W0. Introduction

W0.1
At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 115,000 employees at the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized in five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas. BASF generated sales of more than € 64.5 billion in 2017. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (AN). Further information on BASF is available online on our homepage, www.basf.com.

BASF has subsidiaries in more than eighty countries and supplies products to a large number of business partners in nearly every part of the world. We operate 6 Verbund sites and 347 additional production sites worldwide. Our Verbund site in Ludwigshafen is the largest integrated chemical complex in the world that belongs to a single company.

The company purpose “we create chemistry for a sustainable future” has embedded sustainability even further within the company. Within the journey of contributing to a more sustainable future, water was identified as a key topic for BASF. Increasing world population, the change in consumer behaviour and increasing demand for higher standards of living all characterize the importance of water stewardship.

BASF is also committed to the Sustainable Development Goals of the United Nations, which comprise the goal to ensure availability and sustainable management of water and sanitation for all (SDG 6 – Clean Water and Sanitation).

To promote water stewardship and to increase BASF’s resilience towards this resource we pursue the goal of establishing sustainable water management at all sites in water stress areas and at all Verbund sites by 2025 by applying the European Water Stewardship (EWS) standard. After introducing the standard at our European sites in 2013, we started the global implementation and in 2017 we introduced the standard at three sites in China and two sites in North-America. In 2015, external audit awarded us with the gold-level certification for our extensive application of the EWS standard and water management at the production site in Tarragona, Spain. Our Verbund site in Ludwigshafen received the EWS standard gold-level certification in 2014.

In order to prevent unanticipated emissions and the pollution of surface or groundwater, we create water protection strategies for our production sites as part of the Responsible Care initiative. The wastewater protection plans involve evaluating wastewater in terms of risk and drawing up suitable monitoring approaches. We use audits to check that these measures are being implemented and complied with.

Based on the findings of IPCC AR5 (and subsequent studies e.g. Aqueduct Water Risk Atlas by WRI), we analyzed all BASF Verbund sites worldwide in terms of future water stress. Consequential, we do not expect climate change to have a significant impact on the water supply at these sites in the near future.

We use our eco-efficiency analysis to evaluate products and processes with respect to their emissions to water and their consumptive water use.

We have just recently implemented the AWARE (Available WAter REremaining) Water Assessment methodology into our eco-efficiency analysis. The Aware Methodology is the WULCA consensus characterization model for water scarcity footprints: assessing impacts of water consumption based on available water remaining (AWARE). BASF assesses its value to society - economic, social and environmental benefits and costs - in monetary terms using PwC's TIMM method. The scope includes the supply chain (tier 1 to tier n), own operations and customer industries. With regard to water, emissions and consumption are integrated.

Using the Sustainable Solution Steering® method BASF conducted sustainability assessments of its entire product portfolio. Products and solutions related to € 2.3 billion in sales make a particular contribution to water improvements in the value chain.

With these initiatives and projects, among others, BASF is able to use its expertise and innovation to find sustainable solutions to growing water related issues, such as scarcity or quality, worldwide.

Forward-Looking Statements:

This document may contain forward-looking statements. These statements are based on current estimates and projections and currently available information. Future statements are not guarantees of the future developments and results outlined therein. These are dependent on a number of factors; they involve various risks and uncertainties; and they are based on assumptions that may not prove to be accurate. We do not assume any obligation to update the forward-looking statements contained in this report.
(W-CH0.1a) Which activities in the chemical sector does your organization engage in?

- Bulk organic chemicals
- Bulk inorganic chemicals
- Specialty organic chemicals
- Specialty inorganic chemicals

(W0.2) State the start and end date of the year for which you are reporting data.

<table>
<thead>
<tr>
<th>Reporting year</th>
<th>Start date</th>
<th>End date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January 1 2017</td>
<td>December 31 2017</td>
</tr>
</tbody>
</table>

(W0.3) Select the countries/regions for which you will be supplying data.

- Algeria
- Argentina
- Australia
- Austria
- Azerbaijan
- Bangladesh
- Belarus
- Belgium
- Bolivia (Plurinational State of)
- Brazil
- Bulgaria
- Canada
- Chile
- China
- China, Hong Kong Special Administrative Region
- Colombia
- Costa Rica
- Côte d'Ivoire
- Croatia
- Czechia
- Denmark
- Dominican Republic
- Ecuador
- Egypt
- El Salvador
- Ethiopia
- Finland
- France
- Germany
- Greece
- Guatemala
- Hungary
- India
- Indonesia
- Iran (Islamic Republic of)
- Ireland
- Israel
W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.
EUR
W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Other, please specify (Production sites; based on equity share)

Other: BASF Group’s scope of consolidation for its financial reporting comprises BASF SE, with its headquarters in Ludwigshafen, Germany, and all of its fully consolidated material subsidiaries. Joint operations are proportionally consolidated. Shares in joint ventures and associated companies are accounted for, if material, using the equity method in the BASF Group Consolidated Financial Statements.

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Yes

W0.6a

(W0.6a) Please report the exclusions.

<table>
<thead>
<tr>
<th>Exclusion</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative sites (e.g. sales offices)</td>
<td>BASF only reports water inputs/outputs for its production sites. The water inputs/outputs from its various administrative sites are not collected since their contribution to BASF’s total water inputs/outputs is not significant (&lt;0.1%)</td>
</tr>
<tr>
<td>Associated/affiliated companies over which BASF has significant influence but does not have financial control (so-called B-companies) or from subsidiaries that are considered to be immaterial from a BASF point of view (so-called C-companies)</td>
<td>The contribution of the water inputs/outputs from BASF’s B- and C- companies to BASF’s total water inputs/outputs is not significant (&lt; 2%). Thus, they are not collected and reported.</td>
</tr>
</tbody>
</table>

W1. Current state

W1.1
(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

<table>
<thead>
<tr>
<th>Direct use importance rating</th>
<th>Indirect use importance rating</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient amounts of good quality freshwater available for use</td>
<td>Vital</td>
<td>Important</td>
</tr>
<tr>
<td>Sufficient amounts of recycled, brackish and/or produced water available for use</td>
<td>Vital</td>
<td>Important</td>
</tr>
</tbody>
</table>

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

<table>
<thead>
<tr>
<th>% of sites/facilities/operations</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water withdrawals – total volumes</td>
<td>100%</td>
</tr>
<tr>
<td>Water withdrawals – volumes from water stressed areas</td>
<td>100%</td>
</tr>
<tr>
<td>Water withdrawals – volumes by source</td>
<td>100%</td>
</tr>
<tr>
<td>Produced water associated with your metals &amp; mining sector activities - total volumes</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Produced water associated with your oil &amp; gas sector activities - total volumes</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Water withdrawals quality</td>
<td>76-99</td>
</tr>
<tr>
<td>Water discharges – total volumes</td>
<td>BASF collects data on water supply, water use, and water discharge at site level in a global database, named Responsible Care® Database (RCDB). Data entry and maintenance have precise reporting requirements. Training sessions are conducted to ensure that the same data standards are implemented around the world. We publicly report the information for the entire company in the annual BASF report and the database is audited externally. 100% of BASF production sites are monitored for total volumes of water discharges. Data in the RCDB is updated every six months for larger sites, and annually for smaller sites.</td>
</tr>
<tr>
<td>Water discharges – volumes by destination</td>
<td>BASF collects data on water supply, water use, and water discharge at site level in a global database, named Responsible Care® Database (RCDB). Data entry and maintenance have precise reporting requirements. Training sessions are conducted to ensure that the same data standards are implemented around the world. We publicly report the information for the entire company in the annual BASF report and the database is audited externally. 100% of BASF production sites are monitored for volumes of water discharges by destination. Data in the RCDB is updated every six months for larger sites, and annually for smaller sites.</td>
</tr>
<tr>
<td>Water discharges – volumes by treatment method</td>
<td>BASF collects data on water supply, water use, and water discharge at site level in a global database, named Responsible Care® Database (RCDB). Data entry and maintenance have precise reporting requirements. Training sessions are conducted to ensure that the same data standards are implemented around the world. We publicly report the information for the entire company in the annual BASF report and the database is audited externally. 100% of BASF production sites are monitored for volumes of water discharges by treatment method. Data in the RCDB is updated every six months for larger sites, and annually for smaller sites.</td>
</tr>
<tr>
<td>Water discharge quality – by standard effluent parameters</td>
<td>BASF collects data on water supply, water use, and water discharge at site level in a global database, named Responsible Care® Database (RCDB). Data entry and maintenance have precise reporting requirements. Training sessions are conducted to ensure that the same data standards are implemented around the world. We publicly report the information for the entire company in the annual BASF report and the database is audited externally. 100% of BASF production sites are monitored for quality by standard effluent parameters. Data in the RCDB is updated every six months for larger sites, and annually for smaller sites.</td>
</tr>
<tr>
<td>Water discharge quality – temperature</td>
<td>BASF collects discharge temperature data on a local site level. It is not part of the Responsible Care® Database (RCDB), but carried out according to site specific processes and requirements. In some cases, we also monitor/calculate not only temperature amounts but also heat input to e.g. surface water bodies. Therefore, we assume coverage of 100% of relevant sites (i.e. all sites with discharges of cooling water), or a slightly lesser coverage if all sites are taken into account.</td>
</tr>
<tr>
<td>Water consumption – total volume</td>
<td>For the calculation on corporate level, we use the water balance data gathered through our Responsible Care® Database (RCDB). For the evaporation loss we assume 1.5% of the recirculated cooling water. We calculate a water consumption value at production site level individually for each site. 100% of BASF production sites are monitored for total volumes of water consumption. This calculation is updated annually.</td>
</tr>
<tr>
<td>Water recycled/reused</td>
<td>BASF collects data on water supply, water use, and water discharge at site level in a global database, named Responsible Care® Database (RCDB). Data entry and maintenance have precise reporting requirements. Training sessions are conducted to ensure that the same data standards are implemented around the world. We publicly report the information for the entire company in the annual BASF report and the database is audited externally. 100% of BASF production sites are monitored for water recycled and reused. Data in the RCDB is updated every six months for larger sites, and annually for smaller sites.</td>
</tr>
</tbody>
</table>

**W1.2b**
(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

<table>
<thead>
<tr>
<th></th>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total withdrawals</td>
<td>18,160,000</td>
<td>Higher</td>
<td>Total amount of water withdrawn was somewhat higher due to increased production, plus additional facilities that became operational at our Ludwigshafen site. Future trends: At this time, we expect no significant changes in total water withdrawal, as core groups of procured materials will remain in place. However, further extension of our facilities or a future change in product portfolio could alter this status.</td>
</tr>
<tr>
<td>Total discharges</td>
<td>17,660,000</td>
<td>Higher</td>
<td>Total amount of water discharged was somewhat higher due to increased production, plus additional facilities that became operational at our Ludwigshafen site. Future trends: At this time, we expect no significant changes in total water discharges, as core groups of procured materials will remain in place. However, higher production, further extension of our facilities or a future change in product portfolio could alter this status.</td>
</tr>
<tr>
<td>Total consumption</td>
<td>13,600,000</td>
<td>About the same</td>
<td>Water consumption is defined as “the amount of water that is used but not returned to its original source” (definition ISO 14046). For the evaporation loss we assume 1.5% of the recirculated cooling water. Calculation of water in product is affected on various other data points, including internal re-use, leading to a possible overestimation. Therefore, the figures do not balance using basic calculation “Withdrawals = Consumption + discharges” in this case. Future trends: At this time, we expect no significant changes in total water consumption, as core groups of procured materials will remain in place. However, higher production, further extension of our facilities or a future change in product portfolio could alter this status.</td>
</tr>
</tbody>
</table>

(W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

<table>
<thead>
<tr>
<th>% withdrawn from stressed areas</th>
<th>Comparison with previous reporting year</th>
<th>Identification tool</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>1.03</td>
<td>About the same</td>
<td>All our sites have to report their water withdrawal (see question W 1.2). We used a tool developed by the ETH Zurich (Pfister et al., 2009) to assess which of our sites are located in water stress areas. These are defined as regions where 60% or more of the available water is used by industry, household and agriculture. The tool thus calculates a water stress index (WSI) following a logistic function between 0.01 to 1, taking into account the local freshwater withdrawal-to-availability ratio with additional adjustments. The data for the WSI values per watershed is available. Based on the results, we can filter water data to show only withdrawals for these sites. All the identified sites have to assess the sustainability of their water supply (BASF Global Goal). In 2016 water withdrawal by the sites in water stress areas was 1.11% of BASF’s total withdrawal. The difference is not significant and may be affected by measurement constraints.</td>
</tr>
</tbody>
</table>

(W1.2h)
Provide total water withdrawal data by source.

