

Consolidated financial statements

Income statement for the STEAG Group

in € million	Note	Year	
		2019	2018
Sales	(5.1)	2,087.3	2,901.0
Change in inventories of finished goods		-5.5	-7.4
Other own work capitalized		1.2	1.4
Other operating income	(5.2)	411.1	877.4
Cost of materials	(5.3)	-1,329.9	-2,144.0
Personnel expenses	(5.4)	-371.3	-349.6
Depreciation/amortization and impairment losses	(5.5)	-175.7	-187.7
Other operating expenses	(5.6)	-337.2	-956.2
Income before the financial result and income taxes		280.0	134.9
Interest income	(5.8)	12.6	13.9
Interest expense	(5.8)	-92.8	-82.1
Result from investments recognized at equity	(5.9)	-0.2	18.6
Other financial income	(5.10)	0.9	0.9
Financial result		-79.5	-48.7
Income before income taxes		200.5	86.2
Income taxes	(5.11)	-68.6	-73.5
Income after taxes		131.9	12.7
Thereof attributable to			
Non-controlling interests		48.4	32.6
Shareholders of STEAG GmbH (net income)		83.5	-19.9

Statement of comprehensive income for the STEAG Group

in € million	Note	Year 2019	2018
Income after taxes		131.9	12.7
Thereof attributable to			
Non-controlling interests		48.4	32.6
Shareholders of STEAG GmbH (net income)		83.5	-19.9
Comprehensive income to be reclassified subsequently to profit or loss		42.3	-26.4
Thereof attributable to			
Valuation of financial instruments in hedging relationships		41.2	-55.0
Differences arising from currency translation		9.3	22.6
Investments recognized at equity		1.6	-0.1
Deferred taxes		-9.8	6.1
Comprehensive income that will not be reclassified subsequently to profit or loss		-113.1	-25.7
Thereof attributable to			
Remeasurement of the net defined benefit liability from defined benefit plans		-142.8	-10.2
Valuation of other investments		4.2	-15.6
Deferred taxes		25.5	0.1
Other comprehensive income after taxes	(6.10)	-70.8	-52.1
Thereof attributable to			
Non-controlling interests		0.8	12.6
Shareholders of STEAG GmbH		-71.6	-64.7
Total comprehensive income		61.1	-39.4
Thereof attributable to			
Non-controlling interests		49.2	45.2
Shareholders of STEAG GmbH		11.9	-84.6

Balance sheet for the STEAG Group

in € million	Note	Dec. 31, 2019	Dec. 31, 2018
Intangible assets	(6.1)	211.9	198.9
Property, plant and equipment	(6.2)	1,938.5	1,779.5
Investment property	(6.3)	13.4	13.4
Investments recognized at equity	(6.4)	84.5	98.7
Financial assets	(6.5)	411.6	527.8
Deferred taxes	(6.15)	29.2	40.0
Contract assets	(6.7)	7.1	6.3
Other receivables	(6.7)	15.4	10.9
Non-current assets		2,711.6	2,675.5
Inventories	(6.6)	239.9	279.1
Other income tax assets	(6.15)	18.9	17.6
Trade accounts receivable	(6.7)	560.1	612.2
Contract assets	(6.7)	47.7	40.9
Other receivables	(6.7)	80.1	108.4
Financial assets	(6.5)	294.2	1,104.8
Cash and cash equivalents	(6.8)	413.9	495.4
		1,654.8	2,658.4
Assets held for sale	(6.9)	18.3	-
Current assets		1,673.1	2,658.4
Total assets		4,384.7	5,333.9
Issued capital		128.0	128.0
Reserves		-216.6	-168.0
Equity attributable to shareholders of STEAG GmbH		-88.6	-40.0
Equity attributable to non-controlling interests		406.1	399.1
Equity	(6.10)	317.5	359.1
Provisions for pensions and other post-employment benefits	(6.11)	1,267.2	1,119.6
Other provisions	(6.12)	275.4	294.5
Deferred taxes	(6.15)	65.1	60.1
Financial liabilities	(6.13)	1,097.2	1,287.4
Contract liabilities	(6.14)	10.2	18.2
Other liabilities	(6.14)	9.0	10.1
Non-current liabilities		2,724.1	2,789.9
Other provisions	(6.12)	332.2	311.9
Other income tax liabilities	(6.15)	41.1	68.8
Financial liabilities	(6.13)	453.3	1,311.4
Trade accounts payable	(6.14)	395.2	359.3
Contract liabilities	(6.14)	78.3	82.6
Other liabilities	(6.14)	43.0	50.9
Current liabilities		1,343.1	2,184.9
Total equity and liabilities		4,384.7	5,333.9

Statement of changes in equity for the STEAG Group

Note 6.10

in € million	Issued capital	Reserves			Equity attributable to shareholders of STEAG GmbH	Equity attributable to non-controlling interests	Total equity
		Capital reserve	Accumulated income/loss	Accumulated other comprehensive income			
As at January 1, 2018	128.0	77.5	-110.1	2.5	97.9	490.3	588.2
Capital increases/decreases	-	-	-	-	-	-71.7	-71.7
Profit transfer/dividend distribution	-	-	-45.0	-	-45.0	-70.9	-115.9
Changes in shareholdings in subsidiaries without loss of control	-	-	19.1	0.0	19.1	9.1	28.2
Income after taxes	-	-	-19.9	-	-19.9	32.6	12.7
Other comprehensive income after taxes	-	-	-25.3	-39.4	-64.7	12.6	-52.1
Total comprehensive income	-	-	-45.2	-39.4	-84.6	45.2	-39.4
Other changes	-	-	-27.4 ¹	-	-27.4	-2.9	-30.3
As at December 31, 2018	128.0	77.5	-208.6	-36.9	-40.0	399.1 ²	359.1
Capital increases/decreases	-	-	-	-	-	-8.5	-8.5
Profit transfer/dividend distribution	-	-	-45.0	-	-45.0	-37.3	-82.3
Changes in shareholdings in subsidiaries without loss of control	-	-	-7.7	-0.2	-7.9	3.8	-4.1
Income after taxes	-	-	83.5	-	83.5	48.4	131.9
Other comprehensive income after taxes	-	-	-108.0	36.4	-71.6	0.8	-70.8
Total comprehensive income	-	-	-24.5	36.4	11.9	49.2	61.1
Other changes	-	-	-7.6 ¹	-	-7.6	-0.2	-7.8
As at December 31, 2019	128.0	77.5	-293.4	-0.7	-88.6	406.1 ²	317.5

¹ This amount includes obligations to make compensation payments to non-controlling interests totaling minus € 8.1 million, recognized outside of profit or loss (prior year: minus € 27.4 million).

² As at December 31, 2019, accumulated other comprehensive income of minus € 15.6 million (prior year: minus € 21.7 million) was attributable to non-controlling interests.

Cash flow statement for the STEAG Group

in € million	Note	January 1 to December 31	
		2019	2018
Income before the financial result and income taxes		280.0	134.9
Depreciation, amortization, impairment losses/reversal of impairment losses on non-current assets		136.1	183.0
Gains/losses on disposal of non-current assets		-4.1	-13.5
Other non-cash income/expense		-57.4	-
Change in inventories		42.7	-52.9
Change in trade accounts receivable		49.5	-73.8
Change in trade accounts payable and current advance payments received from customers		28.0	-4.8
Change in provisions for pensions and other post-employment benefits		-16.1	-17.8
Change in other provisions		-22.4	2.6
Change in miscellaneous assets/liabilities		-93.3	83.4
Cash outflows for interest payments		-52.4	-52.5
Cash inflows from interest		4.1	4.9
Dividend payments received		8.9	8.3
Cash outflows for income taxes		-77.8	-80.0
Cash flow from operating activities	(7.1)	225.8	121.8
Cash outflows for investments in intangible assets, property, plant and equipment, and investment property		-71.3	-158.2
Cash outflows for investments in shareholdings		-17.3	-3.9
Cash inflows from divestments of intangible assets, property, plant and equipment and investment property		11.1	22.6
Cash inflows from divestments of shareholdings		-	10.8
Cash inflows/outflows relating to securities, deposits and loans		70.2	107.4
Cash flow from investing activities	(7.2)	-7.3	-21.3
Capital inflows/outflows		-8.5	-
Cash outflows to non-controlling interests		-37.3	-70.9
Cash inflows/outflows relating to changes in shareholdings in subsidiaries without loss of control		-4.1	28.2
Cash outflows for profit transfer for the prior year		-45.0	-45.0
Cash inflows from additions to financial liabilities		159.4	215.0
Cash outflows for repayment of financial liabilities		-366.0	-182.4
Cash flow from financing activities	(7.3)	-301.5	-55.1
Change in cash and cash equivalents		-83.0	45.4
Cash and cash equivalents as at January 1		495.4	449.2
Change in cash and cash equivalents		-83.0	45.4
Changes in exchange rates and other changes in cash and cash equivalents		1.5	0.8
Cash and cash equivalents as at December 31	(6.8)	413.9	495.4

(1) General information

STEAG GmbH is an energy corporation headquartered in Germany which operates internationally. As one of Germany's largest electricity producers, its business focuses on planning, building, acquiring and operating energy generating facilities and the related services. Further core competencies include procurement, marketing, sale and trading of energy, energy sources and other process media, as well as the production, acquisition and provision of the plants required for this purpose and the related services.

The company's registered office is Rüttenscheider Straße 1-3, Essen (Germany), and it is registered in the Commercial Register at Essen Local Court under no. HRB 19649.

STEAG GmbH is a wholly owned subsidiary of KSBG Kommunale Beteiligungsgesellschaft GmbH & Co. KG (KSBG KG), a consortium of six municipal utility companies in the Rhine-Ruhr region. A profit and loss transfer agreement has been in place between KSBG KG and STEAG GmbH since July 1, 2011.

The present consolidated financial statements for STEAG GmbH and its consolidated affiliated companies (referred to jointly as the "STEAG Group") have been prepared on a voluntary basis and are not published in the Federal Gazette (Bundesanzeiger).

The consolidated financial statements were authorized for issue by the Board of Management of STEAG GmbH on March 11, 2020.

As at December 31 of each year, STEAG GmbH and its subsidiaries are fully consolidated in the consolidated financial statements of KSBG KG, as the main parent company of the Group, which are prepared in accordance with the International Financial Reporting Standards (IFRS), as applicable for use in the European Union, and in conformance with Section 315e of the German Commercial Code (HGB). The consolidated financial statements of KSBG KG are published in the electronic Federal Gazette.

(2) Basis of preparation of the financial statements

(2.1) Compliance with IFRS

These consolidated financial statements have been prepared voluntarily on the basis of the IFRS adopted by the European Union. The IFRS comprise the standards (IFRS, IAS) issued by the International Accounting Standards Board (IASB), London (UK) and the interpretations (IFRIC, SIC) of the IFRS Interpretations Committee.

(2.2) Presentation of the financial statements

The consolidated financial statements cover the period from January 1 to December 31, 2019 and are presented in euros. To enhance clarity and comparability, all amounts are stated in millions of euros (€ million) except where otherwise indicated.

The consolidated financial statements provide a snapshot of the actual situation as regards the company's net assets, financial position and results of operations.

The recognition and valuation principles and items presented in the consolidated financial statements are in principle consistent from one period to the next. To enhance the clarity of presentation, some items are combined in the income statement, statement of comprehensive income, balance sheet and statement of changes in equity and explained in detail in the Notes.

The income statement has been prepared using the total cost format.

The statement of comprehensive income is a reconciliation from income after taxes as shown in the income statement to the Group's total comprehensive income, taking into account other comprehensive income (OCI).

On the balance sheet, assets and liabilities are classified by maturity. They are classified as current if they are due or expected to be realized within twelve months from the reporting date. Accordingly, assets and liabilities are classified as non-current if they remain in the company for more than one year. Deferred tax assets and liabilities and provisions for defined benefit pension plans and other post-employment benefits are classified as non-current.

The statement of changes in equity shows changes in the issued capital and reserves attributable to shareholders of STEAG GmbH and non-controlling interests in the reporting period.

The cash flow statement provides information on the Group's cash flows. Cash flows from operating activities are calculated using the indirect method; cash flows from investing activities and financing activities are calculated using the direct method.

The Notes contain basic information on the financial statements, supplementary information on the above components of the financial statements and additional disclosures.

(2.3) Newly issued IFRS

Accounting standards applied for the first time

The IASB regularly issues new and revised standards and interpretations. These have to be officially adopted into EU law by endorsement by the European Commission before they can be applied.

Following endorsement by the EU Commission, the STEAG Group applied the following new and amended standards and interpretations for the first time in fiscal 2019.

IFRS 16 “Leases” was endorsed by the EU Commission in 2017. STEAG has applied IFRS 16 since the mandatory date of initial application – January 1, 2019. This standard replaces IAS 7 “Leases” and the interpretations IFRIC 4 “Determining whether an Arrangement contains a Lease”, SIC 15 “Operating Leases – Incentives” and SIC 27 “Evaluating the Substance of Transactions Involving the Legal Form of a Lease”. The core principle of the new standard is that the lessee normally has to recognize all lease arrangements and the associated contractual rights and obligations on its balance sheet. Going forward, the distinction between finance and operating leases required by IAS 17 is therefore no longer necessary. Under IFRS 16, the lessee recognizes a lease liability for all lease arrangements at the present value of the future lease payments on the balance sheet and simultaneously recognizes a corresponding right to use the leased asset (right-of-use asset). During the term of the lease, the lease liability is recognized on the basis of financial mathematical principles similar to those used for finance leases in the present IAS 17, while the right-of-use asset is depreciated over the term of the lease. For lessors, the rules in the new standard are almost identical to those in the previous standard IAS 17.

The main result of the change in accounting for leases was to increase total assets and liabilities as at January 1, 2019 due to the recognition of right-of-use assets and the corresponding liabilities amounting to some € 134 million. The right-of-use assets are recognized in the balance sheet items in which the underlying assets would have been recognized if they had been owned by the Group. The lease liabilities are recognized in financial liabilities.

STEAG applied the new standard using the modified retrospective approach. Therefore, the prior-year figures are not restated. Initial application did not result in any transition effects that had to be recognized in profit reserves. The new standard was not applied to leases that ended in fiscal 2019. These are treated as short-term leases and recognized as expenses for short-term leases. Further, agreements that were not classified as leases under the old standard (IAS 17) have not been re-assessed to determine whether they constitute leases.

The nominal value of the obligations from operating leases as at December 31, 2018 was around € 138 million. The difference between this amount and the lease liability of around € 134 million recognized as at January 1, 2019 is due to the discounting of lease payments using the applicable incremental borrowing rate and the non-inclusion of leases that ended in fiscal 2019.

The lease liabilities are discounted using the incremental borrowing rate as at January 1, 2019. The weighted average incremental borrowing rate is 2.6%. The incremental borrowing rate is determined us-

ing currency-specific swap curves. The reference interest rates are supplemented by premiums to reflect the creditworthiness, liquidity and country risks.

The recognition of leases on the income statement is as follows:

in € million	2019
Sales and other operating income	
Revenue from finance leases	30.4
Other operating income	
Revenue from operating leases	1.3
Other revenue from leases	0.4
Depreciation	
Depreciation of right-of-use assets	-18.5
Other operating expenses	
Expenses for short-term leases	-1.1
Expenses for variable lease payments	-2.4
Other expenses for leases	-1.9
Financial result	
Interest income from finance leases	0.0
Interest expense for finance leases	-5.2
	3.0

Details of right-of-use assets and lease liabilities can be found in Note (6.2) Property, plant and equipment and Note (6.13b) Liabilities. Further disclosures on lease liabilities can be found in the notes on the relevant items.

The new and revised standards and interpretations listed in the following table, which became mandatory for the first time in fiscal 2019, did not have a material impact on the consolidated financial statements for the STEAG Group.

Standard or interpretation	Content
Amendments to IFRS 9 “Financial Instruments”	Prepayment features with negative consideration
IFRIC 23 “Uncertainty over Income Tax Treatments”	Clarification of how to apply IAS 12 “Income Taxes” when there is uncertainty over income tax treatments
Amendments to IAS 28 “Investments in Associates and Joint Ventures”	Investments in associates and joint ventures that are not recognized using the equity method.
Annual improvements to IFRSs 2015-2017 Cycle – Amendments to IFRS 3 “Business Combinations” and IFRS 11 “Joint Arrangements”	Obtaining control of a business that is a joint operation
Annual improvements to IFRSs 2015-2017 Cycle – Amendments to IAS 12 “Income Taxes”	Income tax consequences of dividend payments

Annual improvements to IFRSs 2015-2017 Cycle – Amendments to IAS 23 “Borrowing Costs”	Borrowing costs of an asset
IAS 19 “Employee Benefits”	Amendment, curtailment or settlement of a defined benefit pension plan

Accounting standards that are not yet mandatory

Up to December 31, 2019, the IASB had issued further accounting standards and amendments to accounting standards that had not yet become mandatory in the EU in the reporting period. The standards and amendments to standards and interpretations presented in the following table are not expected to have a material impact on the consolidated financial statements of the STEAG Group.

Standard or interpretation	Content	Application	Endorsement
Amendments to the conceptual framework	Revised definition of assets and liabilities, new guidelines on measurement and derecognition, disclosure and notes to the financial statements	Jan. 1, 2020	-
Amendments to references to the conceptual framework in individual standards	Updated references to the conceptual framework	Jan. 1, 2020	Yes
Amendments to IFRS 3 “Business Combinations”	Amended definition of a business	Jan. 1, 2020	No
Amendments to IAS 1 “Presentation of Financial Statements” and IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors”	Definition of “material” amended	Jan. 1, 2020	Yes
Amendments to IFRS 9 “Financial Instruments”, IAS 39 “Financial Instruments: Recognition and Measurement” and IFRS 7 “Financial Instruments. Disclosures” in connection with the interest rate benchmark reform	Hedging relationships can be continued or designated despite the expected interest rate benchmark reform.	Jan. 1, 2020	Yes
IFRS 17 “Insurance Contracts”	New standard	Jan 1, 2021	No

(2.4) Scope of consolidation and consolidation methods

Scope of consolidation

Alongside STEAG GmbH, the consolidated financial statements include all material subsidiaries in Germany and abroad that are directly or indirectly controlled by STEAG GmbH. STEAG GmbH controls a company if it is exposed to, or has rights to, variable returns from its involvement with the company and has the ability to affect those returns through its power over the subsidiary.

Associates and joint ventures are generally recognized using the equity method if the Group is able to exert a significant influence or exercises joint control.

Initial consolidation or deconsolidation takes place as at the date on which the company gains or loses control.

Changes in the scope of consolidation are outlined in Note (4.1).

Consolidation methods

The financial statements of the consolidated German and foreign subsidiaries are prepared using uniform accounting and valuation principles.

Capital is consolidated at the time of acquisition by offsetting the carrying amount of the business acquired against the pro rata revalued equity of the subsidiary. In accordance with IFRS 3 "Business Combinations", ancillary acquisition costs are recognized as expenses in the income statement rather than in the carrying amount of the subsidiary. The assets and liabilities (net assets) of the subsidiary are generally included at fair value. If shares in the subsidiary are held before acquiring control, they must be revalued and any resultant change in value must be recognized in the income statement in other operating income or other operating expenses, depending on the classification of the stake already held. Any remaining excess of the acquisition cost over the fair value of the net assets is recognized as goodwill. Negative differences are included in the income statement following a renewed examination of the fair value of the net assets.

Changes in shareholdings in a previously consolidated subsidiary that do not result in a loss of control are recognized directly in equity as a transaction between owners. In this case, the shares attributable to the owners of the parent company and the other shareholders are adjusted to reflect the changes in their respective stakes in the subsidiary. Any difference between this adjusted amount and the fair value of the consideration paid or received is recognized directly in equity and allocated to the shares attributable to the owners of the parent company. Directly related transaction costs are also recognized as a transaction between owners that has no impact on income, with the exception of costs for the issuance of debt or equity instruments, which are still measured in accordance with the criteria for recognizing financial instruments.

The subsidiary must be deconsolidated as at the date on which control is lost. This involves derecognition of the net assets of the subsidiary and non-controlling interests (proportionate net assets of the subsidiary). The gain or loss on the divestments must be calculated from the Group viewpoint. This is derived from the difference between the proceeds of the divestment (selling price less costs to sell) and the proportionate divested net assets of the subsidiary (including the remaining hidden reserves and liabilities,

and any goodwill shown on the balance sheet). The shares in the former subsidiary still held by the STEAG Group are revalued at fair value as at the date on which control is lost. This comprises the fair value on initial recognition of the financial asset in accordance with IFRS 9 or the cost of the investment in the associate or joint operation in the event of downward consolidation. All gains and losses resulting from measurement of the shares still held are recognized in the income statement as other operating income or other operating expenses. Currency translation differences and other amounts attributable to the subsidiary being disposed of that were recognized in OCI and not through profit and loss while the subsidiary was part of the Group, must be deconsolidated as part of the equity being disposed of and are therefore recognized in profit or loss unless a different standard requires direct transfer to retained earnings.

Intragroup income and expenses, profits, losses, receivables and liabilities between consolidated subsidiaries are eliminated. Write-downs and write-ups of balance sheet items in consolidated affiliated companies recognized in the separate financial statements are reversed.

Shares in associates and joint ventures accounted for using the equity method are initially recognized at cost of acquisition, see Note (2.6) "Investments recognized at equity".

(2.5) Currency translation

Foreign currency transactions are measured at the exchange rate on the transaction date. Any gains or losses resulting from the valuation of monetary assets and liabilities in foreign currencies as at the reporting date are recognized in other operating income or other operating expenses.

The financial statements of foreign subsidiaries outside the euro zone are translated on the basis of their functional currency. In the consolidated financial statements, the assets and liabilities of all foreign subsidiaries are translated from the functional currency of the company into euros at closing rates on the reporting date, since they conduct their business independently in their functional currency. The equity of foreign investments accounted for at equity is translated analogously. As an asset pertaining to an economically autonomous foreign sub-entity, goodwill is translated at the closing rate. Income and expense items are translated at average exchange rates for the year. The average annual exchange rates comprise the mean of the exchange rates at month-end over the past 13 months. Translation differences compared to the prior year and translation differences between the income statement and balance sheet are recognized in OCI.

