controlling interests of € 760.4 million. The corresponding difference increased the company's retained earnings by € 226.4 million.

A call option that Vonovia can exercise to buy the shares back was agreed as part of the transaction. The initial measurement as of the transaction date produced a market value of € 374.0 million. As this option was agreed as part of the transaction, it was also recognized outside profit or loss in retained earnings upon initial recognition.

Directly attributable transaction costs associated with the Südewo transaction in the amount of € 30.1 million were recognized under retained earnings, not affecting net income.

On December 31, 2023, Vonovia sold shares of 30.12%, or calculated approximately 25.0%, in a selected portfolio to Apollo Capital Management L.P. for € 1,000.0 million (northern Germany transaction). This resulted in the addition of non-controlling interests of € 821.5 million. The corresponding difference increased the company's retained earnings by € 178.5 million.

A call option that Vonovia can exercise to buy the shares back was agreed as part of the transaction. The initial measurement as of the transaction date produced a market value of € 374.0 million. As this option was agreed as part of the transaction, it was also recognized outside profit or loss in retained earnings upon initial recognition.

Directly attributable transaction costs associated with the northern Germany transaction in the amount of € 45.4 million were recognized under retained earnings, not affecting net income.

Non-controlling interests rose by € 1,154.7 million in the 2023 fiscal year, from € 3,107.3 million as of January 1, 2023, to € 4,262.0 million as of December 31, 2023. This increase is primarily attributable to the sale of shares to Apollo Capital Management L.P. and, with the opposite effect, to the profit for the period attributable to non-controlling interests.

The combined subgroup financial information, prepared in accordance with Vonovia's accounting policies, for the Deutsche Wohnen Group as a major subsidiary with non-controlling interests and its registered headquarters in Berlin is as follows:

in € million	Dec. 31, 2022 Deutsche Wohnen Group (adjusted)	Dec. 31, 2023 Deutsche Wohnen Group
Revenue	1,307.3	1,410.0
Profit for the period	-424.8	-2,526.8
attributale to non-controlling interests	-59.2	-361.7
Other comprehensive income	21.5	-5.8
attributale to non-controlling interests	2.3	-0.8
Total non-current assets	28,151.7	23,749.7
Total current assets	2,394.7	3,082.5
thereof cash and cash equivalents	184.3	157.1
Total non-current liabilities	14,584.5	12,987.6
Total current liabilities	44.2	419.2
Total equity	**15,917.7**	**13,425.4**
Cash flow from operating activities	364.9	384.8
Cash flow from investing activities	5.2	291.3
Cash flow from financing activities	-862.5	658.9
Net changes in cash and cash equivalents of discontinued operations	–	44.4
Net changes in cash and cash equivalents	-492.4	17.2
Dividend	0.04	0.04

39 Provisions

in € million	Dec. 31, 2022 (adjusted) non-current	Dec. 31, 2022 (adjusted) current	Dec. 31, 2023 non-current	Dec. 31, 2023 current
Provisions for pensions and similar obligations	**512.5**	**–**	**512.4**	**–**
Other provisions for taxes (excl. deferred taxes)	**–**	**49.6**	**–**	**32.9**
Other provisions				
Environmental remediation	25.0	–	14.4	–
Personnel obligations	24.2	14.7	45.4	17.0
Miscellaneous other provisions	94.0	173.7	34.7	153.0
Total other provisions	**143.2**	**188.4**	**94.5**	**170.0**
Total provisions	**655.7**	**238.0**	**606.9**	**202.9**

Provisions for Pensions and Similar Obligations

Accounting Policies

When valuing the provisions for pensions, the company pension obligations are determined using the projected unit credit method pursuant to IAS 19 "Employee Benefits," whereby current pensions and vested pension rights as of the reporting date as well as expected future increases in salaries and pensions, are included in the valuation. An actuarial valuation is performed at every reporting date.

The amount shown in the balance sheet is the total present value of the defined benefit obligations (DBO) after offsetting against the fair value of plan assets.

Actuarial gains and losses are accounted for in full in the period in which they occur and recognized in retained earnings as a component of other comprehensive income and not in profit or loss. The actuarial gains and losses are also no longer recognized affecting net income in subsequent periods.

Service cost is shown in personnel expenses. The service cost is the increase in the present value of a defined benefit obligation resulting from employee service in the reporting period.

The interest expense is recognized in the financial result. Interest expense is the increase during a period in the present value of a defined benefit obligation that generally arises due to the fact that the benefit obligation is one period closer to being discharged.

Reinsurance contracts that qualify as plan assets have been taken out to cover the pension obligations toward particular individuals. Where the value of those reinsurance contracts exceeds the related pension obligations, the excess is recognized as an asset and shown under other assets.

Obligations from joint defined benefit multi-employer plans at Versorgungsanstalt des Bundes und der Länder (VBL), a pension institution of the Federal Republic of Germany and the Federal States, are stated, in line with IAS 19.34, in the same way as obligations from defined contribution plans. The data and information required for recognition as defined benefit plans for accounting purposes are not available (in particular information on the individual vested rights and the plan assets assigned to the member company), meaning that the plan is treated as a defined contribution plan in line with IAS 19.34.

Vonovia has pension obligations towards various employees which are based on the length of service.

Vonovia pays contributions to state pension insurance providers under defined contribution pension systems based on statutory provisions. The current contribution payments are reported as social security contributions under personnel expenses in the amount of € 52.1 million (2022: € 51.3 million).

Defined benefit and defined contribution obligations – for which Vonovia guarantees a certain level of benefit – are financed through provisions for pensions. Vonovia has taken out reinsurance contracts for individual people.

Generally, they are pension benefits that depend on the final salary with percentage increases depending on the number of years of service.

The pension commitments cover 6,524 (December 31, 2022: 7,657) vested rights. The increase results mainly from first-time inclusion of the participants in the deferred compensation scheme that was newly agreed in 2021 in the pension valuation.

The new "BAV 2021" deferred compensation scheme applies as standard for all defined employee groups within the Vonovia Group in Germany (current number of participants: 1,482). In addition to deferred compensation, the employer subsidies (matching contributions) are also contributed to the new employee retirement benefit plan. The matching contributions made in each case correspond to the amount of the deferred compensation contribution made, and are limited to 1% of the employee's monthly gross basic salary.

Executives currently working for companies belonging to Vonovia have the opportunity to participate in the "Pension Instead of Cash Remuneration" model (Versorgungsbezüge anstelle von Barbezügen) (eligible persons: 1,790, including persons no longer active). Retirement, invalidity and surviving dependent benefits in the form of a lifelong pension are offered under this deferred compensation model. The retirement benefits can also be paid out as a one-time capital sum.

Overview of the most important basic data for existing pension plans (all of which have already been closed):

	VO 1/VO 2 Veba Immobilien	VO 60/VO 91 Eisenbahnges.	Bochumer Verband
Type of benefit	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits
Pensionable remuneration	Final salary	Final salary	Not applicable
Max. pension level	Yes	Yes	Depends on individual grouping
Total pension model based on final salary	Yes	No	No
Net benefit limit incl. state pension	None	Yes	None
Gross benefit limit	Yes	None	None
Adjustment of pensions	Section 16 (1, 2) BetrAVG	Section 16 (1, 2) BetrAVG	Adjustment every 3 years by Bochumer Verband (Management Board resolution)
Supplementary periods	Age of 55	Age of 55	Age of 55 (half)
Legal basis	Works agreement	Works agreement	Commitment to executives in individual contracts
Number of eligible persons	336	706	350

	VO 1991/VO 2002 Gagfah	VO guideline Gagfah M	VO 2017 VBL-Ersatzversorgung
Type of benefit	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits
Pensionable remuneration	Salary for September of each year	Final salary	Salary of each year
Max. pension level	Module p.a.	Yes	Module p.a.
Total pension model based on final salary	No	Yes	No
Net benefit limit incl. state pension	None	None	None
Gross benefit limit	None	Yes	None
Adjustment of pensions	1% p.a.	Section 16 (1, 2) BetrAVG	1% p.a.
Supplementary periods	Age of 55	Age of 55	None
Legal basis	Works agreement	Works agreement	Individual agreement
Number of eligible persons	1,100	323	116

The current pensions according to the classic pension benefit regulations of Bochumer Verband are adjusted in line with Section 20 of those regulations. Section 20 is a rule which is based on Section 16 (1,2) of the German Occupational Pensions Improvement Act (BetrAVG) but which, according to a ruling of the Federal Labor Court of Germany, is an independent rule. Other company pensions are reviewed and adjusted under the terms of the agreement according to Section 16 (1,2) BetrAVG. On every review date, the development of the cost of living since the individual retirement date is reviewed and compensated for. Only in the aforementioned deferred compensation model is the option, available since January 1, 1999, used to raise the current pensions every year by 1% (Section 16 (3) No. 1 BetrAVG). No further risks are seen.

The company has decided to use the internal financing effect of the provisions for pensions and only to back a relatively small portion of the pension obligations with plan assets. Reinsurance policies have been taken out for former Management Board members against payment of a one-time insurance premium in order to provide additional protection against insolvency; these reinsurance policies were pledged to the eligible persons. They constitute plan assets, which are offset against the gross obligation. The fair value of the reinsurance policies for individual persons is higher than the extent of the obligations towards the respective person. This surplus of the fair values of the assets over the obligation is shown under non-current other assets. The conclusion of further personal liability insurance reinsurance policies is not planned.

Pension plan obligations and the expenses necessary to cover these obligations are determined using the projected unit credit method prescribed by IAS 19. Both pensions known on the reporting date and vested rights as well as expected future increases in salaries and pensions are included in the measurement. The following actuarial assumptions were made at the reporting date – in each case related to the end of the year and with economic effect for the following year.

Actuarial Assumptions

in %	Dec. 31, 2022	Dec. 31, 2023
Actuarial interest rate	3.73	3.17
Pension trend	2.19	2.25
Salary trend	3.00	3.00

In order to take into account the extraordinary inflation prevalent as of the reporting date, a one-time increase of 5.45% (December 31, 2022: 8%) was applied to current pensions for the calculation of pension obligations.

The 2018 G mortality tables of Prof. Dr. Klaus Heubeck have been taken for the biometric assumptions without any changes.

The defined benefit obligation (DBO) developed as follows:

in € million	2022	2023
DBO as of Jan. 1	711.8	539.8
Interest expense	7.7	19.6
Current service cost	16.0	9.1
Actuarial gains and losses:		
Experience-based adjustment of the obligation	31.3	-7.1
Changes in the financial assumptions	-196.9	34.6
Transfer	0.1	-
Benefits paid	-30.2	-27.0
Transfer into discontinued operations	-	-27.8
DBO as of Dec. 31	**539.8**	**541.2**

The present value of the pension obligation is divided among the groups of eligible persons as follows:

in € million	Dec. 31, 2022	Dec. 31, 2023
Active employees	97.9	94.5
Former employees with vested pension rights	85.5	93.0
Pensioners	356.4	353.7
DBO as of Dec. 31	**539.8**	**541.2**

Plan assets primarily comprise pension liability insurance reinsurance contracts and long-term contributions made by Vonovia, which are managed by trustees, in the context of the deferred compensation scheme that was closed in the 2021 fiscal year. The following table provides a breakdown of the plan assets:

in %	Dec. 31, 2022	Dec. 31, 2023
Shares	4.00	5.73
Fixed-interest securities	0.00	4.50
Cash assets	0.00	1.68
Insurance contracts	96.00	88.09

The fair value of the plan assets has developed as follows:

in € million	2022	2023
Fair value of plan assets as of Jan. 1	**28.3**	**28.7**
Return calculated using the actuarial interest rate	0.2	1.0
Actuarial gains:		
Income from plan assets not already included in interest income	0.2	0.1
Benefits paid	-1.6	-1.7
Employer contributions	1.6	1.9
Fair value of plan assets as of Dec. 31	**28.7**	**30.0**

The actual return on plan assets amounted to € 1.1 million during the fiscal year (2022: € 0.4 million).