<table>
<thead>
<tr>
<th>Source</th>
<th>Relevance</th>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh surface water, including rainwater, water from wetlands, rivers, and lakes</td>
<td>Relevant</td>
<td>1472000</td>
<td>Higher</td>
<td>Fresh surface water is the most important source for water supply. Most of the water is used for once-through cooling at our site in Ludwigshafen. The water is taken from the river and is given back to it after use without having contact to chemicals. The increase in freshwater withdrawal was mainly for increased cooling purposes due to increased production at our Ludwigshafen site (last year: 1360000 megaliters). Future trends: Since water withdrawal in our operations is affected by production output due to cooling water use, it may increase to a certain extent with growing production.</td>
</tr>
<tr>
<td>Brackish surface water/seawater</td>
<td>Relevant</td>
<td>258000</td>
<td>Higher</td>
<td>Brackish water has a relevant share within BASF's overall water withdrawals. Most of the brackish water is withdrawn and discharged at our site in Antwerp, located near the sea. The brackish water is taken from the harbor and discharged back after use in a recirculating cooling system. The increase in brackish water withdrawal was mainly for increased cooling purposes (last year: 200000 megaliters). Future trends: Since water withdrawal in our operations is affected by production output due to cooling water use, it may increase to a certain extent with growing production.</td>
</tr>
<tr>
<td>Groundwater – renewable</td>
<td>Relevant</td>
<td>65000</td>
<td>About the same</td>
<td>Groundwater water has a rather small, but relevant share within BASF’s overall water withdrawals, especially for higher quality water requirements. We do not yet distinguish between renewable and non-renewable groundwater supply in our BASF Responsible Care database, but most groundwater supply comes from renewable resources. The amount is roughly the same as last year, which was at 66000 megaliters. Future trends: At this time, we expect no significant changes in groundwater water withdrawal in our operations, as core groups of procured materials will remain in place. However, future shifts in the product portfolio could alter this status.</td>
</tr>
<tr>
<td>Groundwater – non-renewable</td>
<td>Not relevant</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>We do not yet distinguish between renewable and non-renewable groundwater supply in our BASF Responsible Care database, but most groundwater supply comes from renewable resources. Future trends: At this time, we expect no significant changes in ground water withdrawal in our indirect operations, as core groups of procured materials will remain in place. However, future shifts in the product portfolio could alter this status.</td>
</tr>
<tr>
<td>Produced water</td>
<td>Not relevant</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>Produced water is not a relevant withdrawal source for BASF, since water requirements can regularly be met using other, more accessible sources. The situation has not changed since 2017. Future trends: At this time, we expect no significant changes in withdrawal from produced water.</td>
</tr>
<tr>
<td>Third party sources</td>
<td>Relevant</td>
<td>21000</td>
<td>About the same</td>
<td>Third party sources is mainly drinking water (20000 megaliters). Wastewater from another organization accounts for about 1000 megaliters. This represents a rather small share of our overall withdrawals, but the relevance is constituted by the dependence on and interrelations with external stakeholders. The amount is virtually constant compared to the 2016 figures (21000 megaliters). Future trends: At this time, we expect no significant changes in withdrawal from third party sources regarding drinking water. The amount of wastewater from other organization is expected to increase.</td>
</tr>
</tbody>
</table>
(W1.2i) Provide total water discharge data by destination.

<table>
<thead>
<tr>
<th>Destination</th>
<th>Relevance</th>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh surface water</td>
<td>Relevant</td>
<td>1487000</td>
<td>Higher</td>
<td>Fresh surface water is the most important source for water supply. Most of the water is used for once-through cooling at our site in Ludwigshafen. The water is taken from the river and is given back to it after use without having contact to chemicals. The increase in discharge was mainly for increased cooling purposes due to increased production at our Ludwigshafen site (last year: 1428000 megaliters). Future trends: Since water discharge in our operations is affected by production output due to cooling water use, it may increase to a certain extent with growing production.</td>
</tr>
<tr>
<td>Brackish surface water/seawater</td>
<td>Relevant</td>
<td>250000</td>
<td>Higher</td>
<td>Some sites are located nearby the coast and brackish water or the sea is the destination for discharge. The higher discharge into brackish water is the result of higher cooling water discharge at the site in Antwerp (last year: 187000 megaliters). Future trends: Since water discharge in our operations is affected by production output due to cooling water use, it may increase to a certain extent with growing production.</td>
</tr>
<tr>
<td>Groundwater</td>
<td>Relevant</td>
<td>10000</td>
<td>About the same</td>
<td>Water discharge via soil to water beneath the soil surface or water discharge into isolated geological formations. This represents a rather small share of our overall discharges, but the relevance is constituted by the potential ecological implications. The level is roughly equal to the previous year (11000 megaliters). Future trends: At this time, we expect no significant changes in discharges to groundwater.</td>
</tr>
<tr>
<td>Third-party destinations</td>
<td>Relevant</td>
<td>19000</td>
<td>About the same</td>
<td>Includes all water treated in a wastewater treatment plant (WWTP) which is not operated by BASF - municipal and private owned WWTP. This represents a rather small share of our overall discharges, but the relevance is constituted by the dependence on and interrelations with external stakeholders. The amount is within the same range as the 2016 figures (18000 megaliters). Future trends: At this time, we expect no significant changes in discharges to third party sources.</td>
</tr>
</tbody>
</table>

(W1.2j) What proportion of your total water use do you recycle or reuse?

<table>
<thead>
<tr>
<th>% recycled and reused</th>
<th>Comparison with previous reporting year</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1 51-75</td>
<td>About the same</td>
<td>Most of the water is recycled in cooling processes. In 2017 the percentage recycled or reused was 72% for total BASF. In 2016 the percentage recycled or reused was 74%. The insignificantly lower value for 2017 is mainly the result of the increased volume of once-through cooling water use in Ludwigshafen. Impact: The recycling of cooling water reduces the dependence on fresh water supply, however it is often combined with higher energy demand. In regions with high water availability like in Ludwigshafen, once-through cooling is more energy efficient and therefore the preferred process. In regions with low water availability recycling of cooling water is preferred, as this greatly reduces water withdrawals. Correspondingly the percentage recycled and reused in our sites located in water stress regions is considerably higher (99%) compared to total BASF. Future trends: At this time, we expect no significant changes in water reuse/recycling.</td>
</tr>
</tbody>
</table>

W-CH1.3

(W-CH1.3) Do you calculate water intensity for your activities in the chemical sector?

No, but we intend to do so within the next two years

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers
Yes, our customers or other value chain partners
(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number
1-25%

% of total procurement spend
26-50

Rationale for this coverage
Our suppliers are evaluated based on risk due to the size and scale of our supplier portfolio. We define relevant suppliers as those showing an elevated sustainability risk potential as identified by our risk matrices and our purchasers’ assessments. We also use further sources of information to identify relevant suppliers such as evaluations from Together for Sustainability (TfS). In 2017, we reviewed our evaluation methods for high-risk suppliers in order to focus even more closely on relevant issues. For example, we increased the weighting of industry- and country-specific risks in the evaluation. Incentivation: We work together in an open and transparent way to realize long-term benefits for both sides. In doing so, we create added value that goes above and beyond procurement alone, for example by developing solutions to target market-specific customer requirements together with our suppliers.

Impact of the engagement and measures of success
Information requested: In online assessments, suppliers are requested to report on water use, water management procedures, wastewater handling and the existence of a water policy. In TfS on-site audits, suppliers' internal water policies, reports, protection concepts for wastewater effluents, containment measures and water-related impact reduction practices are examined against standard procedures. Use of information: Suppliers' performance in these areas impacts their evaluation result. If we identify potential for improvement, we support suppliers in developing measures to fulfill our standards. We conduct another review according to a defined timeframe based on the sustainability risk measured. Measure of success: By 2020, we aim to evaluate the sustainability performance of 70% of BASF Group’s relevant suppliers and develop action plans for any necessary improvements. Proportion of relevant suppliers evaluated by the end of 2017 in accordance with the new risk approach was 56%.

Comment

W1.4b
(W1.4b) Provide details of any other water-related supplier engagement activity.

**Type of engagement**
Incentivizing for improved water management and stewardship

**Details of engagement**
Water management and stewardship is integrated into supplier evaluation processes

<table>
<thead>
<tr>
<th>% of suppliers by number</th>
<th>1-25</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of total procurement spend</td>
<td>26-50</td>
</tr>
</tbody>
</table>

**Rationale for the coverage of your engagement**
BASF is a founding member of the Together for Sustainability (TfS) initiative of leading chemical companies for global standardization of supplier evaluations and auditing. With the help of TfS, we obtain pertinent sustainability information of our raw material suppliers, providers of technical goods/services and logistics operations, with the goal to promote sustainable development in the supply chain. Our suppliers are evaluated based on risk due to the size and scale of our supplier portfolio. We define relevant suppliers as those showing an elevated sustainability risk potential as identified by our risk matrices and our purchasers' assessments. We also use further sources of information to identify relevant suppliers such as evaluations from TfS.

**Impact of the engagement and measures of success**
Beneficial outcomes: When selecting suppliers, buyers can access evaluation reports on the suppliers’ sustainability performance. Buyers are encouraged and trained to integrate available evaluation results into awarding processes and business decisions. Our third-party sustainability evaluations are also used to continuously monitor performance of existing suppliers. If we identify potential for improvement, we support suppliers in developing measures to fulfil our standards. We conduct another review according to a defined timeframe based on the sustainability risk measured. Measure of success: The sustainability evaluations provide a direct supplier performance indicator. This indicator can be positively influenced, e.g. by proving implementation of water management measures and policies, correct use of water and safe handling of wastewater, and by holding certifications like ISO 14001. 31% of BASF’s suppliers assessed online in 2017 hold an ISO 14001 certification.

**Comment**

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(W1.4c) What is your organization’s rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

I) We integrate sustainability information on BASF and its products in day-to-day business with our customers. **Method/strategy:** We use a range of sustainability tools to support interaction with customers: lifecycle assessment tools (Eco-Efficiency Analysis, SEEBALANCE®, AgBalanceTM) or tools for systematic analysis of the sustainability landscape in a value chain. Exact intensity and modus of interaction (e.g. one-to-one meetings, workshops, joint projects, seminars) is customer-dependent. **Prioritization:** Our engagement with customers essentially covers our entire customer base. Findings from our sustainability tools allow us to identify hot spots; prioritization for working with specific customers is primarily driven by our divisions based on opportunities. We have segmented our portfolio regarding contribution to sustainability (including reduction of water use), using the Sustainable Solution Steering® method. Products with substantial sustainability contribution in the value chain are classified as Accelerators. We measure success of these Accelerators by their percentage within the sales volume.

II) We also undertake sector specific engagements: For instance, via our Agricultural Products division, we engage with selected agricultural customers, networks, initiatives and also local water utilities. **Method and strategy:** Partnerships to jointly develop and disseminate best management practices to reduce water use and pollution. This can apply to optimized product use of e.g. herbicides, technical innovations like mulch films, optimized irrigation practices or alternative cultivation techniques like dry-seed rice.