The exchange rates used for currency translation included:

€1 corresponds to	Annual average rates		Closing rates	
	2019	2018	Dec. 31, 2019	Dec. 31, 2018
Botswana pula (BWP)	12.04	12.01	11.89	12.28
Brazilian real (BRL)	4.42	4.30	4.52	4.44
British pound (GBP)	0.88	0.89	0.85	0.89
Indian rupee (INR)	78.85	80.32	80.19	79.73
Indonesian rupiah (IDR)	15,854.31	16,746.48	15,595.60	16,500.00
Qatari riyal (QAR)	4.09	4.31	4.10	4.19
Colombian peso (COP)	3,689.76	3,509.20	3,685.00	3,726.27
Philippine peso (PHP)	57.91	61.94	56.90	60.11
Polish zloty (PLN)	4.30	4.26	4.26	4.30
Romanian leu (RON)	4.74	4.66	4.78	4.66
Singapore dollar (SGD)	1.53	1.59	1.51	1.56
Turkish lira (TRY)	6.33	5.60	6.68	6.06
US dollar (USD)	1.12	1.18	1.12	1.15

(2.6) Accounting policies and valuation principles

Revenue recognition

Revenues from the sale of goods and services that constitute part of the company's normal business activity and other revenues are recognized as follows:

(a) Sales

The STEAG Group generates sales principally through the operation of power plants in Germany and abroad, the operation of energy supply facilities based on renewable energy resources, coal trading and the marketing of related products and services. In addition, interest and variable payments from finance leases and revenue from modifications of finance leases are recognized as sales if the STEAG Group is the lessor.

Revenue is recognized at the amount of the contractually agreed consideration that the STEAG Group expects to receive in return for transfer of the corresponding goods and services to the customer (transaction price). This involves allocating the transaction price for the goods transferred or services provided arising from the contract with the customer among the individual performance obligations using the relative stand-alone selling prices of each individual good or service.

Recognition of revenue over time for the construction and conversion of plants is based on progress towards satisfying the performance obligation as at the reporting date. Normally, the percentage of completion or progress is measured as the cost incurred as at the reporting date relative to the estimated total cost. If revenue is recognized at a point in time, revenue is recognized when the customer obtains control of the promised assets.

To enhance the information on the company's earnings position, for energy-related commodity derivatives from own-account trading, sales and the cost of materials are presented on a net basis per commodity, i.e. only the net result of the respective commodity derivative is recognized. Commodity deriva-

tives used to optimize CDS trading are also presented on a net basis, analogously to own-account trading. For management purposes, net amounts are also used in internal reporting.

(b) Other revenues

Other revenues are only recognized if they can be determined reliably and it is sufficiently probable that the economic benefit will flow to the company.

To enhance the information on the company's earnings position, for certain types of derivatives used for own-account trading and to optimize CDS trading, the change in fair value is presented in other income and expenses on a net basis.

Interest income is recognized on a pro rata temporis basis using the effective interest method. Income from royalties is accrued on the basis of the commercial terms of the underlying contract and recognized on a pro rata basis. Dividend income is recognized as at the date of the right to receive the payment. Unrealized and realized income from interest rate swaps, options, currency forward agreements and commodity forward agreements are recognized in other income if they are stand-alone instruments and are not included in a valuation unit with the associated hedged item (hedge accounting).

Intangible assets

Intangible assets are capitalized at acquisition or production cost. Intangible assets with a finite useful life are amortized and an impairment test is conducted if there are specific indications of a possible impairment, see Note (2.6) "Impairment test". Intangible assets with an indefinite useful life are not amortized; instead they are tested for impairment at least once a year. The assumptions regarding their indefinite useful life are also reviewed annually.

(c) Goodwill

Goodwill has an indefinite useful life and is tested for impairment at least once a year.

(d) Other intangible assets

Other intangible assets mainly comprise power supply rights, licenses and computer software. These are amortized over their estimated useful life of 3-30 years using the straight-line method.

Property, plant and equipment

Property, plant and equipment are carried at acquisition or production cost and depreciated over their useful life using the straight-line method. Expected useful lives and residual values are reviewed periodically.

If there are indications that an impairment loss needs to be recognized, an impairment test is conducted on the items of property, plant and equipment, see Note (2.6) "Impairment test".

The cost of acquisition includes all expenses directly attributable to the acquisition. The cost of production of assets manufactured within the Group comprises all direct cost of materials and labor, plus the applicable proportion of material and manufacturing overheads, including depreciation. Costs relating to obligations to dismantle or remove non-current assets at the end of their useful life are capitalized as

acquisition or production costs as at the date of acquisition or production. Acquisition and production costs may also include transfers from gains and losses on cash flow hedges entered into in connection with the purchase of property, plant and equipment in foreign currencies and previously recognized in OCI. Borrowing costs that can be allocated directly to the acquisition, construction or production of a qualifying asset are included in the cost of acquisition or production. A qualifying asset is an asset for which more than a year is required to get it ready for its intended use or for sale.

Property, plant and equipment are depreciated using the straight-line method over the expected useful life of the assets.

in years	
Buildings	7 - 50
Plant and machinery	
Power plants and related components	12 - 40
Distributed energy supply facilities	8 - 15
Other technical plant and machinery	3 - 25
Other plant, office furniture and equipment	3 - 25

Expenses for overhauls and major servicing (major repairs) are generally capitalized if it is probable that they will result in future economic benefits from an existing asset. They are then depreciated over the period until the next major repair date. Routine repairs and other maintenance work are expensed in the period in which they are incurred.

If there is a high probability that the project will be realized, costs incurred for planning and pre-engineering work for capital expenditures projects are capitalized. Depreciation is recognized in line with the useful life of the project.

If major components of an asset have different useful lives, they are recognized and depreciated separately.

Gains and losses from the disposal of assets are calculated as the difference between the net proceeds of sale and the carrying amount and recognized in other operating income or other operating expenses.

Investments recognized at equity

Associates and joint ventures are recognized using the equity method if the Group is able to exert a significant influence or exercises joint control.

Initially they are measured at cost of acquisition. The cost of acquisition also contains all ancillary acquisition costs directly attributable to the investment.

As the basis for the measurement of the investment in subsequent periods, the difference between the cost of acquisition and the proportionate equity must be determined. This is analyzed to see to what extent it contains hidden reserves or hidden liabilities. Any positive difference remaining after allocation of hidden reserves or liabilities is treated as goodwill and taken into account in the carrying amount of the investment.

Starting from the acquisition cost of the investment, in subsequent periods its carrying amount is increased or reduced by the proportionate net income. The financial statements of the companies recog-

nized at equity are prepared using uniform accounting and valuation principles for the STEAG Group. Further adjustments to the carrying amount of the investment are necessary if the equity of the investment alters as a result of items contained in OCI. Subsequent measurement must take into account depreciation of hidden reserves on depreciable assets identified at the time of initial consolidation and deducted from the proportionate net income. To avoid dual recognition, any dividends received must be deducted from the carrying amount.

The investment must be tested for impairment if there are indications of impairment see Note (2.6) "Impairment test". No separate impairment test is performed for the proportionate goodwill. The impairment test is performed for the entire carrying amount of the investment. Accordingly, impairment losses are not allocated to the proportionate goodwill included in the carrying amount of the investment and can be reversed in full in subsequent periods.

Impairment test

If there are indications of possible impairment, an impairment test in accordance with IAS 36 "Impairment of Assets" is conducted on intangible assets, property plant and equipment, investment property and investments recognized at equity. The impairment test on such assets is generally conducted for a cash-generating unit (CGU), which is the smallest identifiable group of assets that generates independent cash flows, or for a group of CGUs. Goodwill is allocated to the divisions, in other words, to a group of CGUs, that are expected to benefit from the synergies from the business combination to which the goodwill refers. Goodwill is tested for impairment at least once a year. In addition, in accordance with IAS 36 impairment tests are carried out on certain assets as at the reporting date as a result of indications of possible impairment.

The impairment test comprises comparing the recoverable amount of the CGU or group of CGUs with its carrying amount. The recoverable amount is determined as the higher of the fair value less costs to sell and the value in use of the CGU or group of CGUs. An impairment loss is recognized if the recoverable amount of a CGU or group of CGUs is less than its carrying amount. The impairment loss is reversed – except in the case of goodwill – if the reason for the original impairment charge no longer applies, but the increased carrying amount may not be above the carrying amount less depreciation or amortization that would apply if no impairment loss had been recognized in previous years.

When testing goodwill for impairment, the recoverable value of goodwill is determined from the fair value less costs to sell of the divisions in the STEAG Group. The fair value is the present value of future cash flows determined using a valuation model. The future cash flows are derived from the current five-year mid-term planning. The mid-term planning is based on a mixture of experience of past market trends and expectations of future market trends. The main economic data that influence the impairment test include the development of interest rates, exchange rates, market prices for CO₂ allowances, renewable energy certificates, coal and energy, and the regulatory environment. The mid-term planning is based on the corresponding market expectations, which are set centrally by STEAG GmbH. The specific growth rate is derived from experience and future expectations. It does not exceed the average long-term growth rates for the relevant markets.

The cost of capital used to discount the expected cash flows is calculated as the weighted average of equity and debt on the basis of a capital market-based model. The cost of equity is determined by the risk-free interest rate and a risk premium. The risk premium is the product of the beta factor and market risk premium plus a country risk premium. The beta factor is obtained from the capital market by comparison with the values for comparable companies (peer group). A terminal growth rate is assumed. The cost

of debt for individual CGUs is derived from an analysis of the gearing and creditworthiness analysis of peer group companies. The discount rates are determined after taxes and refer to cash flow after taxes. As required by IAS 36, the recoverable amount determined on this basis corresponds to the value that would have been derived by discounting future cash flows before taxes using a pre-tax discount rate.

For the impairment test on goodwill, the following parameters are applied for the weighted average cost of capital:

Division	Risk-free interest rate		Risk-adjusted interest rate (WACC)		Growth discount	
	2019	2018	2019	2018	2019	2018
	%	%	%	%	%	%
Power	0.20	1.25	5.35	6.01	0.25	0.50
Renewable Energies and Distributed Facilities	0.20	1.25	5.35	6.01	0.25	0.50

For the purpose of impairment testing of property, plant and equipment, specific discount rates ranging from 3.99 percent to 7.22 percent are applied. For information on the method used and principal assumptions, please see the comments on the impairment testing of groups of CGUs to which goodwill is allocated.

Inventories

Inventories are measured at the lower of the cost of acquisition or production and net realizable value. The net realizable value corresponds to the net selling price that could be achieved in normal business operation less the production and selling expenses incurred prior to sale. To ensure risk-free valuation of inventories, adjustments are applied to inventories that have become obsolete.

If impairment losses are no longer applicable, they are reversed, but only up to the historical acquisition or production cost.

The cost of inventories of similar structure or for similar applications is determined uniformly as an average. The production cost of finished goods and work in progress comprises the cost of raw materials and supplies, further directly attributable production expenses such as production-related wages and general overheads that can be assigned to production (based on normal operating capacity). The cost of inventories may also contain gains and losses for qualifying cash flow hedges for the purchase of raw materials which have been reclassified from OCI.

Purchased emission allowances are recognized at the cost of acquisition. They are not depreciated but the provisions of IAS 36 "Impairment of Assets" and IAS 2 "Inventories" still need to be applied. Analogously to IAS 20 "Accounting for Government Grants and Disclosure of Government Assistance", a token amount is recognized for each power plant for emission allowances allocated free of charge. Provisions are recognized for the obligation to surrender emission allowances insofar as such allowances are available, at the amount capitalized for such allowances. If this obligation exceeds the allowances capitalized, the difference is recognized at the market price on the reporting date.

To ensure that recognition reflects the accounting period, allocated renewable energy certificates are recognized in the income statement at fair value as at the date of allocation in accordance with IAS 20 "Accounting for Government Grants and Disclosure of Government Assistance" and IAS 38 "Intangible Assets". For subsequent measurement, the fair value of allocated renewable energy certificates at initial

recognition is taken to be the cost of acquisition. They are subsequently measured at the lower of the acquisition or production cost and net realizable value. Therefore, the value may be written down if the net realizable value is below the cost of acquisition.

Cash and cash equivalents

This item contains balances held at banks, checks, and cash.

Provisions for pensions and other post-employment benefits

Provisions for pensions and other post-employment benefits are measured using the projected unit credit method for defined benefit obligations in accordance with IAS 19 "Employee Benefits". This method takes account of expected future salary and pension increases as well as pension obligations and accrued entitlements as at the reporting date. For German companies valuation is generally based on the biometric data in the 2018 G mortality tables published by Dr. Klaus Heubeck. The probability of disability is based on modified data derived from company-specific factors. Pension obligations outside Germany are determined using country-specific accounting parameters and measurement principles. The fair value of plan assets is deducted from the benefit obligation.

The present value of the defined benefit obligation is the fair value of expected future payments without deduction of the plan assets. These payments are required to fulfill obligations arising from employees' services in the reporting period or previous periods.

Actuarial gains and losses relating to the present value of defined benefit obligations and income from plan assets (apart from interest income) are derived from the difference between the expected pension obligations and the actual obligation calculated at year end, and from deviations between the present value of the defined benefit obligation and the fair value of plan assets. The gains and losses from the remeasurement of the net benefit obligation are recognized in OCI in the year in which they arise.

The STEAG Group recognizes current and past service cost and any gains or losses resulting from changes in plans and plan curtailments in personnel expense, while the net interest expense on the net benefit obligation is recognized in the interest result.

The benefit obligations at year end are compared with the fair value of the plan assets (funded status). Pension provisions are derived from the funded status, taking the asset ceiling into account.

Defined contribution plans exist for both company pension plans and state pension plans (statutory pension insurance). Risks arising from the investment of the contributions and actuarial parameters are not borne by the STEAG Group but by its employees. Defined contribution plans result in an expense in the period in which the contribution is made.

Other provisions

Other provisions are liabilities of uncertain timing or amount. They are established if there are legal or constructive obligations to third parties as at the reporting date, based on past events, that will probably lead to an outflow of resources. It must also be possible to reliably estimate the level of the obligation. If there are several obligations of the same type, the probability of an outflow of resources is calculated for these obligations as an aggregate. Restructuring provisions are only established if constructive obliga-

tions exist on the basis of a formal, detailed plan and those affected have been given justifiable expectations before the reporting date that the restructuring will be carried out.

Provisions are based on settlement obligations and take account of future cost increases. Non-current provisions are discounted using the specific discount rate for the provision. Current provisions and the current portion of non-current provisions are not discounted.

Deferred taxes, other income taxes

STEAG GmbH and KSBG KG form a single entity for income tax purposes. Consequently, STEAG GmbH is not a separate entity for income tax purposes. The presentation in the consolidated financial statements represents the economic view.

In compliance with IAS 12, deferred tax assets and liabilities are established for temporary valuation and recognition differences between the assets and liabilities recognized in the balance sheets prepared for tax purposes and those prepared in accordance with IFRS. Tax-deductible loss carryforwards that will probably be utilized in the future are capitalized at the amount of the deferred tax asset.

Deferred tax assets are recognized on the assumption that sufficient future taxable income is likely to be realized to cover these temporary differences. Where the realization of deferred tax assets is unlikely, they are written down.

Deferred tax assets and liabilities are offset if the company is permitted to net other income tax assets and liabilities and if the deferred tax assets and liabilities relate to income taxes in the same tax jurisdiction.

The tax rates used to calculate deferred taxes are those valid under current legislation or that have been announced as being applicable as at the date when the temporary differences will probably be settled. In view of the profit and loss transfer agreement with KSBG KG, the aggregate tax rate used to calculate deferred taxes for German companies in the tax entity is 16.0 percent. Since the main company in the tax entity is a partnership, the tax entity is not subject to corporation tax and the associated solidarity surcharge. The tax rates used for foreign companies and companies that do not form part of the tax entity are their national tax rates. The foreign tax rates vary between 16.0 percent (Romania) and 33.0 percent (Colombia).

Other income taxes for the reporting period and prior periods are recognized on the basis of the expected payment or refund. They are derived from the company-specific tax rates applicable on the reporting date.

Financial instruments

A financial instrument is a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments are recognized as soon as the STEAG Group becomes a contractual party to the instrument. Financial instruments recognized as financial assets and financial liabilities are not netted. Exceptions are made if there is a netting right for the amounts at the present time and net settlement is planned.

A distinction is made between derivative and non-derivative financial instruments. Non-derivative financial instruments recognized as assets comprise, for example, trade accounts receivable, loans, cash and

cash equivalents and equity instruments held. Financial instruments are carried at amortized cost or fair value on the reporting date, depending on their classification. On the liabilities side, non-derivative financial instruments comprise liabilities measured at amortized cost, e.g. trade accounts payable, loans, and liabilities to banks. Financial derivatives within the scope of IFRS 9 “Financial Instruments” are measured at their fair value on the reporting date.

Financial instruments are initially measured at fair value or the transaction price. Directly attributable transaction costs are included in the financial assets and financial liabilities, providing that these assets and liabilities are not subsequently measured at fair value through profit or loss. Subsequent measurement is based on the classification of the financial instruments mentioned above.

The fair value of financial instruments is normally the amount that the Group would receive or pay if the financial instruments were exchanged or settled on the reporting date. To determine the fair value, the default risk of the Group or the counterparty is taken into account. The fair value of financial instruments on the reporting date is allocated among three levels depending on the input factors used to determine the fair value. Financial instruments are allocated to the highest level (Level 1) if unadjusted quoted prices are available for identical financial instruments in an active market. The second level (Level 2) comprises financial instruments whose price can be derived from the price of similar financial instruments in an active market or an inactive market for identical or similar financial instruments. Further, other observable inputs from the market can be included in their valuation, for example, the development of interest rates, for which generally quoted ranges are observable, implicit volatilities, and credit spreads. For these financial instruments, future cash flows may be discounted using, for example, market interest rates that reflect the remaining term to maturity.

In all other cases, the valuation methods use one or more parameters that are not based on observable market data (Level 3). Discounted cash flow analyses or option pricing models have been selected as established valuation methods. To measure non-current financial instruments that do not bear interest at market rates, the expected future cash flows are discounted to the date of acquisition using the effective interest rate (present value). The effective interest rate takes account of all directly attributable fees that are by nature interest. Where the inputs used to value the financial instrument are drawn from different levels, the significant valuation factor with the lowest classification determines the classification of the financial instrument.

The fair value of standardized linear derivatives is derived from quoted price indicators. For fuels and emissions trading products, the prices on the Intercontinental Exchange (ICE) in London are used. For electricity products, the prices on the European Energy Exchange (EEX) in Leipzig are used. The decision to use the ICE or EEX is based on maximum liquidity of the underlying products.

The valuation of structured and non-linear products (options) is based on recognized valuation models. These models use observable market parameters. In addition, internal assumptions and estimates are made. These are regularly validated. Validation takes place quarterly through external benchmarking and past data.

The use and valuation of financial derivatives in the STEAG Group is subject to stringent controls and regular monitoring based on guidelines, and is part of regular reporting. A regular market conformance test ensures the market conformity of financial statements in the STEAG Group.

Non-derivative financial instruments

IFRS 9 introduced a new model for the classification and measurement of financial assets in the STEAG Group. Financial assets are classified in the following three categories on the basis of the business model used to manage them:

- At amortized cost
- At fair value through OCI
- At fair value through profit or loss

Where the cash flows from financial assets solely comprise payments of interest and repayments of principal, the financial assets are classified on the basis of the business model. Financial assets are measured at amortized cost if they are held within a business model whose objective is to collect the contractual cash flows. If the business model comprises holding but also trading the financial assets, e.g. to meet specific liquidity requirements, the assets are measured at fair value through other comprehensive income; so far the STEAG Group has not applied this business model.

Financial assets whose cash flows are not composed solely of payments of interest and repayments of the principal, for example, securities and derivatives, are measured at fair value through profit or loss. For equity instruments, IFRS 9 allows the option of measurement at fair value through other comprehensive income. The STEAG Group applied this option for equity instruments held as at the reporting date. If the equity instruments are sold, the gains and losses recognized in other comprehensive income up to this point are not reclassified to the income statement.

The impairment rules applied by the STEAG Group are based on expected credit losses, using the future-oriented prospective credit loss model set out in IFRS 9. This model is applied to all financial assets (debt instruments) measured at amortized cost.

Based on the impairment requirements of IFRS 9, the STEAG Group applies either

- the general approach for loans, securities and similar rights, other financial assets, lease receivables, credit commitments and financial guarantees, or
- the simplified approach for trade accounts receivable and contract assets.

The general approach uses a three-step procedure to determine impairment losses. For regular new financial assets and those where the credit risk has not increased significantly since initial recognition, the STEAG Group recognizes a provision for the 12-month expected credit losses (level 1). For contracts where the credit risk has increased significantly since initial recognition, a provision is recognized on the basis of the lifetime expected credit losses (level 2). At the next level (level 3), risk provisioning is also based on the lifetime expected credit losses. Unlike level 2, at level 3 the loss allowance is recognized on the basis of the actual default event. Objective indications of this comprise information that a debtor is in significant financial difficulties.

Establishing whether the credit risk associated with a financial asset has increased significantly is based on the assessment of the probability of default, taking into account both external ratings and internal information on the credit quality of the financial asset. A financial asset is transferred to level 2 if the credit risk has increased significantly since initial recognition.

The STEAG Group determines the expected credit risk for levels 1 and 2 using the logic for the expected loss model with respect to the probability and level of default based on counterparty ratings.

The simplified method is used for trade accounts receivable and contract assets. These receivables are allocated to level 2 when they are initially recognized. Therefore, for both initial recognition and on each subsequent reporting date, a loss allowance is recognized at an amount equal to the lifetime ECL. A simplified method is used to determine the loss allowance on the basis of an impairment matrix, which is based on historical default ratios for portfolios of customer receivables and which can be adjusted using appropriate prospective estimates.

Impairment losses are recognized in the income statement. If the original reason for the impairment loss no longer applies, it is reversed to income, but only up to the amortized cost.

Financial assets are derecognized when the contractual rights to receive payments lapse or are transferred and the STEAG Group has transferred substantially all opportunities and risks associated with ownership. There were no instances where the STEAG Group sold financial assets through securitization or a repurchase agreement and the assets were still reported in full or in part in the financial statements.

Derivative financial instruments

Derivatives are normally used to hedge the risk of changes in exchange rates, the price of goods and interest rates relating to existing or forecast transactions. For this purpose, interest rate swaps, forward exchange contracts, commodity futures, and options on standardized and structured products are used as hedging instruments. Derivatives are always measured at the fair value that corresponds to the price quoted on an active and accessible market. If no stock exchange or market price is available for the derivative from an active market, the fair value is determined using capital market pricing methods. For forward exchange contracts, the forward exchange rate as at the reporting date is used. Commodity derivatives are valued with the aid of spot prices and forward rates while interest rate derivatives are valued by discounting future cash flows using current market interests rates that are congruent with their remaining term.