The net liability recognized in the balance sheet developed as follows:

in € million	2022	2023
Net pension obligation as of January 1	**683.6**	**511.1**
Interest expense	7.4	18.5
Current service cost	16.0	9.1
Actuarial gains and losses:		
Experience-based adjustment of the obligation	30.1	-7.1
Changes in the financial assumptions	-195.7	34.6
Income from plan assets not already included in interest income	-0.2	-0.1
Transfer	0.1	–
Employer contributions	-1.6	-1.9
Benefits paid	-28.6	-25.3
Transfer into discontinued operations	–	-27.8
Net pension obligation as of January 31	**511.1**	**511.1**

The following table shows a reconciliation of the defined benefit obligation to the pension obligation recognized in the balance sheet:

in € million	Dec. 31, 2022	Dec. 31, 2023
Present value of funded obligations	33.5	42.0
Present value of unfunded obligations	506.3	499.1
Total present value of defined benefit obligations	**539.8**	**541.1**
Fair value of plan assets	-28.7	-30.0
Net liability recognized in the balance sheet	**511.1**	**511.1**
Other assets to be recognized	1.4	1.3
Provisions for pensions recognized in the balance sheet	**512.5**	**512.4**

In 2023, actuarial losses of € 27.5 million (excluding deferred taxes) were recognized in other comprehensive income (2022: actuarial gains of € 165.8 million).

The weighted average term of the defined benefit obligations is 12.82 years (December 31, 2022: 12.5 years).

The following table contains the estimated, undiscounted pension payments of the coming five fiscal years and the total of those in the subsequent five fiscal years:

in € million	Projected pension payments
2024	31.7
2025	31.2
2026	31.4
2027	31.0
2028	30.5
2029–2033	150.6

Sensitivity Analyses

An increase or decrease in the material actuarial assumptions would have led to the following defined benefit obligation, providing the other assumptions did not change:

in € million		Dec. 31, 2022	Dec. 31, 2023
Actuarial interest rate	Increase of 0.5%	507.7	509.5
	Decrease of 0.5%	575.1	576.4
Pension trend	Increase of 0.25%	549.7	550.3
	Decrease of 0.25%	529.0	531.0

An increase in life expectancy of 4.8% would have resulted in an increase in the DBO of € 21.9 million as of December 31, 2023 (December 31, 2022: € 17.8 million). This percentage rise corresponds to a one-year increase in the life expectancy of a man who was 65 at the reporting date.

If several assumptions are changed simultaneously, the cumulative effect is not necessarily the same as if there had been a change in just one of the assumptions.

The provisions for pensions include € 2.5 million (December 31, 2022: € 2.6 million) for pension obligations which were transferred to third parties as part of an assumption of debt and which relate to vested rights and the payment of current pensions. A corresponding non-current receivable relating to the reimbursement of these payments is shown under miscellaneous other assets.

Other Provisions

Accounting Policies

Other provisions are recognized when there is a present obligation, either legal or constructive, vis-à-vis third parties as a result of a past event if it is probable that a claim will be asserted and the probable amount of the required provision can be reliably estimated. Provisions are discounted if the resulting effect is material. The carrying amount of discounted provisions increases in each period to reflect the passage of time and the unwinding of the discount is recognized within interest expense. The discount rate is a pre-tax rate that reflects current market assessments.

Provisions for restructuring expenses are recognized when the Group has set up and communicated a detailed formal plan for restructuring and has no realistic possibility of withdrawing from these obligations.

Provisions for onerous contracts are recognized when the expected benefits from a contract are lower than the unavoidable cost of meeting the obligations under the contract. The provision is stated at the lower of the present value of the fulfillment obligation and the cost of terminating the contract, i.e., a possible indemnity or fine for breach or non-fulfillment of contract.

Provisions are reviewed regularly and adjusted to reflect new information or changed circumstances.

The **provisions for pre-retirement part-time work arrangements** are basically to be classified as other long-term employee benefits that are to be accrued over the employees' service periods.

The assets of the insolvency policy to secure fulfillment shortfalls arising from pre-retirement part-time work arrangements are offset against the amounts for fulfillment shortfalls contained in the provisions for pre-retirement part-time work arrangements.

A contingent liability is a possible obligation toward third parties that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events or a present obligation that arises from past events for which an outflow of resources is not probable or the amount of which cannot be estimated with sufficient reliability. According to IAS 37, contingent liabilities are not generally recognized.

Development of Other Provisions During the Fiscal Year

in € million	As of Jan. 1, 2023	Changes in scope of consolidation	Additions	Reversals	Netting plan assets	Interest accretion to provisions	Revaluation from currency effects	Transfer	Transfer into discontinued operations	Utilization	As of Dec. 31, 2023
Other provisions											
Environmental remediation	25.0	-	-	-0.3	-	0.5	-	-9.3	0.4	-1.9	14.4
Personnel obligations	39.0	-	44.2	-0.8	0.0	0.2	-	3.4	-1.2	-22.4	62.4
Miscellaneous other provisions	267.7	0.0	55.4	-86.4	-	3.8	0.0	14.4	-3.1	-64.1	187.7
	331.7	**0.0**	**99.6**	**-87.5**	**0.0**	**4.5**	**0.0**	**8.5**	**-3.9**	**-88.4**	**264.5**

Development of Other Provisions During the previous year

in € million	As of Jan. 1, 2022	Changes in scope of consolidation	Additions	Reversals	Netting plan assets	Interest accretion to provisions	Revaluation from currency effects	Transfer	Utilization	As of Dec. 31, 2022 (adjusted)
Other provisions										
Environmental remediation	36.6	-	-	-0.5	-	-2.2	-	-7.3	-1.6	25.0
Personnel obligations	123.4	-	70.0	-5.0	-0.2	-	-0.7	-71.2	-77.3	39.0
Outstanding trade invoices	267.2	-	-	-	-	-	-	-267.2	-	-
Miscellaneous other provisions	248.6	0.0	58.8	-22.1	-	1.6	-0.1	21.3	-40.4	267.7
	675.8	**0.0**	**128.8**	**-27.6**	**-0.2**	**-0.6**	**-0.8**	**-324.4**	**-119.3**	**331.7**

Reversals of provisions are generally offset against the expense items for which they were originally established.

The provisions for environmental remediation primarily refer to site remediation of locations of the former Raab Karcher companies. Remediation has either already begun or an agreement has been reached with the authorities as to how the damage is to be remedied. The cost estimates are based on expert opinions detailing the anticipated duration of the remediation work and the anticipated cost.

The personnel obligations are provisions for pre-retirement part-time work arrangements, provisions for bonuses, severance payments not relating to restructuring and other personnel expenses. The other personnel expenses include a provision for the long-term incentive plan (LTIP) determined in accordance with IFRS 2 of € 9.1 million (December 31, 2022: € 9.3 million) (see → **[F49] Share-based Payments**).

The material individual cost items under miscellaneous other provisions include costs associated with legal disputes in the amount of € 49.3 million (December 31, 2022: € 39.4 million), litigation costs in the amount of € 38.0 million (December 31, 2022: € 20.0 million), costs associated with company tax audits in the amount of € 2.3 million (December 31, 2022: € 7.3 million) and provisions for other contractually agreed guarantees in the amount of € 2.3 million (December 31, 2022: € 3.9 million).

The Group expects to settle the lion's share of the provision over the coming year.

40 Trade Payables

	Dec. 31, 2022		Dec. 31, 2023	
in € million	non-current	current	non-current	current
Liabilities				
Outstanding trade invoices	–	242.8	–	189.5
From property letting	–	127.7	–	120.2
From other supplies and services	5.2	192.8	7.0	176.7
	5.2	**563.3**	**7.0**	**486.4**

41 Non-derivative Financial Liabilities

	Dec. 31, 2022		Dec. 31, 2023	
in € million	non-current	current	non-current	current
Non-derivative financial liabilities				
Liabilities to banks	17,086.4	1,021.4	14,283.2	632.4
Liabilities to other creditors	24,183.3	2,558.4	25,353.3	2,397.7
Deferred interest from non-derivative financial liabilities	–	210.2	–	230.5
	41,269.7	**3,790.0**	**39,636.5**	**3,260.6**

Accounting Policies

Vonovia recognizes **non-derivative financial liabilities**, which mainly include liabilities to banks and to investors, at their fair value on the day of trading, less the directly attributable transaction costs (this generally corresponds to the acquisition cost). These liabilities are subsequently measured at amortized cost using the effective interest method. Financial liabilities are derecognized when Vonovia's obligations specified in the contract expire or are discharged or canceled.

Liabilities bearing no interest or interest below market rates in return for occupancy rights at rents below the prevailing market rates are recorded at present value.

Deferred interest is presented as current in order to show the cash effectiveness of the interest payments transparently. In principle, the deferred interest is part of the non-derivative financial liability. Of the deferred interest from non-derivative financial liabilities, € 178.6 million (December 31, 2022: € 173.8 million) is from bonds reported under non-derivative financial liabilities to other creditors.

The non-derivative financial liabilities developed as follows in the fiscal year under review:

in € million	As of Jan. 1, 2023	New loans	Scheduled repayments	Unscheduled repayments	Adjusted for effective interest method	Transfer into discontinued operations	Other adjustments	Exchange rate differences	As of Dec. 31, 2023
Bond (US dollar)	233.2		-185.0		-48.2	0.0	0.0		–
Bond (SEK)	112.8				0.3				113.1
Bond (EMTN)	20,994.4		-2,023.7	-581.7	27.4		-85.9		18,330.5
Bond (EMTN Green Bond)	2,179.8			-51.8	2.8		-11.3	0.0	2,119.5
Bond (EMTN Social Bond)	2,380.0			-293.5	6.3		-30.8	0.0	2,062.0
Bond (Deutsche Wohnen)	1,811.6				-8.1				1,803.5
Bearer bond	1,361.0				-8.8				1,352.2
Registered bond	503.1				-3.8		125.0		624.3
Promissory note loan	1,289.9		-120.0		2.7		-125.0		1,047.6
Commercial paper		1,980.0	-1,480.0		-2.6				497.4
Mortgages*	13,983.7	2,330.9	-763.5	-692.0	-111.3	-35.4	2.0	2.1	14,716.5
Deferred interest	210.2						20.3		230.5
	45,059.7	**4,310.9**	**-4,572.2**	**-1,619.0**	**-143.3**	**-35.4**	**-105.7**	**2.1**	**42,897.1**

* New loans include capitalized interest not affecting cash in the amount of € 0.6 million.