**Prioritization:** Partner must be influencers in strategic value chains (crop-specific) and willing to cooperate with industry. **Success** is measured by number of touchpoints with value chain players (e.g. number of engaged farmers or advisors), as well as Agricultural Products product sales within these value chains.
W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?
No

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?
No

W3. Procedures

W-CH3.1

(W-CH3.1) How does your organization identify and classify potential water pollutants associated with its activities in the chemical sector that could have a detrimental impact on water ecosystems or human health?

The BASF Global environmental leadership team (GELT) is responsible to identify water pollutants on global scale.

Impacts considered: We identified and classified pollutants from global relevance, which are heavy metals (due to toxicity for humans and other organisms), and substances causing eutrophication (organic carbon, nitrogen, phosphorus), leading to reduced oxygen availability in water bodies and therefore can decimate water organisms and damage ecosystems. We continuously collect data of these pollutants in our Responsible Care Database globally.

Additional pollutants can be identified and classified depending on local regulation.

The BASF Global Requirement “Environmental Protection” requires that all production facilities make a Water Risk Assessment where applicable, including cooling water protection, firefighting water retention and management of spillages and leakages, process wastewater, surface water and steam condensate. The Risk Matrix Water depends on the frequency (probability) of an event and the severity of the impact.

On site level, environmental impact classes have to be determined including volume and eco-toxicological/toxicological properties of substances handled in the plant (H-phrases as in safety data sheets) and the local conditions including type of receiving water body (river, lake, sea), size and water flow conditions, ecology, use of water body (drinking water, fishing etc.). The site/plant manager is responsible for conducting a Water Risk Assessment and implement measures. The local EHS-Function contributes expert knowledge for conducting Water Risk Assessments.

Regarding our products, documentation and classification is following legal requirements and standards on international and market level, among others the UN Globally Harmonized System of Classification and Labelling of Chemicals.

The basic water-related impacts mentioned above (toxicity to humans and natural ecosystems, eutrophication) are also taken into account when assessing potential pollutants in the value chain. Additionally, specific potential impacts are assessed in relation to the context, e.g. in the case of herbicides in agricultural applications.

W-CH3.1a
(W-CH3.1a) Describe how your organization minimizes adverse impacts of potential water pollutants on water ecosystems or human health. Report up to ten potential pollutants associated with your activities in the chemical sector.

<table>
<thead>
<tr>
<th>Potential water pollutant</th>
<th>Value chain stage</th>
<th>Description of water pollutant and potential impacts</th>
<th>Management procedures</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen</td>
<td>Direct operations</td>
<td>High nitrogen concentrations in aquatic ecosystems raise the level of nutrients, can cause algal blooms and lead to oxygen depletion. This eutrophication process may pose a threat to biodiversity.</td>
<td>Compliance with effluent quality standards Other, please specify (Responsible Care Management System) ● Other, Continuous improvement is an objective of the Responsible Care Management System (RCMS)</td>
<td>The Responsible Care Management System (RCMS) triggers continuous improvements via many different measures in various production plants and improvements in the waste water treatment plants (WWTP); e.g. the site Guaratinguetá / BASF S.A. in Brazil increased the WWTP removal efficiency. Measurement of results: BASF measures total emission of nitrogen across the group. As a result of the management activities under the RCMS, BASF group reduced nitrogen emission from 4600 (t/a) in 2008 to 2800 (t/a) in 2017.</td>
</tr>
<tr>
<td>Heavy metals</td>
<td>Direct operations</td>
<td>Heavy metals can cause serious toxic effects on aquatic organisms, they can absorb heavy metals directly from the water or indirectly from food chains.</td>
<td>Measures to prevent spillage, leakage, and other, please specify (Responsible Care Management System) ● Other, Continuous improvement is an objective of the Responsible Care Management System (RCMS)</td>
<td>Waste water protection plans, in order to avoid unanticipated emissions in the environment, are introduced globally. We have constructed facilities for the improvement of wastewater analytics at our sites in Ludwigshafen, Germany, and Geismar, Louisiana, which help us to identify unanticipated emissions at an even earlier stage. Our site in Nanjing invested in a new WWTP for Cu/Zn removal. Measurement of results: BASF measures total emission of heavy metals across the group. BASF group reduced heavy metal emission from 34 (t/a) in 2008 to 25 (t/a) in 2017.</td>
</tr>
</tbody>
</table>

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.
Direct operations

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an enterprise risk management framework

Frequency of assessment
Annually

How far into the future are risks considered?
6 to 10 years

Type of tools and methods used
Tools on the market
Enterprise Risk Management
International methodologies
Databases

Tools and methods used
COSO Enterprise Risk Management Framework
Alliance for Water Stewardship Standard
Other, please specify (See box)

● Other: European Water Stewardship (EWS) standard ● Other: Water stress index/tool by Pfister et al. ● Other: Integrated Biodiversity Assessment Tool (IBAT) ● Other: Community Advisory Panels (CAPs)

Comment
Most relevant risk fields that cover water-related risks for direct operations within the Enterprise Risk Management are “Plant availability”, “Change in production quality”, “Change in production cost”, “Regulation”, “Ecology and environmental protection”. The risk management is informed by the tools listed.

Supply chain

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an enterprise risk management framework

Frequency of assessment
Six-monthly or more frequently

How far into the future are risks considered?
6 to 10 years

Type of tools and methods used
Tools on the market

Tools and methods used
Other, please specify (see box)

● Other: Risk matrix and Together for Sustainability evaluations; RepRisk; Procurement strategy template; investment decisions. ● Other: PwC TIMM Method

Comment
Other stages of the value chain

Coverage
Partial

Risk assessment procedure
Water risks are assessed as part of an enterprise risk management framework

Frequency of assessment
Annually

How far into the future are risks considered?
6 to 10 years

Type of tools and methods used
Tools on the market
International methodologies

Tools and methods used
Environmental Impact Assessment
Life Cycle Assessment
Other, please specify (Other: PwC TIMM Method, internal methods)

Comment
Product safety risks are considered as a dedicated risk field within the Enterprise Risk Management. This area covers potential harmful impacts by products on man and the environment. The risk management is informed by risk assessment for products, eco-efficiency and environmental impact analyses etc.

W3.3b
<table>
<thead>
<tr>
<th>Contextual Issues</th>
<th>Relevance &amp; Inclusion</th>
<th>Please Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water availability at a basin/catchment level</td>
<td>Relevant, always included</td>
<td>Having sufficient amounts of good quality freshwater available for use is vital for operations: We use water as a coolant, solvent and cleaning agent, as well as to produce our products. BASF collects data on water supply, water use, and water discharge at site level in a global database, named Responsible Care® Database (RCDB). It is filled with data from all BASF sites around the world. By applying the European Water Stewardship (EWS) standard (See “Other: EWS” in question W3.3) at all identified sites in water stress areas and all Verbund sites by 2025 BASF analyses water availability, quality and water management at local level. Currently, EWS Standards are implemented at 45.2% of sites (2019)</td>
</tr>
<tr>
<td>Water quality at a basin/catchment level</td>
<td>Relevant, sometimes included</td>
<td>Having sufficient amounts of good quality freshwater available for use is vital for operations: We use water as a coolant, solvent and cleaning agent, as well as to produce our products. BASF collects data on water supply, water use, and water discharge at site level in a global database, named Responsible Care® Database (RCDB). It is filled with data from all BASF sites around the world. By applying the European Water Stewardship (EWS) standard (See “Other: EWS” in question W3.3) at all sites in water stress areas and all Verbund sites by 2025 BASF analyses water availability, quality and water management at local level. Currently, EWS Standards are implemented at 45.2% of sites (2019)</td>
</tr>
<tr>
<td>Stakeholder conflicts concerning water resources at a basin/catchment level</td>
<td>Relevant, always included</td>
<td>In order to systematically detect the potential for stakeholder conflicts concerning water resources, we have identified all of our production sites within a water stressed area – defined as regions in which more than 60% of available water is used by industry, household and agriculture. In 2017, around 24% of our production sites were located in water stress areas. Around 1% of BASF's total water supply was abstracted from these sites. By 2025, we want to introduce sustainable water management at all sites in water stress areas and at our Verbund sites, covering 93% of BASF's entire water abstraction. We achieved 45.2% of this goal in 2017. In our sustainable water management, we consider the quantitative, qualitative and social aspects of water use. If a stakeholder is concerned about any issue, including issues related to water, he can turn to our compliance hotlines available in all countries we operate in. To be aware of conflicts we provide transparent communication about our activities and we are open to critical questions. As we recognize our particular responsibility toward our production sites’ neighbours, we discuss current issues with them e. g. in Community Advisory Panels (See “Other: Community Advisory Panels (CAPs) in question W3.3). A Community Advisory Panel (CAP) consists of a group of individuals who live near or around a chemical facility and who represent the fabric of their community. The CAP meets regularly to discuss common issues of mutual interest. It is a forum for open and honest dialog between citizens and plant management. By encouraging a two-way flow of information, we hope to enhance communication with the communities in which we operate. In 2016/2017 we developed new globally applicable requirements for CAPs. The minimum requirements are oriented towards grievance mechanisms outlined in the U.N. Guiding Principles for business and human rights</td>
</tr>
<tr>
<td>Implications of water on your key commodities/raw materials</td>
<td>Relevant, always included</td>
<td>BASF strives to increase its resilience to water risks along the value chain. Therefore, BASF assesses the impact of its business activities on society in monetary terms, using PwC’s TIMM methodology. The general scopes include the supply chain (tier 1 to tier n), own operations and customer industries. Water consumption hotspots and water emissions within the supply chain/along the value chain are considered. Results for 2017 show that the main risks are in the area of water consumption upstream (China, India) and downstream (India, China, USA, Ethiopia). The main driver for change compared to 2016 are volume growth and updated valuation coefficients including water emissions and pollution. Measuring and expressing our impact on society in monetary terms improves the understanding of the relevance of specific environmental impacts (including water) and their interdependencies along the different levels of our value chain. The assessments reinforce that water risks are a highly location-specific.</td>
</tr>
<tr>
<td>Water-related regulatory frameworks</td>
<td>Relevant, always included</td>
<td>Water withdrawals and wastewater discharges comply with national, state and local regulations and permit authorization. BASF environmental and advocacy experts are engaged in constant dialogue with stakeholders including local authorities (See &quot;internal company methods” in question W3.3). Contractual agreements with authorities are required in cases where water-related criteria are to be met. During periods of extreme weather conditions (high temperatures) are in place. We do participate in partnerships at watershed level which focus on sustainable water management e. g. ICPR International Commission for the Protection of the Rhine.</td>
</tr>
<tr>
<td>Status of ecosystems and habitats</td>
<td>Relevant, sometimes included</td>
<td>We investigated our production sites around the world to discover which are located near internationally protected areas. To do so, we use the Integrated Biodiversity Assessment Tool (IBAT), a database for globally recognized biodiversity information (See “Other: IBAT” in question W3.3). Focus was on internationally recognized areas (Ramsar, World heritage sites) and legally protected areas (IUCN category I-III). We did not discover any impact of our activities on biodiversity in these protected areas. If there are indications of changing circumstances, we will re-assess these issues regularly on the individual site level. We also routinely investigate ecosystem-related topics in the planning of any new location. BASF expects its suppliers to assess the potential impact of site operations on designated protected areas or ecosystems. During TIS on-site audits, suppliers are therefore specifically required to evaluate their impact on the immediate environment by relying on external data or their own measurement. This includes water-related risks, such as groundwater contamination, leakages and wastewater disposal. Not having assessed impacts on ecosystems or having a detrimental impact on biodiversity can lead to a negative finding in the audit report and requires the supplier to implement corrective actions.</td>
</tr>
<tr>
<td>Access to fully-functioning, safely managed WASH services for all employees</td>
<td>Relevant, always included</td>
<td>BASF signed the “Pledge for Access to Safe Water, Sanitation and Hygiene at the Workplace” (WASH) of the World Business Council for Sustainable Development (WBCSD). By signing the pledge, BASF strengthened its commitment to provide access to water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees. The Department Corporate Health Management is responsible for the management of occupational health and general Health topics of BASF employees, and the coordination and auditing of occupational medicine in BASF group companies worldwide. Part of this responsibility are the topics sanitation and hygiene at the workplace. Sites are audited on a regular basis - 5 year interval if no negative findings were identified, or more frequently in case of findings. Audit results and action items are tracked in an audit database. We performed 13 audits in 2017 and 31 Health Performance Control visits. Tasks and responsibilities are defined in the Corporate Health Management Requirement (See “internal company methods” in question W3.3).</td>
</tr>
<tr>
<td>Other contextual issues, please specify</td>
<td>Not considered</td>
<td></td>
</tr>
</tbody>
</table>
### W3.3c Which of the following stakeholders are considered in your organization’s water-related risk assessments?

