Policies and scope of consolidation

1 Summary of accounting policies

1.1 General information

BASF SE (registered at the district trade register, or *Amtsgericht*, for Ludwigshafen am Rhein, number HRB 6000) is a publicly listed corporation headquartered in Ludwigshafen am Rhein, Germany. Its official address is Carl-Bosch-Str. 38, 67056 Ludwigshafen am Rhein, Germany.

The Consolidated Financial Statements of BASF SE as of December 31, 2017 have been prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) and section 315a (1) of the German Commercial Code (HGB). IFRSs are generally only applied after they have been endorsed by the European Union. For the 2017 fiscal year, all of the binding IFRSs and pronouncements of the International Financial Reporting Interpretations Committee (IFRIC) were applied.

The Consolidated Financial Statements are presented in euros. All amounts, including the figures for previous years, are given in million euros unless otherwise indicated.

The individual financial statements of the consolidated companies are prepared as of the balance sheet date of the Consolidated Financial Statements. The accounting policies applied are largely the same as those used in 2016, with the exception of any changes arising from the application of new or revised standards.

In its meeting on February 19, 2018, the Board of Executive Directors prepared the Consolidated Financial Statements, submitted them to the Supervisory Board for review and approval, and released them for publication.

1.2 Changes in accounting principles

Accounting policies applied for the first time in 2017

Amendments to IAS 7 – Disclosure Initiative

The amendments aim to improve the information provided about changes to an entity's liabilities arising from financing activities. They specify that an entity must disclose changes to financial liabilities and related financial assets for which payments received and payments made are shown under cash provided by/used in financing activities in the statement of cash flows.

For reconciliation reporting, see Note 29 from page 229 onward

Amendments to IAS 12 – Recognition of deferred tax assets for unrealized losses

The amendments to IAS 12 mainly aim to clarify how to account for deferred tax assets for unrealized losses related to assets measured at fair value. The application of the amendments has no material effect on BASF.

Annual Improvements to IFRSs (2014–2016): Three IFRSs were amended in the Annual Improvements to IFRSs (2014–2016), of which only the following had to be applied in 2017: In IFRS 12, it was clarified that disclosures pursuant to IFRS 12 generally also apply to an entity's interests in subsidiaries, joint ventures and associated companies that are classified as held for sale in accordance with IFRS 5, with the exception of the disclosures outlined in IFRS 12.B10–B16 (Financial Information). The clarification is not expected to have any material effect on BASF.

IFRSs and IFRICs not yet to be considered

The effects on the BASF Group financial statements of the IFRSs and IFRICs not yet in force or not yet endorsed by the European Union in 2017 were reviewed and are explained below.

IFRS 9 – Financial Instruments

The IASB published the final version of IFRS 9 – Financial Instruments on July 24, 2014. IFRS 9 contains new requirements for the classification and measurement of financial instruments, fundamental changes regarding the accounting treatment of impairments of certain assets, and a revised approach to hedge accounting. The European Union endorsed the standard on November 29, 2016. First-time adoption of IFRS 9 is effective in the first business year beginning on or after January 1, 2018. Consequently, BASF will apply IFRS 9 for the first time as of January 1, 2018.

IFRS 9 retains "amortized cost" and "fair value" as measurement paradigms for financial instruments, and continues to differentiate between changes in fair value recognized through profit or loss or other comprehensive income. Whether financial assets are measured at amortized cost or fair value will depend on the business model for managing financial asset portfolios, and on the cash flow condition (the solely payments of principle and interest criterion), that is, the contractual cash flow characteristics of an individual financial asset.

In the future, impairments are to be recognized for financial assets not measured at fair value through profit or loss considering expected credit losses based on the change in the default risk of the counterparties. The impairment approach generally adopts a three-stage model to calculate impairment losses. A simplified approach, which applies to certain financial instruments such as trade accounts receivable, uses a two-stage model to assess impairment losses.

IFRS 9 also contains new requirements for the application of hedge accounting to better present an entity's risk management activities, in particular with respect to the management of nonfinancial risks.

The new requirements for classification and measurement can also have an impact on the accounting treatment of other shareholdings, which must be measured only at fair value in accordance with IFRS 9.B5.2.3 in the future.

With the introduction of the cash flow condition in IFRS 9, which must be considered in the classification of financial assets, it could happen that financial assets measured at amortized cost or at fair value through other comprehensive income according to IAS 39 are to be recognized at fair value through profit or loss in the future. At BASF, this will mainly impact securities that are currently classified as available-for-sale financial assets and thus measured at fair value through other comprehensive income.

In the future, expected losses on trade accounts receivable at BASF will largely be calculated on the basis of internal or external customer ratings and the associated probability of default.

Furthermore, the new impairment model is also to be used for further financial instruments, which are not recognized at fair value through profit or loss, such as bank deposits, loan receivables and miscellaneous receivables. Internal and external ratings for the respective counterparties will also be used as a basis for calculating impairments. Since individual valuation allowances were not calculated for the above assets under IAS 39, the first-time adoption of IFRS 9 will lead to additional impairments.

With regard to new hedge accounting regulations, BASF assumes that, in principle, all existing hedge accounting relationships can be continued under IFRS 9.

In the future, BASF will measure material other shareholdings at fair value in accordance with IFRS 9. This is not expected to lead to a material implementation effect.

The first-time adoption of IFRS 9 will take place using the modified retrospective method. BASF expects that this will result in a reduction of equity between €30 million and €40 million, which will be immediately recognized in equity on January 1, 2018. This is primarily due to the recognition of impairments to trade accounts receivable. The expected impact constitutes an estimate, which can deviate from the actual impact.

IFRS 15 – Revenues from Contracts with Customers

The IASB published the new standard on revenue recognition, IFRS 15, on May 28, 2014. The endorsement by the European Union was issued in the third quarter of 2016. The standard particularly aims to standardize existing regulations and thus improve transparency and comparability of financial information. According to IFRS 15, sales revenue is recognized when control of the agreed-upon goods or services and the benefits obtainable from them are transferred to the customer. Sales revenue is measured at the amount the entity expects to receive in exchange for goods and services. The rules and definitions of IFRS 15 supersede the content of IAS 11, IAS 18, and IFRIC 13. The new standard will be effective for reporting periods beginning on or after January 1, 2018. The potential impact of the new standard, including the subseqent clarifications adopted, on BASF's net assets, financial position and results of operations, was assessed. For this purpose, a Group-wide analysis was conducted.

Its analysis revealed that the balance sheet presentation of sales revenue from licenses, which is realized over a period of time, will change under IFRS 15. This is currently accounted for as deferred income. Under IFRS 15, this will be presented in a new balance sheet item, contract liabilities. A reclassification of approximately €100 million is expected as of January 1, 2018 in connection with the transition to IFRS 15.

Based on its analyses, BASF does not expect any further material effects on its results of operations or net assets. IFRS 15 will have a minor impact on BASF, as contracts with customers of BASF generally only give rise to a single performance obligation in each case, which is to be fulfilled at a certain point in time.

BASF will apply IFRS 15 for the first time from January 1, 2018. The modified retrospective method will be used for first-time adoption. The introduction of the new standard will lead to changes in the balance sheet in the form of the new balance sheet items "contract assets" and "contract liabilities," as well as additional quantitative and qualitative disclosures in the notes.

IFRS 16 – Leases

The IASB published the new standard on leasing, IFRS 16, on January 13, 2016. The rules and definitions of IFRS 16 supersede the content of IAS 17, IFRIC 4, SIC 15 and SIC 27. The standard requires an accounting model for a lessee that recognizes all right-of-use assets and liabilities from lease agreements in the balance sheet, unless the term is twelve months or less or the underlying asset is of low value (up to $5,000). As for the lessor, the new standard substantially carries forward the accounting requirements of IAS 17 – Leases. The European Union endorsed the new standard in the fourth quarter of 2017. The new standard will be effective for reporting periods beginning on or after January 1, 2019. BASF does not plan on an early adoption of these amendments.

BASF has started to analyze the potential effects on its Consolidated Financial Statements and plans to make use of the practical expedients. However, it is assumed that a significant number of leasing agreements that today represent operating leases are to be reported in the balance sheet. As well as increasing BASF's total assets, the type of expenses associated with operating leases will change, as IFRS 16 replaces the straight-line expenses for operating leases with a depreciation charge for right-of-use assets and interest expenses on liabilities arising from the lease. BASF plans to recognize the adjustments arising from the transition to IFRS 16 using the modified retrospective method as a cumulative effect directly in other retained earnings as of January 1, 2019 without a restatement of comparative information.

For more information on leasing, see Note 28 from page 228 onward

Annual Improvements to IFRSs (2014–2016): Three IFRSs were amended in the Annual Improvements to IFRSs (2014–2016) of which both the following amendments are mandatory as of January 1, 2018: In IAS 28, it was clarified that the election to measure an investment in an associated company or a joint venture held by an entity that is a venture capital organization or other qualifying entity, can be exercised on an investment-by-investment basis. The short-term exemptions in IFRS 1, Appendix E (IFRS 1.E3–E7) for first-time IFRS users were deleted. The amendments were endorsed by the European Union in the first quarter of 2018. They are not expected to have any material effect on BASF.

Amendments to IAS 28 – Long-term interests in associates and joint ventures

On October 12, 2017, the IASB published amendments to IAS 28 on long-term interests in associated companies and joint ventures. These amendments clarify that IFRS 9 is to be applied to long-term interests in associated companies or joint ventures that are not accounted for using the equity method. The amendment – subject to E.U. endorsement – is mandatory as of January 1, 2019. The effects are explained under IFRS 9 – Financial Instruments in Note 1.2: Changes in accounting principles.

The IASB issued further amendments to standards and interpretations whose application is not yet mandatory and is still subject to E.U. endorsement. These amendments are unlikely to have a material impact on the reporting of BASF SE. BASF does not plan on early adoption of these amendments.

Amendments to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The IASB issued amendments to IFRS 10 and IAS 28 on September 11, 2014. The amendments address a known inconsistency between the requirements of IFRS 10 and IAS 28 (2011) in the case of the sale of an asset to an associated company or a joint venture or the contribution of an asset to an associated company or a joint venture.

IASB has postponed the effective date of the changes indefinitely.

Amendments to IFRS 2 – Classification and Measurement of Share-Based Payment Transactions: The amendments involve a number of individual issues pertaining to the accounting of cash-settled share-based payment transactions. The amendments relate to the calculation of fair value of obligations arising from share-based payment transactions. The amendments are – pending E.U. endorsement – to be applied to compensation granted or changed in business years beginning on or after January 1, 2018.

Amendments to IFRS 9 – Financial assets with a prepayment feature with negative compensation:

The amendments pertain to a limited adjustment of the relevant criteria for the classification of financial assets. Financial assets with a prepayment feature with negative compensation may be recognized under certain conditions at amortized cost or at fair value through other comprehensive income instead of at fair value through profit and loss.

The amendments are – subject to E.U. endorsement – effective on January 1, 2019.

Supplementary information on IFRIC 22 – Foreign Currency Transactions and Advance Consideration: IFRIC 22 addresses an application question for IAS 21 – The Effects of Changes in Foreign Exchange Rates. It clarifies the point in time for determining the exchange rate used to translate foreign-currency transactions containing advance payments that have been made or received. The underlying asset, income or expense is translated using the relevant exchange rate on the date on which the asset or liability resulting from the prepayment was first recognized. The interpretation is – pending E.U. endorsement – to be applied in the first reporting period of a business year beginning on or after January 1, 2018.

IFRIC 23 – Uncertainty over Income Tax Treatments: IFRIC 23 expands on the requirements in IAS 12 on how to account for uncertainties surrounding the income tax treatment of circumstances and transactions. IFRIC 23 is – subject to E.U. endorsement – effective for reporting periods beginning on or after January 1, 2019.

Annual Improvements to IFRSs (2015–2017): Four IFRSs were amended in the Annual Improvements to IFRSs (2015–2017).

In IFRS 3, it was clarified that when a party to a joint arrangement obtains control of a business that is a joint operation and had rights to the assets and obligations for the liabilities relating to that joint operation immediately before the acquisition date, the transaction is a business combination achieved in stages. The acquirer shall therefore apply the requirements for a business combination achieved in stages, including remeasuring its previously held interest in the joint operation.

In IFRS 11, it was clarified that when an entity obtains joint control of a business that is a joint operation and had rights to the assets and obligations for the liabilities relating to that joint operation immediately before the acquisition date, the previously held interest in that business is not to be remeasured.

IAS 12 was amended to the extent that all income tax effects of dividend payments must be considered in the same way as the income on which the dividends are based.

Finally, in IAS 23, it was determined that when entities borrow funds in general for the acquisition of qualifiying assets that those costs for borrowed capital specifically for the acquisition of qualifying assets should not be considered in the determination of the financing rate until their completion.

The amendments are – subject to E.U. endorsement – to be applied for the first time in the reporting period beginning on or after January 1, 2019.

1.3 Group accounting principles

Scope of consolidation: The scope of consolidation is based on the application of the standards IFRS 10 and 11.

According to IFRS 10, a group consists of a parent entity and the subsidiaries controlled by the parent. “Control” of an investee assumes the simultaneous fulfillment of the following three criteria:

- The parent company holds decision-making power over the relevant activities of the investee
- The parent company has rights to variable returns from the investee
- The parent company can use its decision-making power to affect the variable returns

Based on corporate governance and potential supplementary agreements, companies are analyzed for their relevant activities and variable returns, and the link between the variable returns and the extent to which their relevant activities could be influenced.

According to IFRS 11, which regulates the accounting of joint arrangements, a distinction must be made between joint ventures and joint operations. In the case of a joint venture, the parties that have joint control of a legally independent company have rights to the net assets of that arrangement. In joint operations, the parties that have joint control have direct rights to the assets and obligations for the liabilities relating to the arrangement. This requirement is particularly fulfilled if the production output of the joint arrangement is almost entirely transferred to the partners, through which the partners guarantee the joint arrangements’ ongoing financing.

Companies whose corporate governance structures classify them as joint arrangements are analyzed to determine if they meet the criteria for joint ventures or joint operations as per IFRS 11. Should the arrangement be structured through a separate vehicle, its legal form, contractual arrangements and all other facts and circumstances are reviewed.

In addition to BASF SE, the Consolidated Financial Statements include all material subsidiaries on a fully consolidated and all material joint operations on a proportionally consolidated basis. Companies whose business is dormant or of low volume, and are of minor importance for the presentation of a true and fair view of the net assets, financial position and results of operations, are not consolidated, but rather are reported under other shareholdings. These companies are carried at amortized cost and are written down in the case of an impairment. The aggregate assets and equity of these companies amount to less than 1% of the corresponding value at the Group level.

Joint ventures and associated companies are accounted for using the **equity method** in the Consolidated Financial Statements. Associated companies are entities in which significant influence can be exercised over their operating and financial policies and which are not subsidiaries, joint ventures or joint operations. In general, this applies to companies in which BASF has an investment of between 20% and 50%. Equity-accounted income is reported as part of income from operations (EBIT).

Consolidation methods: Assets and liabilities of consolidated companies are uniformly recognized and measured in accordance with the principles described herein. For equity-accounted companies, material deviations in measurement resulting from the application of other accounting principles are adjusted for.

Transactions between consolidated companies as well as intercompany profits resulting from trade between consolidated companies are eliminated in full; for joint operations, they are proportionally eliminated. Material intercompany profits related to companies accounted for using the equity method are eliminated.

Capital consolidation is conducted at the acquisition date according to the purchase method. Initially, all assets, liabilities and additional intangible assets that are to be capitalized are measured at fair value. Finally, the acquisition cost is compared with the proportional share of the net assets acquired at fair value. The resulting positive differences are capitalized as goodwill. Negative differences are reviewed once more, then recognized directly in the income statement.

The incidental acquisition costs of a business combination are recognized in the income statement under other operating expenses.

Foreign currency translations: The cost of assets acquired in foreign currencies and revenue from sales in foreign currencies are determined by the exchange rate on the date of the transaction. Foreign currency receivables and liabilities are valued at the exchange rates on the balance sheet date. Changes in assets and liabilities arising from foreign currency translation are recognized in the income statement, and reported under other operating expenses or income, other financial result, and in the case of available-for-sale financial assets, in other comprehensive income.

Translation of foreign currency financial statements: The translation of foreign currency financial statements depends on the functional currency of the consolidated companies. For companies whose functional currency is not the euro, translation into the reporting currency is based on the closing rate method: Balance sheet items are translated into euros using closing rates on the balance sheet date; expenses and income are translated into euros at monthly average rates and accumulated for the year. The difference between a company's translated equity at historical rates at the time of acquisition or retention and its equity at closing rates on the balance sheet date is reported separately in equity under other comprehensive income (translation adjustments) and is recognized in income only upon the company's disposal.

For certain companies outside the eurozone or U.S. dollar zone, the euro or U.S. dollar is the functional currency. In such cases, the translation into the functional currency of financial statements prepared in the local currency is done according to the temporal method: All nonmonetary assets and related depreciation and amortization as well as equity are translated at the exchange rate applying to the respective transactions. All other balance sheet items are translated using closing rates on the balance sheet date; other expenses and income are translated at monthly average rates. The resulting translation differences are recognized in the income statement under other operating income or expenses. If necessary, financial statements in the functional currency are translated into the presentation currency according to the closing rate method.

Selected exchange rates (€1 equals)

	Closing rates		Average rates	
	Dec. 31, 2017	Dec. 31, 2016	2017	2016
Brazil (BRL)	3.97	3.43	3.60	3.86
China (CNY)	7.80	7.32	7.63	7.35
Great Britain (GBP)	0.89	0.86	0.88	0.82
Japan (JPY)	135.01	123.40	126.68	120.20
Malaysia (MYR)	4.85	4.73	4.85	4.58
Mexico (MXN)	23.66	21.77	21.32	20.67
Norway (NOK)	9.84	9.09	9.33	9.29
Russia (RUB)	69.39	64.30	65.92	74.14
Switzerland (CHF)	1.17	1.07	1.11	1.09
South Korea (KRW)	1,279.61	1,269.36	1,276.52	1,284.18
United States (USD)	1.20	1.05	1.13	1.11

1.4 Accounting policies

Revenue recognition

Revenues from the sale of goods or the rendering of services are recognized upon the transfer of ownership and risk to the buyer. They are measured at the fair value of the consideration received. Sales revenues are reported without consumption taxes. Expected rebates and other trade discounts are accrued or deducted. Provisions are recognized according to the principle of individual measurement to cover probable risks related to the return of products, future warranty obligations and other claims.

Revenues from the sale of precious metals to industrial customers are recognized at the time of shipment and the corresponding purchase prices are recorded at cost of sales. In the trading of precious metals and their derivatives with broker-traders, where there is usually no physical delivery, revenues are netted against their corresponding costs. Revenues from marketing the natural gas from the Yuzhno Russkoye gas field are treated in the same manner.

Income relating to the sale or licensing of technologies or technological expertise are recognized in the income statement according to the contractually agreed-upon transfer of the rights and obligations associated with those technologies.

Assets

Acquired intangible assets (excluding goodwill) with defined useful lives are generally measured at cost less straight-line amortization. The useful life is determined using the period of the underlying contract or the period of time over which the intangible asset can be expected to be used.

Impairments are recognized if the recoverable amount of the asset is lower than the carrying amount. The recoverable amount is the higher of either fair value less costs to sell or the value in use. The value in use is determined on the basis of future cash inflows and outflows, and the weighted average cost of capital after taxes, depending on tax rates and country-related risks. If the reasons for an impairment no longer exist, the write-downs are reversed up to the value of the asset, had an impairment not been recognized. Depending on the type of intangible asset, amortization is reported under cost of sales, selling expenses, research and development expenses or other operating expenses.

Intangible assets with indefinite useful lives are trade names and trademarks that have been acquired as part of acquisitions. These are measured at cost and tested for impairment annually, or if there is an indication that their value has declined.

Internally generated intangible assets primarily comprise internally developed software. Such software and other internally generated assets are measured at cost and amortized over their estimated useful lives. Impairments are recognized if the carrying amount of an asset exceeds the recoverable amount. In addition to those costs directly attributable to the asset, costs of internally generated intangible assets also include an appropriate portion of overhead costs.

The estimated useful lives and amortization methods of intangible assets are based on historical values, plans and estimates. The weighted average amortization periods of intangible assets amounted to:

Average amortization in years

	2017	2016
Distribution, supply and similar rights	15	14
Product rights, licenses and trademarks	20	19
Know-how, patents and production technologies	15	14
Internally generated intangible assets	4	4
Other rights and values	5	5

Emission rights: Emission right certificates, granted free of charge by the German Emissions Trading Authority (Deutsche Emissionshandelsstelle) or a similar authority in other countries, are recognized on the balance sheet with a value of zero. Certificates purchased on the market are capitalized at cost as intangible assets. Emissions generated create an obligation to surrender the emission certificates. Emission certificates purchased on the market are subsequently measured at fair value, up to a maximum of the amount of the acquisition costs. If the fair value is lower than the carrying amount on the balance sheet date, the emission rights are impaired.

Goodwill is only written down if there is an impairment. Impairment testing takes place once a year and whenever there is an indication of an impairment. Impairment reversals are not conducted for goodwill.

Property, plant and equipment are measured at cost less depreciation and impairment over their useful lives. The revaluation method is not applied. Low-value assets are fully written off in the year of acquisition.

The cost of self-constructed plants includes direct costs, appropriate allocations of material and production overhead costs, and a share of the general administrative costs of the divisions involved in the construction of the plants.

Expenditures related to the scheduled maintenance of large-scale plants are separately capitalized and depreciated using the straight-line method over the period until the next planned turnaround. Costs for the replacement of components are recognized as assets when an additional future benefit is expected. The carrying amount of the replaced components is derecognized. Costs for maintenance and repair as part of normal business operations are recognized as an expense.

Both movable and immovable fixed assets are for the most part depreciated using the straight-line method, with the exception of production licenses and plants in the Oil & Gas segment, which are primarily depreciated based on use in accordance with the unit of production method. The estimated useful lives and depreciation methods of property, plant and equipment are based on historical values, plans and estimates. The depreciation methods, useful lives and residual values are reviewed at each balance sheet date. The weighted average depreciation periods were as follows:

Weighted average depreciation in years

	2017	2016
Buildings and structural installations	21	22
Machinery and technical equipment	10	10
Long-distance natural gas pipelines	25	25
Miscellaneous equipment and fixtures	6	7

Impairments are recognized if the recoverable amount of the asset is lower than the carrying amount. The measurement is based on fair value less costs to sell or the value in use. The value in use is determined on the basis of future cash inflows and outflows, and the weighted average cost of capital after taxes, depending on tax rates and country-related risks. An impairment is recognized for the difference between the carrying amount and the recoverable amount. If the reasons for an impairment no longer exist, the write-downs are reversed up to the value of the asset, had an impairment not been recognized.

Investment properties held to realize capital gains or rental income are immaterial. They are valued at the lower of fair value or acquisition cost less depreciation.

Leases: A lease is an agreement whereby the lessor conveys to the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments. Leasing contracts are classified as either finance or operating leases.

Assets subject to operating leases are not capitalized. Lease payments are recognized in the income statement in the period they are incurred.

A lease is classified as a finance lease if it substantially transfers all the risks and rewards related to the leased asset. Assets subject to a finance lease are capitalized at the lower of the fair value of the leased assets or the present value of the minimum lease payments. A leasing liability is recorded in the same amount. The periodic lease payments must be divided into principal and interest components. The principal component reduces the outstanding liability, while the interest component represents an interest expense. Depreciation takes place over the shorter of the useful life of the asset or the period of the lease.

Leases can be embedded within other contracts. If separation is required under IFRS, then the embedded lease is recorded separately from its host contract and each component of the contract is carried and measured in accordance with the applicable regulations.

Borrowing costs: Borrowing costs directly incurred as part of the acquisition, construction or production of a qualifying asset are capitalized as part of the acquisition or production cost of that asset. A qualifying asset is an asset for which the time period necessary to make it ready for its intended use or sale is longer than one year. Borrowing costs are capitalized up to the date the asset is ready for its intended use. The borrowing costs were calculated based on a rate of 2.0% (2016: 2.5%) and adjusted on a country-specific basis, if necessary. All other borrowing costs are recognized as an expense in the period in which they are incurred.

Government grants: Government grants related to the acquisition or construction of property, plant and equipment reduce the acquisition or construction cost of the respective assets. Other government grants or government assistance are recognized immediately as other operating income or treated as deferred income and dissolved over the underlying period.

Investments accounted for using the equity-method: The carrying amounts of these companies are adjusted annually based on the pro rata share of net income, dividends and other changes in equity. Should there be indications of a permanent reduction in the value of an investment, an impairment is recognized in the income statement.

Inventories are measured at acquisition cost or cost of conversion based on the weighted average method. If the market price or fair value of the sales product which forms the basis for the net realizable value is lower, then the sales products are written down to this lower value. The net realizable value is the estimated price in the ordinary course of business less the estimated costs of completion and the estimated selling costs.

In addition to direct costs, cost of conversion includes an appropriate allocation of production overhead costs based on normal utilization rates of the production plants, provided that they are related to the production process. Pensions, social services and voluntary social benefits are also included, as well as allocations for administrative costs, provided they relate to the production. Borrowing costs are not included in cost of conversion.

Inventories may be written down if the prices for the sales products decline, or in cases of a high rate of days sales of inventory (DSI). Write-downs on inventories are reversed if the reasons for them no longer apply.

The exception made by IAS 2 for traders is applied to the measurement of precious metal inventories. Accordingly, inventories held exclusively for trading purposes are to be measured at fair value less costs to sell. All changes in value are recognized in the income statement.

Deferred taxes: Deferred taxes are recorded for temporary differences between the carrying amount of assets and liabilities in the financial statements and the carrying amounts for tax purposes as well as for tax loss carryforwards and unused tax credits. This also comprises temporary differences arising from business combinations, with the exception of goodwill. Deferred tax assets and liabilities are calculated using the respective country-specific tax rates applicable for the period in which the asset or liability is realized or settled. Tax rate changes enacted or substantively enacted on or before the balance sheet date are taken into consideration.

Deferred tax assets are offset against deferred tax liabilities provided they are related to the same taxation authority and have the same maturities. Surpluses of deferred tax assets are only recognized provided that the tax benefits are likely to be realized. The valuation of deferred tax assets is based on the estimated probability of a reversal of the differences and the assessment of the ability to utilize tax loss carryforwards and unused tax credits. This depends on whether future taxable profits will exist during the period in which temporary differences are reversed and in which tax loss carryforwards and unused tax credits can be claimed. The valuation of deferred tax assets is based on internal projections of the future earnings of the particular Group company.

Changes in deferred taxes in the balance sheet are recorded as deferred tax expense or income if the underlying transaction is not to be recognized directly in equity or in income and expenses recognized in equity. For those effects which have been recognized in equity, changes to deferred tax assets and tax liabilities are also recognized directly in equity.

Deferred tax liabilities are recognized for differences between the proportional IFRS equity and the tax base of the investment in a consolidated subsidiary if a reversal of these differences is expected in the foreseeable future. Deferred tax liabilities are recognized for dividend distributions which are planned for the following year if these distributions lead to a reversal of temporary differences.

For more information, see Note 11 from page 198 onward

Financial instruments

Financial assets and financial liabilities are recognized in the balance sheet when the BASF Group becomes a party to a financial instrument. Financial assets are derecognized when the contractual rights to the cash flows from the financial asset expire or when the financial asset, with all risks and rewards of ownership, is transferred. Financial liabilities are derecognized when the contractual obligations expire, are discharged or cancelled. Regular-way purchases and sales of financial instruments are accounted for using the settlement date; in precious metals trading, the day of trading is used.

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When pricing on an active market is available, for example share prices, these are used as the basis for the measurement. Otherwise, the measurement is based on internal measurement models using current market parameters or external measurements, for example, from banks. These internal measurements predominantly use the net present value method and option pricing models.

If there is objective evidence of a permanent impairment of a financial instrument that is not measured at fair value through profit or loss, an impairment loss is recognized. If the reason for the impairment of loans and receivables as well as held-to-maturity financial instruments no longer exists, the impairment is reversed up to the amortized cost and recognized in the income statement. Impairments on financial instruments are booked in separate accounts.

Financial assets and liabilities are divided into the following measurement categories:

- **Financial assets and liabilities at fair value recognized in the income statement** consist of derivatives and other trading instruments. At BASF, this measurement category only includes derivatives. Derivatives are reported in other receivables and miscellaneous assets or other liabilities. BASF does not make use of the fair value option under IAS 39. The calculation of fair values is based on market parameters or measurement models based on such parameters. In some exceptional cases, the fair value is calculated using parameters which are not observable on the market.
- **Loans and receivables** comprise financial assets with fixed or determinable payments, which are not quoted on an active market and are not derivatives or classified as available-for-sale. This measurement category includes trade accounts receivable as well as other receivables and loans reported under other receivables and miscellaneous assets. Initial measurement is done at fair value, which generally matches the nominal value of the receivable or loan. Interest-free and low-interest long-term loans and receivables are recorded at present value. Subsequent measurement recognized in income is generally made at amortized cost using the effective interest method.

  If there is objective evidence for an impairment of a receivable or loan, an individual valuation allowance is made. When assessing the need for a valuation allowance, regional and sector-specific conditions are considered. In addition, use is made of internal and external ratings as well as the assessments of debt collection agencies and credit insurers, when available. A portion of receivables is covered by credit insurance. Bank guarantees and letters of credit are used to an insignificant extent. Valuation allowances are only recognized for those receivables which are not covered by insurance or other collateral. The valuation allowances for receivables whose insurance includes a deductible are not recognized in excess of the amount of the deductible. Write-downs are based on historical values relating to customer solvency and the age, period overdue, insurance policies and customer-specific risks. In addition, a valuation allowance must be recognized when the contractual conditions which form the basis for the receivable are changed through renegotiation in such a way that the present value of the future cash flows decreases.

  Furthermore, valuation allowances are made on receivables based on transfer risks for certain countries.

  If, in a subsequent period, the amount of the valuation allowance decreases and the decrease can be related objectively to an event occurring after the valuation allowance was made, then it is reversed in the income statement. Reversals of valuation allowances may not exceed amortized cost. Loans and receivables are derecognized when they are definitively found to be uncollectible.

- **Held-to-maturity financial assets** consist of nonderivative financial assets with fixed or determinable payments and a fixed term, for which there is the ability and intent to hold until maturity, and which do not fall under other valuation categories. Initial measurement is done at fair value, which matches the nominal value in most cases. Subsequent measurement is carried out at amortized cost, using the effective interest method.

  For BASF, there are no material financial assets that fall under this category.
- **Available-for-sale financial assets** comprise financial assets which are not derivatives and do not fall under any of the previously stated valuation categories. This measurement category comprises shareholdings reported under the item other financial assets which are not accounted for using the equity method as well as short and long-term securities.

  The measurement is carried out at fair value. Changes in fair value are recognized directly in equity (other comprehensive income) and are only recognized in the income statement when the assets are disposed of or have been impaired. Subsequent reversals are recognized directly in equity (other comprehensive income). Only in the case of debt instruments, reversals are recognized in the income statement up to the amount of the original impairment; reversals above this amount are recognized directly in equity. If the fair value of available-for-sale financial assets decreases below acquisition costs, the assets are impaired if the decline in value is material and can be considered lasting. The fair values are determined using market prices. Shareholdings whose fair value cannot be reliably determined are carried at acquisition cost and are written down in the case of an impairment. When determining the value of these shareholdings, the acquisition costs constitute the best estimate of their fair value. This category of shareholdings includes investments in other shareholdings, provided that these shares are not publicly traded. There are no plans to sell significant shares in these shareholdings.
- **Financial liabilities which are not derivatives** are initially measured at fair value, which normally corresponds to the amount received. Subsequent measurement is carried out at amortized cost, using the effective interest method.
- **Cash and cash equivalents** consist primarily of cash on hand and bank balances with maturities of less than three months.

Income from interest-bearing assets is recognized on the outstanding receivables on the balance sheet date using interest rates calculated by means of the effective interest method. Dividends from shareholdings not accounted for using the equity method are recognized when the shareholders' right to receive payment is established.

Derivative financial instruments can be embedded within other contracts. If IFRS requires separation, then the embedded derivative is accounted for separately from its host contract and measured at fair value.

Financial guarantees of the BASF Group are contracts that require compensation payments to be made to the guarantee holder if a debtor fails to make payment when due under the terms of the financial guarantee. Financial guarantees given by BASF are measured at fair value upon initial recognition. In subsequent periods, financial guarantees are carried at the higher of amortized cost or the best estimate of the present obligation on the reporting date.

Cash flow hedge accounting is applied in selected cases to hedge future transactions. The effective portion of the change in fair value of the derivative is thereby recognized directly in equity under other comprehensive income, taking deferred taxes into account. The ineffective portion is recognized immediately in the income statement. In the case of future transactions that will lead to a nonfinancial asset or a nonfinancial debt, the cumulative fair value changes in equity are either charged against the acquisition costs on initial recognition or recognized in profit or loss in the reporting period in which the hedged item is recorded in the income statement. For hedges based on financial assets or debts, the cumulative fair value changes of the hedges are transferred from equity to the income statement in the reporting period in which the hedged item is recognized in the income statement. The maturity of the hedging instrument is determined based on the effective date of the future transaction.

When **fair value hedges** are used, the asset or liability is hedged against the risk of a change in fair value. Here, changes in the market value of the derivative financial instruments are recognized in the income statement. Furthermore, the carrying amount of the underlying transaction is adjusted by the profit or loss resulting from the hedged risk, offsetting the effect in the income statement.

Other comprehensive income

The expenses and income shown in other comprehensive income are divided into two categories: Items that will be recognized in the income statement in the future (known as "recycling") and items that will not be reclassified to the income statement in the future. The first category includes translation adjustments, the measurement of securities at fair value, and changes in the fair value of derivatives held to hedge future cash flows and net investments in a foreign operation. Items in other comprehensive income that will not be reclassified to the income statement at a future date include effects from the remeasurement of defined benefit plans.

Debt

Provisions for pensions and similar obligations: Provisions for pensions are based on actuarial computations made according to the projected unit credit method. In doing so, assumptions for valuation parameters include: future developments in compensation, pensions and inflation, employee turnover and the life expectancy of beneficiaries. The resulting obligations are discounted on the balance sheet date using the market yields on high-quality corporate fixed-rate bonds with a minimum of one AA rating.

Similar obligations, especially those arising from commitments by North American Group companies to pay the healthcare costs and life insurance premiums of retired staff and their dependents, are reported under provisions for similar obligations.

The calculation of pension provisions is based on actuarial reports.

Actuarial gains and losses from changes in estimates relating to the actuarial assumptions used to calculate defined benefit obligations, the difference between standardized and actual returns on plan assets, as well as the effects of the asset ceiling are recognized directly in equity as other comprehensive income.

For more information on provisions for pensions and similar obligations, see Note 22 from page 211 onward

Other provisions: Other provisions are recognized when there is a present obligation as a result of a past event and when there is a probable outflow of resources whose amount can be reliably estimated. Provisions are recognized at the probable settlement value.

Provisions for German trade income tax, German corporate income tax and similar income taxes are determined and recognized in the amount necessary to meet the expected payment obligations less any prepayments that have been made. Other taxes to be assessed are considered accordingly.

Provisions are established for certain environmental protection measures and risks if there exists a present legal or constructive obligation arising from a past event, and the expected cash outflow can be estimated with sufficient reliability. Provisions for restoration obligations primarily concern the filling of wells and the removal of production facilities upon the termination of production in the Oil & Gas segment. When the obligation arises, the provision is measured at the present value of the future restoration costs. An asset is capitalized for the same amount as part of the carrying amount of the plant concerned and is depreciated along with the plant. The discount on the provision is unwound annually until the time of the planned restoration.

In addition, other provisions also cover expected costs for rehabilitating contaminated sites, recultivating landfills, removal of environmental contamination from existing production or storage sites and similar measures. If BASF is the only responsible party that can be identified, the provision covers the entire expected claim. At sites operated together with one or more partners, the provision generally covers only BASF's share of the expected claim. The determination of the amount of the provision is based on the available technical information on the site, the technology used, legal regulations, and official obligations.

Provisions are recognized for expected severance payments or similar personnel expenses as well as for demolition expenses and other charges related to restructuring measures that have been planned and publicly announced by management.

Provisions for long-service and anniversary bonuses are predominantly calculated based on actuarial principles. For contracts signed under early retirement programs, approved supplemental payments are accrued in installments until the end of the exemption phase at the latest. Accounting and measurement follow the German Accounting Standards Committee e.V.'s Application Note 1 (IFRS) of December 2012.

Other provisions also cover risks resulting from legal disputes and proceedings, provided the criteria for recognizing a provision are fulfilled. In order to determine the amount of the provisions, the Company takes into consideration the facts related to each case, the size of the claim, claims awarded in similar cases and independent expert advice as well as assumptions regarding the probability of a successful claim and the range of possible claims. The actual costs can deviate from these estimates.

For more information, see Note 26 on page 221

The probable amount required to settle noncurrent provisions is discounted if the effect of discounting is material. In this case, the provision is recognized at present value. Assumptions must be made in determining the discount rate (2017: 2.0%; 2016: 2.5%) used for calculating noncurrent provisions. Financing costs related to unwinding the discount of provisions in subsequent periods are shown in other financial result.

Other accounting policies

Business combinations: In business combinations, the acquired assets and liabilities are recognized at fair value on the date the acquirer effectively obtains control. The fair value of acquired assets and assumed liabilities at the date of exchange, as well as the useful lives of the acquired assets, are determined on the basis of assumptions. The measurement is largely based on projected cash flows. The actual cash flows can significantly deviate from these estimates. Independent external appraisals are used for the purchase price allocation of material business combinations. Valuations in the course of business combinations are based on existing information as of the acquisition date.

Groups of assets and liabilities held for sale, that is disposal groups, as well as discontinued operations held for sale: These comprise those assets and directly associated liabilities shown separately on the balance sheet whose sale in the context of a single transaction is highly probable. A transaction is estimated to be highly probable, if there are no significant risks of completion of the transaction, which usually requires the conclusion of binding contracts. The assets and liabilities of disposal groups are recognized at the lower of the sum of their carrying amounts or fair value less costs to sell; this does not apply to assets which do not fall under the valuation principles of IFRS 5. Scheduled depreciation of noncurrent assets and the use of the equity method are suspended.

Oil and gas production: Exploration and development expenditures are accounted for using the successful efforts method. Under this method, costs of successful exploratory drilling as well as successful and dry development wells are capitalized.

An exploration well is a well located outside of an area with proven oil and gas reserves. A development well is a well which is drilled to the depth of a reservoir of oil or gas within an area with proven reserves.

Exploratory drilling is generally reported under construction in progress until its success can be determined. When the presence of hydrocarbons is proven such that the economic development of the field is probable, the costs remain capitalized as suspended well costs. At least once a year, all suspended wells are assessed from an economic, technical and strategic viewpoint to see if development is still intended. If this is not the case, the capitalized costs for the well in question are impaired. When reserves are proven, the exploration wells are reclassified as machinery and technical equipment when production begins.

Production costs include all costs incurred to operate, repair and maintain the wells as well as the associated plant and ancillary production equipment, including the associated depreciation.

The unit of production method is used to depreciate assets from oil and gas production at the field or reservoir level. Depreciation is generally calculated on the basis of the production of the period in relation to the proven, developed reserves.

Exploration expenses pertain exclusively to the Oil & Gas segment and include all costs related to areas with unproven oil or gas deposits. These include costs for the exploration of areas with possible oil or gas deposits, among others. Costs for geological and geophysical investigations are always reported under exploration expenses. In addition, this item includes valuation allowances for capitalized expenses for exploration wells which did not encounter proven reserves. Depreciation of successful exploratory drilling is reported under cost of sales.

An Exploration and Production Sharing Agreement is a type of contract in crude oil and gas concessions whereby the expenses and profits from the exploration, development and production phases are divided between the state and one or more exploration and production companies using defined keys. The revenue BASF is entitled to under such contracts is reported as sales.

The intangible asset from the marketing contract for natural gas from the Yuzhno Russkoye natural gas field is amortized based on BASF's share of the produced and distributed volumes.

Intangible assets in the Oil & Gas segment relate primarily to exploration and production rights. During the exploration phase, these are not subject to amortization but are tested for impairment annually. When economic success is determined, the rights are amortized in accordance with the unit of production method.

Use of estimates and assumptions in preparing the Consolidated Financial Statements

The carrying amount of assets, liabilities and provisions, contingent liabilities and other financial obligations in the Consolidated Financial Statements depends on the use of estimates, assumptions and use of discretionary scope. Specific estimates or assumptions used in individual accounting or valuation methods are disclosed in their respective sections. They are based on the circumstances and estimates on the balance sheet date and affect the reported amounts of income and expenses during the reporting periods. These assumptions particularly concern discounted cash flows in the context of impairment tests and purchase price allocations; the determination of useful lives of property, plant and equipment and intangible assets; the carrying amount of shareholdings; and the measurement of provisions for such things as employee benefits, warranties, trade discounts, environmental protection and taxes. Although uncertainty is appropriately incorporated in the valuation factors, actual results can differ from these estimates.

The assumptions regarding the long-term development of oil and gas prices are significant for impairment tests in the Oil & Gas segment. The internal company projections are based on an empirical analysis of the global oil and gas supply and demand. Short-term estimates up to three years also consider the current prices on active markets or forward transactions. In long-term estimates, assumptions are made regarding factors such as inflation, production quantities and costs as well as energy efficiency and the substitution of energy sources. Using external sources and reports, the oil and gas price estimates are regularly checked for plausibility.

For planning purposes in 2018, BASF is using an average yearly price for oil of $65/bbl (Brent) and for gas of approximately €16/MWh (roughly $5.5/mmBtu).

In line with global growth, the demand for oil and gas will continue to increase. Higher marginal costs of production and the currently modest levels of investment should lead to a significant increase in prices in the medium to long-term. Considering the current high levels of oil inventories and the assumption of a longer-term increase in oil supplies from the United States, the oil price scenario has been adjusted compared with the previous year and is now expected to reach $100 only by 2022. BASF's gas price scenario assumes only a moderate increase in gas prices in the E.U. in the next few years due to overcapacity in gas liquefaction (LNG). Afterwards, a significant increase up to around €30/MWh (approximately $11/mmBTU) is expected by 2025 as a result of further increasing demand and higher costs of new production and liquefaction projects.

Impairment tests on assets are carried out whenever certain triggering events indicate that an impairment may be necessary. External triggering events include, for example, changes in customer industries, technologies used and economic downturns. Internal triggering events for an impairment test include lower product profitability, planned restructuring measures or physical damage to assets.

Impairment tests are based on a comparison of the carrying amount and the recoverable amount. The recoverable amount is the higher of fair value less costs to sell and the value in use. As a rule, value in use is determined using the discounted cash flow method. The estimation of cash flows and the assumptions used consider all information available on the respective balance sheet date on the future development of the operating business. Actual future developments may vary. Impairment testing relies upon the cash-generating unit's long-term earnings forecasts, which are based on economic trends. The weighted average cost of capital (WACC) based on the Capital Asset Pricing Model plays an important role in impairment testing. It comprises a risk-free rate, the market risk premium and the spread for the credit risk. Additional important assumptions are the forecasts for the detailed planning period and the terminal growth rates used.

For more information, see Note 14 from page 201 onward

An impairment is recognized if the recoverable amount of the asset is lower than the carrying amount. The impairment of the asset (excluding goodwill) is made in the amount of the difference between these amounts.

The goodwill impairment test is based on cash-generating units. At BASF, these largely correspond to the business units, or in individual cases the divisions. If there is a need for a valuation allowance, the existing goodwill is, if necessary, completely written off as a first step. If there is further need for a valuation allowance, this is allocated to the remaining assets of the cash-generating unit. Goodwill impairments are reported under other operating expenses.

2 Scope of consolidation

2.1 Changes in scope of consolidation

In 2017, the scope of consolidation for the Consolidated Financial Statements encompassed 294 companies (2016: 294). Of this number, 10 companies were first-time consolidations (2016: 46). Since the beginning of 2017, a total of 10 companies (2016: 10) were deconsolidated due to divestiture, merger, liquidation or immateriality.

First-time consolidations in 2017 comprised:
- Five acquired companies with headquarters in the regions Europe and North America
- One newly established company with headquarters in Asia Pacific
- One newly established company with headquarters in the South America, Africa, Middle East region
- Three companies headquartered in Europe that had not been consolidated at the time of the first inclusion in the Consolidated Financial Statements.

First-time consolidations in 2016 comprised:
- 33 companies in connection with the acquisition of Chemetall registered in all regions
- Two newly established companies with headquarters in the regions Asia-Pacific and North America
- 11 companies headquartered in all regions which had not been consolidated at the time of the first inclusion in the Consolidated Financial Statements. Thereof eight were newly established in 2016.

While BASF does not hold majority shares in ZAO Gazprom YRGM Trading, BASF is entitled to the earnings of the company due to profit distribution arrangements, so that the company is fully consolidated in the Group Consolidated Financial Statements.

A list of companies included in the Consolidated Financial Statements and a list of all companies in which BASF SE has a shareholding as required by section 313(2) of the German Commercial Code is provided in the List of Shares Held.

For more information, see Note 3 on page 190
For more information, see basf.com/en/governance

Scope of consolidation

	Europe	Thereof Germany	North America	Asia Pacific	South America, Africa, Middle East	2017	2016
As of January 1	**154**	**57**	**42**	**71**	**27**	**294**	**258**
Thereof proportionally consolidated	6	–	–	2	–	8	7
First-time consolidations	5	2	3	1	1	10	46
Thereof proportionally consolidated	–	–	–	–	–	–	1
Deconsolidations	6	3	2	1	1	10	10
Thereof proportionally consolidated	–	–	–	–	–	–	–
As of December 31	**153**	**56**	**43**	**71**	**27**	**294**	**294**
Thereof proportionally consolidated	6	–	–	2	–	8	8

Overview of impact of changes to the scope of consolidation (excluding acquisitions and divestitures)

	2017		2016	
	Million €	%	Million €	%
Sales	**2**	**0.0**	**.**	**0.0**
Noncurrent assets	(7)	0.0	5	0.0
Thereof property, plant and equipment	1	0.0	1	0.0
Current assets	1	0.0	(3)	0.0
Thereof cash and cash equivalents	(1)	0.0	1	0.1
Assets	**(6)**	**0.0**	**2**	**0.0**
Equity	3	0.0	(2)	0.0
Noncurrent liabilities	8	0.0	.	0.0
Thereof financial indebtedness	–	–	–	–
Current liabilities	(17)	0.1	4	0.0
Thereof financial indebtedness	–	–	2	0.1
Total equity and liabilities	**(6)**	**0.0**	**2**	**0.0**
Other financial obligations	–	–	–	–

2.2 Joint Operations

Proportionally consolidated joint operations particularly comprise:

- Ellba C.V., Rotterdam, Netherlands, which is operated jointly with Shell and produces propylene oxide and styrene monomer
- AO Achimgaz, Novy Urengoy, Russia, which is jointly operated with Gazprom for the production of natural gas and condensate
- BASF DOW HPPO Production B.V.B.A., Antwerp, Belgium, which is operated jointly with The Dow Chemical Company to produce propylene oxide

BASF holds a 50% share in each of these companies and controls them jointly with the respective partner. The companies sell their products directly to the partners. The partners ensure the ongoing financing of the companies by purchasing the production. They were therefore classified as joint operations in accordance with IFRS 11.

A majority of the activities in the Oil & Gas segment's Exploration & Production business sector take place through joint activities, which are not incorporated in separate companies. This primarily relates to activities in Germany, Norway and Argentina. These are generally accounted for as joint operations in accordance with IFRS 11 and contribute the largest part of the sales, depreciation and amortization, and fixed assets in the Oil & Gas segment.

2.3 Joint ventures and associated companies

BASF has shareholdings in two material joint ventures. BASF-YPC Company Ltd., Nanjing, China, is operated by BASF together with its partner Sinopec at the Verbund site in Nanjing. BASF's share is 50%.

Financial information on BASF-YPC Company Ltd., Nanjing, China (100%) (million €)

	2017	2016
Balance sheet		
Noncurrent assets	1,254	1,515
Current assets	908	842
Thereof marketable securities, cash and cash equivalents	231	190
Assets	**2,162**	**2,357**
Equity	1,756	1,760
Noncurrent liabilities	124	204
Thereof financial indebtedness	122	190
Current liabilities	282	393
Thereof financial indebtedness	30	107
Total equity and liabilities	**2,162**	**2,357**
Statement of income		
Sales	2,761	2,358
Depreciation, amortization and impairments	207	214
Interest income	5	3
Interest expenses	9	23
Income taxes	159	110
Net income	473	332
Carrying amount according to the equity method as of the beginning of the year	**881**	**768**
Proportional net income	236	166
Proportional change of other comprehensive income	(59)	(26)
Total comprehensive income	**177**	**140**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	(179)	(27)
Thereof dividends	(179)	(27)
Other adjustments of income and expenses	–	–
Carrying amount according to the equity method as of the end of the year	**879**	**881**

W & G Infrastruktur Finanzierungs-GmbH, Kassel, Germany, a joint venture between BASF and Gazprom for the bundling of the regulated gas transportation business (BASF interest: 50%), was established in August 2017. Effective November 30, 2017, GASCADE Gastransport GmbH, Kassel, Germany, which was reported as a material associated company in the previous year, and NEL Gastransport GmbH, Kassel, Germany, which was reported as a non-material associated company in the previous year, were transferred from W & G Transport Holding GmbH to W & G Infrastruktur Finanzierungs-GmbH.

Financial information on the W & G Infrastruktur Finanzierungs group, Kassel, Germany (100%) (million €)

	2017
Balance sheet	
Noncurrent assets	1,181
Current assets	721
Thereof marketable securities, cash and cash equivalents	2
Assets	**1,902**
Equity	461
Noncurrent liabilities	1,342
Thereof financial indebtedness	923
Current liabilities	99
Thereof financial indebtedness	–
Total equity and liabilities	**1,902**
Statement of income	
Sales	560
Depreciation, amortization and impairments	147
Interest income	1
Interest expenses	(8)
Income taxes	23
Net income	114
Carrying amount according to the equity method as of the beginning of the year	**–**
Proportional net income[1]	57
Proportional change of other comprehensive income	–
Total comprehensive income[1]	**57**
Capital measures/dividends/changes in the scope of consolidation/other adjustments[1]	608
Thereof dividends (includes profit and loss transfers)	(62)
Other adjustments of income and expenses[1]	(8)
Carrying amount according to the equity method as of the end of the year	**657**

1 The disclosures also contain effects from the transfer of GASCADE Gastransport GmbH and NEL Gastransport GmbH to W & G Infrastruktur Finanzierungs-GmbH.

Additionally, W & G Infrastruktur Finanzierungs-GmbH has become party to the financing arrangement previously between WIGA Transport Beteiligungs-GmbH & Co. KG and an international banking consortium; besides WIGA Transport Beteiligungs-GmbH & Co. KG, W & G Infrastruktur Finanzierungs-GmbH functions as a further debtor and assumed €925 million of financial liabilities previously held by WIGA Transport Beteiligungs-GmbH & Co. KG against a transfer of loan receivables to GASCADE Gastransport GmbH and NEL Gastransport GmbH as well as cash. This was deposited in BASF's cash pool. In doing so, W & G Infrastruktur Finanzierungs-GmbH effectively took over the financing function for both of these companies operating in the regulated gas transportation business.

Non-material joint ventures accounted for using the equity method particularly comprise:
- Wintershall Noordzee B.V., Rijswijk, Netherlands, which is operated jointly with Gazprom (BASF interest: 50%);
- N.E. Chemcat Corporation, Tokyo, Japan, which is operated jointly with the partner Sumitomo Metal Mining Co. Ltd. (BASF interest: 50%);
- Heesung Catalysts Corporation, Seoul, South Korea, which is operated jointly with the partner Heesung (BASF interest: 50%).

Non-material joint ventures accounted for using the equity method (BASF interest) (million €)

	2017	2016
Carrying amount according to the equity method as of the beginning of the year	**823**	**825**
Proportional net income	140	(9)
Proportional change of other comprehensive income	(27)	19
Total comprehensive income	**113**	**10**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	(80)	(8)
Other adjustments of income and expense	(4)	(4)
Carrying amount according to the equity method as of the end of the year	**852**	**823**

A material associated company accounted for using the equity method is Joint Stock Company Achim Trading, Moscow, Russia (BASF interest: 18.01%, economic share: 25.01%), which together with Gazprom, will market the output from blocks IV and V of the Achimov formation. The investment value in the amount of €768 million remained unchanged in comparison with the previous year and arose from the fair value measurement as a result of the asset swap with Gazprom on September 30, 2015. The company's economic activities will commence in 2020 with the scheduled start of production from blocks IV and V. Therefore, there is no relevant financial information to report according to IFRS 12 in 2017.

Non-material associated companies accounted for using the equity method particularly comprise:
- OAO Severneftegazprom, Krasnoselkup, Russia (BASF interest: 25%, economic share: 35%)
- Nord Stream AG, Zug, Switzerland, was classified as an associated company even though BASF only has a 15.5% share, as it can exercise significant influence over the company due to the fact that its approval is required for certain relevant board resolutions.
- Stahl Lux 2 S.A., Luxembourg (BASF interest: 16.6%) was classified as an associated company even though BASF only has a 16.6% share, as it can exercise significant influence over the company due to the fact that its approval is required for certain relevant board resolutions.
- Wintershall AG, Kassel, Germany, which operates Libyan exploration and production activities together with Gazprom Libyen Verwaltungs GmbH (BASF interest: 51%). Despite an investment of 51%, BASF does not exercise control according to IFRS 10, as contractual arrangements with the Libyan government strictly limit influence on variable returns after income taxes.

Non-material associated companies accounted for using the equity method (BASF interest) (million €)

	2017	2016
Carrying amount according to the equity method as of the beginning of the year	**1,554**	**1,434**
Proportional net income	151	109
Proportional change of other comprehensive income	(31)	100
Total comprehensive income	**120**	**209**
Capital measures/dividends/changes in the scope of consolidation/other adjustments	(114)	(90)
Other adjustments of income and expense	(1)	1
Carrying amount according to the equity method as of the end of the year	**1,559**	**1,554**

2.4 Acquisitions and Divestitures

Acquisitions

In 2017, BASF acquired the following activities:
- Effective January 1, 2017, BASF took over the western European Construction Chemicals business from the Henkel group with the trade names Thomsit® and Ceresit® for floor and tile-laying systems as well as sealants for professional users. This strengthened BASF's portfolio in the construction chemicals business of the PCI Group, which belongs to the Construction Chemicals division.
- On February 7, 2017, BASF acquired the private company Rolic AG headquartered in Allschwil, Switzerland. The company develops and sells ready-to-use formulations and functional film products for the display and security industry against forgery as well as barrier materials and films. With the acquisition, BASF broadened its technology know-how and product portfolio of display materials. The largest part of the activities was integrated into the Dispersions & Pigments division and a smaller part into the Coatings division.
- On May 24, 2017, BASF acquired ZedX Inc., Bellefonte, Pennsylvania. The company develops agronomic weather, crop and pest models that can rapidly translate data into insights for more efficient agricultural production. The integration of the business into the Crop Protection division strengthens BASF's activities in the area of digital agriculture.
- On September 4, 2017, BASF completed the acquisition of GRUPO Thermotek, a leading manufacturer of waterproofing systems in Mexico with headquarters in Monterrey, Mexico. The acquisition strengthens the Construction Chemicals division's sales channels and its product portfolio, especially in Mexico. The transaction includes trademarks such as Thermotek® and Chovatek®.

The purchase prices for businesses acquired in 2017 and the purchase price adjustments for acquisitions from 2016 totaled €154 million including a contingent consideration; as of December 31, 2017, payments made for these amounted to €155 million. The purchase price allocations were carried out in accordance with IFRS 3. The resulting goodwill amounted to €97 million. The purchase price allocations consider all the facts and circumstances prevailing as of the respective dates of acquisition that were known prior to the preparation of these Consolidated Financial Statements. In accordance with IFRS 3, should further facts and circumstances become known within the 12-month measurement period, the purchase price allocation will be adjusted accordingly.

In 2016, BASF acquired the following activities:

- On September 26, 2016, BASF concluded the acquisition of Guangdong Yinfan Chemistry (“Yinfan”) in Jiangmen, China, and integrated the business into the Coatings division. This acquisition enabled BASF to expand its portfolio of automotive refinish coatings in Asia Pacific with the addition of the Yinfan product range and gain access to a state-of-the-art production plant for automotive refinish coatings in China.
- On December 14, 2016, BASF concluded the acquisition of the global surface treatment provider Chemetall from Albemarle Corp., Charlotte, North Carolina. The acquisition complements the Coating division’s portfolio by adding customized technology and system solutions for the treatment of surfaces. The purchase price, after adjustments to the net financial debt and net working capital, amounted to $3.1 billion.

The preliminary purchase price allocation for the acquisition of Chemetall was reviewed at the end of the 12-month measurement period in accordance with IFRS 3 and corrected to reflect more detailed information on tax matters, provisions for pensions and a retroactive purchase price adjustment. This reduced net working capital by €13 million. Taking into account a cash-effective adjustment, the total purchase price rose by €6 million. Overall, the adjustments increased goodwill by €19 million to €1,564 million. The goodwill recognized resulted primarily from sales synergies arising from the expansion of the portfolio, and to a smaller extent from cost synergies.

The following overview shows the effects of the acquisitions conducted in 2017 and 2016 on the Consolidated Financial Statements. If acquisitions resulted in the transfer of assets or the assumption of additional liabilities, these are shown as a net impact.

Effects of acquisitions and changes in the preliminary purchase price allocations

	2017		2016	
	Million €	%	Million €	%
Goodwill	97	1.0	1,552	15.4
Other intangible assets	138	3.3	1,237	24.3
Property, plant and equipment	8	.	155	0.6
Financial assets	3	0.1	45	0.9
Other noncurrent assets	(3)	(0.1)	20	0.5
Noncurrent assets	**243**	**0.5**	**3,009**	**6.0**
Current assets	**18**	**0.1**	**358**	**1.4**
Thereof cash and cash equivalents	5	0.1	81	5.9
Total assets	**261**	**0.3**	**3,367**	**4.4**
Equity	**–**	**–**	**–**	**–**
Noncurrent liabilities	**40**	**0.1**	**356**	**1.2**
Thereof financial indebtedness	–	–	–	–
Current liabilities	**66**	**0.4**	**162**	**1.1**
Thereof financial indebtedness	–	–	–	–
Total equity and liabilities	**106**	**0.1**	**518**	**0.7**
Payments made for acquisitions	**155**		**2,849**	

Divestitures

In 2017, BASF sold the following activities:

- On February 28, 2017, BASF sold its inorganic specialties business to Edgewater Capital Partners LP, Cleveland, Ohio. The transaction comprised the production site in Evans City, Pennsylvania, and the product lines for special alcoholates, boranes and alkali metals manufactured there in the Intermediates division.
- On July 17, 2017, BASF sold its Bleaching Clay and Mineral Adsorbents businesses to EP Minerals LLC, based in Reno, Nevada. The divestiture affected one global business unit in the Catalysts division and comprises a production site as well as a bleaching clay mine in Mississippi and the mineral rights sublease for a mine in Arizona. Sixty-six employees transferred to EP Minerals LLC.
- On September 29, 2017, BASF completed the combination of the global leather chemicals business in the Performance Chemicals division with the Stahl group. The transaction comprised the global leather chemicals business, as well as the leather chemicals production site in L’Hospitalet, Spain. Around 210 jobs were affected worldwide, 110 of which were in Asia. Under the terms of the agreement, BASF received a 16% minority interest in the Stahl group as well as a payment; this resulted in special income. Furthermore, in the medium to long term, BASF will supply Stahl with significant volumes of leather chemicals.
- On September 30, 2017, BASF concluded the sale of its production site for electrolytes in Szhou, China, to Shenzhen Capchem Technology Co. Ltd., based in Shenzhen, China. The site was allocated to the Catalysts division.

In 2016, BASF sold the following activities:
– On June 30, 2016, BASF completed the sale of its global polyolefin catalysts business to W.R. Grace & Co., Columbia, Maryland. The transaction involved technologies, patents, trademarks and the transfer of production plants in Pasadena, Texas, and Tarragona, Spain. Around 170 employees transferred to Grace. These activities had been assigned to the Catalysts division.
– On August 26, 2016, BASF sold its worldwide photoinitiator business in the Dispersions & Pigments division to IGM Resins B.V., Waalwijk, Netherlands. The transaction comprised technology, patents, trademarks, customer relationships, contracts and inventories as well as the photoinitiator production site in Mortara, Italy. The sale affected 120 employees worldwide.
– On December 14, 2016, BASF sold the Coatings division's industrial coatings business to the AkzoNobel Group. The transaction included technologies, patents and trademarks, customer relationships, inventories as well as the transfer of two production sites in England and in South Africa.

The following overview shows the effects of the divestitures conducted in 2017 and 2016 in the Consolidated Financial Statements. The line item sales reflects the year-on-year decline resulting from divestitures. The impact on equity relates mainly to gains and losses from divestitures.

Effects of divestitures

	2017		2016	
	Million €	%	Million €	%
Sales	**(460)**	**(0.8)**	**(10,718)**[1]	**(15.2)**
Noncurrent assets	**93**	**0.2**	**(234)**	**(0.5)**
Thereof property, plant and equipment	(50)	(0.2)	(97)	(0.4)
Current assets	**(48)**	**(0.2)**	**(64)**	**(0.3)**
Thereof cash and cash equivalents	–	–	–	–
Total assets	**45**	**0.1**	**(298)**	**(0.4)**
Equity	**239**	**0.7**	**467**	**1.4**
Noncurrent liabilities	**(13)**	**.**	**(63)**	**(0.2)**
Thereof financial indebtedness	–	–	–	–
Current liabilities	**(4)**	**.**	**(1)**	**.**
Thereof financial indebtedness	–	–	–	–
Total equity and liabilities	**222**	**0.3**	**403**	**0.5**
Payments received from divestitures	**177**		**701**	

1 Thereof from the asset swap with Gazprom: €10.244 million (–14.5%)

Agreed-upon transactions

On September 18, 2017, BASF signed an agreement with the Solvay group on the acquisition of Solvay's global polyamide business. Solvay and BASF aim to close the transaction in the third quarter of 2018 after regulatory approvals have been obtained and the consent of a joint venture partner has been received. The acquisition would complement BASF's engineering plastics portfolio and expand the company's position as a solutions provider for the transportation, construction and consumer goods industries as well as for other industrial applications. BASF plans to integrate the global polyamide business into the Performance Materials and Monomers divisions. The purchase price on a cash and debt-free basis and excluding other adjustments is €1.6 billion. If the transaction is not concluded, the agreement provides for, subject to certain conditions, a payment of €150 million from BASF to Solvay.

On October 13, 2017, BASF announced that it had signed an agreement on the acquisition of significant parts of Bayer's seed and non-selective herbicide businesses. The assets to be acquired include Bayer's global glufosinate-ammonium business, commercialized under the Liberty®, Basta® and Finale® trademarks, as well as its seed businesses for key row crops in selected markets. The transaction also covers Bayer's trait research and breeding capabilities for these crops. BASF will acquire the manufacturing sites for glufosinate-ammonium production and formulation in Germany, the United States and Canada, seed breeding facilities in the Americas and Europe as well as trait research facilities in the United States and Europe. With the acquisition, which is expected in the first half of 2018 subject to the closing of Bayer's acquisition of Monsanto and approval by the relevant authorities, BASF will expand its crop protection business, strengthen the herbicide portfolio and enter into its own seed business in key agricultural markets. More than 1,800 employees are to be transferred to BASF with the acquisition, strengthening the Crop Protection division. The purchase price amounts to €5.9 billion, subject to certain adjustments at closing.

Intended transactions

On December 7, 2017, BASF signed a letter of intent with the LetterOne group on the merger of their respective oil and gas businesses in a joint venture, which would operate under the name Wintershall DEA. The definitive transaction agreements are to be negotiated over the coming months; the transaction could close in the second half of 2018, subject to the customary regulatory approvals. There is no assurance that BASF will enter into definitive transaction agreements with LetterOne or that the intended transaction will be consummated. Due to this uncertainty, BASF continues to report Oil & Gas as continuing operations.

For more information, see the Management's report on page 86 onward

3 BASF Group List of Shares Held in accordance with section 313(2) of the German Commercial Code

The list of consolidated companies and the complete list of all companies in which BASF SE has a share as required by section 313(2) of the German Commercial Code and information for exemption of subsidiaries from accounting and disclosure obligations are an integral component of the audited Consolidated Financial Statements submitted to the electronic Federal Gazette. The list of shares held is also published online.

For more information, see basf.com/en/governance

4 Reporting by segment and region

BASF's business is conducted by thirteen operating divisions aggregated into five segments for reporting purposes. The divisions are allocated to the segments based on their business models.

The Chemicals segment comprises the classic chemicals business with basic chemicals and intermediates. The focus is on cost leadership in the value chains, efficient and reliable production and logistics processes, as well as process innovation. The segment forms the core of BASF's Production Verbund and is the starting point for a majority of the value chains. In addition to supplying the chemical industry and numerous other sectors, Chemicals ensures that other BASF segments are supplied with chemicals for producing downstream products. The Chemicals segment is composed of the Petrochemicals, Monomers and Intermediates divisions.

The Performance Products segment consists of the Dispersions & Pigments, Care Chemicals, Nutrition & Health and Performance Chemicals divisions. Tailored solutions play a key role. They enable our customers to improve the application properties of their products or optimize production processes, for example. Close customer contact and meeting the demanding requirements of a wide range of industries are crucial to business success. As of January 1, 2017, the activities of the Monomers and Dispersions & Pigments divisions for the electronics industry were merged into the global business unit Electronic Materials in the Dispersions & Pigments division within the Performance Products segment. BASF thereby strengthens its position as a strategic partner for the large electronic producers. The 2016 figures have been restated accordingly.

The Functional Materials & Solutions segment bundles system solutions, services and innovative products for specific sectors and customers, especially the automotive, electrical, chemical and construction industries, as well as applications for household, sports and leisure. An in-depth understanding of applications, the development of innovations in close cooperation with customers, and adaptation to different regional needs are key success factors. The segment is made up of the Catalysts, Construction Chemicals, Coatings, and Performance Materials divisions.

The Agricultural Solutions segment includes the Crop Protection division, which is active in the areas of chemical and biological crop protection, seed treatment and water management as well as for nutrient supply and combating plant stress. It offers farmers innovative solutions, including those based on digital technologies, combined with practical advice. Plant biotechnology research is not assigned to this segment; it is reported in Other.

The Oil & Gas segment comprises the division of the same name and focuses on the exploration and production in oil and gas rich regions in Europe, North Africa, Russia, South America and the Middle East. It benefits from strong partnerships and its technological expertise. In Europe, the segment is also active in the transportation of natural gas together with its Russian partner Gazprom.

Activities not assigned to a particular division are reported in Other. These include the sale of raw materials, engineering and other services, rental income and leases, the steering of the BASF Group by corporate headquarters, and cross-divisional corporate research. Cross-divisional corporate research, to which plant biotechnology research also belongs, works on long-term topics of strategic importance to the BASF Group. Furthermore, it focuses on the development of specific key technologies which are of central importance for the divisions.