The non-derivative financial liabilities developed as follows in the previous year:

in € million	As of Jan. 1, 2022	New loans	Scheduled repayments	Unscheduled repayments	Adjusted for effective interest method	Other adjustments	Exchange rate differences	As of Dec. 31, 2022
Bond (US dollar)	219.3				13.9			233.2
Bond (SEK)		121.2			-8.4			112.8
Bond (EMTN)	24,110.3		-1,600.0	-1,511.8	28.8	-32.9		20,994.4
Bond (EMTN Green Bond)	596.6	1,600.0			-16.8	0.0		2,179.8
Bond (EMTN Social Bond)		2,400.0			-20.0	0.0		2,380.0
Bond (Deutsche Wohnen)*	1,907.0			-65.0	-19.1	-11.3		1,811.6
Bearer bond*	1,472.0		-100.0		-11.0			1,361.0
Registered bond*	508.0				-4.9			503.1
Promissory note loan*	279.9	1,010.0						1,289.9
Bridge financing*	3,481.6		-3,490.0		8.4			–
Commercial paper*	150.0	500.0	-650.0					–
Mortgages*; **	14,131.6	1,172.0	-566.6	-560.6	-85.4	-0.7	-106.6	13,983.7
Deferred interest*	172.7					37.5		210.2
	47,029.0	**6,803.20**	**-6,406.60**	**-2,137.4**	**-114.5**	**-7.4**	**-106.6**	**45,059.7**

* Starting in the 2023 fiscal year, the non-derivative financial liabilities of Deutsche Wohnen and Vonovia will be presented in the same category. For increased comparability, the presentation of the previous year's figures has been adjusted according to this format.
** New loans include capitalized interest not affecting cash in the amount of € 0.5 million. Repayments include debt servicing not yet rendered not affecting cash in the amount of € 3.9 million.

The maturities and average interest rates of the nominal obligations of the liabilities to banks and the liabilities to other creditors are as follows during the fiscal year:

				Repayment of the nominal obligations is as follows:					
in € million	Nominal obligation Dec. 31, 2023	Maturity	Average interest rate	2024	2025	2026	2027	2028	from 2029
Bond (SEK)*	121.2	2026	5.29%	48.5			72.7		
Bond (EMTN)*	18,464.0	2030	1.05%	1,814.0	2,594.4	1,800.3	2,000.0	1,724.9	8,530.4
Bond (EMTN Green Bond)*	2,136.9	2031	2.80%						2,136.9
Bond (EMTN Social Bond)*	2,075.7	2027	2.77%			610.5	750.0	715.2	
Bond (Deutsche Wohnen)*	1,760.7	2030	1.12%		589.7				1,171.0
Registered bond*	600.0	2031	1.68%			100.0	70.0	50.0	380.0
Bearer bond*	1,260.2	2032	1.77%				33.5	10.0	1,216.7
Promissory note loan*	1,045.0	2029	2.57%			50.0	309.0	60.0	626.0
Commercial paper	500.0	2024	4.16%	500.0					
Mortgages**	14,755.4	2030	2.24%	671.1	1,646.6	1,435.8	1,777.1	2,119.2	7,105.6
	42,719.1			**3,033.6**	**4,830.7**	**3,996.6**	**5,012.3**	**4,679.3**	**21,166.6**

* Under the conditions of existing loan agreements, Vonovia is obliged to fulfill certain financial covenants, which it fulfilled.
** For a portion of the mortgages, Vonovia is obliged to fulfill certain financial covenants, which it fulfilled.

In the previous year, the maturities and average interest rates of the nominal obligations were as follows:

				Repayment of the nominal obligations is as follows:					
in € million	Nominal obligation Dec. 31, 2022	Maturity	Average interest rate	2023	2024	2025	2026	2027	from 2028
Bond (US dollar)*	185.0	2023	4.58%	185.0					
Bond (SEK)*	121.2	2026	2.94%		48.5			72.7	
Bond (EMTN)*	21,155.3	2029	1.09%	2,023.7	1,931.6	2,750.0	1,950.0	2,000.0	10,500.0
Bond (EMTN Green Bond)*	2,200.0	2031	2.80%						2,200.0
Bond (EMTN Social Bond)*	2,400.0	2027	2.60%				850.0	750.0	800.0
Bond (Deutsche Wohnen)*; **	1,760.7	2030	1.12%			589.7			1,171.0
Registered bond*; **	475.0	2029	1.53%				100.0	70.0	305.0
Bearer bond*; **	1,260.2	2032	1.77%					33.5	1,226.7
Promissory note loan*; **	1,290.0	2028	1.23%	120.0			50.0	309.0	811.0
Mortgages**; ***	13,911.8	2029	1.33%	1,251.5	1,202.9	1,759.4	1,282.6	1,566.5	6,848.9
	44,759.2			**3,580.2**	**3,183.0**	**5,099.1**	**4,232.6**	**4,801.7**	**23,862.6**

* Under the conditions of existing loan agreements, Vonovia is obliged to fulfill certain financial covenants, which it fulfilled.
** Starting in the 2023 fiscal year, the non-derivative financial liabilities of Deutsche Wohnen and Vonovia will be presented in the same category. For increased comparability, the presentation of the previous year's figures has been adjusted according to this format.
*** For a portion of the mortgages, Vonovia is obliged to fulfill certain financial covenants, which it fulfilled.

The loan repayments shown for the following years contain contractually fixed minimum repayment amounts.

Of the nominal obligations to creditors, € 12,682.1 million (December 31, 2022: € 12,287.4 million) are secured by land charges and other collateral (account pledge agreements, assignments, pledges of company shares and guarantees of Vonovia SE or other Group companies). In the event that payment obligations are not fulfilled, the securities provided are used to satisfy the claims of the banks.

Financial liabilities to banks and other creditors have an average interest rate of approximately 1.75%. The financial liabilities as a whole do not contain any significant short-term interest rate risks as they relate either to loans with long-term fixed interest rates or variable-interest liabilities that are hedged using suitable derivative financial instruments (see → **[G55] Financial Risk Management**).

Repayment of Bonds Under the European Medium-Term Notes Program (EMTN)

In January 2023, Vonovia implemented an open market repurchase to buy back bonds maturing in 2028, 2029 and 2033. An amount of € 53.6 million was bought back early within this context. A bond in the amount of € 403.4 million was repaid as planned in April 2023.

As part of its ongoing efforts to be proactive in managing its financial liabilities, Vonovia successfully completed a cash offer for a number of bonds. Out of the total nominal value offered by the bond investors amounting to approximately € 1.25 billion, Vonovia accepted the buyback of a nominal value of € 1.0 billion for a total value of € 892.0 million in July 2023. This corresponds to a discount of around 11%.

In July and September 2023, two bonds in the amount of € 391.6 million and € 351.9 million, respectively, were repaid as planned.

In December 2023, another bond worth € 876.4 million was repaid as planned.

Repayment of the U.S. Dollar Bond

In December 2023, the U.S. dollar corporate bond worth € 185.0 million was repaid as planned.

Repayment of Secured Financing of Deutsche Wohnen

Deutsche Wohnen repaid secured financing in the amount of € 281.8 million as scheduled in March 2023.

Repayment of Secured Financing of Vonovia

June 2023 saw Vonovia repay a secured financing arrangement in the amount of € 75.9 million on the final maturity date.

In December 2023, another secured financing arrangement worth € 462.0 million was repaid early.

Repayment of Promissory Note Loans

Vonovia repaid promissory note loans of € 120.0 million as scheduled in March 2023.

Extension of the Revolving Credit Facility (RCF)

Vonovia applied for an extension of the RCF in the amount of € 3,000.0 million by two years until 2026, and the application was approved by the bank in September 2023.

Secured Financing

In March 2023, Vonovia took out secured financing with Berlin Hyp in the amount of € 550.0 million with a maturity of ten years. The financing was disbursed in April 2023.

Vonovia also reached an agreement on secured financing of € 125.0 million with NordLB in June 2023, with disbursement in August 2023.

In June 2023, Vonovia concluded a secured financing agreement with a volume of € 130.0 million with UniCredit. A disbursement was made in the third quarter of 2023.

Another agreement on secured financing of € 175.0 million was reached with Berliner Sparkasse in July 2023, and was disbursed in the same month.

In December 2023, Vonovia SE concluded a ten-year secured financing arrangement with BayernLB for € 110.0 million, which was disbursed in the same month.

A secured financing agreement with Ärzteversorgung Westfalen Lippe for an amount of € 120.0 million with a term of 15 years was signed in December 2023 and disbursed in the same month.

Also in December 2023, a secured financing agreement with NordLB for an amount of € 50.0 million with a term of ten years was signed and again disbursed in the same month.

A secured financing agreement for € 150.0 million was signed with Ergo in December 2023, and will be disbursed over the coming year.

Unsecured Financing

On April 2023, Vonovia took out unsecured financing with Caixabank S.A. in the amount of € 150.0 million with a maturity of five years. The financing was disbursed in April 2023.

In September 2023, Vonovia took out an unsecured loan with UniCredit, BNP Paribas, JP Morgan and Société Générale in the amount of € 600.0 million with a maturity of two years.

The first installment of € 450.0 million from the unsecured loan taken out in 2022 with the European Investment Bank (EIB), in a total amount of € 600.0 million, was disbursed in September 2023.

Commercial Paper

Issues in the amount of € 500 million were outstanding under Vonovia SE's commercial paper program as of December 31, 2023.

42 Derivatives

	Dec. 31, 2022		Dec. 31, 2023	
in € million	non-current	current	non-current	current
Derivatives				
Cash flow hedges			48.6	
Stand-alone derivatives			10.6	
Deferred interest from derivatives		1.3		0.1
		1.3	**59.2**	**0.1**

For more information on derivative financial liabilities please refer to chapters → **[G53] Additional Financial Instrument Disclosures** and → **[G57] Cash Flow Hedges and Stand-alone Hedging Instruments**.

43 Put Options

In the 2023 fiscal year, the previous 5.1% non-controlling interest in Süddeutsche Wohnen GmbH, Stuttgart, was increased to 10.1%. This sale of shares increased the put option reported by € 83.2 million. The other change in the amount of € -37.9 million results from adjustments to (reductions in) the current IFRS value of the put options.

44 Leases

Accounting Policies

IFRS 16 "Leases," which has applied as a mandatory requirement since January 1, 2019, introduces only one accounting model (right-of-use model) for lessees, based on which all leases are to be recognized in the balance sheet as a matter of principle. The distinction between operating and finance leases only remains in place for accounting as the lessor.

All contracts that give the Vonovia Group the right to control the use of an identified asset over a certain period of time in return for consideration are considered **leases** within the meaning of IFRS 16.

For all lease contracts that meet the definition of leases according to IFRS 16, Vonovia recognizes lease liabilities equal to the present value of the future lease payments, discounted using the term-specific incremental borrowing rate. Correspondingly, right-of-use assets are recognized in the amount of the lease liabilities, plus any advance payments or any initial direct costs.

The lease liabilities are adjusted in line with financial principles. They are increased by the periodic interest expenses and reduced by the lease payments made.

The right-of-use assets are generally recognized at amortized cost, taking depreciation and impairments into account. Right-of-use assets that meet the definition of investment properties (IAS 40) are recognized at fair value in line with the recognition and measurement rules set out in IAS 40.

Changes within the lease term or within the lease payments lead to a remeasurement of the present value and, as a result, to an adjustment of the lease liability and the right-of-use asset.

Periods resulting from extension or termination options granted on a unilateral basis are assessed on a lease-by-lease basis and are only taken into account if their use is sufficiently probable – for example, due to financial incentives.