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Relevance &amp; Inclusion</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>Relevant, always included</td>
<td>The trust of customers and consumers is essential for the success of BASF. BASF’s customer portfolio ranges from major global customers and medium-sized regional businesses to local workshops. We align our business models and sales channels with the respective customer groups and market segments. +++ Risk example: We consider potential water related risks from inappropriate product use by our customers. This could apply, for example, to products from our BASF Agriculture Solutions portfolio, like crop protection chemicals, that could affect freshwater bodies if used or disposed of improperly. +++ Method of engagement: We ensure uniformly high standards for product stewardship worldwide and offer our customers training in the safe use of our products e.g. for several herbicides we developed instructions for water protection to enable our customers to easily and reliably optimize the use of our product.</td>
</tr>
<tr>
<td>Employees</td>
<td>Relevant, always included</td>
<td>Our employees are fundamental to achieving the goals of our “We create chemistry” strategy. In keeping with our corporate strategy, we integrate sustainability including water topics into our day-to-day business. Our employees work in interdisciplinary teams on innovative processes and products for a sustainable future. Our innovative strength lies in our global team of highly qualified employees with various specializations. +++ Risk example: Production efficiency and/or quality, as well as production/employee safety at the BASF production sites may be affected by a lack of awareness regarding water-related topics. That may include the improper handling of harmful substances, or the inefficient use of water resources. +++ Method of engagement: The methods used to promote increasing awareness towards environmental topics and continuous improvement of operational management include trainings of our employees, and a rigid quality and process management. Our Code of Conduct, which has to be acknowledged by all employees, specifies basic principles and rules for behaviour also in the field of Protection of Environment, Health and Safety.</td>
</tr>
<tr>
<td>Investors</td>
<td>Relevant, always included</td>
<td>As a global industry leader, BASF is expected by investors to act proactively on the challenges of water-related issues. +++ Risk example: If major investors perceive BASF business activities to be misaligned with the growing global momentum to act against water insecurity, this will pose a reputational risk to the company that can ultimately lead to a reduced market valuation. Moreover, there is potential risk of exclusion from thematic funds based on ESG criteria: For example, BASF is part of the CDP Water A List and of the FTSE4Good index since its founding in 2001. +++ Method of engagement: We are in close dialog with the capital market and rating agencies. We conduct roadshows and attend conferences across Europe to also meet with socially responsible investors (SRI). At these events, we discuss various sustainability topics including water and BASF’s approach towards these. In a SRI investor visit to our Ludwigshafen site and SRI conferences in Paris, the discussions with ~30 investors touched water management, among other topics. In addition, one section of our SRI story covers water topics. This presentation is available on our website..</td>
</tr>
<tr>
<td>Local communities</td>
<td>Relevant, sometimes included</td>
<td>As a company in the chemical industry, we are aware of the particular responsibility we have towards the local communities around our sites. We aim at engaging openly with our neighbors in various forms of neighborhood dialogs. +++ Method of engagement: Our different tools for community relations depend on the specific site context, among them Community Advisory Panels. Mostly used at larger production sites, a Community Advisory Panel is a continuous, long-term discussion forum for open dialog. It consists of a group of individuals who live near or around a chemical facility and who represent the fabric of their community. The CAP meets regularly to discuss issues of mutual interest. It is a forum for open and honest dialog between citizens and site management. Our global internal requirements for Community Advisory Panels have been developed based on the UN Guiding Principles for Business and Human Rights for grievance mechanisms. The goal is to provide the community with the opportunity for direct involvement, while allowing us to better address the local expectations. We can only be successful if we enjoy the trust and support of our neighbors. To be able to assess our impact on local communities, we keep track of our environmental data via our Responsible Care Database, including water discharges and water use at all production sites. +++ Risk example: Negative impacts on water security of local communities by BASF’s facilities could arise, for example, through unsustainable water use practices or insufficient effluents management. In accordance with our sustainability strategy &amp; environmental policies, we take appropriate measures to prevent any such impacts, and thus preserve BASF’s license to operate.</td>
</tr>
<tr>
<td>NGOs</td>
<td>Relevant, sometimes included</td>
<td>BASF selects the sustainability topics it publicly reports on based on the materiality principle. We include stakeholder feedback and concerns, a.o. from NGOs, into the materiality analyses which we conduct on a regular basis (every three to four years). +++ Method of engagement: Continuous exchange with our stakeholders including NGOs is guided by a defined organizational unit within our sustainability management. Together with NGOs, namely the EWP (European Water Partnership) as well as the global AWS (Alliance for Water Stewardship), we developed criteria and indicators for sustainable water management. The membership in the Alliance for Water Stewardship also gives us the opportunity to better understand the other members’ expectations, including NGOs, on a continuous basis. +++ Risk example: If NGOs should come to believe that BASF is not fully transparent and cooperative about water-related issues, e.g. contamination events, this could lead to reputational damages for BASF. Two examples from our Ludwigshafen site (headquarter) for our transparency and dialogue with NGOs: • We always publish a press release if an incident involving water contamination above a certain threshold happens. NGOs can subscribe to these press releases and are thus informed automatically. • We invited the German branch of a global environmental NGO in January 2017 to our Ludwigshafen site after a major incident, to exchange about preventative measures and consequences including our protection system against water pollution.</td>
</tr>
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</table>
Other water users at a basin/catchment level

<table>
<thead>
<tr>
<th>Relevance &amp; inclusion</th>
<th>Please explain</th>
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</thead>
<tbody>
<tr>
<td>Relevant, sometimes included</td>
<td>We do participate in partnerships at watershed level that focus on sustainable water management. The dialog with different stakeholders helps us to learn their expectations. BASF employees are participating as industry representative e.g. in the ICPR (International Commission for the Protection of the Rhine). The ICPR consist of representatives of all the states along the course of river Rhine, of environmental organizations, drinking water producers, shipping, hydroelectric power generators etc. There is a yearly plenary meeting, regularly meetings of the strategy group (2 times a year) and meetings of the multiple working groups (about 2-5 times per year each of the groups) (see also <a href="http://www.iksr.org">www.iksr.org</a>) CUACSA (Comunitat d'Usuaris d'Aigües de la Cubeta de Sant Andreu de la Barca). CUACSA is the group of water users in the “Sant Andreu de la Barca” river basin. A BASF employee is member of the “Junta de Govern”. Regularly meeting of the “Junta de Govern” are 2 times per year. There are additional meetings of the “Commissio Operativo” (see meeting calendar at <a href="http://www.cuacsa.org">www.cuacsa.org</a>). +++ Risk example: BASF is highly interested in maintaining a cooperative relationship with water users at basin/catchment level. This helps to address and avoid any potential conflicts regarding water use, pricing etc. Also, if water users act out of common interests, policy-related or technological improvements can be advanced quicker and more sustainably.</td>
</tr>
</tbody>
</table>

Regulators

<table>
<thead>
<tr>
<th>Relevance &amp; inclusion</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant, always included</td>
<td>Water withdrawals and wastewater discharges have to comply with national, state and local regulations and permit authorizations. To identify and evaluate the future potential of regulatory changes of sustainability issues including water we are actively involved in external networks like business associations. We engage in constant dialogue with our stakeholders including local authorities. +++ Risk example: BASF is highly interested in maintaining a cooperative relationship with regulators. This helps to address and avoid any potential conflicts regarding water use, pricing etc. It also allows BASF to anticipate future trends and regulations, thus avoiding uncertainty in this area</td>
</tr>
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</table>

River basin management authorities

<table>
<thead>
<tr>
<th>Relevance &amp; inclusion</th>
<th>Please explain</th>
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</thead>
<tbody>
<tr>
<td>Relevant, sometimes included</td>
<td>We do participate in partnerships at watershed level that focus on sustainable water management. The dialog with different stakeholders, including river basin management authorities, helps us to learn their expectations. BASF employees are participating as industry representative e.g. in the ICPR (International Commission for the Protection of the Rhine). The ICPR consist of representatives of all the states along the course of river Rhine, of environmental organizations, drinking water producers, shipping, hydroelectric power generators etc. There is a yearly plenary meeting, regularly meetings of the strategy group (2 times a year) and meetings of the multiple working groups (about 2-5 times per year each of the groups) (see also <a href="http://www.iksr.org">www.iksr.org</a>) CUACSA (Comunitat d'Usuaris d'Aigües de la Cubeta de Sant Andreu de la Barca). CUACSA is the group of water users in the “Sant Andreu de la Barca” river basin. A BASF employee is member of the “Junta de Govern”. Regularly meeting of the “Junta de Govern” are 2 times per year. There are additional meetings of the “Commissio Operativo” (see meeting calendar at <a href="http://www.cuacsa.org">www.cuacsa.org</a>). +++ Risk example: BASF is highly interested in maintaining a cooperative relationship with river basin management authorities. This helps to address and avoid any potential conflicts regarding water use, pricing etc. Also, if water users act out of common interests, policy-related or technological improvements can be advanced quicker and more sustainably.</td>
</tr>
</tbody>
</table>

Statutory special interest groups at a local level

<table>
<thead>
<tr>
<th>Relevance &amp; inclusion</th>
<th>Please explain</th>
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</thead>
<tbody>
<tr>
<td>Relevant, sometimes included</td>
<td>We do participate in partnerships at watershed level that focus on sustainable water management. For instance, in Tarragona we work together with companies in the industry area and with the local community. +++ Risk example: BASF is highly interested in maintaining a cooperative relationship with special interest groups. This helps to address and avoid any potential conflicts regarding water use, pricing etc. We can only be successful if we enjoy the trust and support of our neighbors. Negative impacts on water security of local stakeholders by BASF's facilities could arise, for example, through unsustainable water use practices or insufficient effluents management. In accordance with our sustainability strategy &amp; environmental policies, we take appropriate measures to prevent any such impacts, and thus preserve BASF's license to operate.</td>
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</table>

Suppliers

<table>
<thead>
<tr>
<th>Relevance &amp; inclusion</th>
<th>Please explain</th>
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<tbody>
<tr>
<td>Relevant, always included</td>
<td>Our sustainability-oriented supply chain management contributes to risk management by clarifying our expectations and standards for our suppliers, and by supporting them in carrying out our requirements. In accordance with BASF's Supplier Code of Conduct, we expect our suppliers to minimize their impact on biodiversity, climate change and water scarcity. Suppliers' engagement is key to integrate sustainability as a key topic in their long-term business relationship with us. Our suppliers are evaluated based on risk due to the size and scale of our supplier portfolio. We define relevant suppliers as those showing an elevated sustainability risk potential as identified by our risk matrices and purchasers' assessments. We also use further sources of information to identify relevant suppliers such as evaluations from the Together for Sustainability (TfS) initiative. In our third-party sustainability online assessments, suppliers are requested to report on water use, water mgmt. procedures and wastewater handling. Existence of a water policy is another important element of the assessment. In TfS on-site audits, suppliers' internal water policies, reports, protection concepts for wastewater effluents, containment measures and water-related impact reduction practices are examined against standard procedures for water and wastewater management. Examples of potential risks considered include insufficient water management, which might lead to potential supply interruptions and could ultimately affect BASF's business continuity. Another example is insufficient effluents protection at BASF's suppliers, which might pose a potential threat to local communities and ecosystems and could eventually put BASF's reputation for effective supply chain sustainability management at risk. Finally, we have integrated water criteria and different water scenarios into our processes for investment decisions and in our processes for capital expenditures for property, plant and equipment.</td>
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Water utilities at a local level