The market price of options is determined using established valuation methods, based on internal models. All market factors that other market participants would use to determine the price are taken into account. Alongside market parameters, valuation based on the option pricing model uses parameters that are not directly observable in the market. Plausible assumptions are used for these parameters. Where physical delivery takes place, the realized revenues are recognized in sales. Changes in the fair value of options are recognized in other income or expenses. In the event that no or only immaterial amounts are physically delivered, option premiums are presented retrospectively in other operating income. Derivatives are initially recognized on the trading date.

Contracts relating to the receipt or delivery of non-financial assets or non-financial liabilities, based on the company's expected purchase, sale or usage requirements, are accounted for as executory contracts and not as derivative financial instruments as per IFRS 9. If these contracts contain embedded derivatives that are not closely related to the economic characteristics and risks of the host contract, they are valued and accounted for separately from the host contract.

Stand-alone derivatives and derivatives that do not form part of an effective hedging relationship (hedge accounting) are classified at fair value through profit or loss and are therefore recognized at fair value through profit or loss.

Provided that certain criteria are met, IFRS 9 still permits the use of special rules for hedge accounting (fair value hedges, cash flow hedges and hedges of a net investment) to reduce the volatility of the income statement. Formal documentation of a hedging relationship is based on the STEAG Group's risk management activities and comprises a description of the risk management strategy, determination of the hedge ratio, designation of the hedging instrument, the hedged item and details of determination of the effectiveness of the hedging relationship. The derivatives included in hedge accounting are not allocated to any category.

When recognizing currency hedges as cash flow hedges, the interest component and the cross-currency basis spread are not designated as part of the hedging relationship and are recognized in the income statement.

The purpose of fair value hedges is to hedge the fair value of assets or liabilities recognized in the balance sheet or of an off-balance-sheet firm commitment. Changes in the fair value of the hedging instrument are recognized in the income statement together with the change in the value of the hedged item. These changes must relate to the hedged risk. If off-balance-sheet firm commitments are hedged, changes in the fair value of the firm commitment relating to the hedged risk give rise to recognition of a financial asset or financial liability that impacts profit or loss. In view of this method, in the case of a perfect hedge changes in the value of the hedged item and the hedge cancel each other out in the income statement.

The purpose of cash flow hedges is to minimize the risk of volatility of future cash flows from a recognized asset or liability or a forecast transaction that is considered highly probable. The effective portion of changes in the fair value of a hedging instrument is recognized in other comprehensive income (OCI) and the ineffective portion of the change in value is recognized in the income statement. Amounts recognized in OCI are reclassified to the income statement as soon as the hedged item has an impact on the income statement or the forecast transaction is no longer probable. In the case of interest rate hedges, such amounts are included in net interest income or expense, while in the case of sales hedges they are included in the corresponding sales revenues and for procurement hedges in the cost of sales. If the hedged future transaction comprises a non-financial asset or liability, the profit or loss previously recognized in OCI is included in the cost of acquisition of the asset or liability when it is initially recognized and is reflected in income e.g. as a result of use.

The purpose of a hedge of a net investment is to reduce the foreign currency risk involved in an investment in a company whose functional currency is not the euro. Such hedges are treated as cash flow hedges. Gains and losses recognized in OCI are reclassified to the income statement when the foreign subsidiary is divested or investment in it is reduced.

Investment property

Property held as a financial investment to generate rental revenues or for capital appreciation is valued at the cost of acquisition or production, taking directly allocable transaction costs into account, and – insofar as it is subject to wear and tear – is depreciated over its useful life of 25-50 years using the straight-line method. If there are indications of a possible impairment, an impairment test is conducted, see Note (2.6) "Impairment test".

The fair values of investment property shown in the Notes are essentially based on average land values, depending on the specific land use, and are assigned to level 2 of the fair value hierarchy. Leasehold properties are valued using a capitalized ground rent in a range between 6 percent and 8 percent and are assigned to level 3.

In the event of an increase (decrease) in the ground rent, the estimated fair value would rise (fall).

Leasing

A lease is a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration. The STEAG Group is party to leases as both lessee and lessor (finance and operating leases).

A lease is classified as a finance lease if, under the lease agreement, the lessee bears substantially all opportunities and risks associated with ownership of the asset. In addition to contractually agreed finance leases, lease agreements relating to the use of assets, for example, long-term power distribution agreements, may be classified as finance leases if they meet certain cumulative criteria.

If the STEAG Group is the lessee, the corresponding right-of-use asset is recognized in the lessee's property, plant and equipment at the present value of the lease payments. Concurrently, a corresponding lease liability is recognized. This is discounted at the interest rate implicit in the lease. If the interest rate implicit in the lease cannot be determined, the lessee's incremental borrowing rate is used. In the STEAG Group, the right-of-use assets are not presented in a separate line item; they are included in the line items on the balance sheet in which the underlying assets would be recognized if they were owned by the company. Accordingly, the lease liabilities are not presented separately, but together with other financial liabilities.

The STEAG Group has elected to apply the recognition exemption for short-term leases (<12 months). The related lease payments are recognized as expense in the income statement on a straight-line basis. Further, the STEAG Group uses the recognition exemption for leases for intangible assets, which are recognized in accordance with the provisions of IAS 38. Similarly, the Group uses the practical expedient allowing leases of a similar nature to be combined in a portfolio.

By contrast, the STEAG Group does not apply the exemptions permitting the recognition of leases for low-value assets as expense and the separation of lease and non-lease components.

Assets held for sale and the associated liabilities

Non-current assets are classified as "held for sale" if the corresponding carrying amount is to be realized principally through a sale transaction rather than through continued use. They are recognized separately if the sale is considered to be highly probable and the assets are available for immediate sale. If the associated liabilities are to be sold with the asset as part of the transaction, these must also be presented separately.

The non-current assets or disposal groups classified as "held for sale" must be measured at the lower of their carrying amount and fair value less disposal costs. The carrying amount of an asset or disposal group is determined using the applicable IFRSs immediately prior to initial classification.

Unless the assets are classified as a discontinued operation, the results of the valuation and the sale of the assets are still included in income from continuing operations.

Government grants

Government grants for the purchase or construction of property, plant and equipment reduce the acquisition or production cost of such assets. They are recognized in profit or loss over the useful life of the assets through lower depreciation. Other grants are accrued and recognized as income over the same period as the expenses for which they are expected to compensate.

Contingent liabilities and other financial commitments

Contingent liabilities are possible or present obligations arising from past events, where an outflow of resources is not probable and the level of the obligation cannot be estimated with sufficient reliability. They are only recognized on the balance sheet if they are acquired as part of a business combination.

Other financial commitments result from non-onerous executory contracts, continuous obligations, statutory requirements and other commercial obligations that are not already included in the liabilities shown on the balance sheet or in contingent liabilities and that are of significance for an assessment of the company's financial position.

(2.7) Changes in accounting policies

The STEAG Group applied IFRS 16 for the first time for the fiscal year beginning on January 1, 2019. The effects of initial application of this new standard are set out in detail in Note (2.3)

(3) Discussion of assumptions and estimation uncertainties

The preparation of consolidated financial statements involves assumptions and estimates about the future. Evidently, the subsequent circumstances do not always match the estimates made. Adjustments to estimates are taken into account in the appropriate period as soon as better information is available. The estimates and assumptions that constitute a material risk that the carrying amounts of assets and liabilities may have to be adjusted within the next fiscal year are discussed below.

(a) Goodwill impairment

Intangible assets, especially goodwill, are tested for impairment on the basis of the best possible assumptions and estimates regarding, for example, future cash flows, sustained earnings prospects, expected growth rates, exchange rates and discount rates.

The lowest positive difference (comparison between the recoverable amount and carrying amount of a CGU or group of CGUs to which goodwill is allocated) is € 108.7 million (after non-controlling interests) for the Renewable Energies and Distributed Facilities division. A sensitivity analysis was conducted for the parameters to which the recoverable amount reacts most sensitively. The recoverable amount would correspond to the carrying amount of the assets and liabilities assigned to the division if the discount rate used for the valuation were 1.0 percentage points higher or if the terminal value of EBITDA were 9.5 percent lower.

(b) Impairment testing of STEAG GmbH's power plants in Germany

The impairment test on STEAG GmbH's power plants (including district heating plants) is based on management assumptions and estimates regarding, for example, future cash flows, sustained earnings prospects, expected growth rates, operational lifetime and the expected future development of market prices. There is not currently any new information on the operational lifetime because the plans to halt coal-fired power generation are not yet sufficiently detailed. Contrary to past practice, the assumptions on future electricity prices are derived from an external electricity price model, rather from STEAG's own model. The carrying amount of the CGU for the German power plants (including district heating plants) tested for impairment was € 227.6 million as at the reporting date. The Walsum 10 power plant (carrying amount: € 601.7 million) comprises a separate CGU. The estimation uncertainties outlined above, especially with regard to the operational lifetime, also apply to this power plant.

(c) Measurement of provisions for pensions and other post-employment benefits

The measurement of provisions for pensions and other post-employment benefits is based, inter alia, on assumptions about discount rates, expected future salary and pension increases and mortality tables. These assumptions may deviate from the actual data due to changes in economic or market conditions.

The sensitivity analysis for the main actuarial parameters is shown in Note (6.11).

(d) Measurement of other provisions

Other provisions, especially provisions for recultivation and environmental protection, dismantling obligations, litigation risks and restructuring, are naturally exposed to significant forecasting uncertainties re-

garding the level and timing of the obligation. The management has to make assumptions about the probability of occurrence of an obligation or future trends, such as the cost of obligations, on the basis of experience. Non-current provisions, in particular, are exposed to forecasting uncertainties. In addition, the level of non-current provisions depends to a large extent on the selection and development of the market-oriented discount rate and the estimate of the overall costs. The STEAG Group uses different interest rates for different currencies and terms to maturity.

(e) Measurement of financial instruments

To hedge future transactions relating to the distribution of energy from STEAG's power plants and from coal trading (see also Note (8.1) "Hedge accounting"), assumptions are made about the probability that the forecast transactions will take place. The STEAG Group hedges clean dark spread trading volumes in order to successively hedge expected future cash flows from the distribution of power. Expected distribution volumes are estimated by modeling expected future hourly power prices on the basis of historical data and expected market trends. Marketing is based on the one hand on a model based on the full value of the underlying power supply model (delta hedging) and on the other on the sale of virtual shares of the power generated by power plants to third parties, which are valued using an in-house option pricing model. The assumptions and parameters used are regularly reviewed and adjusted to ensure the highest possible hedge quality. Alongside the futures price curve for power, a major factor influencing the volume to be hedged is the underlying power supply model. In the context of fuel trading, assumptions are made regarding the probability of sourcing and distribution volume for both long-term master agreements and shorter-term coal and sea freight contracts.

The hedging relationship at STEAG GmbH for the marketing of power from its own power plants was terminated in 2019 due to the specific market situation, with high price volatility and declining contribution margins, and the related uncertainty with regard to the marketing of power plant output.

(f) Measurement of development projects

In view of their long-term nature and the large amount of capital involved, investment decisions involve complex and wide-ranging risks.

Growth projects, in particular, are exposed to considerable uncertainty with regard to the estimates of future opportunities and risks due to the early project phase. At the same time, commercialization may depend on uncertain future events that can currently only be estimated on the basis of a sound opportunity/risk assessment.

In the case of the geothermal energy project in Indonesia, the opportunities and risks relate to the presence of a geothermal system that is suitable for commercialization, the need to halt or extend the exploration phase at short notice, and the search for a strategic partner for the ongoing development of the project. As at December 31, 2019, assets of € 48.4 million were recognized for this project.

(g) Assumptions regarding joint ventures

The STEAG Group holds more than 50 percent of the capital and half of the voting rights in the following companies:

- Fernwärmeschiene Rhein-Ruhr GmbH
- BH Biomasse Handelsgesellschaft mbH & Co. KG
- BK Biomasse Kraftwerkversorgungs GmbH
- STEAG O&M Company Pvt.. Ltd. (India).

In addition, stakes of less than 50 percent are held in the following companies that the Group controls jointly with several partners or with one partner, where the Group has more than half of the voting rights:

- Arenales Solar PS, S.L. (Spain)
- ENNI RMI Windpark Kohlenhuck GmbH
- Projektgesellschaft "Radbod" mbH
- Windkraft Lohberg GmbH
- Cormetec Inc. (USA);
- Hawar Power Minerals W.L.L. (Qatar).

All of these companies are classified as joint ventures because the STEAG Group controls them jointly with one or more partners.

(h) Assumptions regarding associates

The Group holds 50 percent of the capital of Euroment B.V (formerly Euroment Benelux B.V.) (Netherlands). However, since its proportion of the voting rights is lower, it can only exert a significant influence.

(4) Scope of consolidation

(4.1) General

Alongside STEAG GmbH, the consolidated financial statements include all material subsidiaries in Germany and abroad that are directly or indirectly controlled by STEAG GmbH. Associates and joint ventures are recognized at equity.

The scope of consolidation changed as follows:

Number of companies	Germany	Other countries	Total
STEAG GmbH and consolidated subsidiaries			
As at December 31, 2018:	57	34	91
Acquisitions/newly established companies	3	5	8
Other companies consolidated for the first time	2	-	2
Divestments	1	-	1
Intragroup mergers	6	-	6
Other companies derecognized	-	1	1
As at December 31, 2019:	55	38	93
Investments recognized at equity:			
As at December 31, 2018:	33	14	47
Acquisitions/newly established companies	1	7	8
Other first-time consolidations using the equity method	1	-	1
Divestments	-	1	1
Intragroup mergers	-	-	-
Other companies derecognized	2	-	2
As at December 31, 2019:	33	20	53
	88	58	146

Effective January 1, 2019, the STEAG Group acquired the outstanding 51 percent of shares in Gemeinschaftskraftwerk Bergkamen A beschränkt haftende OHG. This company operates a hard coal power plant in Bergkamen, in the Unna region of Germany. The STEAG Group previously held 49 percent of the shares in this company. In the transition consolidation, the shares previously held were remeasured and income of € 29.0 million was recognized. The difference between the purchase price for the 51 percent of shares purchased and the value of the remeasured shares, and the fair value of the net assets acquired was recognized in income as negative difference of € 28.4 million.

The derecognition of companies did not have a material impact on the Group's assets, financial position and results of operations in the reporting period.

(4.2) Non-controlling interests

As in the previous year, there are non-controlling interests of 49.0 percent in each case in the following subsidiaries, which are material for the STEAG Group: STEAG Fernwärme GmbH (Germany), STEAG-EVN Walsum 10 Kraftwerksgesellschaft mbH (Germany), Iskenderun Enerji Üretim ve Ticaret A.S. (Turkey) and STEAG State Power Inc. (Philippines).

Condensed financial information for these subsidiaries is given below. It has been prepared in accordance with IFRS and adjusted for differences in the accounting policies used by the Group and any adjustment of the fair value as at the acquisition date. The amounts shown reflect the perspective of each subsidiary before intragroup elimination.

	2019			
in € million	STEAG-EVN Walsum 10 Kraftwerks- gesellschaft mbH	Iskenderun Enerji Üretim ve Ticaret A.S.	STEAG State Power Inc.	STEAG Fernwärme GmbH
Non-current assets as at December 31	621.0	95.4	188.5	88.7
Current assets as at December 31	85.8	176.9	53.9	42.6
Non-current liabilities as at December 31	316.2	3.1	53.9	79.9
Current liabilities as at December 31	101.2	32.3	23.9	35.4
Net assets	289.4	236.9	164.6	16.0
Sales	195.1	265.9	77.1	107.6
Income after taxes	25.1	25.6	19.3	0.8
Other comprehensive income after taxes	3.7	4.8	2.7	-7.6
Total comprehensive income	28.8	30.4	22.0	-6.8
Net assets attributable to non-controlling interests	145.9	118.2	80.7	7.8
Income after taxes attributable to non-controlling interests	13.5	12.5	9.4	0.4
Dividends attributable to non-controlling interests	10.5	13.3	7.9	-

	2018			
in € million	STEAG-EVN Walsum 10 Kraftwerks- gesellschaft mbH	Iskenderun Enerji Üretim ve Ticaret A.S.	STEAG State Power Inc.	STEAG Fernwärme GmbH
Non-current assets as at December 31	656.3	101.3	187.4	82.8
Current assets as at December 31	109.8	243.7	57.6	47.9
Non-current liabilities as at December 31	344.0	0.8	59.2	68.5
Current liabilities as at December 31	122.6	106.1	27.0	39.3
Net assets	299.5	238.1	158.8	22.9
Sales	209.9	365.0	65.9	95.7
Income after taxes	19.5	24.2	10.5	2.5
Other comprehensive income after taxes	6.1	11.7	6.7	0.1
Total comprehensive income	25.6	35.9	17.2	2.6
Net assets attributable to non-controlling interests	149.6	116.7	77.9	11.2
Income after taxes attributable to non-controlling interests	10.2	11.9	5.2	1.2
Dividends attributable to non-controlling interests	25.5	35.4	2.2	0.0

(5) Notes to the income statement

(5.1) Sales

in € million	2019	2018
Revenues from the sale of goods	1,556.5	2,448.7
Revenues from services	408.5	375.2
Revenues from long-term contracts	91.9	39.4
Revenues from finance leases	30.4	37.7
	2,087.3	2,901.0

The drop in revenues from the sale of goods was mainly due to a reduction in electricity production in Germany. By contrast, revenues from services and construction contracts increased.

Sales and material costs resulting from optimization of marketing were netted for the first time in the reporting period due to the termination of hedge accounting for the marketing of output from the Group's own power plants. In the past, the optimized hedging instruments were part of the documented hedging relationship which was terminated in the reporting period. Netting still allows the economic effect to be presented correctly.

Sales include revenues of € 2.4 million (prior year: € 3.0 million) from allocated renewable energy certificates.

All revenues apart from the revenues from finance leases are within the scope of IFRS 15. Revenues from long-term contracts mainly comprise long-term contracts for the construction and conversion of plants.

Revenues from finance leases contain interest income of € 1.8 million from the STEAG Group's finance leases. The revenues from finance leases exclude both variable lease payments, which were not taken into account in the valuation of the net investment in the lease, and income from reassessment or modification of finance leases.

(5.2) Other operating income

in € million	2019	2018
Income from the valuation of derivatives (excluding interest rate derivatives)	195.3	774.7
Income from initial consolidation	57.4	-
Income from the reversal of impairment losses	44.7	0.9
Income from the reversal of provisions	42.0	15.1
Income from currency translation of monetary assets and liabilities	20.5	30.2
Income from the disposal of assets	5.6	14.6
Income from the reversal of deferred items	5.1	5.4
Income from insurance refunds	2.7	1.5
Income from non-core operations	2.7	2.8
Income from other refunds and compensation for damage	1.1	3.3
Income from refunds of other taxes	-	6.0
Miscellaneous income	34.0	22.9
	411.1	877.4

The decline in other operating income was partly due to the netting for the first time in the reporting period of other operating income and expenses from optimized marketing of output from the Group's power plants; see Note (5.1).

The income from initial consolidation results from the acquisition in stages of Gemeinschaftskraftwerk Bergkamen A beschränkt haftende OHG. € 29.0 million of this amount relates to the remeasurement of shares already held at the higher fair value.

The income from the reversal of impairment losses comprises income of € 38.6 million (prior year: € 0.2 million) from the reversal of impairment losses on intangible assets, property, plant and equipment, € 5.6 million (prior year: € 0.0 million) from the reversal of impairment losses on loans and other receivables, and € 0.5 million (prior year: € 0.7 million) from the reversal of impairment losses on trade accounts receivable and finance leases.

The income from the reversal of provisions mainly contains income from the reversal of provisions for other obligations and relates principally to the former obligation of € 21.9 million to maintain the Lünen power plant site, which was sold in the reporting period, and former obligations of € 9.6 million in connection with the systemic relevance of power plant sites.

The income from the disposal of assets contains gains of € 4.2 million (prior year: € 12.2 million) from the disposal of property, plant and equipment, intangible assets and investment property. In the previous year, this item contains gains of € 2.4 million from the derecognition of consolidated subsidiaries.

The income from non-core operations contains rental income of € 1.7 million (prior year: € 1.7 million) from operating leases. Further rental income from operating leases totaling € 1.6 million (prior year: € 1.7 million) is contained in sales. This rental income results from the rental of investment property; see Note (6.3).

The nominal value of receivables from future minimum lease payments for assets leased under operating leases have the following payment terms:

in € million	Dec. 31, 2019	Dec. 31, 2018
Due within 1 year	1.1	1.0
Due within 1-2 years	0.9	0.5
Due within 2-3 years	0.3	0.5
Due within 3-4 years	0.2	0.3
Due within 4-5 years	0.2	0.2
Due in more than 5 years	1.0	1.1
	3.7	3.6

(5.3) Cost of materials

in € million	2019	2018
Expenses for raw materials and supplies and goods and services sourced	1,321.1	2,142.4
Impairment losses on raw materials, supplies and goods sourced	11.4	7.6
Reversal of impairment losses on raw materials, supplies and goods sourced	-2.6	-6.0
	1,329.9	2,144.0

The expenses for raw materials, supplies and goods and services sourced mainly comprise expenses for the coal used in the power plants and expenses for the procurement of power in fuel trading.

The drop of € 814.1 million in the cost of materials relates to the netting for the first time of sales and material costs in connection with optimized marketing of output from the Group's own power plants; see Note (5.1). Another reason was the reduction in power generation in Germany.

(5.4) Personnel expenses

in € million	2019	2018
Wages and salaries	303.0	282.8
Social security contributions	50.1	49.5
Pension expenses	15.4	14.8
Other personnel-related expenses	2.8	2.5
	371.3	349.6

Personnel expenses were € 21.7 million higher than in the previous year. This was mainly because the balance of reversals of and additions to provisions for restructuring reduced personnel expenses by € 2.2 million (prior year: € 21.4 million). This resulted from changes in the implementation of planned measures and higher staff turnover in the units affected.

The average number of employees in the STEAG Group decreased slightly from 6,391 to 6,295. The reduction was principally in the Power division.

Net interest cost for pensions is reported in the interest result; see Note (5.8).