There is an accounting option available for short-term leases and leases of low-value assets. Vonovia makes use of this option, meaning that such leases are not recognized. As far as rented IT equipment and metering technology is concerned, portfolios are set up for leases with similar terms and a single discount rate is applied to these portfolios.

Such variable lease payments, which are not included in the measurement of the lease liabilities, as well as lease payments associated with short-term leases, with leases of low-value assets and with lease contracts that do not meet the definition of leases according to IFRS 16 are recognized as expenses on a straight-line basis over the lease term.

In addition to conventional vehicle leasing over a fixed lease term of three to five years, the Vonovia Group also leases IT equipment (IT leasing), rented residential, commercial and nursing care properties for subleasing (interim rental agreements; rented nursing care properties reported under the assets/liabilities of discontinued operations as of December 31, 2023), heat generation plants to supply the Group's own properties with heat (contracting), water and heat meters (metering technology), leasing of land for the construction of owner-occupied commercial properties, as well as office buildings, office spaces, warehouse spaces and parking spaces (lease agreements for commercial premises). Under license agreements with public-sector institutions, Vonovia is granted the right to use public properties as storage locations or parking spaces, to lay heating pipes or cables, or to construct playgrounds. Long-term leasehold contracts have the biggest impact on the company's net assets, financial position and results of operations. These involve Vonovia leasing land for the rental of constructed residential and commercial properties. These contracts generally have a term of 99 years.

Development of Right-of-use Assets

in € million	Dec. 31, 2022	Dec. 31, 2023
Right-of-use assets		
Leasehold contracts	2,016.8	1,798.0
Interim rental agreements	3.0	0.5
Right-of-use assets within investment properties	**2,019.8**	**1,798.5**
Leasing of land for the construction of owner-occupied commercial properties	30.9	32.2
Lease agreements for commercial premises	41.7	48.3
Contracting	91.8	78.0
Vehicle leases	4.7	4.9
License agreements	0.5	0.0
Leases of IT equipment	1.5	1.0
Metering technology	22.6	22.1
Right-of-use assets within property, plant and equipment	**193.7**	**186.5**
	2,213.5	**1,985.0**

As of December 31, 2023, the right-of-use assets resulting from leases amount to € 1,985.0 million (2022: € 2,213.5 million).

The majority of the right-of-use assets amounting to € 1,798.5 million is reported under **investment properties** and does not only result from interim lease agreements (leased and subleased residential and commercial properties), but mainly from leasehold contracts (€ 1,798.0 million). The other right-of-use assets totaling € 186.5 million are reported under **property, plant and equipment** and mainly include right-of-use assets resulting from heat contracting (€ 78.0 million), concluded lease agreements for commercial premises (€ 48.3 million), the leasing of land for the construction of owner-occupied commercial properties (€ 32.2 million), contracts connected with leased metering technology (€ 22.1 million) and vehicle leases (€ 4.9 million).

Development of Lease Liabilities

in € million	Dec. 31, 2022 Due within one year	Due in 1 to 5 years	Due after 5 years	Dec. 31, 2023 Due within one year	Due in 1 to 5 years	Due after 5 years
Lease liabilities						
Leasehold contracts (IAS 40)	12.2	39.5	430.6	12.2	40.4	428.9
Interim rental agreements	1.4	1.7	–	0.5	0.0	0.0
Leasing of land for the construction of owner-occupied commercial properties	0.1	0.6	31.3	0.2	0.7	32.7
Lease agreements for commercial premises	10.3	21.3	10.7	11.7	28.8	9.7
Contracting	11.4	40.1	41.8	11.8	30.7	36.4
Vehicle leases	2.2	2.5	–	2.4	2.6	0.0
License agreements	–	–	0.5	0.0	0.0	0.0
Leases of IT equipment	0.7	0.8	–	0.5	0.5	0.0
Metering technology	3.2	12.4	7.2	4.7	13.8	4.0
	41.5	**118.9**	**522.1**	**43.9**	**117.5**	**511.8**

As of December 31, 2023, the lease liabilities amount to € 673.2 million (2022: € 682.5 million).

The year-on-year decrease in lease liabilities of € -9.3 million is mainly due to lower lease liabilities from heating supply contracts (€ -14.3 million), especially as a result of repayments made and prematurely terminated contracts in the 2023 reporting year. On the contrary, lease liabilities from lease agreements for commercial premises increased (€ +7.9 million), mainly due to index-based price increases and newly concluded leases, thereof € 7.0 million in connection with an office building in Berlin leased in January 2023 for Vonovia's customer service.

Totaling € 511.8 million, the majority of the lease liabilities recognized as of December 31, 2023 are due after more than five years. Of this amount, € 428.9 million is attributable to lease liabilities from leasehold contracts. € 43.9 million is due within the next year. € 12.2 million of this amount is attributable to leasehold contracts, € 11.8 million is attributable to heating supply contracts.

The following table shows the development of the right-of-use assets reported under property, plant and equipment:

in € million	Carrying amount of right-of-use assets Jan. 1, 2023	Additions 2023	Depreciation 2023	Transfer into discontinued operations	Carrying amount of right-of-use assets Dec. 31, 2023	Interest expenses 2023
Leasing of land for the construction of owner-occupied commercial properties	30.9	1.8	-0.4	–	32.2	0.9
Lease agreements for commercial premises	41.7	20.7	-12.4	-1.2	48.3	1.0
Contracting	91.8	4.5	-13.3	-0.7	78.0	2.1
Vehicle leases	4.7	3.6	-2.7	-0.3	4.9	0.1
License agreements	0.5	–	–	–	–	–
Leases of IT equipment	1.5	0.5	-0.7	–	1.0	0.1
Metering technology	22.6	14.8	-3.7	–	22.1	0.7
	193.7	**45.9**	**-33.2**	**-2.2**	**186.5**	**4.9**

in € million	Carrying amount of right-of-use assets Jan. 1, 2022	Additions 2022	Depreciation 2022	Carrying amount of right-of-use assets Dec. 31, 2022	Interest expenses 2022 (adjusted)
Leasing of land for the construction of owner-occupied commercial properties	27.4	4.0	-0.4	30.9	0.8
Lease agreements for commercial premises	45.1	16.4	-12.2	41.7	0.4
Contracting	56.8	49.4	-12.2	91.8	1.3
Vehicle leases	4.8	2.7	-2.5	4.7	0.0
License agreements	0.5	0.0	-0.0	0.5	0.0
Leases of IT equipment	2.1	1.7	-1.0	1.5	0.0
Metering technology	38.2	0.8	-5.4	22.6	0.2
	174.9	**75.0**	**-33.7**	**193.7**	**2.7**

The interest expenses recognized in the 2023 fiscal year resulting from leases pursuant to IFRS 16 amounted to € 19.9 million in total (2022: € 17.6 million), mainly from leasehold contracts (€ 15.0 million).

In the 2023 fiscal year, a total of 207 lease contracts (2022: 161) were classified as short-term leases and thus were not recognized in line with the accounting option available. The corresponding expenses, recognized in the 2023 fiscal year, amounted to € 0.9 million (2022: € 0.6 million). Expenses relating to leases of low-value assets amounting to € 2.7 million in the 2023 fiscal year (2022: € 1.2 million) mostly result from leased bicycles/e-bikes. Expenses totaling € 38.8 million were incurred in connection with variable lease payments in the 2023 fiscal year (2022: € 33.1 million), basically due to energy costs under heat supply contracts. Variable lease payments have not been included in the measurement of lease liabilities.

In addition to variable lease payments as well as payments resulting from short-term leases and leases of low-value assets, each included in the cash flow from operating activities, interest payments and repayments of lease liabilities totaling € 58.8 million were incurred in the 2023 fiscal year (2022: € 59.2 million). Thus, the total cash outflow for leases in the reporting period amounted to € 101.2 million (2022: € 94.1 million).

Total income from subleasing, mostly from subleasing of right-of-use assets in connection with rented residential, commercial and care home properties, amounted to € 15.0 million in the reporting period (2022: € 14.4 million). As of the reporting date, there were no significant non-cancelable subleases on the Spree-Bellevue property.

The loss arising from the rental of the sold Spree-Bellevue property (sale and leaseback transaction) in fiscal year 2023 amounted to € 1.2 million (2022: loss of € 1.2 million). This does not have any material impact on the Group's cash flows.

45 Liabilities to Non-controlling Interests

Accounting Policies

Liabilities to non-controlling interests, which include obligations from the guaranteed dividend agreements, in particular, are stated at fair value when they are recognized for the first time. The fair value is, in principle, determined by the value of the respective company; if a contractually agreed minimum purchase price is higher than this amount, this purchase price is recognized.

The liabilities to non-controlling interests relate especially to the obligations to pay several guaranteed dividends under valid profit-and-loss transfer agreements or co-investor agreements in an amount of € 198.4 million (December 31, 2022: € 235.9 million).

46 Financial Liabilities from Tenant Financing

Accounting Policies

Financial liabilities from tenant financing include tenant financing contributions. The financing contributions relate to the contributions collected from tenants in Austria for subsidized apartments. These are reimbursed upon the termination of the rental contract following the deduction of a depreciation amount. The amount refunded can be collected again relating to new tenants. As these are generally rental contracts that can be terminated at any time, these liabilities are reported as current liabilities.

Financial liabilities from tenant financing also include maintenance and improvement contributions deposited by tenants (EVB). These contributions are paid by tenants in Austria to finance the costs associated with modernization work. The payment depends on the age of the building and must be used up for modernization work within 20 years of their receipt. Otherwise, the contributions have to be refunded to the tenant.

First-time recognition is at fair value. Subsequent measurement is at amortized cost.

The financial liabilities from tenant financing as of the reporting date include € 112.1 million (December 31, 2022: € 111.9 million) in tenant financing contributions. Financial liabilities from tenant financing also include € 42.0 million in maintenance and improvement contributions deposited by tenants (EVB) (December 31, 2022: € 43.2 million).

47 Other Liabilities

	Dec. 31, 2022 (adjusted)		Dec. 31, 2023	
in € million	non-current	current	non-current	current
Advance payments received	–	40.3	–	141.1
Accruals	–	78.6	–	75.7
Other taxes	–	30.8	–	26.8
Miscellaneous other liabilities	27.9	51.9	51.0	40.0
	27.9	**201.6**	**51.0**	**283.6**

Section (F): Corporate Governance Disclosures

48 Related Party Transactions

Vonovia had business relationships with unconsolidated investees and subsidiaries in the 2023 fiscal year. These transactions resulted from the normal exchange of deliveries and services and are shown in the table below:

	Provided services		Purchased services		Receivables		Liabilities		Advance payments	
in € million	2022	2023	2022	2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023
Subsidiaries (not consolidated)	0.0	0.0	–	0.2	1.8	–	–	0.0	–	–
Associates	44.8	47.5	25.7	16.2	646.5	666.2	0.1	2.8	290.1	422.2
Joint ventures	9.8	11.6	265.8	118.0	173.1	171.1	6.3	0.2	17.3	22.3
Other non-consolidated subsidiaries	–	–	–	–	–	0.3	–	–	–	57.4
	54.6	**59.1**	**291.5**	**134.2**	**821.4**	**837.6**	**6.4**	**3.0**	**307.4**	**501.9**

As of December 31, 2023, Vonovia's significant business relations were with the QUARTERBACK Group. As of December 31, 2023, loan receivables were recognized in the amount of € 814.3 million (December 31, 2022: € 781.8 million), with € 664.8 million (December 31, 2022: € 672.1 million) repayable in twelve months and € 149.5 million (December 31, 2022: € 109.7 million) repayable in 24 months. The average interest rate for the loans is 7.9%. The interest income from the loans extended to the Quarterback Group amounted to € 58.1 million (2022: € 46.0 million) in the 2023 fiscal year. As of December 31, 2023, there were also interest receivables in the amount of € 17.0 million (December 31, 2022: € 28.0 million).

There are real estate project sales of the QUARTERBACK Group to Vonovia in the amount of € 876.0 million (December 31, 2022: € 876.0 million), for which Vonovia had made advance payments of € 501.9 million in total as of December 31, 2023 (December 31, 2022: € 307.4 million). In connection with agency services contracted by the QUARTERBACK Group in the amount of € 12.4 million (2022: € 24.2 million), Vonovia has outstanding balances on liabilities of € 2.8 million as of December 31, 2023 (December 31, 2022: € 0.1 million).

As of December 31, 2023, there is also a guarantee to secure non-current loan liabilities of the QUARTERBACK Group in the amount of € 12.3 million (December 31, 2022: € 12.3 million).

As of December 31, 2023, Vonovia has outstanding balances on receivables of € 0.0 million (December 31, 2022: € 0.6 million) vis-à-vis G+D Gesellschaft für Energiemanagement mbH, Magdeburg. In the reporting period, services worth € 0.3 million (2022: € 3.7 million) were provided to G+D Gesellschaft für Energiemanagement mbH, Magdeburg, while services worth € 116.6 million (2022: € 144.2 million) were purchased.

In addition, Vonovia purchased services worth € 2.6 million in 2023 (2022: € 1.1 million) from Comgy GmbH and services worth € 1.6 million (2022: € 1.0 million) from GSZ Gebäudeservice und Sicherheitszentrale GmbH, Berlin.

There were also loan receivables of € 5.7 million from OLYDO Projektentwicklungsgesellschaft mbH, Berlin, as of December 31, 2023 (December 31, 2022: € 13.5 million), which are to be repaid within 24 months. The loan has a fixed interest rate of 3.0%.

At Vonovia, the individuals in key positions pursuant to IAS 24 include the members of the Management Board and the Supervisory Board of Vonovia SE.

The emoluments to key management personnel, which are subject to a disclosure requirement under IAS 24, include the remuneration of the active members of the Management Board and Supervisory Board in the reporting year.

The active members of the Management Board and Supervisory Board received the following remuneration:

in € million	2022	2023
Short-term benefits (without share-based payment)	10.2	8.9
Post-employment benefits	2.6	1.2
Share-based payment	-0.8	2.9
	12.0	**13.0**

The balances vis-à-vis the Management Board and the Supervisory Board are as follows:

	Provisions for outstanding remuneration	
	2022	2023
Short-term benefits (without share-based payment)	5.0	3.5
Share-based payment	6.6	6.7
Pension obligation according to IFRS (DBO)	8.3	8.8
	19.9	**19.0**

The payments due in the short term include the relevant basic remuneration and fringe benefits for members of the Supervisory Board.

The payments due in the short term for the members of the Management Board include the basic remuneration, the short-term variable remuneration, the fringe benefits and the pension payment/pension contribution. Management Board members who were appointed for the first time before January 1, 2021 may participate in a Vonovia SE company retirement benefit plan. It includes the option of making the contractually agreed annual pension contribution to the "pension benefits in lieu of cash benefits" deferred compensation scheme as amended from time to time. Management Board members who were appointed for the first time as of January 1, 2021 receive a non-performance-related lump sum (pension) in cash in addition to their fixed remuneration. One Management Board member receives his retirement benefits from a Group subsidiary based on another employment relationship in the form of contributions to a foreign pension fund and a pension payment as additional fixed remuneration; this can also be paid into the pension fund under certain circumstances at the discretion of the Management Board member.

The service cost resulting from provisions for pensions for the active Management Board members is reported under post-employment benefits.

The disclosure on share-based payments is based on the expenses in the fiscal year, which are also reported in chapter → **[F49] Share-based Payments**.

The Management Board and Supervisory Board members were not granted any loans or advances.

49 Share-based Payments

Accounting Policies

The obligations arising from share-based payments are calculated using standard valuation methods based on option pricing models (Monte Carlo simulation). Calculation of the fair value on the reporting date is based on various parameters for the Monte Carlo simulation (risk-free rate, annualized volatilities, correlations). The annualized volatility and the correlation are calculated based on historical volatility and historical correlation in the period matching the residual term based on daily returns. The risk-free rate is calculated using the interest rate structure curve based on the Svensson method. As the LTIP provides for the granting of a dividend equivalent, there is no need to include the dividend yield.

Equity-settled share-based payments are recognized at the grant date at the fair value of the equity instruments vested by that date. The fair value of the obligation is therefore recognized as personnel expenses proportionally over the vesting period and is offset directly against the capital reserves.

The cash-settled share-based payments are shown under other provisions and remeasured at fair value at each reporting date. The expenses are also recognized as personnel expenses over the vesting period (see → **[E39] Provisions**).

Vonovia Management Board

As part of the LTIP in place since 2015, the Management Board members are granted a fixed number of phantom stocks (performance share units or "PSU") annually, which are paid out at the end of a four-year performance period based on the target achievement level for targets defined at the beginning of the performance period and on the development of the share price. The pre-defined target achievement level is based on the targets Relative Total Shareholder Return (RTSR), the development of EPRA Net Tangible Assets (NTA) per share, the development of the Group FFO per share, and the Sustainability Performance Index (SPI), with each target weighted equally at 25%. As a result, this LTIP constitutes a cash-settled plan pursuant to IFRS 2; in turn, the payout claim can be lost entirely if the defined target achievement level has not been reached.

The value of the total phantom stocks that had been granted but not paid out from the LTIP as of December 31, 2023, was calculated by an external expert based on recognized actuarial principles (Monte Carlo simulation). The obligation disclosed as of the reporting date breaks down as follows:

Tranche in €	End of performance period	Number of shares	Average fair value per share at Dec. 31, 2023 in €	Earned provision as of Dec. 31, 2023
2020-2023	Dec. 31, 2023	97,115	28.03	2,904,555
2021-2024	Dec. 31, 2024	88,524	18.39	1,301,250
2022-2025	Dec. 31, 2025	138,742	18.27	1,265,779
2023-2026	Dec. 31, 2026	262,026	20.09	1,273,282

The LTIP program resulted in expenses pursuant to IFRS 2 totaling € 2.9 million in the 2023 reporting year (2022: € -0.8 million).

Vonovia Executives Below Management Board Level

The LTIP was implemented for the first level of management in 2016. This LTIP plan is based largely on the LTIP in place for the Management Board, also regarding the performance objectives and the calculation of the objective values with regard to the minimum value, the "target achievement value," and the maximum value.

The value of the total phantom stocks that had been granted but not paid out from the LTIP as of December 31, 2023, was calculated by an external expert based on recognized actuarial principles (Monte Carlo simulation). The obligation disclosed as of the reporting date breaks down as follows:

Tranche in €	End of performance period	Number of shares	Average fair value per share at Dec. 31, 2023 in €	Earned provision as of Dec. 31, 2023
2020-2023	Dec. 31, 2023	37,580	28.03	1,052,835
2021-2024	Dec. 31, 2024	33,565	18.39	462,168
2022-2025	Dec. 31, 2025	33,354	18.27	304,164
2023-2026	Dec. 31, 2026	83,223	20.09	416,846

The LTIP program results, in accordance with IFRS, in expenses of € 0.9 million in the 2023 reporting year (2022: € -0.5 million).

Employees

The Group works council agreement "Employee Share Program" was concluded in 2014. The program started in the 2015 calendar year, with the shares granted subject to a vesting period of six months. The costs associated with the securities deposit account are borne by Vonovia. All employees that had at least one full year of service as of December 31 of the calendar year concerned are eligible to participate. Shares with a value of between € 90 and € 360 at the most are granted to employees, depending on their gross annual salary, without the employees having to make any contribution of their own.

In accordance with IFRS, the new employee share program results in total expenses of € 2.5 million in the 2023 reporting year (2022: € 2.4 million), which have been offset directly against the capital reserves.

50 Remuneration

Remuneration of the Supervisory Board

The members of the Supervisory Board received total remuneration of € 2.1 million for their work during the 2023 fiscal year (2022: € 2.5 million).

Total Remuneration of the Management Board

The total remuneration paid to the members of the Management Board comprises the following:

Total remuneration of the Management Board in €	Total remuneration 2022	Total remuneration 2023
Fixed remuneration and short-term variable remuneration	9,150,872	7,741,958
Total long-term variable share-based remuneration	6,807,249	5,686,326
of which		
2022-2025	6,807,249	-
2023-2026	-	5,686,326
(number of shares)	138,742	262,026
Total remuneration	**15,958,121**	**13,428,284**

The remuneration paid to the Management Board members includes the remuneration for all mandates at Vonovia Group companies, subsidiaries and participating interests.

Remuneration of Former Management Board Members and Their Surviving Dependents

Total remuneration of former Management Board members and their surviving dependents amounts to € 0.4 million for the 2023 fiscal year (2022: € 0.4 million).

The defined benefit obligation (DBO) to former members of the Management Board and their surviving dependents amounts to € 18.3 million (2022: € 14.8 million).

51 Auditors' Fees

KPMG AG Wirtschaftsprüfergesellschaft was appointed as the auditor of the consolidated financial statements until the end of the 2022 fiscal year. Due to the mandatory legal rotation of the auditor required by law, a new auditor was appointed in the 2023 fiscal year. In the 2023 fiscal year, the Annual General Meeting elected PricewaterhouseCoopers GmbH (PwC) as the new auditor of the consolidated financial statements.

In the fiscal year, the following fees (including expenses and excluding VAT) have been recorded for the services rendered by the Group auditors PwC GmbH Wirtschaftsprüfungsgesellschaft and its network companies:

in € million	2023
Audits	10.3
thereof network company	0.8
Other confirmation services	1.3
thereof network company	0.1
Other services	0.0
	11.6

The fee paid for auditing services performed by PwC GmbH Wirtschaftsprüfungsgesellschaft relates to the audit of the consolidated financial statements and annual financial statements of Vonovia SE, as well as to various audits of annual financial statements and a review of the subsidiaries included in the consolidated financial statements. The consolidated interim financial statements were reviewed and the financial statements were audited in accordance with audit standard IDW PS 490.

The fees for other confirmation services comprise all confirmation services that are not services relating to the audit and are not used in the context of the audit. These mainly include reviews of reconciliations on the interest threshold based on audit standard IDW PS 900, audits pursuant to Section 16 of the of the Real Estate Agent and Commercial Contractor Regulation (MaBV), business audits pursuant to ISAE 3000 relating to the non-financial report, and various housing assistance reports and reports on the appropriation of loans granted by the German government-owned development bank KfW. Other confirmation services also include services associated with the issue of comfort letters and the issue of valuation certificates.

52 Declaration of Conformity with the German Corporate Governance Code

In December 2023, the Management Board and the Supervisory Board of Vonovia SE and Deutsche Wohnen issued a Declaration of Conformity with the recommendations of the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG) and made it permanently available on the **Vonovia** and **Deutsche Wohnen** websites.

Section (G): Additional Financial Management Disclosures

53 Additional Financial Instrument Disclosures

Measurement categories and classes:

in € million	Carrying amounts Dec. 31, 2023
Assets	
Cash and cash equivalents	
Cash on hand and deposits at banking institutions	1,374.4
Trade receivables	593.2
Financial assets	
Investments valued at equity	157.9
Finance lease receivables	15.7
Other current financial receivables from financial transactions*	318.1
Loans to other investments	187.6
Other non-current loans	21.6
Other non-current loans to associates and joint ventures	682.9
Non-current securities	5.9
Other investments	321.7
Derivative financial assets	
Cash flow hedges – no classification in accordance with IFRS 9	8.9
Call option on equity instruments	838.0
Stand-alone interest rate swaps and interest rate caps	63.8
Liabilities	
Trade payables	493.4
Bonds	24,428.7
Other non-derivative financial liabilities	18,468.4
Derivatives and put options	
Purchase price liabilities from put options/rights to reimbursement	316.2
Stand-alone interest rate swaps and interest rate caps	10.6
Cash flow hedges – no classification in accordance with IFRS 9	48.7
Lease liabilities	673.2
Liabilities from tenant financing	154.1
Liabilities to non-controlling interests	198.4

* This includes time deposits and short-term investments in highly liquid money market funds with an original maturity of more than three months.

	Amounts recognized in balance sheet in accordance with IFRS 9						
	Amortized cost	Fair value affecting net income	Fair value recognized in equity without reclassification	Hedge accounting – no classification in accordance with IFRS 9	Amounts recognized in balance sheet in acc. with IAS 28/IFRS 16	Fair value Dec. 31, 2023	Fair value hierarchy level
	1,374.4					1,374.4	n.a.
	593.2					593.2	n.a.
					157.9		n.a.
					15.7		n.a.
	318.1					318.1	2
	187.6					191.5	2
	21.6					21.6	2
	682.9					682.9	2
			5.9			5.9	1
			321.7			321.7	2
		-2.8		11.7		8.9	2
		838.0				838.0	3
		63.8				63.8	2
	493.4					493.4	n.a.
	24,428.7					21,386.5	1
	18,468.4					17,087.8	2
	316.2					220.9	3
		10.6				10.6	2
		0.1		48.6		48.7	2
					673.2		n.a.
	154.1					154.1	n.a.
	198.4					198.4	n.a.

Measurement categories and classes:

in € million	Carrying amounts Dec. 31, 2022
Assets	
Cash and cash equivalents	
Cash on hand and deposits at banking institutions	1,101.8
Money market funds	200.6
Trade receivables	
Receivables from the sale of properties	47.2
Receivables from property letting	44.9
Other receivables from trading	41.3
Receivables from the sale of real estate inventories	196.8
Financial assets	
Investments valued at equity	240.1
Finance lease receivables	23.7
Loans to other investments	33.1
Other non-current loans	11.5
Other non-current loans to associates and joint ventures	825.9
Non-current securities	5.5
Other investments	398.6
Derivative financial assets	
Cash flow hedges – no classification in accordance with IFRS 9	115.1
Stand-alone interest rate swaps and interest rate caps	99.8
Liabilities	
Trade payables	568.5
Bonds	25,900.2
Other non-derivative financial liabilities	19,159.5
Derivatives and put options	
Purchase price liabilities from put options/rights to reimbursement	270.9
Cash flow hedges – no classification in accordance with IFRS 9	1.3
Lease liabilities	682.5
Liabilities from tenant financing	155.1
Liabilities to non-controlling interests	235.8

The section below provides information on the financial assets and financial liabilities not covered by IFRS 9:

> Employee benefits in accordance with IAS 19: Gross presentation of right to reimbursement arising from transferred pension obligations in the amount of € 2.5 million (December 31, 2022: € 2.6 million).
> Amount by which the fair value of plan assets exceeds the corresponding obligation of € 1.5 million (December 31, 2022: € 1.6 million).
> Provisions for pensions and similar obligations: € 512.4 million (December 31, 2022: € 512.5 million).

Amounts recognized in balance sheet in accordance with IFRS 9						
Amortized cost	Fair value affecting net income	Fair value recognized in equity without reclassification	Hedge accounting – no classification in accordance with IFRS 9	Amounts recognized in balance sheet in acc. with IAS 28/IFRS 16	Fair value Dec. 31, 2022	Fair value hierarchy level
1,101.8					1,101.8	n.a.
200.6					200.6	n.a.
47.2					47.2	n.a.
44.9					44.9	n.a.
41.3					41.3	n.a.
196.8					196.8	n.a.
				240.1		n.a.
				23.7		n.a.
33.1					33.2	2
11.5					11.5	2
825.9					825.9	2
		5.5			5.5	1
		398.6			398.6	2
	-10.1		125.2		115.1	2
	99.8				99.8	2
568.5					568.5	n.a.
25,900.2					21,229.2	1
19,159.5					16,554.2	2
270.9					189.6	3
	1.3				1.3	2
				682.5		n.a.
155.1					155.1	n.a.
235.8					235.8	n.a.

The following table shows the assets and liabilities that are recognized in the balance sheet at fair value and their classification according to the fair value hierarchy:

in € million	Dec. 31, 2023	Level 1	Level 2	Level 3
Assets				
Investment properties	81,120.3			81,120.3
Financial assets				
Non-current securities	5.9	5.9		
Other investments	321.7			321.7
Assets held for sale				
Investment properties (contract closed)	313.1		313.1	
Derivative financial assets				
Cash flow hedges	8.9		8.9	
Call option on equity instruments	838.0			838.0
Stand-alone interest rate swaps and caps	63.8		63.8	
Liabilities				
Derivative financial liabilities				
Cash flow hedges	48.7		48.7	
Stand-alone interest rate swaps and caps	10.6		10.6	

in € million	Dec. 31, 2022	Level 1	Level 2	Level 3
Assets				
Investment properties	92,300.1			92,300.1
Financial assets				
Non-current securities	5.5	5.5		
Other investments	398.6			398.6
Assets held for sale				
Investment properties (contract closed)	70.8		70.8	
Derivative financial assets				
Cash flow hedges	115.1		115.1	
Stand-alone interest rate swaps and caps	99.8		99.8	
Liabilities				
Derivative financial liabilities				
Cash flow hedges	1.3		1.3	
Stand-alone interest rate swaps and caps	–		–	

Accounting Policies

In general, Vonovia measures its investment properties on the basis of the discounted cash flow (DCF) methodology (**Level 3**). The material valuation parameters and valuation results can be found in chapter → **[D28] Investment Properties**.

The investment properties classified as assets held for sale are recognized at the time of their transfer to assets held for sale at their new fair value, the agreed purchase price (**Level 2**).

Securities are generally measured using the quoted prices in active markets (**Level 1**).

All **investments in equity instruments** that do not relate to associates or call options to buy back shares (Level 3) are measured at fair value in other comprehensive income. The Group's primary aim is to hold its investments in equity instruments in the long term for strategic purposes. Measurement is at Level 3, as the share price of the relevant investments and the partly underlying cash flows are not directly observable. They are measured either directly via the share price or using a discounted cash flow model.

The fair value of the **bonds** listed on the market is calculated based on the market prices that apply on the reporting date **(Level 1)**.

The fair value of the **other non-derivative financial liabilities** is calculated by means of a discounted cash flow (DCF) model. In addition to the tenor-specific EURIBOR/STIBOR rates (3M; 6M), Vonovia's own credit risk is also used here **(Level 2)**.

For the measurement of **derivative financial instruments**, cash flows are first calculated and then discounted. In addition to the tenor-specific EURIBOR/STIBOR rates (3M; 6M), the respective credit risk is taken as a basis for discounting. Depending on the expected cash flows, either Vonovia's own credit risk or the counterparty risk is taken into account in the calculation.

As part of the valuation of the **cross currency swaps**, the USD cash flows were converted into EUR using the EUR/USD FX forward curve, after which all EUR cash flows are discounted using the 6M EURIBOR curve (Level 2).

The amount of the estimated **impairment loss on cash and cash equivalents** was calculated based on the losses expected over a period of twelve months.

No financial instruments were reclassified to different hierarchy levels vis-à-vis the comparative period.

Due to the current interest rate environment (and the return to more positive market values as a result), counterparty risk premiums were relevant for the interest rate swaps in the consolidated financial statements alongside Vonovia's own credit risk. As with Vonovia's own risk, they are derived from rates observable on the capital markets and ranged from 10 to 160 basis points, depending on the residual maturities. Vonovia's own risk premiums were trading at between 70 and 190 basis points on the same cut-off date, depending on the maturities.

The fair values of the cash and cash equivalents, trade receivables and other financial receivables approximate their carrying amounts at the reporting date owing to their mainly short maturities. It was determined that the cash and cash equivalents have a low risk of default due to the external ratings and short residual maturities and that there is no need for any material impairment of cash and cash equivalents.

in € million	From interest	Income from other non-current loans	Measurement of call options	Dividends from other investments	From subsequent measurement: Impairment losses	Expected credit loss: Other non-current loans to associates	Derecognized receivables	Derecognized liabilities	Financial result affecting income 2023	Measurement of cash flow hedges	Measurement of financial instruments categorized as equity instruments	Total financial result 2023
2023												
Debt instruments carried at (amortized) cost	227.5	60.6		–	-15.6	-12.0	-1.7	–	258.8	–	–	258.8
Derivatives measured at FV through P&L	-3.1	–	90.0	–	–	–	–	–	86.9	–	–	86.9
Effective hedge accounting – no classification in accordance with IFRS 9	–	–	–	–	–	–	–	–	–	-93.0	–	-93.0
Equity instruments measured at FVOCI without reclassification	–	–	–	22.1	–	–	–	–	22.1	–	-28.5	-6.4
Financial liabilities measured at (amortized) cost	-764.9	–	–	–	–	–	–	1.3	-763.6	–	–	-763.6
	-540.5	**60.6**	**90.0**	**22.1**	**-15.6**	**-12.0**	**-1.7**	**1.3**	**-395.8**	**-93.0**	**-28.5**	**-517.3**

in € million	From interest	Income from other non-current loans	Dividends from other investments	From subsequent measurement: Impairment losses	From subsequent measurement: Expected credit loss: Other non-current loans to associates	From subsequent measurement: Derecognized receivables	From subsequent measurement: Derecognized liabilities	Financial result affecting income 2022	Measurement of cash flow hedges	Measurement of financial instruments categorized as equity instruments	Total financial result 2022
2022											
Debt instruments carried at (amortized) cost	110.7	50.1	–	-25.8	-24.1	-2.9	–	108.0	–	–	108.0
Derivatives measured at FV through P&L	141.8	–	–	–	–	–	–	141.8	–	–	141.8
Effective hedge accounting – no classification in accordance with IFRS 9	–	–	–	–	–	–	–	–	72.9	–	72.9
Equity instruments measured at FVOCI without reclassification	–	–	21.2	–	–	–	–	21.2	–	-17.1	4.1
Financial liabilities measured at (amortized) cost	-479.9	–	–	–	–	–	-0.2	-480.1	–	–	-480.1
	-227.4	**50.1**	**21.2**	**-25.8**	**-24.1**	**-2.9**	**-0.2**	**-209.1**	**72.9**	**-17.1**	**-153.3**

54 Information on the Consolidated Statement of Cash Flows

Accounting Policies

The **statement of cash flows** shows how Vonovia's cash has changed during the reporting year as a result of cash inflows and outflows. In accordance with IAS 7 (Statement of Cash Flows), a distinction is made between changes in cash flow from operating activities, investing activities and financing activities.

The cash flow from operating activities is determined from the profit for the period using the indirect method, the profit for the period being adjusted for effects of transactions that are not cash-effective, any deferrals or accruals of past or future operating cash receipts or payments as well as items of income or expense associated with investing or financing cash flows.

The effects of changes in the scope of consolidation are shown separately. Therefore, direct comparison with the corresponding changes in the items of the consolidated balance sheet is not possible. The proceeds from the disposal of intangible assets, property, plant and equipment and investment properties are shown in cash flow from investing activities.

Exercising the IAS 7 option, interest received is shown under cash flow from investing activities and interest paid is shown under cash flow from financing activities.

The item "Payments for acquisition of investment properties" mainly shows expenses for modernization measures.

55 Financial Risk Management

In the course of its business activities, Vonovia is exposed to various financial risks. The Group-wide financial risk management system aims to identify any potentially negative impact on the financial position of the Group early on and take suitable measures to limit this impact. For the structure and organization of financial risk management, we refer to the management report (see → **Risk Management Structure and Instruments**). This system was implemented on the basis of Group guidelines, which were approved by the Management Board and which are continually reviewed. The risks associated with financial instruments and the corresponding risk management are described in detail as follows:

Market Risks

Currency Risks

Liquidity transfers from the German subgroup to Swedish subsidiaries are usually secured through the conclusion of foreign currency forwards. Nevertheless, currency fluctuations are expected to result from financing relationships. By way of example, Vonovia SE issued two bonds denominated in Swedish krona in a total amount of SEK 1,245.4 million in 2022. Based on the exchange rate as of December 31, 2023, a -5% change in the value of the Swedish krona against the euro would result in currency gains of € 5.9 million, while a change of +5% would result in a currency loss of € 5.3 million. Vonovia is subject to no further material currency risks in the scope of its usual business activities.

Interest Rate Risks

The investments measured at fair value are subject, in particular, to a price risk resulting from fluctuations in expected returns, market interest rates and expectations based on the operating business development of the investments. Other investments are long-term investments that are closely related to Vonovia's operating business areas. As a result, short-term realization of the price fluctuations cannot generally be assumed.

In the course of its business activities, Vonovia is exposed to cash-effective interest rate risks as a result of floating-rate debt as well as new and follow-on loans. Within this context, the interest markets are continually monitored by the Finance and Treasury department. Its observations are incorporated into the financing strategy.

As part of its financing strategy, Vonovia uses derivative financial instruments, in particular interest rate swaps and caps, to limit or manage interest rate risks. Vonovia's policies permit the use of derivatives only if they are associated with underlying assets or liabilities, contractual rights or obligations and planned, highly probable transactions.

A sensitivity analysis for cash flow hedges is provided under chapter → **[G57] Cash Flow Hedges and Stand-alone Hedging Instruments**.

Other Risks

Vonovia also acts as an energy supply company through its subsidiary Vonovia Energie Service GmbH. Contracts used for procurement and in the context of sales do not constitute financial instruments under IFRS 9 as a general rule due to the own use exemption. However, because the contracts used are managed in a comparable manner, this business area is also presented below. Due in particular to the current fluctuations in energy procurement conditions, there is a risk that planned energy procurement prices may not be realized. This indirectly results in the risk of the energy sales business becoming loss-making. Vonovia hedges against these risks with a broad range of risk management instruments, which, in addition to a structured multi-year procurement strategy and systematic risk monitoring, also offers the option of price adjustments during the year. This has significantly reduced market price risks in the current dynamic situation on the energy procurement markets.

For all material equity instruments categorized at FVOCI, a 5% increase (reduction) in the share price would have increased (reduced) total equity by € 14.1 million (€ -14.1 million) (December 31, 2022: € 19.5 million (€ -19.5 million). With regard to the impact of the change in equity instruments at fair value in other comprehensive income during the reporting period, we refer to the statement of comprehensive income.

Credit Risks

Vonovia is exposed to a default risk resulting from the potential failure of a counterparty to fulfill its part of the contract. In order to minimize risks, financial transactions are generally only executed with banks and partners whose credit rating has been found by a rating agency to be at least equivalent to Vonovia's. These counterparties are assigned volume limits set by the Management Board. The counterparty risks are managed and monitored centrally by the Corporate Finance and Treasury department.

Liquidity Risks

The companies of Vonovia are financed by borrowings to a notable degree. Due to their high volume, the loans are in some cases exposed to a considerable refinancing risk. The liquidity risks arising from financing transactions with high volumes (volume risks) have become apparent in the financial sector, especially in the wake of the financial crisis. In order to limit these risks, Vonovia is in constant contact with many different market players, continuously monitors all financing options available on the capital and banking markets and uses these options in a targeted manner. Moreover, Vonovia subjects its existing financings to an early review prior to the respective final maturity date in order to ensure refinancing.

Under the conditions of existing loan agreements, Vonovia is obliged to fulfill certain financial covenants such as the debt service coverage ratio or debt-equity ratio. If financial covenants are violated, the breach is not rectified within so-called cure periods and no mutually acceptable agreement can be reached with the lenders, the financing may be restructured and the cost structure changed. Should all commonly practiced solutions be unsuccessful, the lenders could call in the loan. The fulfillment of these financial covenants is continually monitored by the Corporate Finance and Treasury department on the basis of current actual figures and budgetary accounting.

In order to ensure its ability to pay at all times, Vonovia has put a system-supported cash management system in place. This system monitors and optimizes Vonovia's cash flows on an ongoing basis and provides the Management Board with regular reports on the Group's current liquidity situation. Liquidity management is supplemented by short-term rolling, monthly liquidity planning for the current fiscal year, of which the Management Board is also promptly notified. In order to minimize credit risks, large amounts of cash on hand are avoided wherever possible. In the event that large reserves are necessary on a short-term basis due to pending investments or refinancing, these are distributed among various instruments and banking partners with good credit ratings.

The following table shows the forecast for undiscounted cash flows of the non-derivative financial liabilities and derivative financial instruments for the 2023 reporting year. The loan repayments shown for the following years contain only contractually fixed minimum repayment amounts:

		2024		2025		2026 to 2030		from 2031	
in € million	Carrying amount as of Dec. 31, 2023	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment
Non-derivative financial liabilities									
Liabilities to banks	14,915.6	344.5	632.7	369.9	1,628.6	1,100.8	9,727.9	350.9	2,950.0
Liabilities to other creditors	27,751.0	212.3	2,400.9	367.3	3,202.1	1,353.6	12,859.2	876.7	9,317.7
Deferred interest from other non-derivative financial liabilities	230.5	230.5	–	–	–	–	–	–	–
Lease liabilities	673.2	19.8	38.9	18.9	31.6	84.0	101.8	131.9	500.9
Financial liabilities from tenant financing	154.1	–	114.4	–	1.9	–	9.5	–	28.3
Derivative financial assets and liabilities									
Purchase price liabilities from put options/rights to reimbursement	316.2	–	–	–	–	–	95.9	–	220.3
Cash flow hedges/stand-alone interest rate derivatives	-53.2	-42.0		-30.7		-66.3		-14.6	
Cash flow hedges – hedge accounting	44.2	-4.1		-4.0		-12.1		-5.7	
Deferred interest from swaps	-4.4	-4.4							

Another maturity band for the remaining term was added to the information from the 2023 fiscal year onwards. The prior-year figures have not been restated.

in € million	Carrying amount as of Dec. 31, 2022	2023 Interest	2023 Repayment	2024 Interest	2024 Repayment	2025 to 2029 Interest	2025 to 2029 Repayment
Non-derivative financial liabilities							
Liabilities to banks	18,107.8	213.2	1,344.5	241.2	1,163.6	797.0	9,085.1
Liabilities to other creditors	26,741.7	242.2	2,235.7	385.1	2,019.4	1,461.0	13,492.6
Deferred interest from other non-derivative financial liabilities	210.2	210.2	–	–	–	–	–
Lease liabilities	682.5	18.7	38.5	18.1	31.7	83.6	103.2
Financial liabilities from tenant financing	155.1	–	114.1	–	2.0	–	9.7
Derivative financial assets and liabilities							
Purchase price liabilities from put options/rights to reimbursement	270.9	–	–	–	–	–	195.4
Cash flow hedges/stand-alone interest rate derivatives	-165.5	-23.5	–	-14.2	–	-23.5	–
Cash flow hedges (cross currency swap) USD in €	-47.0	-10.8	-185.0				
Cash flow hedges (cross currency swap) in €		8.4	185.0				
Deferred interest from swaps	-1.1	-1.1	–	–	–	–	–

Credit Facilities

Vonovia has concluded framework agreements with various banks with respect to accessing KfW funds. The vast majority of these loans are not secured by way of land charges. As of December 31, 2023, the total volume of these loan framework agreements stood at € 959.0 million (December 31, 2022: € 926.0 million), with € 678.0 million (December 31, 2022: € 835.0 million) drawn.

Since November 2021, an agreement has been in place between Vonovia SE and a banking consortium led by Commerzbank AG for a syndicated credit facility with a volume of € 3,000.0 million. Drawdowns can be made in euros or Swedish krona under the agreement, which originally ended in 2024, with interest based on the EURIBOR or STIBOR, plus an additional margin. This credit line had not been used as of December 31, 2023. As a contractual extension option was exercised at the end of September, the agreement will end in 2026.

A commercial paper master program with a total volume of € 3,000.0 million, in which Vonovia SE acts as the issuer, has also been in place since November 2021. Issues in an amount of € 500.0 million were outstanding as of December 31, 2023.

In September, a general loan agreement for around € 600.0 million was concluded between Vonovia SE and a consortium of four banks led by Unicredit Bank AG. It can be used exclusively to refinance liabilities and any drawdowns must be repaid using the proceeds subsequently received from capital market transactions or sales. This agreement will end after a two-year term.

As of December 31, 2023, the total volume available under guarantee loan agreements in the Group as a whole amounted to € 245.0 million. A total of € 117.2 million of this amount had been drawn down by the reporting date.

Revolving guarantee lender	Master agreement volume	Utilization 2023	Note
Commerzbank AG	€ 60.0 million	€ 29.3 million	
Atradius Kreditversicherung	€ 70.0 million	€ 36.0 million	
Swiss Re International SE	€ 50.0 million	€ 11.6 million	
Berliner Volksbank eG	no framework	€ 0.1 million	project-specific development financing
Frankfurter Sparkasse	no framework	€ 0.2 million	individual guarantees
Kreissparkasse Gelnhausen	no framework	€ 0.2 million	individual guarantees
Hypo Vereinsbank	no framework	€ 0.2 million	individual guarantees
VHV Allgemeine Versicherung AG	no framework	€ 0.2 million	framework agreement cancelled
Euler Hermes	€ 50.0 million	€ 39.9 million	
UniCredit Bank Austria AG	€ 10.0 million	€ 8.3 million	
Raiffeisen Bank International AG	€ 5.0 million	–	

All in all, Vonovia has cash on hand and deposits at banking institutions of € 1,374.4 million as of the reporting date (December 31, 2022: € 1,302.4 million). The master credit agreements/the commercial paper program, together with the cash on hand, guarantee Vonovia's ability to pay at all times.

We refer to the information on financial risk management in the management report.

56 Capital Management

Vonovia's management aims to achieve a long-term increase in value in the interests of customers, employees and investors. Within this context, maintaining a degree of financial flexibility in order to be able to achieve strategic objectives is crucial. This is why Vonovia's capital management focuses on ensuring our investment grade rating. The priority is to ensure sufficient liquidity resources and maintain an efficient ratio between secured and non-secured capital components.

As part of the opportunities and risk management of Vonovia, the members of the Management Board are given monthly reports on the development of results and their potential effects on the capital structure.

The equity situation of the subsidiaries is regularly examined.

Vonovia's equity developed as follows:

in € million	Dec. 31, 2022	Dec. 31, 2023
Total equity	34,438.8	29,944.6
Total assets	101,389.6	91,995.9
Equity ratio	34.0%	32.5%

In order to protect itself against changes in exchange rates and interest rates, Vonovia regularly contracts derivative hedging transactions in the case of liabilities with variable interest rates or liabilities in foreign currencies. The Corporate Finance and Treasury department is responsible for implementing the approved financing strategy.

57 Cash Flow Hedges and Stand-alone Hedging Instruments

On the reporting date, the nominal volume of cash flow hedges held in euros, including pre-hedges, amounts to € 1,165.0 million (December 31, 2022: € 1,501.7 million). Interest rates on hedging instruments are between 1.505% and 3.513% with original swap periods of between 3.5 and 20 years.

In order to manage its interest rate risk, Vonovia concluded five float-to-fix interest rate swaps in the period between June 30, 2023 and July 6, 2023. These were supplemented by a forward starting interest rate swap concluded on July 5, 2023. All of the transactions concluded by Vonovia SE were included in a hedge, while two interest rate swaps concluded by Deutsche Wohnen SE remain stand-alone interest rate swaps. The float-to-fix interest rate swaps will run for between 3.5 years and 6.25 years, hedge a total nominal amount of € 775 million and took effect between

July 4, 2023 and July 10, 2023. The forward swap, with a nominal value of € 500 million and a term of ten years, will take effect on April 16, 2024; cash settlement was agreed. The new interest rate hedges exchange a 3M or 6M EURIBOR for a fixed interest rate of between 2.989% and 3.513%.

All of the zero-cost swaption collars discussed at this point in the report in the previous year were settled in cash in the reporting year.

For the hedging instruments that are maintained through passive hedge accounting, € 6.6 million was reclassified affecting net income in the reporting year in line with the expected cash flows from the underlying hedged items.

This reduced the value recognized in other comprehensive income to € 4.2 million.

All derivatives are included in netting agreements with the issuing banks.

With the exception of one transaction, the euro interest rate swaps are reported with negative market values as of the reporting date.

No economic or accounting offsetting was performed in the reporting year.

Key parameters of the interest rate swaps were as follows:

in € million	Carrying amount Dec. 31, 2023	Balance sheet item including the hedging instrument	Face value	Beginning of term	End of term
Goldmann Sachs (Forward-starting swap)					
Hedged item					
Forward	-24.2	Derivatives	500.0	Apr. 16, 2024	Apr. 16, 2034
Société Générale (Floating-to-fixed hedge)					
Hedged item			142.0	Mar. 1, 2022	Mar. 1, 2027
Interest rate swap	-4.0	Derivatives	142.0	Jul. 4, 2023	Mar. 1, 2027
Société Générale (Floating-to-fixed hedge)					
Hedged item			156.0	Feb. 28, 2022	Mar. 1, 2027
Interest rate swap	-4.4	Derivatives	156.0	Jul. 4, 2023	Mar. 1, 2027
Morgan Stanley (Floating-to-fixed hedge)					
Hedged item			325.0	Feb. 28, 2022	Feb. 28, 2029
Interest rate swap	-16.0	Derivatives	325.0	Jul. 10, 2023	Feb. 28, 2029
UniCredit Bank AG					
Hedged item			42.0	Oct. 1, 2018	Nov. 30, 2038
Interest rate swaps	4.4	Financial assets	42.0	Oct. 1, 2018	Nov. 30, 2038

Current average interest rate (incl. margin)	Changes in the value of the hedging instru-ment recognized in other comprehensive income	Ineffectiveness of the hedging instrument recognized in profit or loss	Profit or loss item including hedge ineffectiveness	Reporting year reclassification	Profit or loss item including the reclassification of the hedge	Change in fair value of the hedged item
	(+) Increase of equity (-) Decrease of equity	(+) Increase of equity (-) Decrease of equity				
6-M-EURIBOR margin 0.0%						
2.989%	-24.2	–	Interest expenses	–	n.a.	
3-M-EURIBOR margin 0.6%						4.0
3.426%	-4.0	–	Interest expenses	-0.3	Interest expenses	
6-M-EURIBOR margin 0.6%						4.4
3.504%	-4.4	–	Interest expenses	-0.3	Interest expenses	
6-M-EURIBOR margin 0.7%						16.0
3.513%	-16.0	–	Interest expenses	-0.6	Interest expenses	
3-M-EURIBOR margin 1.32%						4.8
1.505%	-5.3	0.5	Interest expenses	-0.7	Interest expenses	

The two USD 175.0 million cross-currency swaps, which were contracted in equal amounts with each of JP Morgan Limited and Morgan Stanley Bank International Limited with an original maturity of ten years, matured on October 2, 2023, in line with the bonds.

As of the reporting date, Deutsche Wohnen Group recognized 18 stand-alone interest rate swaps. The nominal value hedged came to € 853.0 million as of December 31, 2023 (December 31, 2022: € 704.8 million); three transactions result in a negative market value of € 7.7 million, while the positive market values of the other interest rate swaps total € 39.4 million (December 31, 2022: only positive market values of € 66.4 million).

The hedged nominal volume of currently twelve stand-alone interest rate swaps of BUWOG amounted to € 335.0 million as of December 31, 2023 (December 31, 2022: € 299.9 million), while positive market values of € 16.6 million were offset by negative market values totaling € 1.6 million (December 31, 2022: only positive market values of € 27.1 million).

On the reporting date, the Victoriahem Group recognized nine stand-alone interest rate swaps, one forward and one interest rate cap. The nominal value hedged in Swedish krona amounted to € 809.4 million as of December 31, 2023 (December 31, 2022: € 1,296.9 million), while positive market values of € 7.7 million were offset by negative market values totaling € 1.2 million (December 31, 2022: only positive market values of € 23.8 million).

The designation of the cash flow hedges as hedging instruments is prospectively determined on the basis of a sensitivity analysis, retrospectively on the basis of the accumulated dollar offset method. The fair value changes of the hedged items are determined on the basis of the hypothetical derivative method. In the reporting year – as in the prior year – the impact of default risk on the fair values is negligible and did not result in any adjustments of the balance sheet item.

In 2023, two new derivatives in the form of long-term call options to buy back shares were recognized for the first time in the amount of € 838.0 million. For details on the call options, please refer to the chapter entitled → **[D29] Financial Assets**

All in all, the positive market values of cash flow hedges in the amount of € 4.4 million were offset in the reporting year by negative market values of € 48.6 million (December 31, 2022: only positive market values of € 65.7 million).

At the same time, positive market values from stand-alone interest rate derivatives of Deutsche Wohnen, BUWOG and Victoriahem were recognized in the amount of € 63.8 million (December 31, 2022: € 99.8 million) and were offset in the reporting year by negative market values of € 10.6 million.

The positive deferred interest balance across the board came to € 4.4 million in the reporting year (December 31, 2022: € 1.1 million).

The impact of the cash flow hedges (after income taxes) on the development of other reserves is shown below:

		Changes in the period		Reclassification affecting net income		
in € million	As of Jan. 1	Changes in CCS	Other	Currency risk	Interest risk	As of Dec. 31
2023	**41.2**	**-42.7**	**-50.3**	**33.9**	**-2.2**	**-20.1**
2022	**-11.9**	**9.0**	**45.0**	**-9.4**	**8.5**	**41.2**

The impact of the cash flow hedges (including income taxes) on total comprehensive income is shown below:

Cash Flow Hedges

in € million	2022	2023
Change in unrealized gains/losses	77.9	-136.7
Taxes on the change in unrealized gains/losses	-23.9	43.7
Net realized gains/losses	-5.0	43.9
Taxes due to net realized gains/losses	4.1	-12.2
Total	**53.1**	**-61.3**

In the reporting year, after allowing for deferred taxes, negative cumulative ineffectiveness for cash flow hedges amounted to € 0.3 million (2022: € -0.4 million), meaning that net interest deteriorated by € 0.7 million.

On the basis of the valuation as of December 31, 2023, Vonovia used a sensitivity analysis for all interest rate swaps to determine the change in equity given a parallel shift in the interest rate structure of 50 basis points in each case:

	Change in equity		
in € million	Other reserves not affecting net income	Income statement affecting net income	Total
2023			
+50 basis points	24.3	17.4	41.7
-50 basis points	-24.5	-17.3	-41.8
2022			
+50 basis points	31.8	10.9	42.7
-50 basis points	-16.9	-20.9	-37.8

Another sensitivity analysis revealed that, for a minority of variable-rate loans not designated as hedges, a parallel shift of 50 basis points in each case would have an effect in the income statement of € 15.3 million (or € -15.3 million), as against an effect of € 18.4 million (or € -18.4 million) in the previous year.

58 Contingent Liabilities

Contingent liabilities exist for cases in which Vonovia SE and its subsidiaries give guarantees to various contractual counterparts. The terms are in many cases limited to an agreed time. In some cases, the term is unlimited.

Contingent liabilities of Vonovia are as follows:

in € million	Dec. 31, 2022	Dec. 31, 2023
Guarantees in connection with Development	86.0	147.6
Rent surety bonds	2.9	2.4
Other	3.9	3.6
	92.8	**153.6**

Vonovia is involved in a number of legal disputes resulting from normal business activities. In particular, these involve tenancy, construction and sales law disputes and, in individual cases, company law disputes (mainly following squeeze-out processes). Furthermore, there are legal disputes with a social insurance provider. None of the legal disputes, taken in isolation, will have any material effects on the net assets, financial position or results of operations of Vonovia. The expected potential amount of loss of originally € 40–150 million relating to this was adjusted to € 150–375 million with an unchanged probability of occurrence of 5-39%.

59 Other Financial Obligations

The other financial obligations are as follows:

in € million	Dec. 31, 2022	Dec. 31, 2023
Other financial obligations		
Investment obligations	757.7	1,239.5
Commitments under purchase orders for modernization and new construction	580.2	819.6
IT service contracts	43.4	46.9
Cable TV service contracts	173.4	20.3
Surcharges under the German Condominium Act	0.3	2.7
Obligations resulting from acquisition	798.6	–
Other	12.0	11.5
	2,365.6	**2,140.5**

The obligations under cable TV service contracts are set against future income from the marketing of the cable TV service.

Bochum, February 28, 2024

Rolf Buch
(CEO)

Arnd Fittkau
(CRO)

Philip Grosse
(CFO)

Daniel Riedl
(CDO)

Ruth Werhahn
(CHRO)