<table>
<thead>
<tr>
<th>Relevance &amp; inclusion</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant, sometimes included</td>
<td>BASF expects their suppliers to minimize their impact on biodiversity, climate change and water scarcity, according to the BASF Supplier Code of Conduct. Integrated in the procurement strategy is the sustainable water abstraction and discharge of third parties at local level. The topic is addressed in dialogs with local water utilities. In addition, part of the European Water Stewardship Standard, which we implement at our Verbund sites and at sites in water-stressed regions, is the dialog with the water utilities regarding sustainable water supply: in the course of successfully implementing the standard at a location, it is required to assess the provenance of water with the local water utility to identify and act on possible risks. Risk example: If water withdrawal by one of our sites exceeds a sustainable volume on a local level, this could lead to direct risks through interruptions of water supply for BASF, and to indirect risks through long term depletion of water resources, stakeholder conflicts and reputational damages. Risk example: If water withdrawal by one of our sites exceeds a sustainable volume on a local level, this could lead to direct risks through interruptions of water supply for BASF, and to indirect risks through long term depletion of water resources, stakeholder conflicts and reputational damages.</td>
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</table>

Other stakeholder, please specify

<table>
<thead>
<tr>
<th>Relevance &amp; inclusion</th>
<th>Please explain</th>
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<tbody>
<tr>
<td>Not considered</td>
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</table>

CDP
Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

BASF's primary tool is our Enterprise Risk Management. It serves as aggregation, assessment & monitoring framework for risks to Corporate level, covering direct operations, upstream & downstream value chain.

Other tools are used on operational level to determine & analyze risk factors, depending on value chain stage:

**Direct operations:**
Primary tool: We use the water stress index (WSI) tool & data developed by Pfister et al. (2009) to determine which production sites are located in water stressed areas.

Rationale: The tool provides a clear global data basis & is easily applied.

Coverage/Implementation: All worldwide production sites, implemented centrally by Group EHS Function.

Timescale: WSI refers to the current situation. Assessment is repeated annually.

Response decision: Sites in risk areas need to adopt the European Water Stewardship Standard. Within this management system, appropriate responses to specific risks are derived and decided upon on facility level. Necessary infrastructure investments above a certain level have to be approved on Corporate level.

**Supply chain:**
Primary tool: We use the “Together for Sustainability” (TfS) evaluation program, which is based on third-party online assessments and/or on-site audits

Rationale: The evaluation process is simplified for both suppliers and TfS member companies by a globally uniform questionnaire.

Coverage/Implementation: Our suppliers are evaluated based on risk due to size and scale of our supplier portfolio. We define relevant suppliers as those showing an elevated sustainability risk potential as identified by our risk matrices and our purchasers' assessments.

Timescale: Every five years or more frequently, based on current and evolving risk & performance level.

Response decision: If we identify potential for improvement after the evaluation, we support suppliers in developing measures to fulfill our standards. We conduct another review according to a defined timeframe based on the sustainability risk measured.

**W4. Risks and opportunities**

**W4.1**

Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, only within our direct operations
(W4.1a) How does your organization define substantive financial or strategic impact on your business?

Water is an element of BASF’s risk management, which identifies and evaluates opportunities and risks as early as possible to take appropriate measures in order to seize opportunities and minimize risks. The aim is to avoid risks that pose a threat to BASF’s continued existence and to make improved managerial decisions to create lasting value.

+++ Definition: We define substantive impact with respect to the achievement of our short-term operational or long-term strategic goals. 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 in terms of probability and economic impact in the event they occur. 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.

+++ Metrics / thresholds:

In order to prepare the legally required reporting of significant risks and opportunities on Group level, we have set the following criteria for risk and opportunity events to be considered: Events, that have an estimated EBIT-impact of 10 million € or more (subsequent to measures taken, i.e. net risk), and at the same time have an estimated probability of occurrence of 20% or more, OR events, that are assessed to initiate public attention or that are assessed to damage BASF’s public image, independent of the magnitude of the impact OR events, that have a current estimated impact below 10 million €, but are assessed to have escalation potential or are assessed to initiate similar, interconnected events.

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. We describe and classify these by their potential short-term effects on EBIT subsequent to measures taken (i.e. net risk), using a 95% confidence interval per risk factor based on planned values. Here, the lower threshold for reported risk factors is an effect of >€100 million.

+++ Scope: The mentioned definitions and thresholds apply regardless to where in the value chain the risk/event is located, i.e. direct operations, supply chain, customers etc.

+++ Example: For BASF’s direct operations, main causes for substantive change related to water are an interruption or a significant reduction of production. To identify sites that cause substantive change to their business due to water risks, we use a screening process as follows (reviewed annually):

- Identifying sites located in water stressed areas (water stress index according to Pfister et al.)

- Determining whether these sites are considered strategic and account for high sales volume

Sites that satisfy both criteria are considered to face a risk and hence have the potential to cause substantive changes to our business.

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

<table>
<thead>
<tr>
<th>Total number of facilities exposed to water risk</th>
<th>% company-wide facilities this represents</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less than 1%</td>
<td>In total 24% of our production sites are located in water stress areas. The site in Freeport is associated with risks that have a potentially substantive financial impact.</td>
</tr>
</tbody>
</table>

CDP
(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive impact on your business, and what is the potential business impact associated with those facilities?

Country/Region
United States of America

River basin
Brazos River

Number of facilities exposed to water risk
1

% company-wide facilities this represents
Less than 1%

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company’s annual electricity generation that could be affected by these facilities
<Not Applicable>

% company’s global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company’s total global revenue that could be affected
1-25

Comment
(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

**Country/Region**
United States of America

**River basin**
Brazos River

**Type of risk**
Physical

**Primary risk driver**
Increased water scarcity

**Primary potential impact**
Increased operating costs

**Company-specific description**
The supply, treatment, transportation and recooling of water is associated with a high energy demand resulting in high operating costs. The specific risk in case of BASF’s Freeport plant is constituted by several drivers: Higher municipal and industrial demand in the Freeport area is expected for the next decades. This could result in an increased competition of different users for the existing water sources (river water, ground water) and an increased price for water in the future. To reduce the risk of increasing water costs alternative sources for water will be considered as well as internal efficiency measures. Possible alternative sources are municipal waste water, ground water, sea water. Amongst all these sources water desalination is energy intensive, however seawater is the most abundant source in the Freeport area. Method for identifying risk: We have assessed current and future water demand and availability at the site (source e.g. Aqueduct Water Risk Atlas by WRI), and have investigated the possibilities to cover additional water sources and intensive internal re-use. We then have assessed different options for alternative water supply from an economic perspective.

**Timeframe**
4 - 6 years

**Magnitude of potential impact**
Medium-low

**Likelihood**
Likely

**Potential financial impact**
400000

**Explanation of financial impact**
We calculated assumed additional operational costs for water desalination to cover a part of the site’s water supply. Factors: The higher demand expected in the area in the future could affect 5 % of total annual water withdrawal volume from the production site; estimate of additional costs per m³ of desalinated water, based on industry reference values. Time horizon: Yearly impact, will manifest after establishment of alternative water supply (i.e. within 4-6 yrs, as described above)

**Primary response to risk**
Secure alternative water supply

**Description of response**
Our immediate response is to undertake infrastructure investment planning considering several options, which is currently ongoing. This involves the in-depth assessment of current and future water situation; of BASF’s current and future water requirements to define the scale and layout of required infrastructure. This is accompanied by the specific implementation planning to tap additional water withdrawal sources (e.g. investment in desalination infrastructure; investment partnerships with other industrial plants in the Freeport area).

**Cost of response**
150000

**Explanation of cost of response**
The costs of the response strategy (infrastructure planning) were estimated at a moderate level due to the fact that the site is near the sea and desalination is an easy to realize option. Infrastructure planning requires mainly personnel resources. We calculate the required resources as 1 FTE, at an estimated cost of 150 000 € per FTE. Infrastructure planning costs are not significant in relation to overall operational expenses at the facility. This is a recurring cost position.
Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

<table>
<thead>
<tr>
<th>Primary reason</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks exist, but no substantive impact anticipated</td>
<td>Identified, but non-substantive risks due to water-related issues might include a potential supply interruption due to insufficient water management at supplier level, which could ultimately endanger the continuity of BASF’s production if a key raw material is affected. Another example of identified, but non-substantive risks is insufficient effluents management at supplier level, which might endanger communities and ecosystems, and could potentially damage BASF’s reputation in terms of effective sustainability supply chain management. These risks are, however, successfully mitigated via our sustainability-oriented supply chain management. BASF sources its raw materials worldwide. In 2017, we reviewed our evaluation methods for high-risk suppliers in order to focus even more closely on relevant issues. In the evaluation, we increased the weighting of industry- and country-specific risks (which we analyze with the help of the global risk analyst Verisk Maplecroft) to avoid the ambiguities in the previous system. In addition, the service provider RepRisk provides us with ad-hoc information if any suppliers have been publicly observed in connection with negative sustainability incidents, including water-related aspects. As an example for downstream value chain risks, we consider potential water related risks from inappropriate product use by our customers. This could apply, for example, to products from our BASF Agriculture Solutions portfolio, like crop protection chemicals, that could affect ground- or surface water bodies if used or disposed of improperly. This risk is mitigated by our product stewardship activities and other safeguards against improper product use (e.g. documentation).</td>
</tr>
</tbody>
</table>

Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized.

Type of opportunity
Products and services

Primary water-related opportunity
Other, please specify

Other: Increase the proportion of products that contribute particularly to sustainability in the value chain, and are characterized by, on average, higher growth rates and profitability.

Company-specific description & strategy to realize opportunity
Using the Sustainable Solution Steering® method BASF conducted sustainability assessments (also with regard to water) of its entire product portfolio. In 2017, our so-called Accelerators that offer a substantial sustainability contribution in the value chain generated about 27.2% of total BASF sales. Strategy: We want to increase the proportion of “Accelerator” products: in other words, products that contribute particularly to sustainability in the value chain, and are characterized by, on average, higher growth rates and profitability. To realize this BASF identifies future product opportunities continuously. A systematic strategic approach is carried out by our central Science Relations and Innovation Management department. The operating units and R&D departments identify specific product opportunities on a project basis. Intensive exchange with our customers and partners from industry and science leads to the identification of market trends and opportunities. Specific target: We aim to increase the number of Accelerator solutions to 28% by 2020 in order to further improve the sustainability contribution made by BASF and its customers. In 2017 products and solutions related to € 2 billion in sales make a particular contribution to water improvements in the value chain. This signifies that the opportunity is already being realized.

Estimated timeframe for realization
Current - up to 1 year

Magnitude of potential financial impact
High

Potential financial impact
Explanation of financial impact
In 2017, our so-called Accelerators that offer a substantial sustainability contribution in the value chain generated about 27.2% of total BASF sales. Products and solutions related to € 2 billion in sales make a particular contribution to water improvements in the value chain. This signifies that the opportunity is already being realized.