(5.5) Depreciation, amortization and impairment losses

This item includes depreciation and amortization resulting from the systematic allocation of the cost of acquisition or production over the useful life of assets. It also includes impairment losses on assets where the recoverable amount (see Note 2.6) was below the carrying amount.

in € million	2019	2018
Depreciation and amortization	164.9	142.4
Impairment losses	10.8	45.3
	175.7	187.7

Depreciation and amortization

Depreciation and amortization refer to the following groups of assets:

in € million	2019	2018
Intangible assets	9.0	8.5
Property, plant and equipment	155.9	133.9
	164.9	142.4

Impairment losses

Impairment losses refer to the following groups of assets:

in € million	2019	2018
Impairment losses pursuant to IAS 36:	7.4	40.7
Intangible assets	-	0.4
Property, plant and equipment	7.4	40.3
Impairment losses pursuant to IFRS 9:	3.4	4.6
Financial assets	1.0	1.6
Trade accounts receivable and other receivables	2.4	3.0
	10.8	45.3

(a) Impairment losses pursuant to IAS 36:

Impairment losses of € 7.4 million (prior year: € 40.7 million) were recognized for intangible assets, property, plant and equipment at power generating plants in Germany and abroad,

The fair values were determined on the basis of recoverable value models, see the section on "Impairment testing" in Note (2.6).

(b) Impairment losses pursuant to IFRS 9:

in € million	2019	2018
Financial assets	1.0	1.6
Loans	1.0	1.5
Other financial assets	-	0.1
Trade accounts receivable	2.4	3.0
	3.4	4.6

Impairment losses totaling € 2.4 million (prior year: € 3.0 million) were recognized for trade accounts receivable. The impairment losses on loans totaled € 1.0 million (€ 1.5 million). As in the previous year, impairment losses on loans outside Germany were negligible.

(5.6) Other operating expenses

in € million	2019	2018
Losses on the valuation of derivatives (excluding interest rate derivatives)	139.8	745.4
Administrative expenses	49.3	52.0
Losses on currency translation of monetary assets and liabilities	31.3	47.5
Insurance premiums	23.2	21.6
IT expenses	10.4	11.7
Miscellaneous tax expense	8.9	8.8
Expenses for leases	5.4	19.9
Expenses for maintenance and repairs	3.0	3.5
Selling expenses	2.3	2.1
Losses on the disposal of assets	1.7	1.2
Miscellaneous other operating expenses	61.9	42.5
	337.2	956.2

The decline in other operating expenses was partly due to the netting for the first time in the reporting period of other operating income and expenses from optimized marketing of output from the Group's power plants; see Note (5.1).

The expenses for leases are broken down as follows:

in € million	2019
Expenses for leases with a term of up to 12 months	1.1
Variable lease expenses that cannot be capitalized	2.4
Other expenses for leases	1.9
Expenses from the reassessment of leases	0.0
	5.4

The losses on the disposal of assets include € 1.7 million (prior year: € 1.2 million) from the sale of property, plant and equipment.

The miscellaneous other operating expenses mainly comprise travel expenses, expenses for other external services and additions to provisions.

(5.7) Research and development expenses

Research and development expenses amounted to € 0.9 million in 2019 (prior year: € 0.7 million). In the reporting period, as in the prior year, the majority of these expenses are included in the cost of materials.

(5.8) Interest result

in € million	2019	2018
Interest income from financial assets	10.5	11.7
Interest and similar income from interest rate derivatives	0.8	1.0
Interest income from discounting other provisions	0.0	0.4
Other interest-type income	1.3	0.8
Interest income	12.6	13.9
Interest expense for financial liabilities	-43.6	-47.8
Net interest expense for pensions	-21.1	-19.8
Interest expenses on accrued interest on other provisions	-17.1	-6.9
Interest expense from lease liabilities	-5.2	-2.4
Interest and similar expenses for interest rate derivatives	-2.5	-0.2
Interest expense for income tax liabilities	-0.1	-0.3
Other interest-type expenses	-3.2	-4.7
Interest expense	-92.8	-82.1
	-80.2	-68.2

Prior-year figures restated.

The interest income from financial assets contains € 6.4 million (prior year: € 6.8 million) from the € 150.0 million upstream loan granted by STEAG GmbH to KSBG KG, see Note (6.5).

The interest expense for financial liabilities comprises € 8.6 million (prior year: € 9.3 million) in connection with the bonded loans taken out by STEAG GmbH; see Note (6.13).

Borrowing costs of € 0.7 million (prior year: € 0.7 million) were capitalized.

The average cost of capital for capitalized borrowing costs in the STEAG Group is 2.8 percent (prior year: 2.8 percent).

(5.9) Result from investments recognized at equity

in € million	2019	2018
Equity-method income	13.0	20.0
Equity-method expenses	-4.8	-1.3
Impairment losses	-8.4	-0.1
	-0.2	18.6

In 2019, as in the prior year, the result came from investments recognized at equity that were individually non-material.

The current result from investments recognized at equity was reduced, in particular, by an impairment loss of € 6.7 million on a joint venture in the USA in connection with reclassification to assets and liabilities held for sale; see Note (6.9). In the prior year, the result was dominated by a positive one-off effect at a joint venture.

(5.10) Other financial income

in € million	2019	2018
Income from other investments	0.9	1.5
Losses on the sale of current securities	-	-0.7
Impairment losses on current time deposits at banks	0.0	-0.1
Reversals of impairment losses on current time deposits at banks	0.0	0.2
	0.9	0.9

(5.11) Income taxes

Income taxes comprise the following:

in € million	2019	2018
Other income taxes	48.2	64.0
(thereof relating to other periods)	(-5.7)	(5.1)
Deferred taxes	20.4	9.5
(thereof relating to other periods)	(0.4)	(0.5)
	68.6	73.5

The tax reconciliation shows the development of expected income taxes relative to the effective income taxes stated in the income statement.

The expected current income taxes are based on an aggregate tax rate of 16.0 percent (prior year: 16.0 percent). This comprises the average domestic trade tax. The effective income taxes include income taxes and deferred taxes.

in € million	2019	2018
Income before income taxes	200.5	86.2
Expected income taxes	32.0	13.8
Variances/changes in tax rates	17.9	9.8
Change in the impairment of deferred taxes	21.1	28.6
Non-deductible expense	5.9	6.4
Tax-free income	-5.2	-3.4
Other	-3.1	18.3
Effective income taxes	68.6	73.5

The variances between expected and effective income taxes are principally due to deviations in foreign tax rates and to German companies that are subject to corporation taxes as well as to trade tax. The change in the impairment of deferred taxes principally comprises minus € 2.5 million (prior year: minus € 3.5 million), which relates to the impairment of deferred tax assets for the German tax entity, taking into account future tax planning, and € 23.5 million (prior year: € 32.1 million) on losses for which no deferred taxes were established. € 4.8 million of the tax-free income relates to the remeasurement of shares. In the prior year, € 3.4 million was principally due to the sale of investments. The other effects contain non-period taxes of € 5.7 million (prior year: € 5.1 million) and non-period deferred taxes of € 0.4 million (prior year: € 0.5 million). In addition, this item contains deferred taxes of € 2.7 million (prior year: € 12.4 million) in connection with exchange rate fluctuations at Iskenderun Enerji Üretim ve Ticaret A.S. (Turkey).

(6) Notes to the balance sheet

(6.1) Intangible assets

in € million	Goodwill	Other intangible assets	Total
Acquisition/production cost			
As at January 1, 2018	77.9	248.0	325.9
Currency translation	-0.2	2.8	2.6
Additions from business combinations	-	-	-
Other additions	-	3.0	3.0
Disposals	-0.4	-0.9	-1.3
Reclassifications	-	0.7	0.7
As at December 31, 2018	77.3	253.6	330.9
Currency translation	0.3	1.6	1.9
Additions from business combinations	2.6	0.2	2.8
Other additions	7.5	8.2	15.7
Disposals	-0.4	-1.0	-1.4
Reclassifications	-	0.9	0.9
As at December 31, 2019	87.3	263.5	350.8
Amortization and impairment losses			
As at January 1, 2018	-	123.4	123.4
Currency translation	-	0.7	0.7
Amortization	-	8.5	8.5
Impairment losses	-	0.4	0.4
Disposals	-	-1.0	-1.0
Reclassifications	-	-	-
As at December 31, 2018	-	132.0	132.0
Currency translation	-	0.4	0.4
Amortization	-	9.0	9.0
Reversal of impairment losses	-	-1.6	-1.6
Disposals	-	-0.9	-0.9
Reclassifications	-	-	-
As at December 31, 2019	-	138.9	138.9
Carrying amounts as at December 31, 2018	77.3	121.6	198.9
Carrying amounts as at December 31, 2019	87.3	124.6	211.9

The reported goodwill results from acquisitions of shares in subsidiaries and business operations.

The additions of € 10.1 million in the reporting period relate to the Power division and are due to the provisional purchase price allocation in connection with the acquisition of the SENS Group.

Disposals of goodwill relate to the Renewable Energies and Distributed Facilities division. € 0.4 million of this amount relates to the disposal of Biomasseheizkraftwerk Odenwald GmbH.

The goodwill is allocated to the Power and Renewable Energies and Distributed Facilities CGUs.

The table shows how it is broken down:

Goodwill

in € million	Dec. 31, 2019	Dec. 31, 2018
Power	67.5	57.2
Renewable Energies and Distributed Facilities	19.8	20.1
	87.3	77.3

On the reporting date, there were other restrictions on the use of intangible assets totaling € 35.1 million (prior year: € 43.4 million). As in the prior year, there were no commitments to purchase intangible assets.

(6.2) Property, plant and equipment

in € million	Land, land rights and buildings	Plant and machinery	Other plant, office furniture and equipment	Advance payments and construction in progress	Total
Acquisition/production cost					
As at January 1, 2018	589.3	4,614.7	151.8	72.7	5,428.5
Currency translation	0.4	1.4	1.3	3.7	6.8
Additions from business combinations	-	-	-	-	0.0
Other additions	1.3	64.2	9.3	87.3	162.1
Disposals	-6.6	-80.3	-6.0	-5.3	-98.2
Reclassifications	2.8	19.6	0.8	-24.1	-0.9
As at December 31, 2018	587.2	4,619.6	157.2	134.3	5,498.3
Initial measurement, initial application of IFRS 16	102.3	27.2	4.4	-	133.9
Change due to IFRS 16	-8.4	-0.4	-0.2	-	-9.0
Currency translation	1.5	3.5	0.7	2.1	7.8
Additions from business combinations	24.5	59.7	0.1	14.3	98.6
Other additions	10.7	33.7	9.6	28.8	82.8
Disposals	-37.7	-395.4	-3.1	-0.8	-437.0
Reclassifications	24.7	49.8	0.8	-73.6	1.7
As at December 31, 2019	704.8	4,397.7	169.5	105.1	5,377.1
Depreciation and impairment losses					
As at January 1, 2018	314.8	3,160.7	120.4	2.6	3,598.5
Currency translation	0.0	-0.3	1.1	0.8	1.6
Additions from business combinations	-	-	-	-	0.0
Depreciation	13.2	110.8	9.9	0.0	133.9
Impairment losses	3.5	11.0	0.0	25.7	40.2
Reversal of impairment losses	-0.2	-	-	-	-0.2
Disposals	-5.1	-44.3	-5.8	-	-55.2
Reclassifications	-	-	-	-	0.0
As at December 31, 2018	326.2	3,237.9	125.6	29.1	3,718.8
Currency translation	0.7	1.4	0.5	0.5	3.1
Additions from business combinations	-	0.8	0.1	13.6	14.5
Depreciation	23.0	122.0	10.8	0.1	155.9
Impairment losses	-	-	-	7.4	7.4
Reversal of impairment losses	-1.0	-36.0	0.0	-	-37.0
Disposals	-35.1	-386.1	-2.9	-	-424.1
Reclassifications	-	-	-	-	0.0
As at December 31, 2019	313.8	2,940.0	134.1	50.7	3,438.6
Carrying amounts as at December 31, 2018	261.0	1,381.7	31.6	105.2	1,779.5
Carrying amounts as at December 31, 2019	391.0	1,457.7	35.4	54.4	1,938.5

The carrying amounts of finance leases recognized in the prior year in accordance with the old lease standard, IAS 17, amounted to € 0.7 million for land, land rights and buildings, € 15.6 million for plant and machinery, and € 1.8 million for other plant, office furniture and equipment.

In the STEAG Group, leases are mainly for land, office premises and plant. The following table shows the development of the carrying amounts of the right-of-use assets recognized as at January 1, 2019 in accordance with IFRS 16.

in € million	Land, land rights and buildings	Plant and machinery	Other plant, office furniture and equipment	Advance payments and construction in progress	Total
Acquisition/production cost					
As at January 1, 2019	102.3	27.2	4.4	-	133.9
Currency translation	0.1	0.0	0.0	-	0.1
Additions from business combinations	0.6	-	0.1	-	0.7
Change due to IFRS 16	-8.4	-0.4	-0.2	-	-9.0
Other additions	9.3	2.3	3.2	-	14.8
Disposals	-0.2	-	-	-	-0.2
Reclassifications	0.7	42.3	5.5	-	48.5
As at December 31, 2019	104.4	71.4	13.0	-	188.8
Depreciation and impairment losses					
As at January 1, 2019	-	-	-	-	0.0
Currency translation	0.0	0.0	0.0	-	0.0
Additions from business combinations	-	-	-	-	0.0
Depreciation	9.0	6.6	2.9	-	18.5
Impairment losses	-	-	-	-	0.0
Reversal of impairment losses	-	-	-	-	0.0
Disposals	-	-0.1	-0.1	-	-0.2
Reclassifications	0.5	29.8	3.2	-	33.5
As at December 31, 2019	9.5	36.3	6.0	-	51.8
Carrying amounts as at December 31, 2019	94.9	35.1	7.0	-	137.0

The carrying amounts of property, plant and equipment pledged as collateral for Group liabilities amounted to € 477.1 million (prior year: € 535.1 million). A further € 578.7 million (prior year: € 573.9 million) are subject to other restrictions on use.

The Group has commitments of € 7.3 million (prior year: € 9.2 million) to purchase property, plant and equipment.

(6.3) Investment property

in € million	Land, land rights	Buildings	Total
Acquisition/production cost			
As at January 1, 2018	13.6	0.5	14.1
Other additions	-	-	-
Disposals	-0.1	-	-0.1
Reclassifications	-	-	-
As at December 31, 2018	13.5	0.5	14.0
Other additions	-	0.1	0.1
Disposals	-0.1	-	-0.1
Reclassifications	-	-	-
As at December 31, 2019	13.4	0.6	14.0
Depreciation and impairment losses			
As at January 1, 2018	0.3	0.3	0.6
Depreciation	-	0.0	0.0
Impairment losses	-	-	-
As at December 31, 2018	0.3	0.3	0.6
Depreciation	-	-	-
Impairment losses	-	-	-
As at December 31, 2019	0.3	0.3	0.6
Carrying amounts as at December 31, 2018	13.2	0.2	13.4
Carrying amounts as at December 31, 2019	13.1	0.3	13.4

The fair value of investment property was € 16.6 million (prior year: € 16.9 million).

The income statement contains operating expenses totaling € 0.3 million (prior year: € 0.4 million) that are directly related to investment property that generates rental revenues. Rental revenues amounted to € 1.6 million (prior year: € 1.7 million).

In addition, gains of € 0.2 million from the sale of investment property were recorded (prior year: € 0.1 million).

(6.4) Investments recognized at equity

The STEAG Group holds shares in a number of associates and joint ventures, which are individually non-material.

The carrying amount of associates recognized at equity is € 48.2 million (prior year: € 52.3 million) and the carrying amount of joint ventures recognized at equity is € 36.3 million (prior year: € 46.4 million).

The following table shows the combined financial data from the latest available financial statements of these companies:

in € million	Associates		Joint ventures	
	2019	2018	2019	2018
Income after taxes	13.2	14.2	-6.1	-8.6
Other comprehensive income after taxes	-	-	-	7.6
Total comprehensive income	13.2	14.2	-6.1	-1.0

A credit facility of € 6.4 million was made available to the joint venture Fernwärmeschiene Rhein-Ruhr GmbH. A total of € 5.4 million (prior year: € 4.6 million) of this amount had been drawn as at year-end 2019.

(6.5) Financial assets

in € million	Dec. 31 2019		Dec. 31, 2018	
	Total	thereof non-current	Total	thereof non-current
Other investments	17.3	17.3	13.6	13.6
Loans	186.9	181.3	195.2	187.9
Securities and similar rights	0.0	0.0	0.0	0.0
Receivables from finance leases	212.2	194.7	246.4	201.8
Receivables from derivatives	228.1	13.2	1,032.2	114.5
Other financial assets	61.3	5.1	145.2	10.0
	705.8	411.6	1,632.6	527.8

(a) Other investments

Other investments comprise investments in unlisted equity instruments that are recognized at fair value through other comprehensive income. The change is mainly due to the valuation of an investment in India.

(b) Loans

Loans are exposed to an interest rate risk, which can affect their fair value or future cash flows. They are carried at amortized cost. Impairment losses on loans are outlined in Note (8.1).

An upstream loan of € 150.0 million has been granted to KSBG KG. Including capitalized interest, loans include total lending to KSBG KG of € 150.6 million (prior year: € 177.6 million).

(c) Securities and similar rights

Securities and similar rights are exposed to an interest rate risk, which can affect their fair value or future cash flows. They are carried at fair value through profit or loss. Securities listed on a stock exchange are exposed to a risk of changes in their market price.

(d) Receivables from finance leases

The reconciliation from gross investment to the present value of outstanding minimum lease payments and their due dates is as follows:

in € million	Dec. 31, 2019	Dec. 31, 2018
Gross investment	397.3	456.3
(thereof non-guaranteed residual value)	(-)	(-)
Due within 1 year	43.7	73.8
Due within 1-2 years	37.4	39.8
Due within 2-3 years	35.8	35.6
Due within 3-4 years	37.0	34.1
Due within 4-5 years	34.7	34.0
Due in more than 5 years	208.7	239.0
Interest included therein	-184.9	-209.6
Net investment	212.4	246.7
Accumulated impairment losses	-0.2	-0.3
Carrying amount of receivables from finance leases	212.2	246.4
Less present value of non-guaranteed residual values	-	-
Present value of outstanding minimum lease payments	212.2	246.4
Due within 1 year	17.5	44.6
Due within 1-5 years	56.6	51.3
Due in more than 5 years	138.1	150.5

Receivables from finance leases include a contract to provide capacity at the Mindanao power plant (Philippines) valued at € 169.0 million (prior year: € 171.0 million). This contract of STEAG State Power Inc. (Philippines) runs for 25 years and ends in November 2031. The leased assets will be transferred to the lessee when the contract ends.

In 2017, a finance lease was concluded with Ford-Werke GmbH for a block heating plant. This resulted in a lease receivable of € 10.4 million (prior year: € 13.5 million). This contract runs for 10 years and ends in December 2026.

Moreover, receivables from finance leases include € 20.6 million (prior year: € 20.1 million) relating to the lease agreement for the STEAG refinery power plant in the federal state of Saxony-Anhalt. This agreement dates from November 1994 and had an original term of twelve years. In 2006 it was extended for another eight years to November 2014. In 2014 and 2016, new agreements were concluded up to November 2016 and 2026.

The long-term agreement on the provision of capacity at the power plant in Iskenderun (Turkey) ended in November 2019. The prior-year receivables of € 31.9 million from this agreement have been settled in full. The power plant has been marketed on the open market since November 2018.

In 2019, there were further receivables from finance leases totaling € 12.2 million (prior year: € 9.9 million), none of which were individually material.

(e) Receivables from derivatives

The breakdown of receivables from derivatives is as follows:

in € million	Dec. 31, 2019	Dec. 31, 2018
Receivables from currency derivatives	23.2	25.8
Receivables from interest rate derivatives	-	0.8
Receivables from commodity derivatives	204.9	1,005.6
	228.1	1,032.2

The change in the reporting period results from price changes and a reduction in the amount of collateral.

(f) Other financial assets

Financial assets include margining of € 42.8 million (prior year: € 64.7 million) for stock exchange forward contracts. As at the reporting date, there were no positive fair values from pending hedged items recognized as fair value hedges. In the prior year, the positive fair values totaled € 0.5 million.

(g) Collateral pledged

Total financial assets pledged as collateral for Group liabilities amounted to € 52.9 million (prior year: € 60.8 million). A further € 162.8 million (prior year: € 242.1 million) was subject to other restrictions on use. The majority of the assets pledged as collateral related to receivables from finance leases of the project companies for the Mindanao power plant.

The collateral can only be utilized by the financing banks in the event of permanent non-performance of contractual obligations, for example, non-payment of interest and repayment installments, or failure to achieve agreed financial covenants. Utilization of the collateral is not anticipated.

(6.6) Inventories

in € million	Dec. 31, 2019	Dec. 31, 2018
Raw materials and supplies	206.9	269.9
Work in progress	3.4	1.7
Finished goods and merchandise	29.6	7.5
	239.9	279.1

The year-on-year decrease of € 63.8 million in raw materials and supplies was mainly due to lower inventories of coal and to consumption of certain emission allowances. The € 1.7 million increase in work in progress was mainly due to changes in the scope of consolidation. The € 22.1 million increase in finished goods and merchandise was caused primarily by higher inventories of goods for resale than in the prior year.

Inventories totaling € 38.4 million (prior year: € 38.8 million) are recognized at net realizable value.

Inventories include € 2.1 million (prior year: € 2.5 million) for allocated renewable energy certificates.

The carrying amounts of inventories pledged as collateral for Group liabilities amounted to € 0.0 million (prior year: € 0.2 million). Inventories totaling € 12.9 million (prior year: € 15.1 million) are subject to other restrictions on use.

(6.7) Trade accounts receivable and other receivables

in € million	Dec. 31, 2019		Dec. 31, 2018	
	Total	thereof non-current	Total	thereof non-current
Trade accounts receivable	560.1	-	612.2	-
Contract assets	54.8	7.1	47.2	6.3
Advance payments made	8.0	-	22.5	-
Miscellaneous other receivables	79.8	14.8	91.0	10.3
Deferred expenses	7.7	0.6	5.8	0.6
	710.4	22.5	778.7	17.2

(a) Trade accounts receivable

Trade accounts receivable decreased by € 52.1 million to € 560.1 million (prior year: € 612.2 million), principally because of a change in the mode of invoicing due to the transition from a long-term agreement on the provision of capacity to short-term marketing at the subsidiary Iskenderun Enerji Üretim ve Ticaret A.S. (Turkey).

Trade accounts receivable include claims to reimbursement from third parties amounting to € 63.2 million (prior year: € 71.3 million). These relate to provisions established for obligations to surrender emission allowances, see Note (6.12).

Impairment losses on trade accounts receivable are outlined in Note (8.1). The geographic split of trade accounts receivable by location of the STEAG Group companies was as follows:

in € million	Dec. 31, 2019	Dec. 31, 2018
Germany	491.3	460.7
Turkey	10.8	100.9
Other countries in the European Union	21.4	18.6
Other regions	36.6	32.0
	560.1	612.2

(b) Contract assets/contract liabilities

The revenues recognized in 2019 for contract liabilities reported in the prior year totaled € 100.8 million (prior year: € 60.0 million).

The transaction price for unsatisfied or partially unsatisfied performance obligations under construction contracts recognized over time, which are expected to run until 2021 or beyond, amounted to € 191.7 million. This amount will probably be recognized in sales in 2020 (€ 93.7 million), 2021 (€ 87.6 million), 2022 (€ 8.4 million), 2023 (€ 1.0 million), and 2024 (€ 1.0 million).

(c) Miscellaneous other receivables

Miscellaneous other receivables include claims to reimbursement from third parties amounting to € 13.5 million (prior year: € 13.4 million), which relate to other provisions for recultivation and environmental protection, see Note (6.12).

(d) Collateral pledged

Receivables pledged as collateral for Group liabilities amounted to € 3.7 million (prior year: € 2.5 million).

A further € 67.5 million (prior year: € 66.8 million) was subject to other restrictions on use.

(6.8) Cash and cash equivalents

The cash and cash equivalents totaling € 413,9 million (prior year: € 495.4 million) include balances with banks, checks and cash. This item also includes financial securities with high liquidity and terms of no more than three months on the date of acquisition.

The carrying amounts of cash and cash equivalents pledged as collateral for Group liabilities amounted to € 6.9 million (prior year: € 11.4 million). A further € 63.4 million (prior year: € 90.6 million) are subject to other restrictions on use.

(6.9) Assets and liabilities held for sale

In 2019, the assets and liabilities held for sale comprised the shares in a joint venture in the USA. The STEAG Group intends to sell its 45 percent stake in this joint venture in the first half of 2020. These shares are recognized using the equity method of accounting. Their carrying amount at the date of transfer to assets and liabilities held for sale was € 18.3 million, see Note (5.9).

(6.10) Equity

(a) Issued capital

The company's fully paid-up capital stock was unchanged at € 128,000,000 on the reporting date.

(b) Capital reserve

As in the prior year, the capital reserve of STEAG GmbH totaling € 77.5 million contains all other payments received from shareholders pursuant to Section 272 Paragraph 2 Nos. 1 and 4 of the German Commercial Code (HGB).

(c) Accumulated income/loss

The accumulated loss of € 293.4 million (prior year: accumulated loss of € 208.6 million) comprises Group earnings from fiscal 2019 and prior years. Income after taxes corresponds to the net income attributable to shareholders of STEAG GmbH, as stated in the income statement for the 2019 fiscal year. As at December 31, 2019, STEAG GmbH's profit reserves (HGB) were unchanged at € 272.8 million. Earnings of € 45.0 million (prior year: € 45.0 million) are to be transferred under the profit and loss transfer agreement between STEAG GmbH and KSBG KG.

The accumulated income/loss also includes the remeasurement of the net defined benefit liability from defined benefit plans after taxes and the valuation of other investments.

(d) Accumulated other comprehensive income

Accumulated other comprehensive income contains gains and losses that are not recognized in the income statement.

The reserve for changes in the fair value of financial instruments used in hedging relationships comprises net gains or losses resulting from changes in the fair value of the effective portion of hedging instruments that are accounted for as cash flow hedges or net investment hedges.

The reserve for differences arising from currency translation comprises differences arising from the translation of foreign financial statements to euros, which is the Group's reporting currency.

The reserve for investments recognized at equity contains the pro rata change in the equity of the companies that is recognized without any impact on profit or loss.

The changes in accumulated other comprehensive income were as follows:

in € million	Changes in the fair value of financial instruments used in hedging relationships	Differences arising from currency translation	Investments recognized at equity	Total
As at December 1, 2018	30.5	-25.1	-2.9	2.5
Other comprehensive income after taxes:	-51.9	12.6	-0.1	-39.4
Gains/losses recognized in OCI	-33.2	6.7	-0.1	-26.6
Amounts reclassified to the income statement	24.9	5.9	-	30.8
Amounts reclassified to assets and liabilities	-51.2	-	-	-51.2
Deferred taxes on OCI	7.6	-	-	7.6
Changes in shareholdings in subsidiaries without loss of control	0.0	-	-	0.0
As at December 31, 2018	-21.4	-12.5	-3.0	-36.9
Other comprehensive income after taxes:	29.9	4.9	1.6	36.4
Gains/losses recognized in OCI	-23.6	10.0	0.1	-13.5
Amounts reclassified to the income statement	52.3	-5.1	1.5	48.7
Amounts reclassified to assets and liabilities	10.0	-	-	10.0
Deferred taxes on OCI	-8.8	-	-	-8.8
Changes in shareholdings in subsidiaries without loss of control	-	-0.2	-	-0.2
As at December 31, 2019	8.5	-7.8	-1.4	-0.7

(e) Equity attributable to non-controlling interests

Non-controlling interests comprise shares in the issued capital and reserves of consolidated subsidiaries that are not attributable to the shareholders of STEAG GmbH.

The change in OCI relating to non-controlling interests was € 0.8 million (prior year: € 12.6 million) and contains the change in accumulated profit/loss and accumulated other comprehensive income.

The change in accumulated profit/loss contains a loss of € 5.1 million (prior year: loss of € 0.4 million) from remeasurement of the net defined benefit liability from defined benefit pension plans in the reporting period. Further, the change in accumulated profit/loss is due to changes in shareholdings in subsidiaries without loss of control amounting to minus € 0.2 million (prior year: minus € 0.0 million).

The changes in accumulated other comprehensive income relating to non-controlling interests were as follows:

in € million	Changes in the fair value of financial instruments used in hedging relationships	Differences arising from currency translation	Total
As at January 1, 2018	-18.6	-16.1	-34.7
Other comprehensive income after taxes:	3.0	10.0	13.0
Gains/losses recognized in OCI	-3.3	10.0	6.7
Amounts reclassified to the income statement	7.8	-	7.8
Deferred taxes on OCI	-1.5	-	-1.5
Changes in shareholdings in subsidiaries without loss of control	0.0	-	0.0
As at December 31, 2018	-15.6	-6.1	-21.7
Other comprehensive income after taxes:	1.5	4.4	5.9
Gains/losses recognized in OCI	-4.0	4.4	0.4
Amounts reclassified to the income statement	6.5	-	6.5
Deferred taxes on OCI	-1.0	-	-1.0
Changes in shareholdings in subsidiaries without loss of control	-	0.2	0.2
As at December 31, 2019	-14.1	-1.5	-15.6

(6.11) Provisions for pensions and other post-employment benefits

As in the prior year, German companies accounted for most of the pension provisions on the reporting date.

At the German companies, occupational pension plans are predominantly defined benefit plans. They are primarily funded by provisions.

The main defined benefit pension plans for the German companies in the STEAG Group comprise the "Ruhegeldordnung" pension regulation, the Bochumer Verband benefit plan (Bochumer Verband old), the Bochumer Verband benefit plan for employer-financed pension commitments (Bochumer Verband II - employer-financed) and the Bochumer Verband benefit plan - deferred compensation (Bochumer Verband - employee-financed).

The Bochumer Verband II employer- and employee-financed plans are defined contribution plans. All of these plans are based on a company agreement. The Bochumer Verband II benefit plan was closed to new entrants on December 31, 2019. The employer recognizes pension provisions for the associated commitments.

Under the "Ruhegeldordnung" and "Bochumer Verband old" plans, all employees were granted rights to lifelong retirement pension benefits, disability benefits and surviving dependents' benefits by way of direct commitments. These are final-salary plans. Benefits depend on pensionable income, the contribution ceiling for statutory pension insurance and the number of eligible years of service. The "Ruhegeldordnung" and "Bochumer Verband old" plans were closed to new entrants on June 30, 2002.

Starting on January 1, 1982, the "Ruhegeldordnung" granted non-managerial employees a company pension plan. Employees hired prior to January 1, 1982 have salary-based vested rights from a previous company agreement. Current benefits are reviewed regularly in accordance with Section 16 Paragraph 1 of the German Company Pensions Improvement Act (BetrAVG). Therefore, the benefit obligation for these pension commitments is dependent on inflation.

The "Bochumer Verband old" pension plan provides pensions for exempt and managerial employees through individual contractual arrangements. The contributions made by these groups are set by the Bochumer Verband, taking into account the general development of salaries for exempt employees, by applying a salary trend for valuation purposes. Current benefits are reviewed by Bochumer Verband and adjusted at its discretion, with due consideration being given to the interests of the beneficiaries and the economic situation of the members. The adjustments to the benefits are indirectly related to inflation.

The Bochumer Verband II - employer-financed - and Bochumer Verband II - employee-financed - plans grant employees covered by collective agreements, exempt employees and senior management staff rights to lifelong retirement benefits, disability benefits and surviving dependents' benefits. For the employer-financed Bochumer Verband II plan, rights are granted as direct commitments, while the employee-financed Bochumer Verband II plan is financed through deferred compensation. The employer and employee contributions are converted into pension increments on the basis of age using conversion factors set out in the relevant actuarial tables. The pension benefits payable are derived from the sum of all pension increments accrued up to the date of eligibility. The guaranteed annual pension increase of 1 percent p.a. based on current benefits relieves the employer from the additional review in accordance with Section 16 of the German Company Pensions Improvement Act (BetrAVG). Therefore, the present

value of the defined benefit obligation used for valuation purposes is not dependent on inflation. Furthermore, the valuation is based on the present value of the benefits earned in accordance with Section 2 Paragraph 5a BetrAVG, so it is not dependent on salary either.

The pension rules for the employee-financed Bochumer Verband II plan allow employees to opt for a lump-sum payment rather than lifelong pension benefits. Unlike the employer-financed commitments under the Bochumer Verband II plan, the deferred compensation plan does not provide for disability benefits.

For all four of the plans outlined above, the quantified benefit obligation depends to a large extent on the discount rate applied. In addition, the benefit obligations for the "Ruhegeldordnung" and the commitments under the "Bochumer Verband old" plan also depend on a salary trend and pension trend. By contrast, the benefit obligation under the Bochumer Verband II plans does not.

From the Group's perspective, the pension plans of foreign subsidiaries are only of minor significance. They relate to the subsidiaries in India, Poland, Italy, the Philippines and Turkey. The benefit obligations vary depending on the legal and economic circumstances in the various countries in which the companies operate.

The table shows the weighted average assumptions used for the actuarial valuation of the obligations:

in %	2019	2018
Discount rate as of December 31	1.14	1.95
Future salary increases	2.10	2.11
Future pension increases	1.25	1.50

The pension provisions included on the balance sheet were as follows:

in € million	Dec. 31, 2019	Dec. 31, 2018
Present value of all defined benefit obligations as of Dec. 31	1,276.2	1,127.6
Less fair value of plan assets as of Dec. 31	9.0	8.0
Pension provisions included in the balance sheet	1,267.2	1,119.6

The present value of the defined benefit obligation and the fair value of the plan assets changed as follows in the reporting period:

in € million	Present value of defined benefit obligations	Fair value of plan assets	Net benefit obligation
As at January 1, 2019	1,127.6	-8.0	1,119.6
Current service cost	15.1	-	15.1
Interest expense (+)/interest income (-)	21.7	-0.6	21.1
Employee contributions	1.8	-	1.8
Employer contributions	-	-0.2	-0.2
Remeasurement	143.0	-0.2	142.8
thereof: return on plan assets excluding interest income	-	-0.2	-0.2
thereof: actuarial gains (-) / losses (+) from changes in financial assumptions	0.0	-	0.0
thereof: actuarial gains (-) / losses (+) from changes in financial assumptions	140.1	-	140.1
thereof: actuarial gains (-) / losses (+) from changes empirical adjustments	2.9	-	2.9
Past service cost	0.1	-	0.1
Benefits paid	-36.5	0.4	-36.1
Changes in the scope of consolidation/transfer of employees	0.2	-	0.2
Carried forward	3.0	-	3.0
Currency translation	0.2	-0.4	-0.2
As at December 31, 2019	1,276.2	-9.0	1,267.2

in € million	Present value of defined benefit obligations	Fair value of plan assets	Net benefit obligation
As at January 1, 2018	1,115.4	-7.9	1,107.5
Current service cost	14.5	-	14.5
Interest expense (+)/interest income (-)	20.2	-0.4	19.8
Employee contributions	2.2	-	2.2
Employer contributions	-	-0.4	-0.4
Remeasurement	9.7	0.5	10.2
thereof: return on plan assets excluding interest income	-	0.5	0.5
thereof: actuarial gains (-) / losses (+) from changes in demographic as- sumptions	15.5	-	15.5
thereof: actuarial gains (-) / losses (+) from changes in financial assumptions	-19.2	-	-19.2
thereof: actuarial gains (-) / losses (+) from changes empirical adjustments	13.4	-	13.4
Past service cost	0.1	-	0.1
Benefits paid	-35.6	0.1	-35.5
Changes in the scope of consolidation/transfer of employees	-1.1	-	-1.1
Carried forward	2.5	-	2.5
Currency translation	-0.3	0.1	-0.2
As at December 31, 2018	1,127.6	-8.0	1,119.6

The composition of plan assets valued at fair value is as follows:

in € million	Dec. 31, 2019			Dec. 31, 2018		
	Quoted market price in an active market	Other	Total	Quoted market price in an active market	Other	Total
Investments	1.7	-	1.7	1.4	-	1.4
Bonds	4.0	1.2	5.2	3.2	1.2	4.4
Insurance contracts	-	1.2	1.2	-	1.2	1.2
Other investments	0.2	0.7	0.9	0.4	0.6	1.0
	5.9	3.1	9.0	5.0	3.0	8.0

As in the prior year, most of the plan assets relate to a subsidiary in the Philippines.

The sensitivity analysis below illustrates the effects of changes in the key valuation parameters on the benefit obligation.

The chosen range represents increments that, in the opinion of STEAG GmbH, are reasonable for the expected changes in the respective parameters up to the next reporting date. The effects were determined separately for each of the valuation parameters.

The actuarial method used to determine the expected changes is the same as the method used for the valuation as at the reporting date. The effects shown are therefore subject to the same reservations regarding their information value as the calculation of the benefit obligation as at the reporting date. Alongside possible deviations in the actuarial assumptions applied, this applies in particular to uncertainty with regard to the possible duration of the obligations. The statements should therefore only be regarded as a trend, not as changes that will occur with unrestricted certainty.

Change in € million	Dec. 31, 2019	Dec. 31, 2018
Actuarial interest rate		
+ 100 basis points	-200.4	-168.4
- 100 basis points	265.4	220.5
Pension adjustment		
+ 25 basis points	17.6	16.1
- 25 basis points	-40.2	-33.6
Salary trend		
+ 50 basis points	10.3	9.5
- 50 basis points	-9.8	-9.6

Employer contributions to plan assets of € 0.6 million are expected for 2020.

The average weighted duration of the pension obligations for the STEAG Group is 17 years (prior year: 17 years).

The total expense for the defined benefit plans is broken down as follows:

in € million	2019	2018
Service cost	15.2	14.6
Net interest cost	21.1	19.8
Net pension expense recognized in the income statement	36.3	34.4

in € million	2019	2018
Actuarial gains and losses	143.0	9.7
Return on plan assets excluding interest income	-0.2	0.5
Expense from the remeasurement of the net defined benefit obligation from defined benefit plans recognized in OCI	142.8	10.2

Interest cost is included in the interest result, see Note (5.8). Service cost is included in the personnel expenses, see Note (5.4).

€ 0.2 million (prior year: € 0.2 million) was paid into defined contribution plans. This amount is also recorded in personnel expenses (pension expenses).

Further, € 25.1 million (prior year: € 24.7 million) was paid into defined contribution state plans (statutory pension insurance) in Germany and abroad. This is reported in personnel expense (expenses for social security contributions).

(6.12) Other provisions

Other provisions comprise the following items:

in € million	Dec. 31, 2019		Dec. 31, 2018	
	Total	thereof non-current	Total	Thereof non-current
Personnel-related	73.3	35.6	68.7	32.4
Recultivation and environmental protection	35.8	26.4	31.7	21.5
Restructuring	77.7	53.4	105.9	72.7
Dismantling obligations	116.6	113.3	104.0	100.5
Obligations to surrender emission allowances	160.3	-	119.5	-
Other obligations	143.9	46.7	176.6	67.4
	607.6	275.4	606.4	294.5

(a) Personnel-related provisions

Personnel-related provisions are established for, among other things, bonuses and variable remuneration, statutory and other early retirement arrangements, redundancy plans, unused vacation entitlements, life-time worktime arrangements and anniversary bonuses.

(b) Provisions for recultivation and environmental protection

Provisions are established for recultivation and environmental protection on the basis of contracts, laws and regulatory requirements. They cover soil reclamation obligations, water protection, the recultivation of landfills and site decontamination obligations. The majority of the non-current portion of provisions will

only result in payments after 2024. As a counter item to the provisions, other receivables contain claims for reimbursement amounting to € 13.5 million (prior year: € 13.4 million); see Note (6.7).

(c) Provisions for restructuring

Provisions for restructuring are based on defined restructuring measures. Such measures comprise programs which are planned and controlled by the company and will materially alter one of the company's areas of business activity or the way in which a business activity is carried out. Restructuring provisions may only be established for costs that are directly attributable to the restructuring program. They mainly include severance packages, redundancy and early retirement arrangements, and expenses for the termination of contracts in this context. The majority of the non-current portion of provisions will be utilized between 2021 and 2024.

(d) Provisions for dismantling obligations

Provisions for dismantling obligations relate to dismantling that is not part of a restructuring program for which a provision for restructuring has been established. These provisions are almost all non-current. The majority of the payments will not be made until after 2024.

(e) Provisions for obligations to surrender emission allowances

Provisions for the obligation to surrender emission allowances are established on the basis of Section 7 Paragraph 1 of the German Greenhouse Gas Emissions Trading Act (TEHG). Under this law, companies are required to surrender allowances by April 30 of the following year equivalent to the emissions generated in reporting period (calendar year). These provisions will be utilized in the following year. Trade accounts receivable contain claims for reimbursement relating to the obligation to surrender emission allowances under agreements with electricity clients amounting to € 63.2 million (prior year: € 71.3 million); see Note (6.7).

(f) Provisions for other obligations

Provisions for other obligations relate to price discounts and the risk of price adjustments in sales and procurement, safeguarding the future of sites where power plants are scheduled for shutdown, obligations under the German Renewable Energies Act (EEG), provisions for goods and services purchased for which no invoice has yet been received, other taxes, litigation risks, legal and consultancy expenses, and audit fees. Most of these provisions will be utilized within one year and the remainder will mainly result in payments between 2021 and 2024. Provisions of € 29.7 million (prior year: € 61.0 million) were established for obligations to safeguard the future of the West power plant site, see Note (5.6). The prior-year figure still includes obligations to safeguard the future for the Lünen site. These provisions were reversed due to the divestment of this site.

Other provisions changed as follows in fiscal 2019:

in € million	Personnel-related	Recultivation, environmental protection	Restructuring	Dismantling obligations	Obligations to surrender emission allowances	Other obligations	Total
As at January 1, 2019	68.7	31.7	105.9	104.0	119.5	176.6	606.4
Additions	39.2	2.2	1.5	0.4	160.2	86.2	289.7
Utilization	-36.0	-1.3	-26.1	-0.2	-119.4	-76.9	-259.9
Reversal	-1.1	-0.1	-3.7	-0.8	-0.1	-43.3	-49.1
Addition of accrued interest/ interest rate adjustments	2.2	3.3	3.1	13.0	-	1.0	22.6
Other	0.3	0.0	-3.0	0.2	0.1	0.3	-2.1
As at December 31, 2019	73.3	35.8	77.7	116.6	160.3	143.9	607.6

(6.13) Financial liabilities

in € million	Dec. 31, 2019		Dec. 31, 2018	
	Total	thereof non-current	Total	thereof non-current
Liabilities to banks	956.4	805.5	1,117.4	959.9
Loans from non-banks	80.1	79.1	78.0	77.1
Lease liabilities	156.5	137.9	32.5	27.2
Liabilities from derivatives	240.8	40.8	1,235.4	184.0
Other financial liabilities	116.7	33.9	135.5	39.2
	1,550.5	1,097.2	2,598.8	1,287.4

(a) Liabilities to banks

The biggest item within liabilities to banks is STEAG GmbH's bonded loan. In 2014, a bonded loan totaling € 400.0 million was taken out. € 366.0 million of this amount comprised liabilities to banks. At the reporting date, financial liabilities to banks relating to the bonded loan amounted to € 272.1 million (prior year: € 331.6 million). The change was mainly due to repayment of tranches amounting to € 140.5 million and the uptake of new tranches totaling € 81.0 million.

Further, this item contains financing of € 272.2 million (prior year: € 308.5 million) for the Walsum 10 power plant project. The creditors received security in the form of pro rata guarantees from sponsors in the construction phase and the start-up phase, which has not yet been completed. The proportion sponsored by STEAG GmbH totals 51.0 percent. These sponsor guarantees lapse when defined conditions occur. Since the start of the operating phase creditors' rights have been secured by land mortgages, liens on the Group's project shareholding and the assignment of rights to future receivables.

In 2018, STEAG Waste to Energy GmbH borrowed funds totaling € 100 million to finance projects. In addition, SFW Energia Sp.zo.o. borrowed € 32.9 million to refinance intragroup loans. As at the reporting date, these companies' financial liabilities to banks were € 69.4 million and € 28.2 million respectively (prior year: € 84.6 million and € 30.5 million respectively).

Further project financing mainly comprises € 76.4 million (prior year: € 84.1 million) for the French wind farms, € 47.8 million (prior year: € 51.7 million) for STEAG Windpark Ullersdorf GmbH & Co.KG, € 34.8 million (prior year: € 39.8 million) for STEAG Battery Systems GmbH, € 33.2 million (prior year: € 39.5 million) for STEAG Rüzgar Süloğlu Enerji Yatırım Üretim ve Ticaret AS, and € 9.4 million (prior year: € 10.1 million) for ENTEGA STEAG Wärme GmbH.

Project financing of € 37.8 million (prior year: € 43.9 million) for the Mindanao power plant is in the advanced repayment phase. Security for the financing of this foreign power plant is arranged exclusively via the company as non-recourse financing.

Power prepayment agreements with a financing character were concluded in 2016. As at the reporting date, the liabilities to banks included € 4.7 million (prior year: € 23.4 million) relating to these agreements.

Liabilities with variable interest rates are exposed to an interest rate risk. This risk may affect future cash flows.

(b) Lease liabilities

The increase in lease liabilities in the reporting period was principally due the initial application of IFRS 16. Since January 1, 2019, all leases held as lessee are recognized on the balance sheet as a right-of-use asset and a corresponding liability, with the exception of short-term leases with a term of less than 12 months; see Note (2.3).

The due dates of the lease liabilities are as follows:

in € million	Dec. 31, 2019	Dec. 31, 2018
Present value of future lease liabilities	156.5	32.5
Due within 1 year	18.6	5.3
Due within 1-5 years	64.8	21.0
Due in more than 5 years	73.1	6.2

(c) Liabilities from derivatives

The breakdown of liabilities from derivatives is as follows:

in € million	Dec. 31, 2019	Dec. 31, 2018
Liabilities from currency derivatives	13.3	17.2
Liabilities from interest rate derivatives	41.9	41.5
Liabilities from commodity derivatives	185.6	1,176.7
	240.8	1,235.4

The change in the reporting period results from price changes and a reduction in the amount of collateral.

(d) Other financial liabilities

Other financial liabilities include liabilities to KSBG KG under the profit and loss transfer agreement amounting to € 45.0 million (prior year: € 45.0 million) and obligations to make compensation payments to non-controlling interests totaling € 28.0 million (prior year: € 28.2 million). This item also includes liabilities from drawings on a credit line (€ 12.2 million) and margining (€ 2.9 million) in connection with exchange-traded forward agreements (prior year: only cash margining of € 16.3 million). Liabilities of € 8.0 million, € 4.9 million and € 0.9 million are recognized for earn-out agreements in connection with the acquisition of the Bexbach power plant, STEAG Solar Energy Solutions (Italia) S.r.l. and STEAG Solar Energy Solutions GmbH (prior year: only € 7.5 million for the Bexbach power plant). Further, the non-

controlling interest in STEAG Windpark Ullersdorf GmbH & Co. KG totaling € 8.2 million (prior year: € 8.2 million) is recognized in other financial liabilities.

In addition, in the previous year, this item contained liabilities for dividend payments to non-controlling interests (€ 15.1 million) and the negative fair value of fair value hedges (€ 3.1 million).

(6.14) Trade accounts payable, other liabilities

in € million	Dec. 31, 2019		Dec. 31, 2018	
	Total	thereof non-current	Total	thereof non-current
Trade accounts payable	395.2	-	359.3	-
Contract liabilities	88.5	10.2	100.8	18.2
Advance payments received from customers	4.4	0.7	0.8	-
Miscellaneous other liabilities	36.1	2.2	43.2	2.8
Deferred income	11.5	6.1	17.0	7.3
	535.7	19.2	521.1	28.3

For further information on contract liabilities, see Note (6.7).

(6.15) Deferred taxes, other income taxes

The breakdown of deferred taxes and other income taxes reported on the balance sheet by due date is shown in the table:

in € million	Dec. 31, 2019		Dec. 31, 2018	
	Total	thereof non-current	Total	thereof non-current
Deferred tax assets	29.2	29.2	40.0	34.7
Other income tax assets	18.9	-	17.6	-
Deferred tax liabilities	65.1	65.1	60.1	49.6
Other income tax liabilities	41.1	-	68.8	-

In accordance with IAS 1, the current elements of deferred taxes are reported on the balance sheet under non-current assets and liabilities.

In the reporting period, the impairment loss on deferred tax assets decreased by € 4.5 million from € 117.0 million to € 112.5 million. € 2.7 million (prior year: € 1.8 million) of this amount had been recognized outside of profit or loss.

Deferred taxes related to the following items:

in € million	Deferred tax assets		Deferred tax liabilities	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Assets				
Intangible assets	0.7	1.1	18.0	18.2
Property, plant and equipment, investment property	28.2	42.7	74.4	36.5
Financial assets	4.6	4.3	90.4	227.7
Inventories	14.3	6.6	3.1	3.4
Receivables, other assets	6.4	9.8	5.4	5.0
Liabilities				
Provisions	154.7	135.9	2.3	1.5
Liabilities	65.9	191.7	7.4	4.7
Special reserves with an equity portion (based on local law)	-	-	1.5	1.7
Loss carryforwards	4.3	3.5	-	-
Other	-	-	-	-
Deferred taxes (gross)	279.1	395.6	202.5	298.7
Impairment losses	-112.5	-117.0	-	-
Offsetting	-137.4	-238.6	-137.4	-238.6
Deferred taxes (net)	29.2	40.0	65.1	60.1

Deferred tax assets of € 4.3 million (prior year: € 3.5 million) were recognized for companies with tax loss carryforwards as they are expected to generate sufficient taxable income in the future.

In addition to tax loss carryforwards for which deferred taxes were recognized, there are tax loss carryforwards that are not utilizable and for which no deferred taxes are recognized. These are shown in the table:

in € million	Corporation taxes (Germany and foreign)		Local taxes (Germany and foreign)	
	2019	2018	2019	2018
Loss carryforwards	128.4	146.3	63.2	64.8
thereof with no expiration date	68.0	69.3	63.2	64.8

No deferred tax liabilities were recognized for temporary differences of € 83.9 million (prior year: € 70.1 million) between net assets and the carrying amount of subsidiaries as determined for tax purposes (outside basis differences). 5 percent of gains from profit distributions or the divestment of shareholdings would be subject to German taxation; in some cases, foreign withholding taxes would also be applicable. In addition, in the event of profit distributions from a subsidiary to an intermediate holding company, further income tax effects would have to be taken into account. Consequently, profit distributions and divestments generally result in additional tax expense. Calculating deferred taxes on the taxable temporary differences would therefore involve an unreasonable amount of work.

(7) Notes to the cash flow statement

The cash flow statement shows the changes in cash and cash equivalents of the STEAG Group in the reporting period. It is broken down into cash flows from operating, investing and financing activities. The impact of changes in the scope of consolidation has been eliminated.

Interest paid and interest and dividends received are included in operating activities while dividends paid and profit and loss transfers are assigned to financing activities.

(7.1) Cash flow from operating activities

The cash flow from operating activities is calculated using the indirect method. Income before the financial result and income taxes from the continuing operations is adjusted for the effects of non-cash income and expenses and items that are allocated to investing or financing activities. Certain other changes in amounts shown on the balance sheet are calculated and added to the result.

The cash flow from operating activities is € 225.8 million, which is above the prior-year figure of € 121.8 million. The increase was mainly due to the following factors: Firstly, the purchase of emission allowances for 2019 (€ 86.8 million) was postponed to the following year. Secondly, trade accounts receivable at the subsidiary Iskenderun Enerji Üretim ve Ticaret A.S. (Turkey) were € 89.8 million less than in the previous year as a long-term power supply agreement ended and power production was marketed via the electricity market with short payment terms. In particular, the year-on-year change in inventories and trade accounts receivable contributed to the increase in the cash flow from operating activities.

(7.2) Cash flow from investing activities

The cash outflow for investing activities was € 7.3 million, around the same level as in the previous year (€ 21.3 million). The year-on-year change was principally due to the following effects. Cash inflows/outflows relating to securities, deposits and loans showed a net inflow of € 70.2 million, compared with a net outflow of € 107.4 million in the previous year. Further, the year-on-year reduction in the cash flow from investing activities was due to lower outflows for investments in intangible assets, property, plant and equipment, and investment property.

As at the reporting date, cash and cash equivalents totaling € 10.0 million (prior year: € 70.0 million) were held in short-term deposits.

(7.3) Cash flow from financing activities

The cash outflow for financing activities was € 301.5 million (prior year: outflow of € 55.1 million) and was principally influenced by borrowing and by repayment of financial debt. Repayments exceeded borrowing by € 206.6 million (in the prior year, borrowing exceeded repayments by € 32.6 million). Borrowing mainly comprised changes in bonded loans. Tranches totaling € 140.5 million were repaid and new tranches totaling € 84.0 million were issued. In the reporting period, cash inflows and outflows relating to the divestment of shareholdings without loss of control were € 32.3 million lower than in the previous year. Please refer to Note (6.13) in connection with the main repayments.

The table shows the reconciliation of the cash flow from financing activities to balance sheet items:

in € million	Non-current liabilities	Current liabilities	Lease liabilities	Profit transfer	Assets used to hedge liabilities	Components of financing activities
As at January 1, 2019	1,078.3	205.0	32.7	45.0	-0.8	1,360.2
Repayments of principal and profit transfer	-5.5	-356.7	-20.1	-45.0	-	-427.3
Borrowing	5.7	138.5	16.6	-	-	160.8
Changes affecting cash flow	0.2	-218.2	-3.5	-45.0	-	-266.5
Changes due to business combinations	-	12.0	0.6	-	-	12.6
Currency translation	1.7	0.7	0.1	-	-	2.5
Interest, discounting, changes in fair value	2.1	12.1	5.1	-	0.8	20.1
Reclassifications	-161.5	188.3	-	-	-	26.8
Other changes	-	-	125.2	45.0	-	170.2
Changes not affecting cash flow	-157.7	213.1	131.0	45.0	0.8	232.2
As at December 31, 2019	920.8	199.9	160.2	45.0	0.0	1,325.9

in € million	Non-current liabilities	Current liabilities	Lease liabilities	Profit transfer	Assets used to hedge liabilities	Components of financing activities
As at January 1, 2018	1,060.1	134.6	35.4	45.0	-2.2	1,272.9
Repayments of principal and profit transfer	-1.1	-174.3	-7.0	-45.0	-	-227.4
Borrowing	150.1	65.5	-0.6	-	-	215.0
Changes affecting cash flow	149.0	-108.8	-7.6	-45.0	-	-12.4
Changes due to business combinations	0.0	0.0	0.0	-	-	0.0
Currency translation	2.8	1.3	0.0	-	0.0	4.1
Interest, discounting, changes in fair value	1.8	14.4	0.2	-	1.4	17.8
Reclassifications	-135.4	163.5	4.7	-	-	32.8
Other changes	-	-	-	45.0	-	45.0
Changes not affecting cash flow	-130.8	179.2	4.9	45.0	1.4	99.7
As at December 31, 2018	1,078.3	205.0	32.7	45.0	-0.8	1,360.2

(8) Other disclosures

(8.1) Additional information on financial instruments

Net result from financial instruments

The income and expenses, gains and losses from financial instruments reflected in the income statement are reported as the net result for each of the valuation categories defined in IFRS 9.

in € million	Result by valuation category						2019
	Debt instruments			Equity instruments at fair value	Liabilities at amortized cost	Not allocated to any category	
	At amortized cost	At fair value through profit or loss	Derivatives at fair value				
Valuation result	-	-	55.6	-	-	-0.1	55.5
Impairment losses/reversals of impairment losses	-2.5	-	-	-	-	0.1	-2.4
Interest income	9.6	0.9	0.8	-	-	-	11.3
Interest expense	-	-	-3.2	-	-43.6	-5.5	-52.3
Income from other investments	-	1.4	-	0.9	-	-	2.3
Result from current fixed-term bank deposits	-	0.0	-	-	-	-	0.0
	7.1	2.3	53.2	0.9	-43.6	-5.5	14.4

in € million	Result by valuation category						2018
	Debt instruments			Equity instruments at fair value	Liabilities at amortized cost	Not allocated to any category	
	At amortized cost	At fair value through profit or loss	Derivatives at fair value				
Valuation result	-	-	32.2	-	-	-2.9	29.3
Impairment losses/reversals of impairment losses	-4.1	-	-	-	-	0.2	-3.9
Interest income	11.1	0.5	1.1	-	-	-	12.7
Interest expense	-	-	-17.9	-	-30.8	-2.5	-51.2
Income from other investments	-	-	-	1.5	-	-	1.5
Result from current securities	-	-0.7	-	-	-	-	-0.7
Result from current fixed-term bank deposits	-	0.1	-	-	-	-	0.1
	7.0	-0.1	15.4	1.5	-30.8	-5.2	-12.2

The valuation result comprises the valuation of foreign exchange and commodity derivatives and contains all valuation effects up to the expiration date. Impairments losses/reversal of impairment losses comprises impairment losses and income from the reversal of impairment losses on financial assets (e.g. loans, finance leases, trade accounts receivable), excluding current securities and current fixed-term bank deposits, as IFRS 9 specifies that impairment losses/reversals of impairment losses for these must be recognized in the result from current securities. Income from other investments comprises income from investments and the effect of changes in the fair value of an option on equity instruments.

Carrying amounts and fair values of financial instruments

In the following table, financial instruments are allocated to groups (classes) in accordance with their underlying characteristics. In the STEAG Group, the classification is based on the presentation on the balance sheet. The carrying amounts of each class have to be presented at fair value on the reporting date on the basis of the valuation categories defined in IFRS 9. This includes receivables from finance leases and receivables and liabilities relating to derivatives for which hedge accounting is applied, together with the related hedged items (fair value hedges) that do not belong to any of the valuation categories defined in IFRS 9. They are presented separately. The carrying amount of financial assets is also the maximum default risk.

The following tables show the classification of financial assets:

in € million	Valuation category				Dec. 31, 2019	
	Equity instruments	Debt instruments and derivatives			Carrying amount	Fair value
	At fair value through OCI	Financial assets at amortized cost	At fair value through profit or loss	Not allocated to any category		
Financial assets	17.3	248.2	227.8	212.5	705.8	883.4
Other investments	17.3	-	-	-	17.3	17.3
Loans	-	186.9	-	-	186.9	249.3
Securities and similar rights	-	0.0	-	-	0.0	0.0
Receivables from finance leases	-	-	-	212.2	212.2	327.4
Receivables from derivatives	-	-	227.8	0.3	228.1	228.1
Other financial assets	-	61.3	-	-	61.3	61.3
Trade accounts receivable	-	560.1	-	-	560.1	560.1
Cash and cash equivalents	-	413.9	-	-	413.9	413.9
	17.3	1,222.2	227.8	212.5	1,679.8	1,857.4

in € million	Valuation category				Dec. 31, 2018	
	Equity instruments	Debt instruments and derivatives			Carrying amount	Fair value
	At fair value through OCI	Financial assets at amortized cost	At fair value through profit or loss	Not allocated to any category		
Financial assets	13.6	330.0	1,022.5	266.5	1,632.6	2,589.5
Other investments	13.6	-	-	-	13.6	13.6
Loans	-	195.2	-	-	195.2	233.5
Securities and similar rights	-	0.0	-	-	0.0	0.0
Receivables from finance leases	-	-	-	246.4	246.4	1,165.0
Receivables from derivatives	-	-	1,012.5	19.7	1,032.2	1,032.2
Other financial assets	-	134.8	10.0	0.4	145.2	145.2
Trade accounts receivable	-	612.2	-	-	612.2	612.2
Cash and cash equivalents	-	495.4	-	-	495.4	495.4
	13.6	1,437.6	1,022.5	266.5	2,740.2	3,697.1

In the prior year, the fair value of receivables from finance leases contained an agreement on the provision of capacity at the Iskenderun power plant in Turkey up to November 2019 and expected positive income from the continued use of this power plant. Since expiry of the agreement on the provision of capacity, the power plant has been operated independently.

The following tables show the classification of financial liabilities:

in € million	Valuation category				Dec. 31, 2019	
	At fair value through profit or loss		Liabilities at amortized cost	Not allocated to any category	Carrying amount	Fair value
	Liabilities held for trading	Other liabilities				
Financial liabilities	199.6	14.6	1,138.6	41.2	1,394.0	1,469.0
Liabilities to banks	-	-	956.4	-	956.4	1,013.7
Loans from non-banks	-	-	80.1	-	80.1	97.8
Liabilities from derivatives	199.6	-	-	41.2	240.8	240.8
Other financial liabilities	-	14.6	102.1	-	116.7	116.7
Trade accounts payable	-	-	395.2	-	395.2	395.2
	199.6	14.6	1,533.8	41.2	1,789.2	1,864.2

in € million	Valuation category				Dec. 31, 2018	
	At fair value through profit or loss		Liabilities at amortized cost	Not allocated to any category	Carrying amount	Fair value
	Liabilities held for trading	Other liabilities				
Financial liabilities	1,045.9	12.5	1,315.3	225.1	2,598.8	2,684.7
Liabilities to banks	-	-	1,117.4	-	1,117.4	1,185.2
Loans from non-banks	-	-	78.0	-	78.0	94.1
Liabilities from finance leases	-	-	-	32.5	32.5	34.5
Liabilities from derivatives	1,045.9	-	-	189.5	1,235.4	1,235.4
Other financial liabilities	-	12.5	119.9	3.1	135.5	135.5
Trade accounts payable	-	-	359.3	-	359.3	359.3
	1,045.9	12.5	1,674.6	225.1	2,958.1	3,044.0

In connection with the initial prospective application of IFRS 16, as from fiscal 2019 the fair value of lease liabilities no longer has to be stated.

Wherever possible the fair value of a financial instrument is determined using observable market data. Based on the input parameters used in the valuation methods, the fair values are allocated to the following levels in the valuation hierarchy:

- Level 1: The inputs are quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date. A quoted price in an active market (e.g. exchange markets, dealer markets) provides the most reliable evidence of fair value and should be used without adjustment whenever available, apart from a few exceptional cases.
- Level 2: The inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These are, for example, quoted prices for identical or similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, input factors other than quoted prices that are observable for an asset or liability (e.g. interest rates, yield curves, volatilities or credit spreads) and market-corroborated inputs derived from observable market data by correlation or another technique.

- **Level 3:** The inputs are unobservable inputs for the asset or liability and take account of situations where there is little, if any, market activity for the asset or liability. Unobservable inputs must reflect the assumptions that market participants would use when pricing the asset or liability (e.g. assumptions about risk). Unobservable inputs are developed using the best information available (including internal information).

There were no reclassifications between the various levels of the valuation hierarchy in the reporting period.

The following table shows the assignment of the financial instruments carried at fair value to the three levels of the hierarchy:

in € million	Fair value of financial instruments based on			Dec. 31, 2019
	Level 1	Level 2	Level 3	
Financial assets	0.0	223.8	21.6	245.4
Other investments	-	-	17.3	17.3
Securities and similar rights	0.0	-	-	0.0
Receivables from derivatives	-	223.8	4.3	228.1
Financial liabilities	-	255.4	-	255.4
Liabilities from derivatives	-	240.8	-	240.8
Other financial liabilities	-	14.6	-	14.6

in € million	Fair value of financial instruments based on			Dec. 31, 2018
	Level 1	Level 2	Level 3	
Financial assets	10.0	1,032.6	13.6	1,056.2
Other investments	-	-	13.6	13.6
Securities and similar rights	0.0	-	-	0.0
Receivables from derivatives	-	1,032.2	-	1,032.2
Other financial assets	10.0	0.4	-	10.4
Financial liabilities	-	1,246.8	4.2	1,251.0
Liabilities from derivatives	-	1,231.2	4.2	1,235.4
Other financial liabilities	-	15.6	-	15.6

The fair values of other investments are determined using discounted income amounts and are based on planning data discounted using the cost of capital for discounting expected cash flows. These are assigned to Level 3 in the above table.

In addition to the planning values mentioned above, other significant unobservable inputs used to determine the fair value of other investments are the following parameters:

Significant unobservable inputs	Spread (weighted average)
Country-specific weighted average cost of capital before taxes (WACC)	6% to 10%

A higher (lower) weighted average cost of capital (WACC) before taxes decreases (increases) the fair value of other investments. A hypothetical shift in the country-specific WACC of 100 basis points decreases the fair value by € 3.3 million (prior year: € 3.2 million) or increases it by € 3.5 million (prior year: € 3.6 million).

The fair values of options for energy contracts (especially virtual shares of power generated by power plants) are determined using valuation models based on mathematical methods, using market prices, especially the clean dark spread, which represents revenues from the sale of power after the cost of inputs and their volatility. As receivables from derivatives, they are assigned to Level 3 in the above table.

In the reporting period, the platform used for the valuation of power plant blocks and, especially, virtual shares of the power generated by power plants was harmonized. This resulted in a transition effect of minus € 0.7 million as at the reporting date due to differences in the method used to estimate future market parameters.

A hypothetical reduction in the clean dark spread of € 1 per MWh reduces the fair value by € 1.1 million (prior year: € 1.7 million). A hypothetical increase in the clean dark spread of € 1 per MWh increases the fair value by € 1.1 million (prior year: € 1.8 million).

The following table shows the development of Level 3 financial instruments recognized at fair value:

in € million	Jan. 1, 2019	Changes			Dec. 31, 2019
		Recognized in profit or loss	Recognized in OCI	Adjustments	
Other investments	13.6	-	3.7	-	17.3
Receivables from derivatives	-	4.3	-	-	4.3
Liabilities from derivatives	4.2	-4.2	-	-	-

in € million	Jan. 1, 2018	Changes			Dec. 31, 2018
		Recognized in profit or loss	Recognized in OCI	Adjustments	
Other investments	29.1	-	-15.5	-	13.6
Liabilities from derivatives	0.8	3.4	-	-	4.2

Gains and losses assigned to Level 3 were recognized as follows in the income statement:

in € million	2019	Thereof attributable to financial instruments still held on the reporting date	2018	Thereof attributable to financial instruments still held on the reporting date
Gains and losses, level 3	8.5	-4.3	-3.4	-4.2
Other operating income	8.5	-	-	-
Other operating expenses	-	-4.3	-3.4	-4.2

The following overview shows the financial assets and financial liabilities that are offset in accordance with IAS 32:

in € million	Recognized gross amount	Offsetting	Reported net amount	Financial instruments	Corresponding non-offset amounts	Net amount Dec. 31, 2019
					Cash collateral received/posted	
Derivatives (positive fair values)	330.4	-102.3	228.1	-	-2.9	225.2
Derivatives (negative fair values)	355.8	-115.0	240.8	-	-42.7	198.1

in € million	Recognized gross amount	Offsetting	Reported net amount	Financial instruments	Corresponding non-offset amounts	Net amount Dec. 31, 2018
					Cash collateral received/posted	
Derivatives (positive fair values)	1,360.8	-328.6	1,032.2	-	-16.3	1,015.9
Derivatives (negative fair values)	1,434.1	-198.7	1,235.4	-	-64.7	1,170.7

The amounts offset comprise the variation margin that has to be deposited by both parties in connection with stock exchange transactions. The associated amounts that are not offset comprise the initial margin of €42.7 million that had to be provided upfront (prior year: € 64.7 million) and variation margin amounts that are not offset amounting to € 2.9 million (prior year: € 16.3 million).

Other investments are investments in equity instruments and are recognized at fair value through other comprehensive income because they are neither held for trading nor do they constitute contingent consideration in connection with a business combination pursuant to IFRS 3 and are assigned to this category by the Board of Management of STEAG GmbH.

This is shown in the following table:

in € million	Fair value as at Dec. 31, 2019	Dividends received
Hinduja National Power Corporation Limited	15.8	-
STEAG ENSIDA Energy Services Enerji Sistemleri Danışmanlık Mühendislik Tesis ve Ticaret Limited Şirketi	1.0	-
Other investments in equity instruments	0.5	0.1
	17.3	0.1

in € million	Fair value as at Dec. 31, 2018	Dividends received
Hinduja National Power Corporation Limited	11.6	-
STEAG ENSIDA Energy Services Enerji Sistemleri Danışmanlık Mühendislik Tesis ve Ticaret Limited Şirketi	1.0	-
Other investments in equity instruments	1.0	0.1
	13.6	0.1

In the reporting period, investments in equity instruments with a fair value of € 0.4 million (prior year: none) were derecognized due to intragroup mergers.

Fair value measurement of financial instruments that are not included in the balance sheet at fair value is based on the following method:

Non-current receivables are valued using a variety of parameters. Impairment losses are recognized for any expected defaults on receivables. Accordingly, the net carrying amount of these receivables basically corresponds to their fair value. For receivables from finance leases, the fair value is the country-specific weighted average cost of capital before taxes. For loans granted, liabilities to banks and loans from non-banks, the fair value is determined as the present value of future cash inflows or outflows on the assumption that they are valued using the appropriate interest rate for their term.

In view of their short maturity, in all other cases the carrying amounts of trade accounts receivable and payable, other financial assets, other financial liabilities, and cash and cash equivalents on the reporting date do not differ significantly from their fair values.

The following table shows the assignment of the fair values of financial instruments that are not recognized on the balance sheet at fair value. It does not contain information on financial assets and financial liabilities if their carrying amount is an appropriate approximation of their fair value.

in € million	Fair value of financial instruments based on			Dec. 31, 2019
	Level 1	Level 2	Level 3	
Financial assets	52.8	257.8	327.4	638.0
Loans	-	249.3	-	249.3
Receivables from finance leases	-	-	327.4	327.4
Other financial assets	52.8	8.5	-	61.3
Financial liabilities	2.9	1,160.4	5.3	1,168.6
Liabilities to banks	-	1,013.7	-	1,013.7
Loans from non-banks	-	97.8	-	97.8
Other financial liabilities	2.9	48.9	5.3	57.1

in € million	Fair value of financial instruments based on			Dec. 31, 2018
	Level 1	Level 2	Level 3	
Financial assets	134.8	233.5	1,165.0	1,533.3
Loans	-	233.5	-	233.5
Receivables from finance leases	-	-	1,165.0	1,165.0
Other financial assets	134.8	-	-	134.8
Financial liabilities	16.3	1,316.7	55.7	1,388.7
Liabilities to banks	-	1,185.2	-	1,185.2
Loans from non-banks	-	94.1	-	94.1
Lease liabilities	-	-	34.5	34.5
Other financial liabilities	16.3	37.4	21.2	74.9

The significant unobservable inputs used to determine the fair value of lease receivables are as follows:

Significant unobservable inputs	Spread (weighted average)
Country-specific weighted average cost of capital before taxes (WACC)	4 percent

A higher (lower) weighted average cost of capital (WACC) before taxes decreases (increases) the fair value of receivables from finance leases. A hypothetical shift in the country-specific WACC of 100 basis points decreases their fair value by 6 percent (prior year: 6 percent) or increases it by 7 percent (prior year: 7 percent).

Notional value of derivatives

The notional value of currency derivatives is the foreign exchange amount converted into euros. The notional value of interest derivatives is the sum of the present nominal value of the hedged items translated in euros, while the notional value of commodity derivatives is the hedged cost of acquisition translated into euros. The changes in the absolute level of the notional value of financial derivatives cannot be transferred to the level of the net risk position as some risk positions offset each other. Consequently, there is not necessarily a direct correlation between the sensitivities derived from the net risk position and the development of notional value.

The notional amount of the derivatives used in hedge accounting and those not used in hedge accounting is as follows:

							Dec. 31, 2019
in € million	Total	thereof current	thereof 1-3 years	thereof 4-5 years	thereof 6-10 years	thereof > 10 years	
Currency derivatives	801.9	754.3	37.0	10.6	-	-	
Interest rate derivatives	506.6	8.1	99.5	1.5	340.7	56.8	
Commodity derivatives	4,232.2	3,569.0	663.2	-	-	-	
	5,540.7	4,331.4	799.7	12.1	340.7	56.8	

							Dec. 31, 2018
in € million	Total	thereof current	thereof 1-3 years	thereof 4-5 years	thereof 6-10 years	thereof > 10 years	
Currency derivatives	1,437.8	1,140.1	297.7	-	-	-	
Interest rate derivatives	665.1	110.0	114.6	1.8	381.9	56.8	
Commodity derivatives	9,938.8	8,164.3	1,774.5	-	-	-	
	12,041.7	9,414.4	2,186.8	1.8	381.9	56.8	

Interest rate derivatives with a residual term of more than one year are stated in the period in which they mature at their present notional value, even if the notional value increases or decreases over their total term. The notional value does not include any options on energy contracts. These options have a volume of 350 MW (prior year: 400 MW) and expiration dates up to 2021.

The change in the notional value of commodities mainly results from a volume-driven adjustment of trading for own use.

The table shows the respective average prices:

in € million	Dec. 31, 2019	Dec. 31, 2018
Currency forward agreements		
USD / EUR	1.183	1.202
EUR / USD	0.866	0.813
PLN / EUR	4.347	4.340
Interest rate swaps		
EUR	2.41%	2.08%
USD	2.48%	2.48%
PLN	2.79%	2.79%
Commodity derivatives		
Power € / MWh	46.31	42.99
CO ₂ allowances € / EUA	23.91	16.51
Coal € / mt	63.20	73.58
Gasoil € / t	511.98	582.70

Financial risk management

Since it operates internationally, the STEAG Group is exposed to financial risks in the course of its operating business. A major objective of corporate policy is to minimize the impact of market, liquidity and default risks on the value of the company and on the profitability of the STEAG Group in order to check adverse fluctuations in cash flows and earnings without forgoing the opportunity to benefit from positive market trends. For this purpose, a systematic financial and risk management system has been established as a central element of the management of the company. This is geared specifically to securing present and future potential for success and avoiding, preventing, countering and minimizing risks. Due to its fields of activity, the STEAG Group is exposed to constantly changing political, social, demographic, legal and economic operating conditions. The resultant risks are addressed by monitoring and analyzing the entire operating environment and anticipating the associated market developments. The findings are used to systematically develop STEAG's portfolio in accordance with the strategy for the Group. That includes strategic and operational planning, preparations for investment decisions, monthly reporting and projections, and, from a certain level, immediate reporting of risks. The organizational units conduct an extensive annual inventory of opportunities and risks in connection with the mid-term planning process. All relevant factors are systematically identified and documented and the probability of the risks occurring and the potential damage are evaluated.

Interest rate and currency risks are managed centrally at STEAG GmbH. In principle, a large proportion of debt is structured in a manner that ensures that – apart from limited exceptions – liability is confined to the relevant project company.

Financial derivatives are used to reduce financial risks. They are entered into in connection with an underlying transaction (hedged item) relating to normal operating business, which provides a risk profile directly opposite to that of the hedge. The instruments used to manage exchange rate and interest rate risks are customary products found on the market such as currency forwards, interest rate and currency swaps and interest rate caps. To hedge commodity risks arising from power, coal, freight, oil and emission allowances, forward contracts are used (forwards, futures, swaps, options).

An appropriate, documented and functioning risk management system monitors financial risks and the efficiency of measures taken to minimize risk. The scope, accountability and controls are defined in internal directives.

The parameters used to control commodity trading in the STEAG Group are the daily calculation of changes in market prices and their impact on the pending result, value at risk (VaR), and a sensitivity analysis. Limits are set centrally and monitored and reported daily, thus effectively limiting the risk of changes in market prices.

(a) Market risk

Market risk can basically be subdivided into exchange rate, interest rate and commodity risks.

Exchange rate risks arise from both the sourcing of raw materials and the sale of end-products in currencies other than the functional currency of the company concerned. The aim of currency management is to protect the company's operating business from negative fluctuations in earnings and cash flows resulting from changes in exchange rates. Account is taken of the opposite effects arising from procurement and sales activities. The remaining currency risks to the STEAG Group chiefly relate to changes in the exchange rate of the euro versus the US dollar and the Polish zloty.

The aim of interest rate management is to protect net income from the effects of fluctuations in market interest rates. Interest rate risk is managed through derivative and non-derivative financial instruments, especially interest rate swaps and interest rate caps. The aim is to achieve an appropriate ratio of fixed rates (with interest rates fixed for more than one year) and variable rates (terms of less than one year), taking costs and risks into account. Around 95.6 percent of floating rate loan liabilities (with an original term to maturity of more than one year) were hedged by interest rate swaps on December 31, 2019 (prior year: around 96.1 percent).

The fair values of interest rate derivatives include contracts that could still be adversely affected by the IBOR reform. The fair values of these interest rate derivatives, most of which are designated as part of hedging relationships, amounted to minus € 2.1 million as at the reporting date. STEAG GmbH assumes that the effectiveness of the recognized hedges will not be impaired by the IBOR reform. The uncertainty relates to the 3M WIBOR and 6M USD Libor reference rates.

Several scenario analyses were carried out to measure exchange rate, interest rate and commodity risk as at December 31, 2019. The following tables show the impact on income before taxes and on OCI. The impact on equity, including the result for the period, is derived from the sum of the individual effects.

With regard to currency risk, the exchange rates for the most important currencies for the STEAG Group, the US dollar versus the euro, and the Polish zloty versus the euro, were altered by 1 percent, 5 percent and 10 percent. In this way, the possible loss of value of derivative and non-derivative financial instruments is simulated.

The results are summarized in the table:

US dollar vs. euro in € million	Dec. 31, 2019		Dec. 31, 2018	
	Impact on result	OCI	Impact on result	OCI
+1 percent	1.1	-0.7	-1.5	2.4
-1 percent	-1.1	0.7	1.5	-2.4
+5 percent	5.4	-3.2	-7.0	11.9
-5 percent	-5.1	3.5	7.8	-11.7
+10 percent	11.1	-6.1	-13.4	23.9
-10 percent	-9.9	7.4	16.5	-23.3

Polish zloty vs. euro in € million	Dec. 31, 2019		Dec. 31, 2018	
	Impact on income	OCI	Impact on income	OCI
+1 percent	-0.7	-	-0.6	-
-1 percent	0.7	-	0.6	-
+5 percent	-3.2	-	-2.9	-
-5 percent	3.5	-	3.2	-
+10 percent	-6.1	-	-5.5	-
-10 percent	7.3	-	6.7	-

Several scenarios were also simulated for interest rates. These analyzed shifts of 0.5 percent, 1 percent and 1.5 percent in interest rates or the interest rate curve. The changes modeled relate to the interest rate curves for all foreign currencies and for the euro. In this way, the possible loss of value of derivative and non-derivative financial instruments is simulated. The results are shown in the table:

in € million	Dec. 31, 2019		Dec. 31, 2018	
	Impact on income	OCI	Impact on income	OCI
+0.5 percent	0.4	8.1	0.9	9.7
-0.5 percent	-0.3	-8.0	-0.9	-10.0
+1 percent	0.7	15.7	1.7	18.9
-1 percent	-0.7	-16.5	-1.8	-20.4
+1.5 percent	1.1	23.0	2.6	27.8
-1.5 percent	-1.1	-25.3	-2.7	-31.3

Commodity risks arise from changes in the market price of power, emission allowances and raw materials, including the sea freight required for logistics purposes. The market price risk resulting from the marketing of the power generated by the STEAG Group's power plants comprises a change in the clean dark spread as a combination of the market price (electricity price less currency-adjusted costs for the procurement of coal, oil and CO₂ allowances). Raw materials are purchased both to meet in-house requirements and for resale on the external market. Other factors of importance for the STEAG Group's risk position are the physical availability of raw materials and dependence on their price. The STEAG Group uses broadly based, all-round portfolio management for the procurement of fuel to reduce price dependency and procurement risks on the sourcing market.

The price risks arising from procurement and resale are logged and effective measures to minimize the risks are defined. These include, for example, agreeing sliding price clauses and hedging via forward contracts. The principle is that financial derivatives and the corresponding hedged transaction must have opposite profiles.

To measure the market risk arising from commodity derivatives, the sensitivity of the fair value of these instruments to an increase or decrease of 10 percent in their market price was determined. The results are shown in the table:

in € million	Dec. 31, 2019		Dec. 31, 2018	
	Impact on income	OCI	Impact on income	OCI
CDS trading				
Power				
+10 percent	-23.1	-	0.3	-70.8
-10 percent	23.1	-	-0.3	70.8
CO ₂ allowances				
+10 percent	19.9	-	0.0	25.0
-10 percent	-19.9	-	0.0	-25.0
Coal				
+10 percent	6.1	-	-0.2	31.9
-10 percent	-6.1	-	0.2	-31.9
Gasoil				
+10 percent	0.3	-	0.0	0.4
-10 percent	-0.3	-	0.0	-0.4
Other trading				
Power				
+10 percent	0.0	-	0.4	-
-10 percent	0.0	-	-0.4	-
CO ₂ allowances				
+10 percent	0.0	-	0.0	-
-10 percent	0.0	-	0.0	-
Coal				
+10 percent	-0.2	-	1.7	1.1
-10 percent	0.2	-	-1.7	-1.1

The table shows the sensitivity of commodity derivatives. It does not show the opposite change in the value of the corresponding physical transactions.

Hedge accounting

Where the criteria for hedge accounting are fulfilled, commodity, currency and interest rate derivatives are accounted for as fair value hedges, cash flow hedges or hedges of a net investment.

Depending on the type of transaction and the associated hedging strategy, the following distinctions are made in accordance with the applicable policies and procedures:

Asset-based clean dark spread (CDS) trading

In forward sales of power generated by the Group's power plants, the focus is on hedging the margin between the cost of power generation (cost of fuel, supplies and emission allowances) and the revenues from marketing the power. The forecast future cash flows are therefore hedged via standardized forward contracts as part of a dynamic investment strategy. Wherever possible, until November 2019 the hedging relationship was recognized on the balance sheet as a cash flow hedge or fair value hedge.

Fuel management

There may be a discrepancy in the timing of the procurement of fuel for own use in the generation of power and its marketing. In addition, price risks may arise from the fact that the underlying pricing may be

asynchronous. In such cases, prices were hedged via swaps, including hedging of exchange rate fluctuations. Depending on the physical hedged underlying transaction, until November 2019 these hedging instruments were recognized as cash flow hedges or fair value hedges.

Other trading

The Group has long-term master agreements on the procurement and sale of imported coal, including the associated sea freight, and also utilizes short-time distribution opportunities. Where procurement and sale do not take place concurrently on the same price basis, price risks arise from the pending transactions. These risks are hedged using coal and freight swaps. Depending on the physical underlying transaction, until November 2019 they were accounted for either as cash flow hedges or as fair value hedges. In addition, to extend marketing activities, forward agreements are concluded for power, emission allowances and currency-adjusted fuels. The price risks are generally reduced by counter-transactions of the same volume and value.

In particular, economic hedges in asset-based CDS trading were reflected in hedge accounting in previous fiscal years. In view of the specific market situation, with high price volatility and declining contribution margins, and the related uncertainty with regard to the marketing of power plant output, a decision was taken in 2019 to end hedge accounting for asset-based CDS trading, fuel management and other trading and to recognize the transactions on a stand-alone basis in the future.

Interest rate hedges

To hedge financing costs against future interest rate rises, floating rate debt instruments are swapped for fixed-interest payments and interest rate caps are used to limit interest payments. The risk strategy includes rebalancing interest hedging transactions in the event of major deviations in forecast cash flows by adjusting the notional amount and interest payments in the interest hedging contract. The adjustment is reflected in a change in the fixed interest rate or a cash settlement. Alternatively, a further hedge may be entered into. Wherever possible, these are accounted for as cash flow hedges.

Currency hedging

Currency hedges have been concluded to hedge the currency gains and losses resulting from currency translation of the net assets of foreign power plant projects in the course of consolidation. They are accounted for as hedges of a net investment.

STEAG GmbH's hedging policy only allows effective hedging relationships. The effectiveness of the hedging relationship is determined at the date of initial recognition. To ensure an effective hedging relationship, the first step comprises documenting the economic relationship between the hedged item and the hedging instrument at STEAG GmbH. The contractual terms of the hedging transactions are those of the forecast, highly probable transactions or firm commitments. The underlying risk of the hedging instrument must be identical to the hedged risk components. Consequently, the hedge ratio for the Group's hedging relationship and the hedge ratio for the hedged item and hedging instrument is normally 100 percent.

The effectiveness of the hedging relationships is proven prospectively at every reporting date using the hypothetical derivatives method. A regression analysis is used for this. For interest rate hedges where option-type instruments are used as the hedging instrument, evidence of effectiveness is provided using the intrinsic value method.

Any ineffectiveness is determined using the dollar offset method. Ineffectiveness of a hedge of a net investment may occur if the amount of the investment in the foreign power plant project is below the amount of the forward currency agreement. Ineffectiveness of an interest rate hedge may be influenced by (partial) derecognition of hedged items, for example, one-time payments under agreed repayment schedules or by taking into account different default risks. When hedging asset-based CDS, fuel management or other trading activities, ineffectiveness can arise from differences in the delivery dates for the physical coal trading.

As at the reporting date, the impact of the hedging transactions outlined above on the balance sheet was as follows:

Cash flow hedge accounting

The option of hedge accounting provided for by IFRS 9 prevents an accounting mismatch by ensuring that highly effective economic hedging relationships do not result in the recognition of income or loss. In hedge accounting, the change in the value of the derivatives used as hedging instruments is therefore recognized in equity, while the change in the value of the physical underlying is not recognized in the financial statements until the expiration date.

At the expiration date, the compensatory changes in the value of the hedged item and hedging instrument are shown in income or as part of the cost of acquisition in the carrying amount of the related non-financial asset. If a hedging relationship is highly effective, it has no or only little impact on income.

In 2018, energy-related forward transactions used to hedge forecast purchases and sales of goods procurement of goods against fluctuations in market prices and forward exchange agreements used to hedge against exchange rate fluctuations were designated as cash flow hedges in the areas of asset-based CDS trading, fuel management and other trading.

Most interest payments relating to STEAG GmbH's floating rate bonded loans and the financing of power plant projects have been hedged up to 2031 via interest rate swaps and interest rate caps.

The following table shows the changes in the value of the hedged items:

in € million	Change in the value of the hedged item as the basis of ineffectiveness	Dec. 31, 2019 Cash flow hedge reserve	
		From hedging relationships still in effect	From hedging relationships no longer in effect
Financing costs with variable interest rates	48.2	38.0	10.2
	48.2	38.0	10.2

in € million	Change in the value of the hedged item as the basis of ineffectiveness	Cash flow hedge reserve	
		From hedging relationships still in effect	From hedging relationships no longer in effect
Asset-based CDS trading	43.8	24.8	19.0
Fuel management	-5.5	-0.1	-5.4
Other trading	1.2	1.2	-
Financing costs with variable interest rates	51.8	38.5	13.3
	91.3	64.4	26.9

The impact of hedging instruments designated in hedging relationships on the balance sheet, other comprehensive income and the income statement, including any resulting ineffectiveness, is as follows:

in € million	Carrying amount of the hedging instrument		Change in the value of the hedge as the basis of ineffectiveness	Notional value	In the fiscal year		
	Financial assets	Financial liabilities			Gains and losses from hedging relationships recognized in OCI	Amount reclassified to profit or loss or assets	Item showing reclassified amount
Currency derivatives	-	-	-	-	-14.0	6.9	Other operating expenses
						2.7	Inventories
Interest rate derivatives	-	40.5	-40.5	455.4	-10.9	14.5	Interest expense
Commodity derivatives	-	-	-	-	-1.4	5.8	Sales
						32.3	Other operating expenses
						7.3	Inventories
	-	40.5	-40.5	455.4	-26.3	69.5	

in € million	Carrying amount of the hedging instrument		Change in the value of the hedge as the basis of ineffectiveness	Notional value	In the fiscal year		
	Financial assets	Financial liabilities			Gains and losses from hedging relationships recognized in OCI	Amount reclassified to profit or loss or assets	Item showing reclassified amount
Currency derivatives	9.1	0.5	8.6	267.7	-10.7	-0.9	Cost of materials
						0.6	Inventories
Interest rate derivatives	0.8	39.3	-38.5	503.2	7.4	-16.0	Interest expense
Commodity derivatives	123.3	157.8	-34.5	1,040.1	37.9	-34.2	Sales
						50.7	Inventories
	133.2	197.6	-64.4	1,811.0	34.6	0.2	

The hedging instruments are recognized as receivables from derivatives or liabilities from derivatives in the balance sheet item financial assets or financial liabilities. The corresponding basis for determining ineffectiveness is the change in the carrying amount of the hedging instruments before offsetting of the variation margin to be provided by both parties in connection with stock exchange transactions. In the prior year, commodity derivatives totaling minus € 106.4 million were offset. Minus € 2.5 million was recognized in income as the ineffective portion of the valuation of cash flow hedges (prior year: a negligible amount).

The interest component of currency derivatives not recognized in the hedging relationship was € 4.2 million in the prior year.

Fair value hedge accounting

To hedge fuel management, in 2018 a small amount of recognized commodity inventories were designated as hedges against changes in value; all expired in the reporting period. No new hedges were designated in the reporting period due to the specific market situation for power plants, which has already been mentioned.

The following table shows the changes in the value of the hedged items in 2018:

in € million	Carrying amount of the hedged item			Dec. 31, 2018	
	Financial assets	Financial liabilities	Accumulated amount of hedging-related adjustments	Change in the value of the hedged item as the basis of ineffectiveness	
Fuel management	0.3	2.1	-1.8		-1.8
	0.3	2.1	-1.8		-1.8

The hedging instruments designated in hedging relationships have the following impact on the balance sheet:

in € million	Carrying amount of the hedging instrument			Dec. 31, 2018	
	Financial assets	Financial liabilities	Change in the value of the hedge as the basis of ineffectiveness	Notional value	
Commodity derivatives	2.1	0.3	1.8		35.6
	2.1	0.3	1.8		35.6

Hedge of a net investment

Currency derivatives were used to hedge the foreign exchange risk of currency gains and losses from currency translation of the net assets of foreign power plant projects, which have to be recognized in the course of consolidation. The following table shows the changes in the value of the hedged items:

in € million	Dec. 31, 2019		
	Change in the value of the hedged item as the basis of ineffectiveness	Reserve for hedges of a net investment	
		From hedging relationships still in effect	From hedging relationships no longer in effect
Currency gains and losses on foreign power plant projects	-27.5	0.4	-27.9
	-27.5	0.4	-27.9

in € million	Dec. 31, 2018		
	Change in the value of the hedged item as the basis of ineffectiveness	Reserve for hedges of a net investment	
		From hedging relationships still in effect	From hedging relationships no longer in effect
Currency gains and losses on foreign power plant projects	-29.4	0.8	-30.2
	-29.4	0.8	-30.2

The impact of the hedging instruments designated in hedging relationships on the balance sheet, other comprehensive income and the income statement is as follows:

in € million	Carrying amount of the hedging instrument		Change in the fair value of the hedge as the basis of ineffectiveness	Notional value	in million	Dec. 31, 2019				
	Financial assets	Financial liabilities				Hedging gains or losses recognized in the reserve for hedges of a net investment	Gains and losses from hedging relationships recognized in OCI	Amount reclassified to profit or loss	Item showing reclassified amount	In the fiscal year
Currency derivatives	0.3	0.6	-0.3	75.9	USD	28.5	-1.2	-0.6	Other operating income	
	0.0	0.1	-0.1	28,640.3	COP	-1.0	-0.1	-		
	0.3	0.7	-0.4			27.5	-1.3	-0.6		

in € million	Carrying amount of the hedging instrument		Change in the fair value of the hedge as the basis of ineffectiveness	Notional value	in million	Dec. 31, 2018				
	Financial assets	Financial liabilities				Hedging gains or losses recognized in the reserve for hedges of a net investment	Gains and losses from hedging relationships recognized in OCI	Amount reclassified to profit or loss	Item showing reclassified amount	In the fiscal year
Currency derivatives	0.1	0.9	-0.8	34.1	USD	29.4	-1.9	-18.3	Other operating income	
	0.1	0.9	-0.8			29.4	-1.9	-18.3		

(b) Liquidity risk

The liquidity risk comprises a risk that there might not be sufficient cash and cash equivalents to meet financial obligations. To ensure that it remains solvent, the STEAG Group has a flexible range of corporate financing instruments to meet capital requirements for day-to-day business, investments and the repayment of financial debt. A key focus is optimizing net working capital.

The bonded loans taken out in 2014 and 2019 are another major aspect. Here, STEAG GmbH is required to meet certain covenants. There is a basic risk that it will not meet the financial indicators defined for these covenants. Under the agreements, failure to meet these covenants constitutes grounds for termination with the possible consequence that the outstanding loans would be repayable immediately. That would result in an immediate outflow of funds. The liquidity risk to STEAG GmbH of non-fulfillment of the financial covenants is classified as low.

In connection with forward marketing, STEAG GmbH concludes trading agreements, some of which contain financial covenants that have to be fulfilled; if the indicators are below the level set, the contractual party has a right to additional collateral. In principle, there is a risk that this would have to be paid in the form of cash margin payments. Not all agreed covenants were met as of December 31, 2019. The amount of relevance for margining was € 24.6 million on the reporting date. As a result of changes in market prices and the counter-effect of liquidity inflows from exchange trading, the risk is considerably lower as at the date of preparation of these financial statements. The total risk to STEAG GmbH of non-fulfillment of the financial covenants is therefore classified as low.

Liquidity risk is managed through business planning to ensure that the funds required to finance the current operating business and current and future investments at all Group companies are available at the right time and in the right currency at optimum cost. Liquidity requirements for business operations, investments and other financial activities are derived from rolling monthly liquidity planning based on suitable risk management. Liquidity is pooled in a central cash management pool at STEAG GmbH where this makes economic sense and is legally permissible. Central liquidity risk management facilitates low-cost borrowing and advantageous offsetting of financial requirements. These measures ensure that the Group has sufficient liquidity to cover payments at all times. Based on present planning, the liquidity of the STEAG Group is ensured for the entire planning period. The liquidity risk of STEAG GmbH is therefore classified as low.

The table shows the remaining maturity of the non-derivative financial instruments based on the agreed dates for payment as the sum of the expected interest and installment payments.

in € million	Payments due in				December 31, 2019
	up to 1 year	more than 1 - 3 years	more than 3 - 5 years	more than 5 years	
Financial liabilities	275.2	426.8	289.2	449.5	1,440.7
Liabilities to banks	163.6	362.2	248.7	275.4	1,049.9
Loans from non-banks	10.0	6.6	10.6	85.4	112.6
Lease liabilities	20.7	38.7	29.9	72.1	161.4
Other financial liabilities	80.9	19.3	-	16.6	116.8
Trade accounts payable	395.2	-	-	-	395.2

in € million	Payments due in				Dec. 31, 2018
	up to 1 year	more than 1 - 3 years	more than 3 - 5 years	more than 5 years	
Financial liabilities	310.5	416.3	341.1	467.5	1,535.4
Liabilities to banks	186.6	375.0	318.3	356.1	1,236.0
Loans from non-banks	5.6	11.8	6.6	86.8	110.8
Liabilities from finance leases	7.3	13.8	11.4	6.5	39.0
Other financial liabilities	111.0	15.7	4.8	18.1	149.6
Trade accounts payable	357.4	1.9	-	-	359.3

The STEAG Group has not infringed the payment terms agreed for its non-derivative financial liabilities.

The breakdown of payments of interest and repayments of principal by residual maturity in the following tables relates to derivative financial instruments with positive and negative fair values. The tables show the net value of cash inflows and outflows. Since netting was not agreed for currency derivatives, they are presented as gross amounts:

in € million	Payments due in				Dec. 31, 2019
	up to 1 year	more than 1 - 3 years	more than 3 - 5 years	more than 5 years	
Receivables from derivatives	1,623.4	259.8	-	-	1,883.2
Currency derivatives	24.9	-0.1	-	-	24.8
Cash inflows	490.0	4.2	-	-	494.2
Cash outflows	-465.1	-4.3	-	-	-469.4
Interest rate derivatives	-	-	-	-	-
Commodity derivatives	1,598.5	259.9	-	-	1,858.4
Liabilities from derivatives	-1,640.4	-234.3	-10.2	-8.5	-1,893.4
Currency derivatives	-15.0	0.3	-	-	-14.7
Cash inflows	288.4	44.2	-	-	332.6
Cash outflows	-303.4	-43.9	-	-	-347.3
Interest rate derivatives	-10.5	-15.9	-10.2	-8.5	-45.1
Commodity derivatives	-1,614.9	-218.7	-	-	-1,833.6

in € million	Payments due in				Dec. 31, 2018
	up to 1 year	more than 1 - 3 years	more than 3 - 5 years	more than 5 years	
Receivables from derivatives	4,138.9	923.1	0.3	0.6	5,062.9
Currency derivatives	25.2	16.6	-	-	41.8
Cash inflows	547.8	222.9	-	-	770.7
Cash outflows	-522.6	-206.3	-	-	-728.9
Interest rate derivatives	-0.3	-0.3	0.3	0.6	0.3
Commodity derivatives	4,114.0	906.8	-	-	5,020.8
Liabilities from derivatives	-4,081.2	-891.9	-9.3	-8.8	-4,991.2
Currency derivatives	-19.4	-7.5	-	-	-26.9
Cash inflows	617.4	91.4	-	-	708.8
Cash outflows	-636.8	-98.9	-	-	-735.7
Interest rate derivatives	-11.5	-16.7	-9.3	-8.8	-46.3
Commodity derivatives	-4,050.3	-867.7	-	-	-4,918.0

(c) Default risk

Credit risk management divides default risk into three categories, which are analyzed separately on the basis of their specific features. The three categories are debtor and creditor risk, country risk and the risk of default by financial counterparties.

The debtor and creditor default risks are analyzed and monitored continuously with the aid of an internal limit system. The Group's major foreign customers include state-owned corporations whose payment obligations are secured by state guarantees. Political risk (country risk) is also taken into account in foreign investment and export orders so that the overall risk assessment takes account of both political and economic risk factors.

Wherever it makes sense, equity is insured against political risks (expropriation, transfer risks, etc.). On the basis of this analysis, a maximum limit is set for the risk exposure of each contractual party.

In addition, a specific limit is set for financial and trading counterparties for each type of risk (money market, capital market and derivatives). Maximum limits for each contracting party are set on the basis of the creditworthiness analyses. These are predominantly based on the rating issued by international rating

agencies and external credit analyses and are continuously updated. In the case of funds deposited with banks, the bank's liable capital and insurance limits in the deposit insurance system are also taken into account in the creditworthiness and risk analysis. In addition, the prospective expected credit loss model is used. This model has a strong focus on the future. This model is applied to amortized cost, lease receivables, trade accounts receivable and contract assets, using one of the following approaches:

- the general approach, which is applicable for most loans and debt instruments.
- the simplified approach, which is applicable for most trade accounts receivable.

The probability of default by individual customers, which is required for the general approach, is determined centrally at STEAG GmbH. In the STEAG Group, the general approach is used to calculate the loss allowance for individual instruments in each category of the following assets:

- loans, securities and similar rights, and other financial assets (including time deposits with a term of more than 3 months), insofar as they are measured at amortized cost and at fair value through other comprehensive income (OCI)
- lease receivables

Whether there has been a significant increase (or decrease) in the credit risk is assessed at every reporting date on the basis of the change in the lifetime expected credit loss of the financial instrument. Risk provisioning for a fully secured asset is based on the lifetime ECL, even if no loss is expected

The assessment of whether the credit risk has increased significantly frequently takes place within an overall analysis including a wide range of factors. The significance and relevance of each specific factor depends on

- the type of product
- the characteristics of the financial instruments concerned
- the characteristics of the borrower, and
- geographical factors.

In certain circumstances, qualitative rather than quantitative factors can be used to determine whether a financial instrument meets the criteria for recognition of a lifetime ECL. In such cases, a statistical model or credit rating process is not applied to assess whether there has been a significant increase in the credit risk. In other cases the assessment can be based on quantitative factors or a mixture of quantitative and qualitative factors.

When assessing whether it is necessary to recognize a lifetime expected credit loss, the following factors or indicators must be taken into account:

- Significant changes in internal price indicators of credit risk as a result of a change in the credit risk since inception of the contract (e.g. changes in the credit spread that would result if a similar financial instrument with the same terms and the same counterparty were newly originated or issued at the reporting date).
- An actual or expected significant change in the financial instrument's external or internal credit rating.

- Actual or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant change in the borrower's ability to meet its payment obligations, such as an actual or expected increase in interest rates or an actual or expected significant increase in unemployment rates.
- An actual or expected significant change in the borrower's operating result, including an actual or expected decline in sales, increasing operating risks, working capital deficiencies, a reduction in asset quality, increased balance sheet leverage, liquidity, management problems or changes in the scope of business or organizational structure (e.g. discontinuance of a segment of the business or a business activity) that results in a significant change in the borrower's ability to meet its payment obligations.
- An actual or expected significant adverse change in the borrower's regulatory, economic, or technological environment that results in a significant change in the borrower's ability to meet its payment obligations, e.g. a decline in demand for the borrower's products because of a shift in technology.
- Significant changes (e.g. a reduction) in financial support from the parent company, another affiliated company or a shareholder or an actual or expected significant change in the quality of credit enhancement that are expected to reduce the borrower's economic incentive to make contractually agreed payments. This could occur, for example, if the parent company decided to withdraw financial support for a subsidiary and the subsidiary therefore faced the threat that it could be unable to meet its payment obligations or could be placed in administration. Credit enhancement and support include the consideration of the financial situation of the guarantor.
- Expected changes in the loan documentation (i.e. changes in the contractual terms), including an expected breach of contract that could lead to covenant waivers or amendments, postponement of interest payments, interest rate step-ups, requirements for additional collateral or guarantees, or other contractual amendments relating to the financial instrument.
- Significant changes in the expected performance and behavior of the borrower, including changes in the payment status of borrowers in the group (e.g. an increase in the expected number or extent of past due contractual payments).
- Significant changes in the quality of the guarantees provided by a shareholder (or the parent company of an individual company) if the shareholder (or the parent company) has an incentive and is financially in the position to prevent default by injecting capital or financing.
- Information on past due payment.

The following factors are relevant for classification as significant:

- The original credit risk on initial recognition: The change in the absolute probability of default by a certain number of percentage points is more significant for a financial instrument with a low original credit risk than for a financial instrument with a higher original credit risk.
- The expected maturity structure: The default risk for financial instruments with a similar credit risk increases as the expected term of the relevant financial instruments increases. In view of the link between the expected term and the default risk, the change in the credit risk cannot simply be assessed by comparing the absolute default risk over a certain period of time. If the default risk for a financial instrument with an original term of ten years on initial recognition is equally high after, for example, five years, this indicates that the credit risk has increased because the default risk normally decreases as the due date approaches. In addition, the standard makes it clear that the default risk of financial instruments that have significant payment obligations shortly before the due date (e.g. if the principal only has to be repaid on expiry of the financial instrument) does not necessarily decrease as time passes. In such cases, the entity must also consider other qualitative factors.

When applying the general approach, there are various practical expedients and assumptions that help a company assess whether there has been a significant increase in the credit risk since initial recognition. These include:

- If a financial instrument has a “low credit risk” corresponding to the worldwide “investment-grade” credit rating, the entity may assume that the credit risk has not increased significantly.
- If no future-oriented information is available (either for individual financial instruments or for a group of financial instruments [portfolio]), there is a rebuttable presumption that the credit risk has increased significantly if contractually agreed payments are more than 30 days past due.
- If the risk of a default event occurring in the next twelve months changes, this may often be taken as an approximation for the change in the risk that a default may occur in the remaining term to maturity.
- This assessment may be undertaken at portfolio level or at the level of the counterparty.

The credit risk for a financial instrument is classified as low if the financial instrument has a low default risk, the borrower is able to satisfy the contractually agreed cash flow obligations in the near future and adverse long-term changes in the economic and business conditions could but would not necessarily impair the borrower's ability to meet the contractually agreed cash flow obligations. The existence of collateral does not normally have any influence on the determination of whether a financial instrument has a low credit risk. The description of a low credit risk largely corresponds to the rating agencies' definition of the investment-grade range. This corresponds to a BBB- or higher rating from Standard & Poor's and Fitch or a rating of Baa3 or above from Moody's. However, it should be noted that the default ratios used by the rating agencies are based on historical data. To assess expected credit losses or to assess whether credit quality has deteriorated, it is necessary to consider the origin of the data. Where necessary, the present and future-oriented information must be updated. Although ratings always refer to future development, changes in the credit rating may not be reflected immediately. Consequently, when assessing whether the credit risk is low, an entity may have to take account of expected changes in credit ratings.

The development of the loss allowance is presented below, based on a comparison of the situation at the beginning and end of the year for risk provisioning for assets carried at amortized cost.

in € million	General approach			Simplified approach	Dec. 31, 2019
	Level 1	Level 2	Level 3		
Gross carrying amount as at January 1	1,104.9	-	16.3	665.8	1,787.0
Loss allowance as at January 1	-33.4	-	-16.1	-6.4	-55.9
Net carrying amount as at January 1	1,071.5	-	0.2	659.4	1,731.1
Foreign currency translation differences	5.6	-	-	2.5	8.1
Impairment losses	-0.8	0.0	-0.3	-2.4	-3.5
Reversal of impairment losses	0.8	-	-	0.4	1.2
Accrued interest	6.4	-	-	-	6.4
Reclassifications	-8.5	8.2	0.3	-	0.0
to/from Level 1	-8.5	-	-	-	-8.5
to/from Level 2	-	8.2	-	-	8.2
to/from Level 3	-	-	0.3	-	0.3
Newly issued or acquired financial assets	14,843.6	0.8	-	1,745.6	16,590.0
Financial assets derecognized during the period due to repayment, modifications, sale, etc.	-15,051.9	-1.3	-0.2	-1,790.6	-16,844.0
Gross carrying amount as at December 31	901.6	7.7	9.9	623.2	1,542.4
Loss allowance as at December 31	-34.9	0.0	-9.9	-8.3	-53.1
Net carrying amount as at December 31	866.7	7.7	0.0	614.9	1,489.3

in € million	General approach			Simplified approach	Dec. 31, 2018
	Level 1	Level 2	Level 3		
Gross carrying amount as at January 1	1,196.8	-	17.1	582.5	1,796.4
Loss allowance as at January 1	-33.9	-	-14.6	-4.9	-53.4
Net carrying amount as at January 1	1,162.9	-	2.5	577.6	1,743.0
Foreign currency translation differences	10.2	-	-	4.5	14.7
Impairment losses	-0.2	-	-1.5	-3.0	-4.7
Reversal of impairment losses	0.4	-	-	0.5	0.9
Accrued interest	6.8	-	-	-	6.8
Reclassifications	-	-	-	-	0.0
to/from Level 1	-	-	-	-	0.0
to/from Level 2	-	-	-	-	0.0
to/from Level 3	-	-	-	-	0.0
Newly issued or acquired financial assets	13,708.5	-	0.2	3,994.3	17,703.0
Financial assets derecognized during the period due to repayment, modifications, sale, etc.	-13,817.1	-	-1.0	-3,914.5	-17,732.6
Gross carrying amount as at December 31	1,104.9	-	16.3	665.8	1,787.0
Loss allowance as at December 31	-33.4	-	-16.1	-6.4	-55.9
Net carrying amount as at December 31	1,071.5	-	0.2	659.4	1,731.1

The simplified method is used for trade accounts receivable and contract assets without significant financing components. The impairment losses totaling € 8.3 million (prior year: € 6.4 million) contain around € 0.4 million derived from the simplified approach, which is mainly used for receivables that are up to 90 days past due.

(8.2) Related parties

In addition to the affiliated companies included in the consolidated financial statements, the STEAG Group maintains relationships with related parties.

Related parties within the meaning of IAS 24 are KSBG KG and its shareholder Dortmunder Stadtwerke AG, together with the companies under its control.

The transactions between the STEAG Group and these companies are shown in the table:

in € million	KSBG KG		STEAG affiliates		Joint ventures		Associates		Other related parties	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Goods and services:										
supplied	0.1	0.1	0.2	0.2	24.2	20.2	5.8	31.8	-	0.9
sourced	-	-	0.1	0.1	11.7	11.4	1.8	14.5	-	-
Other income	6.9	7.3	0.1	0.1	0.8	0.7	0.1	0.2	0.0	0.0
Other expense	0.6	0.7	0.1	0.1	0.4	0.6	0.3	0.2	0.0	0.0
Receivables as at Dec. 31	160.4	195.0	0.4	6.2	7.4	6.6*	1.7	8.8	0.0	0.0
Liabilities as at Dec. 31	45.0	45.0	0.0	0.3	0.2	0.2	0.2	0.3	-	-

* Prior-year figure restated

The receivables from KSBG KG mainly comprise the upstream loan granted to this company, including capitalized interest of € 150.6 million (prior year: € 177.6 million). There is also a receivable resulting from the associated taxes. On the reporting date, the liabilities to KSBG KG related to the profit and loss transfer agreement.

In the reporting period, write-downs of € 1.2 million (prior year: € 6.4 million) were recognized for uncollectable and doubtful financial receivables from companies classified as related parties. These relate to joint ventures. In the prior year, they related to STEAG investments and to a foreign joint venture.

Related parties also include members of the management who are directly or indirectly responsible for corporate planning, management and oversight of the activities of the STEAG Group, and members of their families. Within the STEAG Group these are the Board of Management and Supervisory Board of STEAG GmbH, KSBG GmbH, which is the managing partner of KSBG KG, and other members of the management of the STEAG Group. The other management members comprise the directors of STEAG Fernwärme GmbH, STEAG Power Minerals GmbH, STEAG Energy Services GmbH, STEAG New Energies GmbH and STEAG Technischer Service GmbH.

The supervisory boards of the subsidiaries STEAG New Energies GmbH and STEAG Technischer Service GmbH are not able to exercise any material influence on the STEAG Group.

The remuneration paid to related parties is shown in the table:

in € million	Board of Management of STEAG GmbH		Other management members	
	2019	2018	2019	2018
Short-term remuneration	3.8	3.7	3.1	3.2
Long-term performance-oriented remuneration (LTI plans)	1.1	0.5	-	-
Current service cost for pensions and other post-employment benefits	0.9	0.9	0.4	0.5

Remuneration comprises both amounts not related to performance and performance-related components.

The present value of defined benefit obligations is € 18.3 million for the Board of Management (prior year: € 15.3 million) and € 15.5 million (prior year: € 12.5 million) for other management members.

The total remuneration of members of the Supervisory Board of STEAG GmbH was € 0.4 million (prior year: € 0.4 million).

Apart from the relationships stated above, the STEAG Group did not have any other significant business relationships with related parties.

(8.3) Contingent liabilities and other financial commitments

Contingent liabilities were as follows on the reporting date:

in € million	Dec. 31, 2019	Dec. 31, 2018
Guarantee obligations	70.8	48.8
Obligations under warranties and indemnity agreements	68.4	91.5
	139.2	140.3

Obligations under warranties and indemnity agreements include letter of comfort, some of which were issued jointly with third parties.

There are legal liabilities in respect of investments in partnerships, collectively owned enterprises and as the general partner of limited liability partnerships.

The disclosure of uncertainties regarding the amounts and maturity dates of the reported guarantee obligations and obligations under warranties and indemnity agreements is omitted for cost-benefit reasons.

Since January 1, 2019, the liabilities from operating leases have been recognized on the balance sheet in accordance with the provisions of IFRS 16.

There are administrative, regulatory, court, and arbitration proceedings concerning STEAG GmbH and/or its affiliated companies. Their outcome could affect the future economic and financial situation of these companies. In some cases, out-of-court claims are also being pursued. However, these cases are not expected to have a material impact on the earnings, assets and financial position of the STEAG Group.

(8.4) Events after the reporting date

On February 3, 2002, 26.01 percent of the shares in Arenales Solar PS S.L., were sold by Steag 1. Beteiligungs GmbH as seller to Fronterasol B.V. as purchaser.

Essen, March 11, 2020

STEAG GmbH
Board of Management

Rumstadt

Baumgärtner

Dr. Cieslik

Geißler