Forecast
Opportunities and risks report

Opportunities	Risks	Risk management
Potential successes that exceed our defined goals	Events that can negatively impact the achievement of our goals	Identifying opportunities and risks as early as possible and planning effective courses of action

The goal of BASF's risk management is to identify and evaluate opportunities and risks as early as possible and to take appropriate measures in order to seize opportunities and limit business losses. The aim is to avoid risks that pose a threat to BASF's continued existence and to make improved managerial decisions to create value. We understand risk to be any event that can negatively impact the achievement of our short-term operational or long-term strategic goals. We define opportunities as potential successes that exceed our defined goals.

In order to effectively measure and manage identified opportunities and risks, we quantify these where appropriate in terms of probability and economic impact in the event they occur. Where possible, we use statistical methods to aggregate opportunities and risks into risk factors. This way, we achieve an overall view of opportunities and risks at a portfolio level, allowing us to take effective measures for risk management.

Overall assessment

- **Significant risks and opportunities arise from overall economic developments and volatility in exchange rates and margins**

For 2018, we expect the global economy to continue to grow at around the same pace as the previous year. Important opportunities and risks for our earnings are associated with uncertainty regarding market growth, the development of key customer industries, acquisitions and divestitures, as well as volatility in exchange rates and margins. In particular, a considerable slowdown of the Chinese economy continues to pose significant risks. Such a development would negatively affect demand for intermediate and investment goods. This would impact the emerging markets that export raw materials as well as the advanced economies. This is especially true for Europe. Further risks to the global economy arise from an escalation of geopolitical conflicts and an increased tendency toward protectionism.

Potential short-term effects on EBIT of key opportunity and risk factors subsequent to measures taken[1]

Possible variations related to:	Outlook 2018 –	Outlook 2018 +
Business environment and sector		
Market growth	■■■■	■■■□
Margins	□■■■	■■□□
Competition	□□■■	■□□□
Regulation/policy	□□□■	■□□□
Company-specific opportunities and risks		
Purchasing/supply chain	□□□■	■□□□
Investments/production	□□■■	■□□□
Personnel	□□□■	■□□□
Acquisitions/divestitures/cooperations	■■■■	■■□□
Information technology	□□□■	□□□□
Law	□□□■	■□□□
Finance		
Exchange rate volatility	□■■■	■■■□
Other financial opportunities and risks	□□■■	■□□□

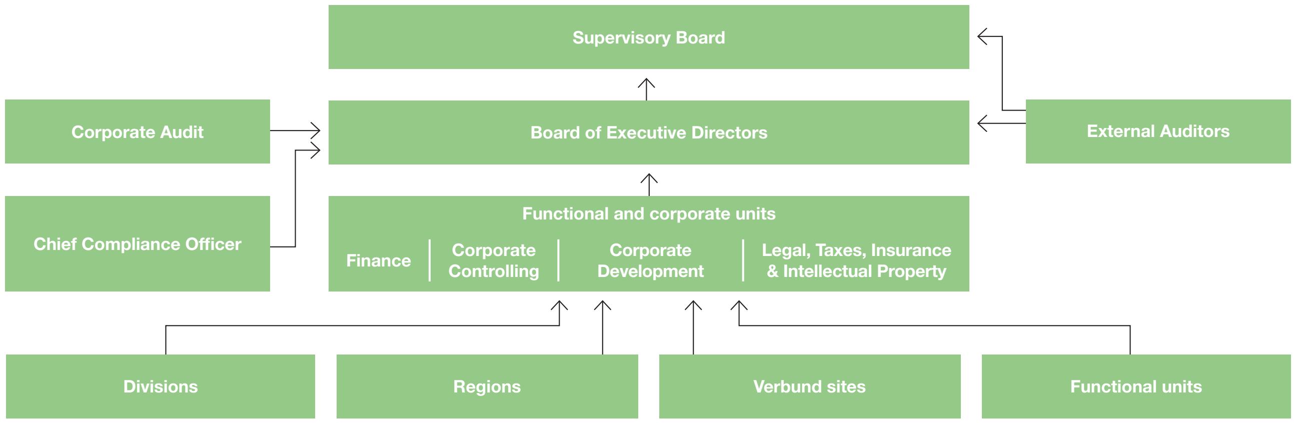
□□□■ < €100 million
□□■■ ≥ €100 million < €500 million
□■■■ ≥ €500 million < €1,000 million
■■■■ ≥ €1,000 million < €1,500 million

[1] Using a 95% confidence interval per risk factor based on planned values; summation is not permissible.

According to our assessment, there continue to be no significant individual risks that pose a threat to the continued existence of the BASF Group. The same applies to the sum of individual risks, even in the case of another global economic crisis.

Ultimately, however, residual risks remain in all entrepreneurial activities which even comprehensive risk management cannot exclude.

Organization of BASF Group's risk management



Risk management process

- Integrated process for identification, assessment and reporting
- Decentralized management of specific opportunities and risks
- Aggregation at a Group level

The BASF Group's risk management process is based on the international risk management standard COSO II Enterprise Risk Management – Integrated Framework (2004), and has the following key features:

Organization and responsibilities

- Risk management is the responsibility of the Board of Executive Directors, which also determines the processes for approving investments, acquisitions and divestitures.
- The Board of Executive Directors is supported by the units Finance, Corporate Controlling, Corporate Development and Legal, Taxes, Insurance & Intellectual Property, and the Chief Compliance Officer. These units coordinate the risk management process at a Group level and provide the structure and appropriate methodology. Opportunity and risk management is thus integrated into the strategy, planning and budgeting processes.
- A network of risk managers in the business, functional and corporate units as well as in the regions and at the Verbund sites advances the implementation of appropriate risk management practices in daily operations.
- The management of specific opportunities and risks is largely delegated to the business units and is steered at a regional or local level. Risks relating to exchange rates and raw materials prices are an exception. In this case, there is an initial consolidation at a Group level before derivative hedging instruments, for example, are used.
- BASF's Chief Compliance Officer (CCO) manages the implementation of our Compliance Management System, supported by additional compliance officers worldwide. He regularly reports to the Board of Executive Directors on the status of implementation as well as on any significant results. He also provides a status report to the Supervisory Board's Audit Committee at least once a year, including any major developments. In the event of significant incidents, the Audit Committee is immediately informed by the Board of Executive Directors.
- The internal auditing unit (Corporate Audit) is responsible for regularly auditing the risk management system established by the Board of Executive Directors in accordance with section 91(2) of the German Stock Corporation Act. Furthermore, as part of its monitoring of the Board of Executive Directors, the Supervisory Board considers the effectiveness of the risk management system. The suitability of the early detection system we set up for risks is evaluated by our external auditor.

Instruments

- The Risk Management Policy, applicable throughout the Group, forms the framework for risk management and is implemented by the business units according to their particular business conditions.
- A catalog of opportunity and risk categories helps to identify all relevant opportunities and risks as comprehensively as possible.
- We use standardized evaluation and reporting tools for the identification and assessment of risks. The aggregation of opportunities, risks and sensitivities at division and Group level using a Monte Carlo simulation helps us to identify effects and trends across the Group.
- The nonfinancial topics relevant for BASF are addressed by the responsible functional units, which assess the risks identified as being relevant according to impact and probability of occurrence. We identify opportunities and risks that arise in connection with the topics of environment, society and governance with our sustainability management

tools. We have established global monitoring systems to check adherence to laws and our voluntary commitments in these areas. These also incorporate our suppliers.
- The BASF Group's management is informed about operational opportunities and risks (observation period of up to one year) in the monthly management report produced by the Corporate Controlling unit. In addition, Corporate Controlling and Finance provide information twice a year on the aggregated opportunity/risk exposure of the BASF Group. Furthermore, if a new individual risk is identified which has a more than €10 million impact on earnings or bears reputational risks, it must be immediately reported.
- As part of our strategy development, the Corporate Development unit conducts strategic opportunity/risk analyses with a 10-year assessment period. These analyses are annually reviewed as part of strategic controlling and are adapted if necessary.

For more information on our sustainability management processes, see page 29 onward

- Our Group-wide Compliance Program aims to ensure adherence to legal regulations and the company's internal guidelines. Our global employee Code of Conduct firmly embeds these mandatory standards into everyday business. Members of the Board of Executive Directors are also expressly obligated to follow these principles.

For more information on our Group-wide Compliance Program, see page 135 onward

Significant features of the internal control and risk management system with regard to the Group financial reporting process

- **Conducted in accordance with standardized Group guidelines**
- **Segregation of duties, principle of dual control and clearly regulated access rights**
- **Annual evaluation of the control environment and relevant processes at significant companies**

The Consolidated Financial Statements are prepared by a unit in the Finance division. BASF Group's accounting process is based on a standardized accounting guideline that sets out accounting policies and the significant processes and deadlines on a Group-wide basis. There are binding directives for the internal reconciliations and other accounting operations within the Group. Standard software is used to carry out the accounting processes for the preparation of the individual financial statements as well as for the Consolidated Financial Statements. There are clear rules for the access rights of each participant in these processes.

Employees involved in the accounting and reporting process meet the qualitative requirements and participate in training on a regular basis. There is a clear assignment of responsibilities between the specialist units, companies and regional service units involved.

We strictly adhere to the principles of segregation of duties and dual control, or the "four-eyes principle." Complex actuarial reports and evaluations are produced by specialized service providers or specially qualified employees.

An internal control system for financial reporting continuously monitors these principles. To this end, methods are provided to ensure that evaluation of the internal control system in financial reporting is structured and uniform across the BASF Group.

The significant risks for the BASF Group regarding a reliable control environment for proper financial reporting are reviewed and updated on an annual basis. Risks are compiled into a central risk catalog.

Moreover, a centralized selection process identifies companies that are exposed to particular risks, that are material to the Consolidated Financial Statements of the BASF Group, or that provide service processes. The selection process is conducted annually. In the relevant companies, one person is given the responsibility of monitoring the execution of the annual evaluation process.

In these companies, the process comprises the following steps:
- **Evaluation of the control environment**
  Adherence to internal and external guidelines that are relevant for the maintenance of a reliable control environment is checked by means of a standardized questionnaire.
- **Identification and documentation of control activities**
  In order to mitigate the risks to the financial reporting processes listed in our central risk catalog, critical processes and control activities are documented.
- **Assessment of control activities**
  After documentation, a review is performed to verify whether the described controls are capable of adequately covering the risks. In the subsequent test phase, samples are taken to test whether, in practice, the controls were executed as described and effective.
- **Monitoring of control weaknesses**
  The managers responsible receive reports on any control weaknesses identified and their resolution, and an interdisciplinary committee investigates their relevance for the BASF Group. The Board of Executive Directors and the Audit Committee are informed once control weaknesses have been identified that have a considerable impact on financial reporting. Only after material control weaknesses have been resolved does the company's managing director confirm the effectiveness of the internal control system.
- **Internal confirmation of the internal control system**
  All managing directors and chief financial officers of each consolidated Group company must confirm to the Board of Executive Directors of BASF SE every half-year and at the end of the annual cycle, in writing, that the internal control system is effective with regard to accounting and reporting.

Short-term opportunities and risks

Development of demand

The development of our sales markets is one of the strongest sources of opportunities and risks. More details on our assumptions regarding short-term growth rates for the global economy, regions and key customer industries, such as the chemicals, automotive and construction sectors, can be found from pages 119 to 121.

We also consider risks from deviations in assumptions. We continue to see a significant macroeconomic risk in an increased slowdown of the Chinese economy, which would have considerable impact on demand for intermediate goods for industrial production as well as investment goods. This would have an effect on emerging markets that export raw materials as well as on advanced economies that specialize in technological goods. Risks to the global economy would also be posed by the possible escalation of geopolitical conflicts and an increased tendency toward protectionism.

Should the macroeconomic environment develop more slowly than we predict, we expect a lower oil price. In this case, we also expect the euro to weaken relative to the U.S. dollar in the medium term as compared with our planning assumptions, as the eurozone's economy shows a high level of dependency on exports and, in times of global economic weakness, the U.S. dollar is preferred by portfolio investors as a safe haven.

Weather-related influences can result in positive or negative effects on our crop protection business.

Margin volatility

The BASF Group will be exposed to margin risk in 2018, driven by the isocyanates business in particular. It is also possible that margin pressure on a number of other products and value chains could be increased by, for example, new capacities or increasing raw material costs. This would have a negative effect on our income from operations (EBIT).

The year's average oil price for Brent crude was around \$54 per barrel in 2017, compared with \$44 per barrel in the previous year. For 2018, we anticipate an average oil price of \$65 per barrel. We therefore expect a slight increase in price levels for the raw materials and petrochemical basic products that are important to our business. Yet an oil price level below the expected average would pose risks for our oil and gas business, whose EBIT declines by approximately €20 million for every \$1 decrease in the average annual barrel price of Brent crude.

Competition

We continuously enhance our products and solutions in order to maintain competitive ability. We watch the market and the competition, and try to take targeted advantage of opportunities and counter emerging risks with suitable measures. Aside from innovation, a major component our competitiveness is our cost structure.

Regulation and political risks

Risks for us can arise from intensified geopolitical tensions, new trade sanctions, stricter emissions limits for plants or energy and climate laws. In addition, risks to the BASF Group can be posed by further regulations in key customer industries or on the use or registration of agricultural and other chemicals.

Economic and political uncertainties may arise as a result of Brexit. At this point in time, it is not yet clear what the future relationship between the European Union and the United Kingdom will look like post-Brexit and what specific consequences this will have for our sites, our supply chains and the regulatory environment. A cross-divisional Brexit team has been established to prepare the BASF organization for various exit scenarios and enable it to quickly react to political decisions.

Political measures could also give rise to opportunities. For example, we view the worldwide expansion of renewable energy and measures to increase energy efficiency as an opportunity for increased demand for our products, such as our insulation foams for buildings or our solutions for wind turbines. Our broad product portfolio enables us to offer alternatives if chemicals have to be substituted as a result of restrictions in connection with the REACH chemicals regulation or new standards in our customers' industries.

Purchasing and supply chain

We minimize procurement risks through our broad portfolio, global purchasing activities and the purchase of raw materials on spot markets. If possible, we avoid procuring raw materials from a single supplier. When this cannot be avoided, we try to foster competition or we knowingly enter into this relationship and assess the consequences of potential nondelivery. We continuously monitor the credit risk of important business partners.

Production and investments

We try to prevent unscheduled plant shutdowns by adhering to high technical standards and by continuously improving our plants. We reduce the effects of unscheduled shutdowns on the supply of intermediate and end products through diversification within our global production Verbund.

In the event of a production outage – caused by an accident, for example – our global, regional or local emergency response plans and crisis management structures are engaged, depending on the impact scope. Every region has crisis management teams on a local and regional level. They not only coordinate the necessary emergency response measures, they also initiate the immediate measures for damage control and resumption of normal operations as quickly as possible.

Short-term risks from investments can result from, for example, technical malfunctions or schedule and budget breaches. We counter these risks with highly experienced project management and controlling.

For more information on emergency response, see page 100 or basf.com/emergency_response

Acquisitions, divestitures and cooperations

We are constantly watching our environment in order to identify possible targets and develop our portfolio appropriately. In addition, we work together in collaborations with customers and partners to jointly develop new, competitive products and applications.

Opportunities and risks arise in connection with acquisitions and divestitures from the conclusion of a transaction, or it being completed earlier or later than expected. They relate to the regular earnings contributions gained or lost as well as the realization of gains or losses from divestitures if these deviate from our planning assumptions.

For more information on opportunities and risks from acquisitions and divestitures in 2018, see the Outlook from page 122 onward

Personnel

Due to BASF's worldwide compensation principles, the development of personnel expenses is partly dependent on the amount of variable compensation, which is linked to the company's success, among other factors. The correlation between variable compensation and the success of the company has the effect of minimizing risk. Another factor is the development of interest rates for discounting pension obligations. Furthermore, changes to the legal environment of a particular country can have an impact on the development of personnel expenses for the BASF Group. For countries in which BASF is active, relevant developments are therefore constantly monitored in order to recognize risks at an early stage and enable BASF to carry out suitable measures.

For more information on our compensation system, see page 46
For more information on risks from pension obligations, see page 117

Information technology risks

BASF relies on a large number of IT systems. Their nonavailability, violation of confidentiality or the manipulation of data in critical IT systems and applications can all have a direct impact on production and logistics processes. The threat environment has changed in recent years, as attackers have become better organized, use more sophisticated technology, and have far more resources available. If data are lost or manipulated, this can, for example, negatively affect process safety and the accuracy of our financial reporting. Unauthorized access to sensitive data, such as personnel records, competition-related information or research results, can result in legal consequences or jeopardize our competitive position. This would also be accompanied by the associated loss of reputation.

To minimize such risks, BASF uses globally uniform processes and systems to ensure IT security, such as stable and redundantly designed IT systems, backup processes, virus and access protection, encryption systems as well as integrated, Group-wide standardized IT infrastructure and applications. The systems used for information security are constantly tested, continuously updated, and expanded if necessary. In addition, our employees receive regular training on information and data protection. IT-related risk management is conducted using Group-wide regulations for organization and application, as well as an internal control system based on these regulations.

BASF also established the Cyber Defense Center in 2015; is a member of the Cyber Security Sharing and Analytics e.V. (CSSA); and is a founding member of the German Cyber Security Organization (DCSO) together with Allianz SE, Bayer AG and Volkswagen AG.

Legal dispute and proceedings

We constantly monitor current and potential legal disputes and proceedings, and regularly report on these to the Board of Executive Directors and Supervisory Board. In order to assess the risks from current legal disputes and proceedings and any potential need to recognize provisions, we prepare our own analyses and assessments of the circumstances and claims considered. In addition, in individual cases, we consider the results of comparable proceedings and, if needed, independent legal opinions. Risk assessment is particularly based on estimates as to the probability of occurrence and the range of possible claims. These estimates are the result of close cooperation between the affected operating and functional units together with the Legal and Finance units. If sufficient probability is identified, a provision is recognized accordingly for each proceeding. Should a provision be unnecessary, general risk management continues to assess whether these litigations nevertheless present a risk for the EBIT of the BASF Group.

We use our internal control system to limit risks from potential infringements of rights or laws. For example, we try to avoid patent and licensing disputes whenever possible through extensive clearance research. As part of our Group-wide Compliance Program, our employees receive regular training.

Financial opportunities and risks

The management of liquidity, currency and interest rate risks is conducted in the Treasury unit. The management of commodity price risks takes place in the Procurement functional unit or in appropriately authorized Group companies. Detailed guidelines and procedures exist for dealing with financial risks. Among other things, they provide for the segregation of trading and back office functions.

As a part of risk management, activities in countries with transfer restrictions are continuously monitored. This includes, for example, regular analysis of the macroeconomic and legal environment, shareholders' equity and the business models of the operating units. The chief aim is the reduction of counterparty, transfer and currency risks for the BASF Group.

Exchange rate volatility

Our competitiveness on global markets is influenced by fluctuations in exchange rates. For BASF's sales, opportunities and risks arise in particular when the U.S. dollar exchange rate fluctuates. A full-year rise in the value of the U.S. dollar/euro exchange rate by $0.01 would result in an increase of around €50 million in the BASF Group's EBIT, assuming other conditions remain the same. On the production side, we counter exchange rate risks by producing in the respective currency zones.

Financial currency risks result from the translation of receivables, liabilities and other monetary items in accordance with IAS 21 at the closing rate into the functional currency of the respective Group company. In addition, we incorporate planned purchase and sales transactions in foreign currencies in our financial foreign currency risk management. These risks are hedged using derivative instruments, if necessary.

Interest rate risks

Interest rate risks result from potential changes in prevailing market interest rates. These can cause a change in the fair value of fixed-rate instruments and fluctuations in the interest payments for variable-rate financial instruments, which would positively or negatively affect earnings. To hedge these risks, interest rate swaps and combined interest rate and currency derivatives are used in individual cases.

In addition to market interest rates, BASF's financing costs are determined by the credit risk premiums to be paid. These are mainly influenced by our credit rating and the market conditions at the time of issue. In the short to medium term, BASF is largely protected from the possible effects on its interest result thanks to the balanced maturity profile of its financial indebtedness.

Risks from metal and raw materials trading

In the catalysts business, BASF employs commodity derivatives for precious metals and trades precious metals on behalf of third parties and on its own account. Appropriate commodity derivatives are also traded to optimize BASF's supply of refinery products, gas and other petrochemical raw materials. To address specific risks associated with these trades, which are not part of our operating business, we set and continuously monitor limits with regard to the type and size of the deals concluded.

Liquidity risks

Risks from fluctuating cash flows are recognized in a timely manner as part of our liquidity planning. We have access to extensive liquidity at any time thanks to our good ratings, our unrestricted access to the commercial paper market and committed bank credit lines. In the short to medium term, BASF is largely protected against potential refinancing risks by the balanced maturity profile of its financial indebtedness as well as through diversification in various financial markets.

For more information on the maturity profile of our financial indebtedness, see the explanations in the Financial Position on page 58 and the Notes to the Consolidated Financial Statements from page 218 onward

Risk of asset losses

We limit country-specific risks with measures based on internally determined country ratings, which are continuously updated to reflect changing environment conditions. We selectively use investment guarantees to limit specific country-related risks. We lower credit risks for our financial investments by engaging in transactions only with banks with good credit ratings and by adhering to fixed limits. Creditworthiness is continuously monitored and the limits are adjusted accordingly. We reduce the risk of default on receivables by continuously monitoring the creditworthiness and payment behavior of our customers and by setting appropriate credit limits. Due to the global activities and diversified customer structure of the BASF Group, there are no major concentrations of credit default risk. Risks are also limited through the use of credit insurance and bank guarantees.

Impairment risks

The risk of an asset impairment occurs if the assumed interest rate in an impairment test increases, the predicted cash flows decline, or investment projects are suspended. In the current business environment, we consider the risk of impairment of individual assets such as customer relationships, technologies and trademarks, as well as goodwill, to be nonmaterial. Nevertheless, a continuing decline in the prices of oil or gas below our assumed planning level would result in impairment risks for the Oil & Gas segment's assets.

Long-term incentive program for senior executives

Our senior executives have the opportunity to participate in a share price-based compensation program. The need for provisions for this program varies according to the development of the BASF share price and the MSCI World Chemicals Index; this leads to a corresponding increase or decrease in personnel costs.

Risks from pension obligations

Most employees are granted company pension benefits from either defined contribution or defined benefit plans. We predominantly finance company pension obligations externally through separate plan assets. This particularly includes BASF Pensionskasse VVaG and BASF Pensionstreuhand e.V. in Germany, in addition to the large pension plans of our Group companies in North America, the United Kingdom and Switzerland. To address the risk of underfunding due to market-related fluctuations in plan assets, we have investment strategies that align return and risk optimization to the structure of the pension obligations. Stress scenarios are also simulated regularly by means of portfolio analyses. An adjustment to the interest rates used in discounting pension obligations leads immediately to changes in equity. To limit the risks of changing financial market conditions as well as demographic developments, employees have been almost exclusively offered defined contribution plans for future years of service in recent years. Some of these contribution plans include minimum interest guarantees. If the pension fund cannot generate this, it must be provided by the employer. A permanent continuation of the low interest rate environment could make it necessary to recognize pension obligations and plan assets for these plans.

Long-term opportunities and risks

Long-term demand development

We assume that chemical production (excluding pharmaceuticals) will grow slightly faster than global gross domestic product over the next five years and be slightly below the previous five-year average. Through our market-oriented and broad portfolio, which we will continue to strengthen in the years ahead through investments in new production capacities, research and development activities and acquisitions, we aim to achieve sales growth that slightly exceeds this market growth. Should global economic growth see unexpected, considerable deceleration, due for example to an ongoing weak period in the emerging markets or to geopolitical crises, the expected growth rates could prove too ambitious. As a result of our high degree of diversification across various customer industries and regions, we would still expect our growth to be above the market average, even under these conditions.

For more information on the "We create chemistry" strategy, see page 23 onward

Development of competitive and customer landscape

We expect competitors – especially in Asia and the Middle East – to gain increasing significance in the years ahead. Furthermore, we predict that many producers in countries rich in raw materials will expand their value chains. We counter this risk through active portfolio management. We exit markets in which we see only limited possibilities to stand out from competitors in the long term.

We continuously improve our processes in order to remain competitive through our operational excellence. Our strategic excellence program, DrivE, also contributes to this aim. Starting at the end of 2018, we expect this program to contribute around €1 billion in earnings each year compared with baseline 2015.

In order to achieve lasting profitable growth, tap into new market segments and customers, and make our customers more successful, our research and business focus is on highly innovative business areas, some of which we enter into through strategic cooperative partnerships.

Innovation

The trend toward more sustainability in our customer industries continues. We want to use innovations to take advantage of the resulting opportunities. In the long term, we aim to continue increasing sales and earnings with new and improved products.

The central research areas Process Research & Chemical Engineering, Advanced Materials & Systems Research and Bioscience Research serve as global platforms headquartered in our key regions: Europe, Asia Pacific and North America. Together with the development units in our operating divisions, they form the core of the global Know-How Verbund. Stronger regional presence opens up new opportunities to participate in local innovation processes and gain access to local talent. We optimize the effectiveness and efficiency of our research activities through our global Know-How Verbund.

Research activities funded by the BASF Group promote the targeted development and enhancement of key technologies as well as the establishment of new business areas. Focus areas in research are determined based on their strategic relevance for BASF, above and beyond existing business areas.

We also address the risk of the technical or economic failure of research and development projects by maintaining a balanced and comprehensive project portfolio, as well as through professional, milestone-based project management.

The opportunities of digitalization – especially in production, for new business models and in research and development – are being assessed in specific project organizations. To take advantage of these, measures are being implemented together with the divisions and the functional and research units. The risks of digitalization are managed in the divisions and functional units.

The trust of customers and consumers is essential for the successful introduction of new technologies. That is why we enter into dialog with our stakeholders at an early stage of development.

For more information on innovation and digitalization, see pages 35 to 39

Portfolio development through investments

Our decisions on the type, size and locations of our investment projects are based on assumptions related to the longterm development of markets, margins and costs, as well as raw material availability and country, currency and technology risks. Opportunities and risks arise from potential deviations in actual developments from our assumptions.

We expect the increase in chemical production in emerging markets in the coming years to remain above the global average. This will create opportunities that we want to exploit by expanding our local presence.

We are continuing to evaluate an investment in a world-scale methane-to-propylene complex on the U.S. Gulf Coast and conduct regular assessments, taking into account raw materials prices and the relevant market conditions.

For more information on our investment plans, see page 124

Acquisitions

In the future, we will continue to refine our portfolio through acquisitions that promise above-average profitable growth, are innovation-driven, offer added value for our customers and reduce the cyclicality of our earnings.

The evaluation of opportunities and risks plays a significant role during the assessment of acquisition targets. A detailed analysis and quantification is conducted as part of due diligence. Examples of risks include increased staff turnover, delayed realization of synergies, or the assumption of obligations that were not precisely quantifiable in advance. If our expectations in this regard are not fulfilled, risks could arise, such as the need to impair intangible assets; however, there could also be opportunities, for example, from additional synergies.

For more information on our acquisitions, see page 40 onward

Recruitment and long-term retention of qualified employees

BASF is adjusting in the medium and long term to the rising challenge of gaining skilled employees due to demographic changes, especially in North America and Europe. As a result, there is an increased risk that job vacancies may not be filled with suitable applicants, or only after a delay. We address these risks with measures to integrate diversity, employee and leadership development, and intensified employer branding. At local level, demographic management includes succession planning, knowledge management and offerings to improve the balance between personal and professional life and promote healthy living. This increases BASF's appeal as an employer and retains our employees in the long term.

For more information on the individual initiatives and our goals, see page 42 onward

Sustainability

As part of our sustainability management, we also assess the opportunities and risks associated with the topics we have identified as material. These also include the increasing internalization of external effects, through which positive and negative earnings contributions from companies' activities that were previously borne by the community are attributed to these companies.

For example, the material topic "energy and climate" is analyzed to enable us to identify, assess and manage climate-related risks and opportunities. For BASF as an energy-intensive company, these arise particularly from regulatory changes, such as in carbon prices through emissions trading systems, taxes or energy legislation.

For more information on sustainability management and material topics for BASF, see page 29 onward

For more information on energy and climate protection, see page 104 onward

For more information on opportunities and risks from energy policies, see page 114

Economic environment in 2018

The global economy is expected to grow by 3.0% in 2018, about as fast as in 2017 (+3.1%). We expect economic momentum in the European Union (E.U.) to ease slightly. The United States will presumably grow at a slightly stronger rate. We anticipate a weakening of the high growth in China. This will probably negatively impact the Japanese economy as well. We forecast a continuation of the recovery already underway in Brazil and Russia. Global chemical production is forecast to grow by 3.4% in 2018, roughly at the same rate as in 2017 (+3.5%). For 2018, we predict an average price of $65 per barrel for Brent crude oil and an exchange rate of $1.20 per euro.

Trends in the global economy in 2018

- Slightly slower growth forecast for the E.U.
- Slightly stronger growth in the United States
- Growth moderation expected in China
- Continuation of recovery in Brazil and Russia

Growth in the **E.U.** is expected to slow slightly in 2018. Although the economy is in a cyclical upturn that is likely to continue in 2018, supported by low interest rates and moderate inflation, exports will be curbed by the comparatively strong euro and the weaker growth expected in Asia. We also anticipate a weakening of growth in the United Kingdom as uncertainty about the situation following the announced Brexit dampens investment and private consumers increasingly suffer from unclear labor market prospects and high inflation. Growth rates in the eastern E.U. countries are forecast to decline slightly after the strong upswing in the previous year. We expect the recovery in Russia to continue at roughly the same moderate pace as in 2017.

The **United States** should maintain its economic momentum, with slightly stronger growth compared with 2017. Early economic indicators point to a stable, positive consumer climate, which also reflects the strong labor market trend. Moderating effects will come from the financial market. Slowly rising interest rates should put more of a damper on consumer spending than in the previous year. By contrast, the corporate tax cut and the income tax reform passed in December 2017 will provide additional growth stimulus.

Outlook for gross domestic product 2018
(Real change compared with previous year)

World	**3.0%**
European Union	2.0%
United States	2.5%
Emerging markets of Asia	5.9%
Japan	1.2%
South America	2.0%

Trends in gross domestic product 2018–2020
(Average annual real change)

World	**2.9%**
European Union	1.7%
United States	2.3%
Emerging markets of Asia	5.7%
Japan	0.8%
South America	2.4%

In the **emerging markets of Asia**, we expect economic growth to remain robust but slightly below the prior-year level in 2018. China should report slower but still strong growth: Government stimuli for the economy will probably be weaker and the financial markets will generally be more strictly regulated to prevent a further rise in corporate and consumer debt. Conversely, we are seeing slightly stronger growth rates in India. Here, the dampening effects of the introduction of a new sales tax system will presumably taper off.

For **Japan**, we anticipate a slowdown in 2018 after a year of unexpectedly high growth. In particular, China's stimulating effect on Japanese exports is expected to weaken. However, the weak yen and the expansive fiscal policy will shore up the Japanese economy, meaning that the moderate upward trend is expected to continue.

We anticipate a continuation of the slow economic recovery in **South America**. In Brazil, demand for investment goods and durable consumer goods will presumably pick up slowly and export demand will develop solidly. We expect the Argentinian government to continue its path of reforms. Declining inflation rates should strengthen private consumption, and rising demand should also improve the investment climate.

Outlook for key customer industries

- Stable growth expected in global industrial production for 2018

We expect global industrial production in 2018 to grow at more or less the same rate as in the previous year (2017: +3.3%; 2018: +3.2%). The trends in the regions are mixed: Growth in the E.U. and Japan will probably weaken compared with the high level of 2017. By contrast, we anticipate a slight upturn in the United States. In the emerging markets of Asia, we assume that China will experience a cooldown but India will return to stronger industrial growth. In South America, the recovery in industrial production that emerged over the course of 2017 is expected to continue.

The **transportation industry** should post stable growth overall, roughly on the same level as in 2017. We continue to anticipate modest growth rates for the automotive industry in western Europe, but stronger and stable growth of around 3% for production in the transportation industry as a whole. Continued robust growth is forecast for the eastern European automotive market, supported by a dynamic recovery of production in Russia. Automotive production in North America should also once again see slight growth in 2018 after the decline in the previous year. One reason is the anticipated replacement of the vehicles that were destroyed in the hurricanes in fall 2017. We expect growth in Asia to slow, mainly as a result of the phasing out of sales tax incentives in China at the end of 2017. By contrast, the automotive industry in South America is expected to continue its recovery.

In the **energy and raw materials sector**, we anticipate stronger production growth for 2018. The increase in prices for energy raw materials will drive forward the production of unconventional oil and gas deposits in the United States. In the Middle East, on the other hand, we only anticipate a slight rise in growth rates due to the ongoing production cuts imposed by the OPEC countries. We predict slight growth in South America for 2018 following the decline in the previous year. In Europe, too, we expect energy and raw material production to expand at a slightly higher rate.

Global growth in the **construction industry** should increase slightly in 2018. However, we expect slightly weaker growth overall in western Europe: The construction industry in Germany is stretched to its capacity limits, government subsidy programs in France are coming to an end and the announced Brexit is negatively impacting construction demand in the United Kingdom. We anticipate robust growth in demand in the eastern European construction sector, which is also supported by a gradual recovery in Russia. For the United States, we forecast low growth in the construction industry, but higher than the weak prior-year level; in the infrastructure segment, we once again expect a slight increase following a significant decline in the previous year. In China and the other Asian emerging markets, we predict largely stable growth rates in the construction industry. As in previous years, the highest growth rates will likely be in infrastructure investment. For South America, we predict a weak increase in 2018 for the first time after four years of declining construction activity. Given a background of continuing weak oil and gas prices, the construction industry in the Middle East should see moderate growth.

We expect **consumer goods** production to pick up slightly in 2018 in line with the positive trajectory of the world economy and rising purchasing power of consumers. Growth in western and eastern Europe should weaken somewhat after an exceptionally strong previous year. We expect moderate growth in production in North and South America in 2018. In Asia, the world's largest market for consumer goods, we forecast stable growth roughly at the high prior-year level.

The **electronics industry** benefits from increasing digitalization and automation. Following strong growth in the previous year, particularly in Asia, growth rates should remain high but ease slightly in 2018. The industry will see different trends in the main production countries: We still anticipate double-digit growth rates in the emerging economies of Asia despite a slight slowdown. The downturn is expected to be more pronounced in Japan. Growth in the United States should increase slightly.

We expect slightly lower growth in the **health and nutrition** sector for 2018 after a comparatively strong performance in 2017. The weaker global growth rate is primarily attributable to Asia, where momentum will be strong but slightly slower. In Europe, too, we anticipate a slight decline in growth, while slightly stronger increases are forecast for North and South America.

Agricultural production should see stable growth in 2018 on a level with the long-term average. That being said, we expect very different regional trends. We anticipate slightly stronger growth at a low level in Europe, while production in North America should expand at a higher rate after the weather-related losses in the previous year. Continued growth is forecast for South America; however, this is expected to be weaker than the rates seen in 2017. The agricultural industry in Asia should expand at roughly the same robust level of the previous year.

Outlook for the chemical industry

- **Global growth in chemical industry roughly at level of previous year**

Global chemical production (excluding pharmaceuticals) is expected to grow by 3.4% in 2018, roughly on a level with 2017 (+3.5%). We anticipate a slightly weaker expansion rate in the advanced economies (2017: +3.7%; 2018: +2.4%). Growth in the emerging markets should pick up slightly (2017: +3.4%; 2018: +4.2%).

The development of the world's largest chemical market – **China** – has a significant impact on the global growth rate. We again expect slightly stronger growth here after a comparatively weak figure in 2017. As a result, China will presumably once again account for almost two percentage points of global chemical growth. Growth rates in the remaining emerging markets of Asia should remain stable.

We expect growth in the **E.U.** to remain above average in 2018, but slower than in 2017. Domestic demand in key customer industries will probably be slightly weaker following strong industrial growth in the previous year. We also anticipate weaker export demand from Asia.

By contrast, chemical growth in the **United States** should pick up. One reason for the higher growth forecast for 2018 is the production outages in the U.S. caused by Hurricane Harvey in fall 2017. In addition, new production capacities will reach the market in 2018, which will presumably increase exports as well.

We expect chemical growth in **Japan** to level off after unusually strong, largely export-driven growth in the previous year.

In **South America**, we assume that the upturn in the chemical industry will continue in line with the overall economic recovery.

Outlook for chemical production 2018 (excl. pharmaceuticals)
(Real change compared with previous year)

World	**3.4%**
European Union	2.2%
United States	3.2%
Emerging markets of Asia	4.6%
Japan	2.5%
South America	2.0%

Trends in chemical production 2018–2020 (excl. pharmaceuticals)
(Average annual real change)

World	**3.4%**
European Union	1.5%
United States	3.2%
Emerging markets of Asia	4.9%
Japan	1.0%
South America	2.4%

Outlook 2018

For 2018, we expect the global economy and chemical production to grow at roughly the same pace as in 2017. We assume an average price of $65 for a barrel of Brent blend crude oil and an exchange rate of $1.20 per euro. In this environment, we aim to continue to grow profitably and slightly increase the BASF Group's sales and income from operations (EBIT) before special items in 2018.[1] This forecast takes into account the agreed transactions with Bayer and Solvay. In contrast, it does not include the intended merger of our oil and gas activities with the business of DEA Deutsche Erdoel AG and its subsidiaries.

For more information on our expectations for the economic environment in 2018, see page 119 onward

Sales and earnings forecast for the BASF Group

- Slight sales growth, mainly from higher volumes
- EBIT before special items expected to be up slightly on 2017 level

Our forecast for 2018 includes the agreed acquisition of significant parts of **Bayer's seed and non-selective herbicide businesses**, which is expected to close in the first half of 2018. Based on the timing of the acquisition, the seasonality of the businesses to be taken over and the anticipated integration costs, this is likely to have a positive impact on sales and a negative impact on earnings for the Agricultural Solutions segment and the BASF Group in 2018. This outlook also includes the intended acquisition of **Solvay's integrated polyamide business** in the third quarter of 2018. However, we currently do not expect this transaction to have any material effect on sales and earnings for 2018.

We anticipate slightly higher BASF Group **sales** in 2018, largely as a result of volumes growth. We expect considerable sales growth in the Agricultural Solutions and Oil & Gas segments, and slightly higher sales in the Functional Materials & Solutions and Performance Products segments and in Other. Our planning for the Chemicals segment assumes slightly lower sales due to price factors.

EBIT before special items is expected to be up slightly on the 2017 level. This will mainly be driven by significantly higher contributions from the Performance Products, Functional Materials & Solutions and Oil & Gas segments. We are forecasting a slight improvement in the earnings generated by Other. After a strong result in 2017, we expect considerably lower EBIT before special items in the Chemicals segment, primarily as a result of lower margins. We anticipate a slight decrease in the Agricultural Solutions segment: The agreed transaction with Bayer is likely to have a negative effect on earnings in 2018. Excluding this acquisition, we would expect the segment to record slight growth in EBIT before special items.

EBIT for the BASF Group is forecast to decline slightly in 2018. We anticipate special charges in the form of integration costs in connection with the agreed acquisitions. In contrast, the Performance Products and Oil & Gas segments in particular recorded special income in 2017. EBIT in the Chemicals and Agricultural Solutions segments is expected to be considerably below the 2017 figure. We are forecasting slightly higher EBIT for the Performance Products and Oil & Gas segments and Other, and considerable growth in the Functional Materials & Solutions segment.

We aim to once again earn a significant premium on our cost of capital in 2018. However, compared with the previous year, the BASF Group's **EBIT after cost of capital** will decrease considerably. This will mainly be due to lower EBIT as well as the additional cost of capital from the planned acquisitions. In the Chemicals and Agricultural Solutions segments, we anticipate a considerable decrease in EBIT after cost of capital, and a considerable increase in the Performance Products, Functional Materials & Solutions and Oil & Gas segments.

The intended merger of our oil and gas activities with the business of DEA Deutsche Erdoel AG and its subsidiaries is not taken into account in this outlook. On signature of the final transaction agreements, the Oil & Gas segment's earnings would no longer be included in sales and EBIT for the BASF Group – retroactively as of January 1, 2018 and with the prior-year figures restated. Rather, this would be presented in the income before minority interests of the BASF Group as a separate item, income from discontinued operations. From the transaction closing date, we would presumably account for BASF's share of income generated by the joint venture – Wintershall DEA – using the equity method and include this in EBIT for the BASF Group. The gain from the change from full consolidation to the equity method would be shown in income from discontinued operations.

The significant risks and opportunities that could affect our forecast are described on pages 111 to 118.

[1] For sales, "slight" represents a change of 1–5%, while "considerable" applies to changes of 6% and higher. "At prior-year level" indicates no change (+/–0 %). For earnings, "slight" means a change of 1–10%, while "considerable" is used for changes of 11% and higher. "At prior-year level" indicates no change (+/–0 %).

Forecast by segment[1] (million €)

	Sales		Income from operations (EBIT) before special items	
	2017	Forecast 2018	2017	Forecast 2018
Chemicals	16,331	slight decline	4,233	considerable decline
Performance Products	16,217	slight increase	1,416	considerable increase
Functional Materials & Solutions	20,745	slight increase	1,617	considerable increase
Agricultural Solutions	5,696	considerable increase	1,033	slight decline[2]
Oil & Gas	3,244	considerable increase	793	considerable increase
Other	2,242	slight increase	(764)	slight increase
BASF Group	64,475	**slight increase**	8,328	**slight increase**

1 For sales, "slight" represents a change of 1–5%, while "considerable" applies to changes of 6% and higher. "At prior-year level" indicates no change (+/–0 %). For earnings, "slight" means a change of 1–10%, while "considerable" is used for changes of 11% and higher. "At prior-year level" indicates no change (+/–0 %).

2 Excluding the agreed transaction with Bayer, we expect a slight increase in EBIT before special items in the Agricultural Solutions segment.

Sales and earnings forecast for the segments

Despite the planned volumes growth, sales in the **Chemicals** segment are expected to decline slightly in 2018 due to price factors. Overall, we anticipate lower sales prices in the isocyanates business as a result of additional capacities, especially in the Middle East and Asia, which will increase competitive pressure. EBIT before special items will presumably be considerably below the high 2017 level. The earnings contribution from higher sales volumes is not expected to compensate for the lower margins in the isocyanates business in particular.

In the **Performance Products** segment, we expect sales to be up slightly on the prior-year level in 2018. We plan to increase sales through volumes growth in the Dispersions & Pigments, Care Chemicals and Performance Chemicals divisions and are forecasting higher average prices overall. Sales will be dampened by the absence of the leather chemicals business, which was transferred to the Stahl group at the end of the third quarter of 2017, as well as the anticipated negative currency effects and the limited product availability of citral-based flavors and fragrances as well as vitamins. We are aiming for a considerable year-on-year increase in EBIT before special items with higher volumes and margins as well as strict cost discipline.

Sales in the **Functional Materials & Solutions** segment will presumably rise slightly in 2018. Higher overall prices and volumes growth in all divisions – due to factors such as the startup of new production capacities – should contribute to this. Our forecast is supported by the expectation of continuing good demand from the automotive and construction industries. Despite the continued challenging market environment and higher fixed costs from new plants, we anticipate a considerable increase in EBIT before special items, mainly as a result of volumes growth and higher margins.

In the **Agricultural Solutions** segment, our aim is to exploit positive market momentum, especially in the emerging markets, significantly increase sales volumes with innovative solutions and raise our prices. This should more than offset the expected negative currency effects. In this way, we plan to considerably increase sales. Excluding the agreed transaction with Bayer, we would expect a slight improvement in earnings, mainly from the planned volumes growth and innovative new products amid continued strict cost management. However, negative earnings effects from the timing of the acquisition, the seasonality of the businesses to be taken over and the anticipated integration costs will probably lead to a slight decline in EBIT before special items.

Our forecast for the **Oil & Gas** segment does not take into account the intended merger of our oil and gas activities with the business of DEA Deutsche Erdoel AG and its subsidiaries. Planning for the 2018 business year is based on an average price for Brent blend crude oil of $65 per barrel. Gas prices are likely to be on a level with 2017. We are forecasting considerable growth in sales and EBIT before special items in the Oil & Gas segment, driven by positive price effects and the start of production at fields in Norway in particular.

Sales in **Other** are expected to increase slightly in 2018, primarily as a result of higher sales from raw materials trading. We anticipate a slight improvement in EBIT before special items as against 2017.

Investments[1]

■ **Investments of around €4.0 billion planned for 2018**

Our investments in 2017 focused on the Chemicals, Functional Materials & Solutions and Oil & Gas segments. For example, we started up the expanded compounding plant for Ultramid® and Ultradur® in Schwarzheide, Germany, completed construction of the chemical catalysts plant in Shanghai, China, and invested in field development projects in Argentina, Norway and Russia.

We are planning total capital expenditures of around €4.0 billion for the BASF Group in 2018. For the period from 2018 to 2022, we have planned capital expenditures totaling €19.0 billion. The investment volume in the coming years is thus in line with the planning period 2017 to 2021. Projects currently being planned or underway include:

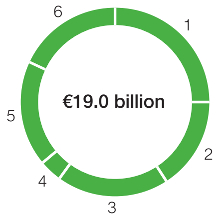
Capital expenditures: Selected projects

Location	Project
Geismar, Louisiana	Capacity expansion: MDI plant
Ludwigshafen, Germany	Replacement: acetylene plant
	Construction: production plant for vitamin A
	Construction: production plant for ibuprofen
Shanghai, China	Construction: production plant for plastic additives
Środa Śląska, Poland	Capacity expansion: plant for emissions catalysts

In the Oil & Gas segment, our currently planned investments of around €3.5 billion between 2018 and 2022 will focus mainly on the development of proven gas and oil deposits in Argentina, Norway and Russia. The actual expenses are also dependent on oil and gas price developments and will be adjusted as necessary. If the merger of our oil and gas activities with the business of DEA Deutsche Erdoel AG and its subsidiaries is consummated as intended, these expenditures will no longer be reported as investments by the BASF Group.

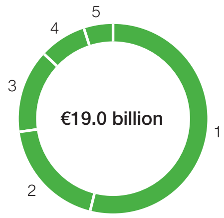
Investments in property, plant and equipment by segment, 2018–2022

1	Chemicals	25%
2	Performance Products	16%
3	Functional Materials & Solutions	19%
4	Agricultural Solutions	4%
5	Oil & Gas	18%
6	Other (infrastructure, R&D)	18%



Investments in property, plant and equipment by region, 2018–2022

1	Europe	54%
2	North America	19%
3	Asia Pacific	14%
4	South America, Africa, Middle East	8%
5	Alternative sites currently being investigated	5%



Dividends

We stand by our ambitious dividend policy and offer our shareholders an attractive dividend yield. We continue to aim to increase our dividend each year, or at least maintain it at the previous year's level.

Information on the proposed dividend can be found on page 15

Financing

In 2018, we expect cash outflows in the equivalent amount of around €1.8 billion from the scheduled repayment of bonds. To refinance maturing bonds and to optimize our maturity profile, we continue to have medium to long-term corporate bonds and our U.S. dollar commercial paper program at our disposal.

Information on our financing policies can be found on page 58

Events after the reporting period

There have been no significant changes in the company's situation or market environment since the beginning of the 2018 business year.

[1] Excluding additions to property, plant and equipment resulting from acquisitions, capitalized exploration, restoration obligations and IT investments