Type of opportunity
Products and services

Primary water-related opportunity
Sales of new products/services

Company-specific description & strategy to realize opportunity
BASF established a market facing business unit combining all products for the water industry to position itself as a leading provider for water treatment chemicals. BASF is working on development of new products and technologies for all relevant water treatment segments. Exact statements on the financial implications cannot be made. Nevertheless, scenario techniques respecting uncertainties and probabilities of success enable us to generate a possible range of outcomes. Concerning our R&D investments in Water Chemicals, in 2020 we expect €50 million of our turnover and €11 million of our EBITDA from innovations that have been in the market for less than 5 years. Case study for newly introduced Sokalan® RO3500: Situation: Growing demand of water reuse via reverse osmosis (RO) causing different scales and decreasing efficiency of RO systems. Task: Development of a multifunctional antiscalant performing at a variety of reused water qualities. Action: In 2016 BASF launched a multifunctional antiscalant with Sokalan® RO3500. Less scale formation leading to improved plant efficiencies, reduced cleaning cycles and enhanced overall performance of RO plants. Compared to commonly used phosphonate based chemistry Sokalan® RO3500 is not causing eutrophication to water bodies. Result: BASF product portfolio further enhanced by addressing the need for differentiated chemistry to enable water reuse. With the launch BASF is fostering its position as a leading provider for water chemicals

Estimated timeframe for realization
1 to 3 years

Magnitude of potential financial impact
Medium-high

Potential financial impact
50000000

Explanation of financial impact
In 2020 we estimate €50 million of our turnover and €11 million of our EBITDA from innovations derived from BASF’s Water Chemicals portfolio launched since 2015. This estimate was derived based on the previous development of the respective revenues, and an outlook regarding market potentials.

W5. Facility-level water accounting

W5.1
For each facility referenced in W4.1c, provide coordinates, total water accounting data and comparisons with the previous reporting year.

**Facility reference number**
Facility 1

**Facility name (optional)**
Freeport/ TX/ BASF Corporation

**Country/Region**
United States of America

**River basin**
Brazos River

**Latitude**
29.004413

**Longitude**
-95.393282

**Primary power generation source for your electricity generation at this facility**
<Not Applicable>

**Oil & gas sector business division**
<Not Applicable>

**Total water withdrawals at this facility (megaliters/year)**
8448

**Comparison of withdrawals with previous reporting year**
About the same

**Total water discharges at this facility (megaliters/year)**
6045

**Comparison of discharges with previous reporting year**
About the same

**Total water consumption at this facility (megaliters/year)**
4099

**Comparison of consumption with previous reporting year**
About the same

**Please explain**
Change is not substantive. Water consumption is mainly from evaporation in cooling systems

W5.1a
(W5.1a) For each facility referenced in W5.1, provide withdrawal data by water source.

**Facility reference number**
Facility 1

**Facility name**
Freeport/ TX/ BASF Corporation

**Fresh surface water, including rainwater, water from wetlands, rivers and lakes**
8365

**Brackish surface water/seawater**
0

**Groundwater - renewable**
1

**Groundwater - non-renewable**
0

**Produced water**
0

**Third party sources**
81

**Comment**
Fresh surface water is the main water source. High proportion of the water is used for cooling.

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(W5.1b) For each facility referenced in W5.1, provide discharge data by destination.

**Facility reference number**
Facility 1

**Facility name**
Freeport/ TX/ BASF Corporation

**Fresh surface water**
5678

**Brackish surface water/seawater**
0

**Groundwater**
367

**Third party destinations**
0.05

**Comment**

---

(W5.1c)
For each facility referenced in W5.1, provide the proportion of your total water use that is recycled or reused, and give the comparison with the previous reporting year.

**Facility reference number**
Facility 1

**Facility name**
Freeport/ TX/ BASF Corporation

**% recycled or reused**
76-99%

**Comparison with previous reporting year**
About the same

Please explain
Change to previous year is not substantive. High demand on cooling water is mainly satisfied by recycling.

---

(W5.1d) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?

**Water withdrawals – total volumes**

- **% verified**
  - 76-100

**What standard and methodology was used?**
BASF Management’s Report was audited and approved free of qualification, covering also statements and figures pertaining to sustainability. Audit with limited assurance was conducted in accordance with ISAE 3000 and 3410. Auditor’s procedures included detailed document audits of all water indicators reported by all worldwide locations for the purpose of composing aggregated company figures - including water withdrawals total and by source.

**Water withdrawals – volume by source**

- **% verified**
  - 76-100

**What standard and methodology was used?**
BASF Management’s Report was audited and approved free of qualification, covering also statements and figures pertaining to sustainability. Audit with limited assurance was conducted in accordance with ISAE 3000 and 3410. Auditor’s procedures included detailed document audits of all water indicators reported by all worldwide locations for the purpose of composing aggregated company figures - including water withdrawals total and by source.

**Water withdrawals – quality**

- **% verified**
  - Not verified

**What standard and methodology was used?**
BASF collects water withdrawals quality data on a local site level. It is not part of the Responsible Care® Database (RCDB), but carried out according to site specific processes and guidelines, where required. Therefore, it is not included in the verification of water-related data as part of the above mentioned engagement.

**Water discharges – total volumes**

- **% verified**
  - 76-100

**What standard and methodology was used?**
BASF Management’s Report was audited and approved free of qualification, covering also Statements and figures pertaining to sustainability. Audit with limited assurance was conducted in accordance with ISAE 3000 and 3410. Auditor’s procedures included detailed document audits of all water indicators reported by all worldwide locations for the purpose of composing aggregated company figures – including water discharges total and by destination/treatment method.
Water discharges – volume by destination

% verified
76-100

What standard and methodology was used?
BASF Management's Report was audited and approved free of qualification, covering also statements and figures pertaining to sustainability. Audit with limited assurance was conducted in accordance with ISAE 3000 and 3410. Auditor's procedures included detailed document audits of all water indicators reported by all worldwide locations for the purpose of composing aggregated company figures – including water discharges total and by destination/treatment method.

Water discharges – volume by treatment method

% verified
76-100

What standard and methodology was used?
BASF Management's Report was audited and approved free of qualification, covering also statements and figures pertaining to sustainability. Audit with limited assurance was conducted in accordance with ISAE 3000 and 3410. Auditor's procedures included detailed document audits of all water indicators reported by all worldwide locations for the purpose of composing aggregated company figures – including water discharges total and by destination/treatment method.

Water discharge quality – quality by standard effluent parameters

% verified
76-100

What standard and methodology was used?
BASF Management’s Report was audited and approved free of qualification, covering also statements and figures pertaining to sustainability. Audit with limited assurance was conducted in accordance with ISAE 3000 and 3410. Auditor's procedures included detailed document audits of all water indicators reported by all worldwide locations for the purpose of composing aggregated company figures - including quality by standard effluent parameters.

Water discharge quality – temperature

% verified
Not verified

What standard and methodology was used?
BASF collects discharge temperature data on a local site level. It is not part of the Responsible Care® Database (RCDB), but carried out according to site specific processes and guidelines, where required. Therefore, it is not included in the verification of water-related data as part of the above mentioned engagement.

Water consumption – total volume

% verified
Not verified

What standard and methodology was used?
Water consumption is calculated on the basis of reported and verified indicators, but not verified separately on a per-location basis.

Water recycled/reused

% verified
76-100

What standard and methodology was used?
BASF Management's Report was audited and approved free of qualification, covering also statements and figures pertaining to sustainability. Audit with limited assurance was conducted in accordance with ISAE 3000 and 3410. Auditor's procedures included detailed document audits of all water indicators reported by all worldwide locations for the purpose of composing aggregated company figures - including amounts of water recycled/reused.

W6. Governance
W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available.

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Content</th>
</tr>
</thead>
</table>
| Company-wide  | Description of business dependency on water  
|               | Description of business impact on water  
|               | Description of water-related performance standards for direct operations  
|               | Description of water-related standards for procurement  
|               | Reference to international standards and widely-recognized water initiatives  
|               | Company water targets and goals  
|               | Commitment to align with public policy initiatives, such as the SDGs  
|               | Commitments beyond regulatory compliance  
|               | Commitment to water-related innovation  
|               | Commitment to stakeholder awareness and education  
|               | Commitment to water stewardship and/or collective action  
|               | Acknowledgement of the human right to water and sanitation  
|               | Recognition of environmental linkages, for example, due to climate change  

BASF’s company-wide water policy (WP) demonstrates the commitment to responsible water use in all our production sites, water catchment areas as well as along the entire value chain. Rationale for scope: Part of the policy is BASF’s Responsible Care Management System (RCMS) encompassing environmental and health protection for direct operations and our value chain. It comprises global rules, standards and procedures e.g. to use water sparingly and further reduce emissions to water. Component of RCMS are EHS documents that apply throughout the BASF Group and cover water topics. BASF’s water policy acknowledges the human right to water and sanitation and supports respective SDGs, in line with our BASF Group’s Position on Human Rights. Our WP includes performance standards for supplier, procurement+contracting best practice to secure raw materials supply and boost suppliers awareness. Part of our water policy is the commitment to customer education, within our product stewardship strategy.
**W6.2a**

(W6.2a) Identify the position(s) of the individual(s) on the board with responsibility for water-related issues.

<table>
<thead>
<tr>
<th>Position of individual</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director on board</td>
<td>One member of our Board of Directors, responsible for Environment, Health and Safety, has the overall responsibility for water issues. The head of BASF’s Environment, Health and Safety Division, has oversight for water topics in BASF, reports directly to the Board member and is a member of BASF’s Corporate Sustainability Board (CSB), which is BASF’s central steering committee for sustainable development, including water. It is comprised of the heads of business, corporate and functional units as well as of the regions. The CSB monitors the implementation of the sustainability strategy and cross-divisional initiatives, defines sustainability goals and approves corporate position papers on sustainability topics.</td>
</tr>
<tr>
<td>Director on board</td>
<td>Another Board member chairs BASF’s Corporate Sustainability Board (CSB), which is BASF’s central steering committee for sustainable development, including water. It is comprised of the heads of business, corporate and functional units as well as of the regions. The head of BASF’s Environment, Health and Safety Division, which has oversight for all water-related topics in BASF, is also a member of the CSB. The CSB monitors the implementation of the sustainability strategy and cross-divisional initiatives, defines sustainability goals and approves corporate position papers on sustainability topics.</td>
</tr>
</tbody>
</table>

**W6.2b**

---

CDP
Frequency that water-related issues are a scheduled agenda item | Governance mechanisms into which water-related issues are integrated | Please explain
--- | --- | ---
Row 1 | Scheduled - some meetings | Monitoring implementation and performance | How Board oversight is constituted. Our Management Board reviews at least annually major water-related topics like, for instance: - Water-related risks and opportunities - Target performance - Budgets for functions and business units involved in water-related topics - Progress on specific measures supporting BASF’s sustainability strategy In addition, depending on need, the following topics are addressed: - Investment decisions - Requests for approval of specific action plans, e.g. new R&D initiatives This range of topics ensures that water issues are covered from both an operational and a market-driven perspective, that the appropriate strategic decisions are made and that BASF meets its own commitments. Who briefs the Board: A Board member, responsible for Environment, Health and Safety, has the overall responsibility for water topics. Another Board member chairs BASF’s Corporate Sustainability Board (CSB), which is BASF’s central steering committee for sustainable development, including water topics. It is comprised of the heads of business, corporate and functional units as well as of the regions. The CSB monitors the implementation of the sustainability strategy and cross-divisional initiatives, defines sustainability goals and approves corporate position papers on sustainability topics.
Overseeing acquisitions and divestiture | Overseeing major capital expenditures |
Reviewing and guiding annual budgets | Reviewing and guiding business plans |
Reviewing and guiding major plans of action | Reviewing and guiding risk management policies |
Reviewing and guiding strategy | Reviewing and guiding corporate responsibility strategy |
Reviewing innovation/R&D priorities | Setting performance objectives |
(W6.3) Below board level, provide the highest-level management position(s) or committee(s) with responsibility for water-related issues.

Name of the position(s) and/or committee(s)
President

Responsibility
Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
Quarterly

Please explain
The President of the Functional Division Environment, Health and Safety represents the highest responsibility for overall governance for water topics below Board of Directors (= delegation of governance from Board). The President reports directly to a member of the BASF Board of Management and is a member of the Corporate Sustainability Board (CSB) led by another Board member, which is BASF’s central steering committee for sustainable development, including water topics. Meetings of the CSB and direct meetings/jour fixes with the mentioned Board members ensure a regular reporting to Board level. The Functional Division led by the President is responsible to define requirements for the Responsible Care Management System (in agreement with the board), oversight of the monitoring process, and integrates major global functionalities required for preparing decisions of the CSB on water topics, such as corporate environmental goal setting, controlling and reporting, etc.

W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4

(W-FB6.4/W-CH6.4/W-EU6.4/W-OG6.4/W-MM6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?
Yes

W-FB6.4a/W-CH6.4a/W-EU6.4a/W-OG6.4a/W-MM6.4a

(W-FB6.4a/W-CH6.4a/W-EU6.4a/W-OG6.4a/W-MM6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues?

<table>
<thead>
<tr>
<th>Who is entitled to benefit from these incentives?</th>
<th>Indicator for incentivized performance</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary reward</td>
<td>Please select</td>
<td>Please select</td>
</tr>
<tr>
<td>Recognition (non-monetary)</td>
<td>Corporate executive team</td>
<td>Other, please specify (EWS Stewardship Implementation)</td>
</tr>
<tr>
<td>Other non-monetary reward</td>
<td>Please select</td>
<td>Please select</td>
</tr>
</tbody>
</table>

W6.5
Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?
Yes, direct engagement with policy makers
Yes, trade associations

W6.5a

What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

The Board of Directors decides on BASF’s sustainability strategies, taking thorough analysis by experts and practitioners at working level into account. The Head of the Functional Division EHS coordinates reports to the Board of Directors and has the key position to ensure consistency of actions resulting from the decisions.

Direct water-related corporate activities are stipulated & performed by following corporate groups:

- Sustainability Strategy
- Global Support Environmental Protection

Representatives of the groups have regular meetings with relevant colleagues to exchange about ongoing activities & to align positions to ensure consistency with BASF’s strategy.

The corporate groups are connected to a network of BASF representatives with analogous functions around the world through email and web conference to receive regular updates on local activities and to engage with the local representatives to ensure that activities fit to the corporate strategy.

Example: An Ad-hoc network is used to inform and align BASF positions & prepare feedback, e.g. regarding BASF involvement in drafting the German micro-pollutant strategy.

The management level of the corporate groups supported by Corporate Communications and Government Relations supervises consistency of positioning and actions under the strategy through receiving regular updates from the reporting lines and giving guidance on major topics. Additionally, alignment of BASF membership in associations is ensured by this function.
(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

<table>
<thead>
<tr>
<th>Are water-related issues integrated?</th>
<th>Long-term time horizon (years)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, water-related issues are integrated</td>
<td>&gt; 30</td>
<td>Water issues integrated: Enable access to clean water for people, reducing and avoiding water requirements for food production and industry etc. Reduce and avoid water contamination, preserve ecosystems and biodiversity on land and under water. How they are integrated: Our strategy provides direction for how we further develop BASF. At the core is our corporate purpose: “We create chemistry for a sustainable future.” We are well aware of the needs of the fast-growing global population. More and more people need access to food and water, energy, raw materials, housing and healthcare. At the same time, the Earth’s resources are limited. Our products and services contribute to reconciling the needs with the limitations. We are also committed to the Sustainable Development Goals. Explanation of chosen time horizon: Our corporate purpose “We create chemistry for a sustainable future.” Indicates the long-term perspective that BASF takes on matters surrounding sustainability, also in relation to our core businesses. This commitment is not limited to a defined time horizon, but involves the livelihoods and well-being of all future generations, as well as the preservation of ecosystems in the long term. Strategies also cover investment into assets and sites which have &gt;40+ year time horizon in the Chemical Industry.</td>
</tr>
</tbody>
</table>

| Strategy for achieving long-term objectives | Yes, water-related issues are integrated | 5-10 | Issues integrated: Water use/stewardship and avoidance of pollution within our own operations; water-related impacts of our products regarding water efficiency, possible contaminations (product stewardship); reduction of emissions to water and reduced impact on water scarcity within supply chain. How they are integrated: We have defined sustainability focus areas within our corporate strategy. These formulate the commitments with which BASF positions itself in the market and how it aims to meet the growing challenges along the value chain: – We source responsibly – We produce safely for people and the environment – We produce efficiently – We value people and treat them with respect – We drive sustainable products and solutions Relevant topics resulting from these commitments -such as supply chain responsibility, responsible production, resource efficiency, energy & climate protection, water, product stewardship, employment & employability, and portfolio management- form focal points of our reporting. We also integrate these into our long-term steering processes to ensure societal acceptance & realize business opportunities. Time horizon: We chose the time horizon of 10 years as it exceeds usual operational planning horizons within BASF, thus giving strategic orientation on our goal and commitment to enhancing sustainability within our operations, the supply chain & industries we serve, and also to contributing to the SDGs; with a time horizon of up to 2030 |

| Financial planning | Yes, water-related issues are integrated | 5-10 | Water issues integrated: Revenue targets for products with a particular contribution to sustainability, as for instance enabling higher resource efficiency and water conservation / water resource protection in the value chain. How they are integrated: We have segmented our portfolio regarding the contribution of our more than 60,000 specific product applications to sustainability (including reduction of water use), using the Sustainable Solution Steering® method. Products with a substantial sustainability contribution in the value chain are classified as Accelerators. We aim to increase proportion of sales generated by Accelerator products to 28% by 2020, from a baseline of 26.2% in 2015. In various business segments, detailed planning exists regarding the development of innovative products. For example, our well-stocked innovation pipeline in the Agricultural Solutions segment comprises products with a launch date between 2017 and 2027. With a peak sales potential of €3.5 billion, the pipeline includes innovations from all business areas. Many of these are directed towards water conservation. Explanation of chosen time horizon: We chose the time horizon of 10 years as it exceeds usual operational planning horizons within BASF, thus giving strategic orientation on our goal and commitment to enhancing sustainability within the industries and sectors we serve. Also, as shown above, strategic planning on segment level usually encompasses the mentioned time horizons. |

(W7.2) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

<table>
<thead>
<tr>
<th>Water-related CAPEX (+/- % change)</th>
<th>Anticipated forward trend for CAPEX (+/- % change)</th>
<th>Water-related OPEX (+/- % change)</th>
<th>Anticipated forward trend for OPEX (+/- % change)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>We are not disclosing water-related CAPEX/OPEX</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(W7.3)
(W7.3) Does your organization use climate-related scenario analysis to inform its business strategy?

<table>
<thead>
<tr>
<th>Use of climate-related scenario analysis</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Circular economy will become a key contributor to a low-carbon economy, transforming value chains and decoupling growth and resource consumption. The aim of the scenario analysis was to evaluate the impact in more detail. The level of impact was assessed in three scenarios, for which the level of international policy response and action on circular economy, driven by climate change, is the central differentiator: The scenarios were applied to three major customer industries of BASF. For each scenario, key drivers of change were identified and underpinned by a set of assumptions about direction and magnitude of change. Considering the findings regarding the potential impact of circular economy on BASF business, we promoted the establishment of strategic partnerships in this area in 2017. To this end, we joined the “Circular Economy 100” and the “New Plastic Economy” programs. We also kicked off an internal scouting project to investigate selected business opportunities.</td>
</tr>
</tbody>
</table>

W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Yes

W7.3b

(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization’s response?

<table>
<thead>
<tr>
<th>Climate-related scenario(s)</th>
<th>Description of possible water-related outcomes</th>
<th>Company response to possible water-related outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other, please specify (Internal climate-related scenarios)</td>
<td>Circular economy will become a key contributor to a low-carbon economy, transforming value chains and decoupling growth and resource consumption. Customer industries of BASF will be affected by this trend to a variable extent, and consequently the impact on BASF's value generation will also vary. The aim of the scenario analysis was to evaluate the impact in more detail. The topic of resource consumption covers a range of resources, including water use. Water demand from primary production may be reduced due to higher circularity. Also, increased circular use of water may be a direct outcome. Scenario results: Total BASF sales show significant upside potential in the moderate as well as in the progressive scenario. Construction trends have the strongest impact on BASF sales in the moderate scenario, whereas automotive trends have the strongest impact on sales in the progressive scenario.</td>
<td>Reporting of results: Results were shared internally with representatives from operating divisions, which manage the SBUs, and relevant corporate units in the context of regular group meetings dedicated to sustainability topics. Reporting was limited to internal stakeholders. Integration of results into business objectives / strategy: Results informed the next steps of the internal process for developing a BASF position and strategy regarding circular economy. The strategic approach, including the findings from the scenario analysis, was finally presented to and approved by the Board of Directors. Example of how the results have directly influenced business objectives / strategy: Considering the findings regarding the potential impact of circular economy on BASF business, we promoted the establishment of strategic partnerships in this area in 2017. To this end, we joined the “Circular Economy 100” program and the “New Plastic Economy” program of the Ellen MacArthur Foundation. We also kicked off an internal scouting project to investigate selected business opportunities in more detail.</td>
</tr>
</tbody>
</table>

W7.4
(W7.4) Does your company use an internal price on water?

Yes

Please explain

Internal valuation / cost allocation: There is a site specific BASF internal price for the provision of water as well as the disposal of waste water depending on local conditions. Cost calculation for new investments: We have integrated a price for water as well as for waste water into our processes for investment decisions. The price is depending on the current and future local situation. Valuation of external costs: BASF assesses its Value to Society in monetary terms using PwC’s TIMM method. The scope includes the supply chain (tier 1 to tier n), own operations and customer industries. With regard to water, emissions and consumption are integrated. To quantify and value the costs to society caused by emissions to water, inorganic and organic pollutants and nutrient discharges to water are taken into account. Environmental outcomes of water consumption using the volume of corporate water consumption and the respective water stress level based on a water stress index (WSI).

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

<table>
<thead>
<tr>
<th>Levels for targets and/or goals</th>
<th>Monitoring at corporate level</th>
<th>Approach to setting and monitoring targets and/or goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company-wide targets and goals</td>
<td>Targets are monitored at the corporate level</td>
<td>Company-wide goals are proposed and elaborated by interdisciplinary working groups, and decided upon by the BASF Board of Management. Monitoring of water-related goals and targets is carried out via an established reporting process within our Responsible Care Management System. The progress for all company-wide targets and goals is reported in the BASF Annual Report. Facility-level targets and goals regarding water (e.g. incident avoidance) are agreed upon by the relevant corporate functions and monitored via the company-wide Responsible Care Management System and/or HSE audits on facility level. Monitoring results are reported to the respective corporate functions and escalated up to the executive or board level, if required.</td>
</tr>
<tr>
<td>Site/facility specific targets and/or goals</td>
<td>Goals are monitored at the corporate level</td>
<td>Product level targets and goals related to water (for example product performance or product characteristics) are defined by the business units as a response to internal agendas and/or external requirements. They are monitored via business-level reporting. Important achievements are reported also to the Board of Management, and/or included in BASF corporate communications, e.g. the annual report.</td>
</tr>
<tr>
<td>Brand/product specific targets and/or goals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

**Target reference number**
Target 1

**Category of target**
Other, please specify (Implementing sustainable water mgmt.)

*Other*: Assessing and implementing sustainable Water management

**Level**
Company-wide

**Primary motivation**
Water stewardship

**Description of target**
We want to introduce sustainable water management at 100% of our production sites in water stress areas and at all Verbund sites by 2025. We pursue this by applying the European Water Stewardship (EWS) standard. In total, around 24% of our production sites were located in water stress areas in 2017. We introduced the standard at our European sites in 2013 and are furthering its
implementation in China and North and South America.

**Quantitative metric**

Other, please specify (% of production sites implementing EWS)

**Baseline year**

2010

**Start year**

2011

**Target year**

2025

**% achieved**

45.2

**Please explain**

By 2017, we have established the standard at 45.2% of our relevant locations (as compared to 0% in the base year). That means we are on track for reaching the target by 2025.

**Target reference number**

Target 2

**Category of target**

Product use-phase

**Level**

Company-wide

**Primary motivation**

Commitment to the UN Sustainable Development Goals

**Description of target**

A significant lever for steering of BASF’s product portfolio is the Sustainable Solution Steering® method. BASF has conducted sustainability assessments and ratings for 97.5% of its company-wide product portfolio. We consider the products application in various markets and industries. Our so-called Accelerator products make a particular contribution to sustainability, as for instance enabling higher resource efficiency and water conservation / water resource protection in the value chain. We therefore aim to increase proportion of sales generated by Accelerator products to 28% by 2020, from a baseline of 26.2% in 2015.

**Quantitative metric**

% increase in revenue from products designed for use-phase resource efficiency

**Baseline year**

2015

**Start year**

2016

**Target year**

2020

**% achieved**

61

**Please explain**

In 2017 the overall share of sales generated by Accelerator products increased to €58.4 billion or 27.3% of total sales. This means we have reached 61% of the targeted increase (target value 28%), based on the base year value of 26.2%. Calculation of target completion: (28% - 27.3% * 100) / (28% - 26.2%) = 0.61 This means we are on track for reaching the target by 2020.

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**W8.1b**

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

**Goal**

Promotion of sustainable agriculture practices
**Level**
Business

**Motivation**
Recommended sector best practice

**Description of goal**
Description and implementation: In order to help preserve biodiversity and natural resources using modern agriculture, BASF established a European farm network. In this network, we are developing biodiversity promotion measures together with farmers with experts from science and nature conservation organizations. The goal is to grow the farm network into a global network by 2020. Rationale for level chosen: This goal tackles issues touched by our Agricultural Solutions business segment, across all countries and activities within this segment. Importance for BASF: Biodiversity is the foundation for numerous ecosystem services, for example air quality, climate, pollination, water purification & soil formation. We as a chemical company depend on ecosystem services like water availability and quality (see W1.1) and have an impact on them. Protecting biodiversity is an important issue also addressed in the UN Sustainable Development Goals (SDGs). BASF contributes to achieving the SDGs and actively supports and implements projects to encourage protection of biodiversity at local level. Consequently, in 2016 we signed the Business and Biodiversity Pledge: We commit to deliver solutions for the conservation of biodiversity, its sustainable use, and the fair & equitable sharing of benefits from resources. That includes promoting awareness about values of biodiversity, acting as ambassadors for responsible stewardship of biodiversity, and regularly reporting on actions.

**Baseline year**
2008

**Start year**
2010

**End year**
2020

**Progress**
Progress: Currently, there are more than 15 farms in the Farm Network, located in Germany, France, the UK, Italy, Poland and the Czech Republic showing how modern farming throughout Europe can help protect ecosystems and resources. Also, the network now includes more than 30 partner organizations in eight countries (indicator to assess progress). Independent experts evaluate the progress of each farm in the Farm Network. Data tracked includes the number of birds, pollinators, and other beneficial insects living on the farm. Water management measures and sustainable soil treatments are also carefully monitored. A different model with the same objectives is currently being pursued with farmers in USA (“living acres”). Next year, a cooperation is being established with IRRI on the Philippines to look at biodiversity in sustainable rice production. Threshold for success: We see every new member of the Farm Network as a success for the promotion of sustainable agriculture. The achievement of our goal to establish a global network will be marked by extension of our activities to other continents outside of Europe. On the individual farm level, we hope to see clear improvements on the indicators mentioned above. The unique conditions at each location contradicts the establishment of uniform thresholds.

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**Goal**
Engagement with suppliers to help them improve water stewardship

**Level**
Company-wide

**Motivation**
Recommended sector best practice

**Description of goal**
Description of goal and implementation: Our goal is to evaluate relevant suppliers regarding sustainability practices, including water management, and develop action plans for any necessary improvements. The evaluation process is based on third-party online assessments and/or on-site audits. If we discover a need for improvement, we support our suppliers in the development of measures that fulfill our standards. We then check again according to a defined timeframe based on the sustainability risk measured. Rationale for level chosen: Our suppliers are evaluated based on risk due to the size and scale of our supplier portfolio. We define relevant suppliers as those showing an elevated sustainability risk potential as identified by our risk matrices and our purchasers' assessments. This process covers all suppliers worldwide. Importance: As shown in W1.1, water availability and quality plays an important role in our supply chain. Hence, the BASF Supplier Code of Conduct expects suppliers, inter alia, to use resources efficiently, apply energy-efficient, environmentally friendly technologies, reduce emissions to water, and minimize impacts on biodiversity and water scarcity. Our sustainability-oriented supply chain management also contributes to risk management by clarifying our expectations and standards for our suppliers, and by supporting them in carrying out our requirements.

**Baseline year**
2008
Start year
2015

End year
2020

Progress
Indicator to assess progress/threshold for success: We track the coverage of our sustainability evaluations. By 2020, we aim to evaluate the sustainability performance of 70% of the BASF Group’s relevant suppliers. Progress: The proportion of relevant suppliers evaluated by the end of 2017 in accordance with our new risk approach was 56%. This percentage represents a considerable progress in our journey towards reaching our 2020 goal. (In 2017, we reviewed our evaluation methods for high-risk suppliers in order to focus even more closely on relevant issues. For example, we increased the weighting of industry- and country-specific risks in the evaluation to avoid the ambiguities in the previous system. One of these ambiguities was that our former risk approach did not provide enough risk differentiation).

Goal
Promotion of sustainable agriculture practices

Level
Company-wide

Motivation
Corporate social responsibility

Description of goal
Description of goal and implementation: We aim to ensure that palm oil raw materials come from sustainable, certified sources, and actively support the Roundtable on Sustainable Palm Oil (RSPO). Our goal is to only source RSPO certified palm oil and palm kernel oil by 2020, provided it is available on the market. By 2025, this voluntary commitment will be expanded to include the most important intermediate products based on palm oil and palm kernel oil; these include fractions and primary oleochemical derivatives as well as edible oil esters. Importance/rationale for coverage Two of our key renewable raw materials are palm oil and palm kernel oil and their respective derivatives, which we mainly use to produce home and personal care ingredients and, to a lesser extent, food ingredients. Oil palm plantations can contribute significantly to deforestation, loss of biodiversity and climate change from the loss of peatland, and may also affect local water resources. We share the widespread concern about these challenges and are committed to reducing the impact on the environment. Consequently, our company-wide BASF Palm Sourcing Policy addresses the requirements for protecting and preserving forests and peatland, along with the involvement of local communities in decision-making processes.

Baseline year
2011

Start year
2015

End year
2020

Progress
Indicators: We look at the share of RSPO certified products within the total palm and palm kernel oil procurement. Threshold of success: In continuation of our commitment made in 2011, BASF’s goal is to source 100% RSPO-certified sustainable palm oil and palm kernel oil. Progress: In 2017, we published our first progress report – the BASF Palm Progress Report – for greater transparency in the value chain. Based on the voluntary commitment to sustainably source palm oil products that we expanded in 2015, we were able to purchase large volumes of certified palm kernel oil in 2017 despite a difficult market environment. In 2017, we purchased 153,000 metric tons RSPO-certified palm kernel oil (2016: 158,000 metric tons). Our share of RSPO-certified sustainable palm kernel oil amounted to approximately 51% (2016: 56%). In order to involve smallholder farmers and improve their living conditions, BASF and Henkel have cooperated with the development organization Solidaridad since 2016 to provide training for around 5,500 farmers in Indonesia. To date, more than 1,700 smallholders have completed a training program as part of the Farmer Field School initiative. BASF also advanced the RSPO supply chain certification of its sites for cosmetic ingredients. In 2017, 20 production sites worldwide were RSPO certified.

W9. Linkages and trade-offs
W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?
Yes

W9.1a

(W9.1a) Describe the linkages or tradeoffs and the related management policy or action.

<table>
<thead>
<tr>
<th>Linkage or tradeoff</th>
<th>Linkage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of linkage/tradeoff</td>
<td>Decreased GHG emissions</td>
</tr>
<tr>
<td>Description of linkage/tradeoff</td>
<td></td>
</tr>
</tbody>
</table>

BASF operates several wastewater plants, that emit GHGs directly (from decomposition of organic material) and indirectly (energy consumption). For instance, BASF’s wastewater treatment plant in Ludwigshafen is one of the largest in Europe and the largest wastewater treatment plant on the Rhine. Also, we rely on externally operated plants. Lower amount of wastewater treated and lower carbon load mean less GHG emissions. Impact: The emissions of BASF-operated wastewater plants of 251,000 tCO2 in 2017 are accounted for in our Scope 1 or Scope 2 emissions; emissions from non-BASF operated plants of 32,000 tCO2 in Category 5 of Scope 3. Management: At several wastewater treatment plants, sewage sludge is incinerated. E.g. at our Ludwigshafen site, the steam created is used to generate electricity and stored in the district heating network. Thus, we make use of the carbon content of the sludge, lowering the local demand for other fuels and thus indirectly reducing total BASF CO2 emission.

Policy or action
Change in impact: The emissions of BASF-operated wastewater plants have been reduced from 258,000 t CO2 in 2016 to 251,000 t CO2 in 2017. The emissions of non-BASF operated wastewater plants have increased from 28,000 t CO2 in 2016 to 32,000 t CO2 in 2017. Integration into company strategy: We are constantly working to optimize our energy consumption and the amount of water we use, and to adapt to the needs of our business and the environment. As a strategic response to sustainability topics, BASF assesses its Value to Society - economic, social and environmental benefits and costs - in monetary terms using PwC’s TIMM method. The scope includes the supply chain (tier 1 to tier n), own operations and customer industries. This also covers Greenhouse Gas Emissions. With regard to water, emissions and consumption are integrated. In order to quantify and value the costs to society caused by emissions to water, inorganic and organic pollutants as well as nutrient discharges to water are taken into account. BASF is looking at the topic of improving the environmental impact of water treatment not just in its own operations, but also from a business opportunity perspective. Via our Water Solutions business, we provide a comprehensive range of water treatment chemicals, including flocculants and coagulants especially designed for the solid/liquid separation process in the industrial and municipal waste water treatment sector.

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?
Yes

W10.1a
**W10.1a** Which data points within your CDP disclosure have been verified, and which standards were used?

<table>
<thead>
<tr>
<th>Disclosure module</th>
<th>Data verified</th>
<th>Verification standard</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1. Current state</td>
<td>Company-wide water accounting figures (withdrawals, discharges, consumption)</td>
<td>ISAE3000</td>
<td>Statements and figures pertaining to sustainability in the Management’s Report and Consolidated Financial Statements of BASF’s Annual Report are audited. The audit with limited assurance was conducted in accordance with ISAE 3000 (Assurance Engagements other than Audits or Reviews of Historical Financial Information) and ISAE 3410 (Assurance Engagements on Greenhouse Gas Statements), the relevant international auditing standards for sustainability reporting.</td>
</tr>
<tr>
<td>W8. Targets</td>
<td>Target and status for European Water Stewardship implementation</td>
<td>ASAE3000</td>
<td>Statements and figures pertaining to sustainability in the Management’s Report and Consolidated Financial Statements of BASF’s Annual Report are audited. The audit with limited assurance was conducted in accordance with ISAE 3000 (Assurance Engagements other than Audits or Reviews of Historical Financial Information) and ISAE 3410 (Assurance Engagements on Greenhouse Gas Statements), the relevant international auditing standards for sustainability reporting.</td>
</tr>
</tbody>
</table>

**W11. Sign off**

**W-FI**

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization’s response. Please note that this field is optional and is not scored.

**W11.1**

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

<table>
<thead>
<tr>
<th>Job title</th>
<th>Corresponding job category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1: Member of the Board of Executive Directors furthermore Site Director of Ludwigshafen</td>
<td>Board/Executive board</td>
</tr>
</tbody>
</table>

**W11.2**

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate’s Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes