

W0. Introduction

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W0.1

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**(W0.1) Give a general description of and introduction to your organization.**

LANXESS is a leading specialty chemicals company with sales of EUR 6.8 billion in 2019. The company currently has about 14,300 employees in 33 countries. The core business of LANXESS is the development, manufacturing and marketing of chemical intermediates, additives, specialty chemicals and plastics. LANXESS is listed in the leading sustainability indices Dow Jones Sustainability Index (DJSI World and Europe) and FTSE4Good. "Good for business, good for society" under this guiding principle LANXESS aims at combining safety, environmental protection, social responsibility, and commercial efficiency in its business operations. As a specialty chemicals enterprise operating worldwide, we believe that developing efficient technologies that protect the environment is a well-founded strategy for securing the long-term growth of our company. Every business decision at LANXESS takes into account the company's responsibility for society, environment, climate, and business results. Therefore, sustainability is an important criterion in all our strategic considerations and decisions. Regardless of where we do business, we are a leading provider of quality solutions. This means that we not only supply our clients with high-quality products, but also actively enable their own innovation and sustainable processes along their value chain.

LANXESS is serious about climate and water protection - both in terms of its own footprint and with regard to the benefits to society. "Climate Action and Energy Efficiency" and "Safe and sustainable sites" are two of our seven material sustainability topics (Annual Report 2019, p. 14 ) and as such incorporated into all strategy processes and integral part of LANXESS Corporate Strategy, the group wide risk management system and the agenda of all relevant operational committees. The foundation of LANXESS's climate strategy has the objective to reduce the impact of our own activities and manage emissions from our processes, sourced energy and raw materials, to make LANXESS more resilient in the long-term perspective. To this end, LANXESS has declared to become climate neutral by 2040.

Water plays an important role, especially when it comes to climate change. Access to clean drinking water is not only crucial for the nutrition and health, but also an important economic factor. The Sustainable Development Goals examine various facets of water comprehensively throughout its framework, including wastewater reduction, water efficiency and water management. The sensitive handling of the scarce resource of water is therefore a future-safe approach - especially at locations in water stressed areas where there are problems with availability, quality and/or access to water.

As a chemical company, we rely on water for our production activities. We use it mainly for cooling, as an input material in chemical processes or in the form of steam. In addition, rivers are important for transportation. Through access to drinking water at our sites, we are also meeting our responsibility to our employees. In addition, beyond our own production processes we are using our knowledge and experience to develop products and technologies which enable water savings or increase availability. The Business Unit Liquid Purification Technologies (LPT) with the development and production of ion exchange resins is an important example for that. Ion exchange resins are used to remove dissolved substances from liquids. Water treatment is the best-known and biggest field of application for ion exchange resins. In household, such applications are used among others to soften water. Ion exchange resins are also used in industry, for example in power generation. They are used in the production of ultra-pure boiler feed water and steam to avoid incrustations and corrosion. This improves the efficiency, operating reliability and lifetime of power plants. In the cleaning of industrial effluent and treatment of groundwater, the removal of toxic substances plays a key role. LANXESS offers a range of special resins that are able to selectively remove, for example, heavy metal ions and organic pollutants from (waste) water.

W-CH0.1a

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**(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
- Other, please specify

W0.2

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

	Start date	End date
Reporting year	January 1 2019	December 31 2019

W0.3

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

- Argentina
- Australia
- Belgium
- Brazil
- Canada
- China
- France
- Germany
- India
- Italy
- Japan
- Mexico
- Republic of Korea
- Russian Federation
- Singapore
- Taiwan, Greater China
- United Kingdom of Great Britain and Northern Ireland
- United States of America

**W0.4**

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

EUR

**W0.5**

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**(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.**

Companies, entities or groups over which financial control is exercised

**W0.6**

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

Yes

**W0.6a**

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**(W0.6a) Please report the exclusions.**

Exclusion	Please explain
All production sites related to the business unit Leather are excluded from the 2019 reporting.	In 2019 the board decided to divest the business unit "Leather chemicals", therefore they were reported under discontinued operations in the financial reporting and are not part of the reported LANXESS revenue or EBITDA. We have adjusted the environmental data accordingly.

**W1. Current state**

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**W1.1**

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Direct use: The primary use of freshwater is for cooling purposes (approx. 82% of withdrawn freshwater); the remaining amount is used as steam, solvents and product input. Rationale: Freshwater is vital as we require quality water for product and process inputs. what makes it vital: Impure water will affect the product quality, increase the maintenance and water pre-treatment costs. Example: If low quality or salty water is used for cooling purposes it can cause corrosion in the pipes resulting in high maintenance costs. Indirect use: Our raw material and energy suppliers use water as coolant, solvent or raw material for their own production. Also, the river-water ways are used for transportation purposes. Example: River Rhine is an important goods transportation route for our production sites in Nord Rhine-Westphalia in Germany. Rationale: The requirements are very product specific and hence, important to keep up with the production quality and quantity of supplied goods. What makes it important: Not all products depend on these supplied goods heavily therefore important but not vital. Future trends: For both direct use and Indirect use the requirement for freshwater will mostly remain unchanged. However, increased production, new acquisitions and a change in product portfolio might alter the situation.
Sufficient amounts of recycled, brackish and/or produced water available for use	Not very important	Not very important	Direct use: Some of our production sites have an intake of low quality water and process it for being utilized in production processes. Rationale: It is a readily available source of water for some of our production sites. After treatment it can be used as product and process inputs. What makes it not very important: There are alternative sources of water available in case of a situational change. Overall, there is a very low dependency on this water type and that makes it not very important from a group perspective (approx. 0.05% of total water withdrawn). Indirect use: The brackish water ways are used for transportation purposes by our suppliers and might be used as product or process input. Rationale: It is an economical means of transportation. What makes it not very important: Alternative means of transportation or input source can be used which makes it not very important for us. Future trends: The dependency on this source of water for both direct and indirect use will remain the same unless a change in product portfolio and production rates is made.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	Frequency: Quarterly basis; Method: Measurement and reporting into an internal data base; Details: Environmental data is collected and monitored with an internal data base system called "HSE Performance Data". On a quarterly basis, water-related KPIs (besides other environmental-relevant KPIs) are reported into the system by site personnel. After a three-step control process, the data is externally verified and published in our annual report. Regarding water quantity LANXESS measures total water withdrawals and withdrawals by source for all the production sites. The sites use metering, invoicing or calculation methods to determine the withdrawal volumes. The HSE Performance Data system is based on the requirements of the GRI Standard.
Water withdrawals – volumes by source	100%	Frequency: Quarterly basis; Method: Measurement and reporting into an internal data base; Details: Environmental data is collected and monitored with an internal data base system called "HSE Performance Data". On a quarterly basis, water-related KPIs (besides other environmental-relevant KPIs) are reported into the system by site personnel. After a three-step control process, the data is externally verified and published in our annual report. Regarding water quantity LANXESS measures water withdrawals by source (groundwater, surface water, third party water, rain water, sewage water) for all the production sites. The sites use metering, invoicing or calculation methods to determine the withdrawal volumes. The HSE Performance Data system is based on the requirements of the GRI Standard.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Frequency: Regular basis; Method: Laboratory testing, checks and controls according to site permit; Details: Quality controls of water withdrawals are the responsibility of the production site. According to their permit and operating instructions the personnel on site make sure to get the amounts and quality of water they need for production processes.
Water discharges – total volumes	100%	Frequency: Quarterly basis; Method: Measurement and reporting into an internal data base; Details: Environmental data is collected and monitored with an internal data base system called "HSE Performance Data". On a quarterly basis, water-related KPIs (besides other environmental-relevant KPIs) are reported into the system by site personnel. After a three-step control process, the data is externally verified and published in our annual report. Regarding water discharge LANXESS measures total water discharge for all the production sites. The sites use metering, invoicing or calculation methods to determine the discharge volumes. The HSE Performance Data system is based on the requirements of the GRI Standard.
Water discharges – volumes by destination	Not monitored	"Water discharge by destination" as a KPI is not part of the current HSE Performance Data system.
Water discharges – volumes by treatment method	100%	Frequency: Quarterly basis; Method: Measurement and reporting into an internal data base; Details: Environmental data is collected and monitored with an internal data base system called "HSE Performance Data". On a quarterly basis, water-related KPIs (besides other environmental-relevant KPIs) are reported into the system by site personnel. After a three-step control process, the data is externally verified and published in our annual report. Regarding water discharge LANXESS measures water discharge according to the treatment method (with chemical/ biological treatment) for all the production sites. The sites use metering, invoicing or calculation methods to determine the discharge volumes. The HSE Performance Data system is based on the requirements of the GRI Standard.
Water discharge quality – by standard effluent parameters	100%	Frequency: Quarterly basis; Method: Laboratory testing and reporting into an internal data base; Details: Environmental data is collected and monitored with an internal data base system called "HSE Performance Data". On a quarterly basis, water-related KPIs (besides other environmental-relevant KPIs) are reported into the system by site personnel. After a three-step control process, the data is externally verified and published in our annual report. Regarding water quality LANXESS measures and reports on following parameters for all the production sites: nitrogen, total organic carbon (TOC) and heavy metals. The sites use internal or external lab results to determine different discharge parameters. The HSE Performance Data system is based on the requirements of the GRI Standard.
Water discharge quality – temperature	100%	Frequency: Continuously; Method: Checks and controls according to site permit; Details: The Maximum temperature of water discharge is strictly regulated in the site permits, therefore all relevant checks and controls are the responsibility of the production site. The temperature measurement is done continuously to assure compliance with the permit limits.
Water consumption – total volume	100%	Frequency: Quarterly basis; Method: Measurement, calculation and reporting into an internal data base; Details: Environmental data is collected and monitored with an internal data base system called "HSE Performance Data". On a quarterly basis, water-related KPIs (besides other environmental-relevant KPIs) are reported into the system by site personnel. After a three-step control process, the data is externally verified and published in our annual report. The sites use metering, invoicing or calculation methods to determine the withdrawal and discharge volumes. Water consumption is calculated according to the GRI standard as water withdrawal subtracted by discharge. The HSE Performance Data system is based on the requirements of the GRI Standard.
Water recycled/reused	Not monitored	"Water recycled/reused" as a KPI is not part of the current HSE Performance Data system.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Frequency: Risk based, Minimum every 5 years; Method: Auditing as part of Compliance Checks; Details: Compliance with safety and hygiene standards are regularly verified worldwide in the context of HSE (health, safety, environment) Compliance Checks. Experts examine the implementation of LANXESS guidelines and local regulations.

**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?**

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	221282	About the same	The total water withdrawn includes the water bought in the form of steam, wastewater (input) and freshwater from third-party sources along with water drawn from freshwater bodies. The total amount of water withdrawn for the year 2019 corresponds to the previous year (222386.461 megaliters/year). The production rates and the product portfolio remained the same resulting in the similar withdrawal amounts. Future trends: The future water withdrawal amounts are likely to remain unaltered. A change in the product portfolio or increased production in the future might alter the withdrawal amounts.
Total discharges	200401	About the same	The total discharge primarily consists of the once-through cooling water, the steam condensate and generated wastewater. The total amount of water discharged in 2019 remained almost the same compared to the last year (198664.169 megaliters/ year) due to consistent product portfolio and production rates. Future trends: At this time, the discharge amounts are likely to stay the same. A change in product portfolio or production rates can alter the discharge amounts.
Total consumption	20881	Lower	The total consumption is defined as "the amount of water used by an organization such that it is no longer available for use by the ecosystem or local community in the reporting year" (GRI 303 Water and Effluents 2018). The total water consumption measures equal to the difference between total water withdrawal and total water discharges (Total consumption= total withdrawal - total discharges). The resulting consumption amount in 2019 is lower compared to the previous year (23722.292 megaliters/year). Compared to water withdrawal, the water consumption of LANXESS is very low due to the main usage as once-through cooling. Therefore a slight increase in discharge volumes led to a visible decrease in water consumption. Future trends: At this time, the total consumption is likely to stay the same. A change in product portfolio or production rates can alter the consumption amounts.

## W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	1-10	Much lower	WRI Aqueduct	The water withdrawal data for all our sites is evaluated and monitored (refer question W1.2). On a yearly basis we use the online water tool "WRI Aqueduct" to identify the sites located in water stress areas. This tool is fed with the information of the location (latitude and longitude) of where our production sites are situated. The tool thereby identifies the basin location of the site and with its "Baseline Water Stress" risk indicator measures the ratio of total annual water withdrawal to total available annual renewable supply, accounting for upstream consumptive use. A higher percentage indicates more competition among users. The production sites in the locations identified with a high percentage (>40%) were assumed to be in water stress areas. In the reporting year 2019 a total of 13 sites were located in water stress areas. The water withdrawal from the water stress sites amounted for less than 3% of the total water withdrawal we had.

## W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	52702	Higher	Fresh surface water supply is a very relevant source of water supply for LANXESS. It is mainly used for cooling purposes apart from being used as product input and solvents. Most of this water is released back to its sources with no contamination as there is no contact with the chemical processes. The amount of fresh water supply in 2019 was higher compared to the previous year (49517.08 megaliters). The main reason is a higher demand of once-through cooling water. Future trends: The situation is expected to be similar, except for when a change is made in product portfolio and production rates.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	Water withdrawal from Brackish surface water/sea water is no relevant withdrawal source for LANXESS. Future trends: The situation likely to stay unchanged, unless the asset portfolio stays unchanged.
Groundwater – renewable	Relevant	4948	Lower	Groundwater withdrawal amount constitutes for a very small percentage in the overall water withdrawal amounts for LANXESS. However, it is a very important source of quality water for some of our production sites. We do not yet differentiate between renewable and non-renewable groundwater supply as a KPI in our HSE performance data, still most groundwater supply comes from renewable sources. The amount of groundwater supply in 2019 is slightly lower than the previous year (5324.41 megaliters). The main reason for that is the divestment described in W0.6a which led to decrease of ground water withdrawal. Future trends: The situation is expected to be similar, except for when a change is made in product portfolio and production rates.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	We do not yet differentiate between renewable and non-renewable groundwater supply as a KPI in our HSE performance data, still most groundwater supply comes from renewable sources. Future trends: The situation is expected to be similar, except for when a change is made in product portfolio.
Produced/Entrained water	Relevant	1149	About the same	Produced water is a relevant source of water supply for LANXESS. Although it makes for a very small amount of water withdrawal compared to the overall water withdrawal amounts, it is a readily available source of water for few of our production sites. The amount for 2019 is about the same with regards to the previous year (1195.67 megaliters). This is due to consistent production rate and product portfolio. The divestment described in W0.6a led to a slight decrease below 5% and is therefore assessed as "about the same". Future trend: The withdrawal of produced amounts will most like remain the same or increase, as it is seen to be a very sustainable way of water intake. Example: At one of our Indian sites we take sewage water of a nearby community and clean it, so that it is ready to use for the production processes. A change in product portfolio or production rates could alter this status.
Third party sources	Relevant	162483	About the same	Third party sources of water supply is the primary source of water supply for LANXESS. It makes for around 80% of our total water withdrawal amount. Also, this amount includes the water supplied in the form of steam by the third-party sources. It is mainly used as a coolant (85% of the total third party water supply), other uses are as solvents, process input and drinking water. The water used for cooling is uncontaminated as it has no contact with chemical processes and is released back to the nearby water bodies. This amount in 2019 has relatively stayed the same compared to the previous year (166349.30 megaliters) due to constant production rates and product portfolio. The divestment described in W0.6a led to a slight decrease below 5% and is therefore assessed as "about the same". Future trends: No relatively change in this amount of water supply from third party sources is expected in the coming years. An alteration in the product portfolio and production rate can bring a shift.

## W-CH1.3

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

Yes

## W-CH1.3a

**(W-CH1.3a) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.**

**Product type**

Other, please specify (All LANXESS products)

**Product name**

Corporate Water Consumption Intensity

**Water intensity value (m3)**

2.84

**Numerator: water aspect**

Total water consumption

**Denominator**

Ton

**Comparison with previous reporting year**

About the same

**Please explain**

We calculate water intensity for different levels of detail, e.g. corporate or plant level. So far we only publish data on corporate level. The water consumption intensity per ton of product is about the same, compared to the previous year (2018: 2.83; 2019: 2.84). Main reasons are the unchanged portfolio and the production volume, which have been on a similar level compared to the previous year. Internally the HSE Management Dashboard provides a detailed overview on water consumption and withdrawal intensities. The information is available for all management levels at site and for the corporate functions. As trends can be displayed, the data can be used to measure progress, monitor and derive targets. The intensity is likely to stay the same in coming years. A change in product portfolio and production rate can cause a shift in the amounts.

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**W1.4**

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**(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**

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**(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**

51-75

**Rationale for this coverage**

As founding member of the Together for Sustainability (TfS) initiative for the Chemical Industry, we value this as core in the measurement of the Sustainability for our suppliers. Within the TfS initiatives suppliers are requested to participate in either a TfS Audit, and or TfS Assessment. A number of key factors are considered for the identification of suppliers to participate in this initiative. Although the procurement spend is an important factor, we also look at various other factors that have a significant impact on the supplier relationship. These factors include, but are not limited to, contract duration, strategic importance, business impact, previous CSR ratings, category and country risks.

**Impact of the engagement and measures of success**

Together for Sustainability is the foundation for our Sustainability engagement with suppliers. TfS Assessments & Audits focusses on environmental topics including water, & water management. This verifies if a suppliers has a related environmental policy in place and if they take actions on water management (awareness training, reduction of water intake, water recycling, measures to minimize water quality impacts). Suppliers must report on specific water KPIs (total water consumption). The TfS Assessments & Audits generates a Corrective Action Plan (CAP). This CAP is used in discussions to ensure continuous improvement. Supplier scorecards are reported on monthly basis. Specific supplier scorecards are also presented when the Strategic Buyer present his purchasing strategy as part of the balanced scorecard. Preference is given to a supplier with a favourable score, thereby incentivizing the participation and improvement. Re-assessments and re-audits are used to measure improvement.

**Comment**

Positive steps and improvements have been made in the formalisation of our risk based approach of identification of suppliers. This will strengthen and support our focus on sustainability as supplier CSR rating will be fundamental in the decision making process.

**W1.4b**

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

**Type of engagement**

No other supplier engagements

**Details of engagement**

<Not Applicable>

**% of suppliers by number**

<Not Applicable>

**% of total procurement spend**

<Not Applicable>

**Rationale for the coverage of your engagement**

As founding member of the Together for Sustainability (TfS) initiative for the Chemical Industry, we value this as core in the measurement of the sustainability for our suppliers. No additional engagements were conducted in the reporting year.

**Impact of the engagement and measures of success**

<Not Applicable>

**Comment**

<Not Applicable>

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**W1.4c**

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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?**

**Customers:**

LANXESS continuously invests into R&D. In 2019 LANXESS invested 114 m. € into R&D. Our spending can be attributed to process improvement projects which are the prerequisite to improve the climate and water footprint of our production assets, product and application development which are the prerequisite for new products in the market. Here we work closely together with our customers to meet their demands. The engagement therefore is part of our sales activities as it has a major sales share.

**Suppliers:**

LANXESS suppliers are seen and treated as an extension of our Value Chain. We believe that our suppliers are business partners, and the aim is to foster long-term corporate partnerships that drive success and add value for society. This can only be achieved on the basis, among other things, of the extent to which our business partners share our social and environmental values. Our values are transparently shared with our supplier through our Supplier Code of Conduct, and as member of the Together for Sustainability Initiative (TfS) we fully support the principals in the areas of ethics, labour rights, health and safety, environment and related management systems. We measure the success of the supplier engagement in the score achieved by the supplier, with the TfS initiative. Supplier scores are reported on monthly basis. Further to this, we also measure the suppliers score against the industry benchmark for the chemical industry. We also track and report on the change in score achieved between audits and assessments to have visibility on improvements, stable or declining scores for our suppliers.

**W2. Business impacts**

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**W2.1**

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**(W2.1) Has your organization experienced any detrimental water-related impacts?**

No

**W2.2**

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**(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**

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**W-CH3.1**

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**(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?**

**Pollutants identified and classified:** The relevant pollutants identified and classified by LANXESS are of global significance. These are heavy metals (example: arsenic, cadmium, chromium, copper, mercury, nickel, lead, zinc, tin) and total organic content (organic carbon, nitrogen, inorganic and organic phosphorous).

**Impacts considered:** The heavy metals are toxic and potentially cancerous for humans. They adversely affect the growth of flora and fauna in water and soil. The organic content in water leads to eutrophication and high BOD (Biological Oxygen Demand) levels, resulting in reduced oxygen availability to water organisms and damaging ecosystems. Group-wide guidelines e.g. regarding waste water treatment or the measurement of environmental-relevant KPIs, define the standard for all LANXESS production sites.

**The relevant data procurement:** We continuously collect the data of these pollutants from all our production sites. Our HSE Performance Data has specific KPI's to record and monitor the quantities of above mentioned pollutants in the water discharged. These pollutants are not relevant for all our sites in the same way as they are product specific. Therefore, the reporting is done based on the permits and sets standards for the individual sites. Additional water-relevant data (like temperature, pH, salt) and pollutants are identified and classified depending on local regulation at the site-level. (Example: On few of our sites the water being released for treatment to wastewater treatment plants (WWTP's) is checked for specific pollutants and is regulated. This is done to not endanger the microorganisms used for biodegradation process in the biological treatment unit in WWTP's. The water after treatment is evaluated accordingly for the above discussed pollutants). Whenever substantial financial or strategic impacts in regards to water pollutants are identified, they are integrated into the LANXESS Risk Management Process. The process is described more detailed in 3.3d.

**Activities on site:** All the substances handled in the plant, raw materials and products, are classified according to their toxicological properties and their environmental impacts (Material Safety Data Sheet (MSDS)). The guidelines in MSDS are strictly adhered to when handling these substances. (Procurement, storage, prevent spillages, leaching and leakages). With regards to our products, documentation and classification is done according to the legal requirements and standards on international (Example: UN Globally Harmonized System of Classification and labelling of chemicals) and local market level.

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.**

Potential water pollutant	Value chain stage	Description of water pollutant and potential impacts	Management procedures	Please explain
Heavy metals	Direct operations	Heavy metals are classified as toxic and probable carcinogens. They can cause multiple organ damage in humans and animals on ingestion. Plants experience cellular damage upon exposure to heavy metals. They also adversely affect the soil and water biodiversity.	Compliance with effluent quality standards	With the help of HSE Performance Data, continuous monitoring of the effluent quality is done. This monitoring of all LANXESS production sites ensures continuous improvements in the handling of discharged water (including the wastewater sent for treatments to external WWTP). Measurement of results: Decreasing trends in TOC illustrate the success of the management approach. Since 2015 more than 60% reduction of the heavy metal load could be realized (2019: 0.0022 thousand metric tons).
TOC (Total Organic Content)	Direct operations	High concentration of organic content in aquatic ecosystems leads to eutrophication. This results in increase of suspended particles owing to extensive macro algal blooms, decrease of water clarity which in turn leads to the destruction of aquatic habitat by shading of submerged vegetation.	Compliance with effluent quality standards	With the help of HSE Performance Data, continuous monitoring of the effluent quality is done. This monitoring of all LANXESS production sites ensures continuous improvements in the handling of discharged water (including the wastewater sent for treatments to external WWTP). Measurement of results: Decreasing trends in TOC illustrates the success of the management approach. Since 2015 a 20% reduction of the total organic content could be realized (2019: 1.2 thousand metric tons).
Nitrogen	Direct operations	As nutrients, nitrogen and phosphorous are part of the aquatic ecosystem. In a high concentration they become a pollutant causing eutrophication. This results in increase of suspended particles owing to extensive macro algal blooms, decrease of water clarity which in turn leads to the destruction of aquatic habitat by shading of submerged vegetation.	Compliance with effluent quality standards	With the help of HSE Performance Data, continuous monitoring of the effluent quality is done. This monitoring of all LANXESS production sites ensures continuous improvements in the handling of discharged water (including the wastewater sent for treatments to external WWTP). Measurement of results: Decreasing trends in nitrogen content illustrates the success of the management approach. Since 2015 a 20% reduction of the nitrogen content could be realized (2019: 0.4 thousand metric tons).

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

More than once a year

### How far into the future are risks considered?

More than 6 years

### Type of tools and methods used

Tools on the market  
Enterprise Risk Management  
Databases

### Tools and methods used

WRI Aqueduct  
WWF Water Risk Filter  
COSO Enterprise Risk Management Framework

### Comment

LANXESS Risk Management Process: The risk identification and assessment takes place twice a year. It covers direct operations, as well as upstream and downstream activities. The process applies COSO model as framework and is based on a 2 step model: (1) Identification process: Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. (2) Assessment process: Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. Relevant water-related topics are: Environment and technology, procurement/logistics, political relations, corporate strategy, innovation management. In addition to the financial dimension, risk owners also assess the potential reputational impact on the group for each risk and the potential impact on society and environment. Additional water-specific assessments: Additional to the standardized risk management process, LANXESS uses established and recognized tools. Once a year WWF Water Risk Filter and WRI Aqueduct Water Risk Atlas are used to analyze all LANXESS production sites in regards to water stress. In the reporting year, 13 production sites were identified to be operated in water stress areas.

## Supply chain

### Coverage

Full

### Risk assessment procedure

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

### Frequency of assessment

More than once a year

### How far into the future are risks considered?

More than 6 years

### Type of tools and methods used

Enterprise Risk Management

### Tools and methods used

COSO Enterprise Risk Management Framework

### Comment

LANXESS Risk Management Process: The risk identification and assessment takes place twice a year. It covers direct operations, as well as upstream and downstream activities. The process applies COSO model as framework and is based on a 2 step model: (1) Identification process: Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. (2) Assessment process: Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. Relevant water-related topics are: Environment and technology, procurement/logistics, political relations, corporate strategy, innovation management. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.

## Other stages of the value chain

### Coverage

Full

### Risk assessment procedure

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

### Frequency of assessment

More than once a year

### How far into the future are risks considered?

More than 6 years

### Type of tools and methods used

Enterprise Risk Management

### Tools and methods used

COSO Enterprise Risk Management Framework

### Comment

LANXESS Risk Management Process: The risk identification and assessment takes place twice a year. It covers direct operations, as well as upstream and downstream activities. The process applies COSO model as framework and is based on a 2 step model: (1) Identification process: Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. (2) Assessment process: Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. Relevant water-related topics are: Environment and technology, procurement/logistics, political relations, corporate strategy, innovation management. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Relevance: The availability of a sufficient amount of water is vital for LANXESS. That's why we track water input and output data for all our sites. Water is mainly used for cooling purposes apart from being used as product input, steam and solvent. Since 2015 LANXESS carries out a global but country specific risk assessment. Besides others, risks arising from non-availability of water are tracked. Included are direct and indirect site-, operations-, supply chain-, product and business-impacts related to the aspect of water quality in the basin. Such impacts include financial, organizational and strategic implications as well as proposed measures. Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. Assessment tools & process: WWF Water Risk Filter + WRI Aqueduct + LANXESS Risk Management Process. The mentioned tools are used to assess current and future trends. Identified risks will be tracked in the LANXESS Risk Management Tool. It covers direct operations, as well as upstream and downstream activities. The process applies the COSO model as framework. The risk identification and assessment takes place twice a year in the context of the forecasting and the budget/planning process. Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. There are specialized committees on company level to oversee risks during the assessment process, e.g. HSEQ committee for environmental, water and climate protection standards. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.
Water quality at a basin/catchment level	Relevant, always included	Relevance: The access to a sufficient amount of water in good quality is vital for LANXESS. That's why we track data on water quality for all our sites. Water is mainly used for cooling purposes apart from being used as product input, steam and solvent. Since 2015 LANXESS carries out a global but country specific risk assessment. Besides others, risks arising from an insufficient quality of water are tracked. Included are direct and indirect site-, operations-, supply chain-, product and business-impacts related to the aspect of water quality in the basin. Such impacts include financial, organizational and strategic implications as well as proposed measures. Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. Assessment tools & process: WWF Water Risk Filter + WRI Aqueduct + LANXESS Risk Management Process. The mentioned tools are used to assess current and future trends. Identified risks will be tracked in the LANXESS Risk Management Tool. It covers direct operations, as well as upstream and downstream activities. The process applies the COSO model as framework. The risk identification and assessment takes place twice a year in the context of the forecasting and the budget/planning process. Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. There are specialized committees on company level to oversee risks during the assessment process, e.g. HSEQ committee for environmental, water and climate protection standards. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Relevance: As a global company, ensuring the social license to operate is very important for all sites world-wide. Since 2015 LANXESS carries out a global but country specific risk assessment. Besides others, risks arising from stakeholder conflicts are tracked. Included are direct and indirect site-, operations-, supply chain-, product and business-impacts related to the aspect of stakeholder concerns in the basin. Such impacts include financial, organizational and strategic implications as well as proposed measures. Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. Assessment tools & process: LANXESS Risk Management Process. Identified risks will be tracked in the LANXESS Risk Management Tool. It covers direct operations, as well as upstream and downstream activities. The process applies the COSO model as framework. The risk identification and assessment takes place twice a year in the context of the forecasting and the budget/planning process. Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. There are specialized committees on company level to oversee risks during the assessment process, e.g. HSEQ committee for environmental, water and climate protection standards. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.
Implications of water on your key commodities/raw materials	Relevant, always included	Relevance: As a global company LANXESS is highly dependent on resilient and reliable supply chains. This also includes water-related risks, e.g. transportation or water supply of our suppliers. Since 2015 LANXESS carries out a global but country specific risk assessment. Besides others, risks related to raw materials and commodities are tracked. Included are direct and indirect site-, operations-, supply chain-, product and business-impacts related to the aspect of supplier activity. Such impacts include financial, organizational and strategic implications as well as proposed measures. Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. Assessment tools & process: TFS Audits & Assessments + LANXESS Risk Management Process. One of the key pillars within both the TFS Assessments and TFS Audits, are the focus on environmental topics including water and water management. These processes would verify if a suppliers has a related environmental policy in place; Action of water management (awareness training, reduction of water intake, water recycling, measures to minimize water quality impacts), and ask the supplier to report on specific water KPIs (total water consumption). Identified risks will be tracked in the LANXESS Risk Management Tool. It covers direct operations, as well as upstream and downstream activities. The process applies the COSO model as framework. The risk identification and assessment takes place twice a year in the context of the forecasting and the budget/planning process. Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. There are specialized committees on company level to oversee risks during the assessment process, e.g. HSEQ committee for environmental, water and climate protection standards. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.
Water-related regulatory frameworks	Relevant, always included	Relevance: As a global company, ensuring the compliance with the local regulation and site permits at any time is vital for LANXESS. It is relevant to track changes well ahead to prepare for increasing water-related regulatory pressure and more demanding permit limits (e.g. related to water efficiency or water discharge limits for certain pollutants). Since 2015 LANXESS carries out a global but country specific risk assessment. Besides others, risks arising from current, as well as upcoming regulations are tracked. Included are direct and indirect site-, operations-, supply chain-, product and business-impacts related to the aspect of stakeholder concerns in the basin. Such impacts include financial, organizational and strategic implications as well as proposed measures. Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. Assessment tools & process: LANXESS Risk Management Process. Identified risks will be tracked in the LANXESS Risk Management Tool. It covers direct operations, as well as upstream and downstream activities. The process applies the COSO model as framework. The risk identification and assessment takes place twice a year in the context of the forecasting and the budget/planning process. Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. There are specialized committees on company level to oversee risks during the assessment process, e.g. HSEQ committee for environmental, water and climate protection standards. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.
Status of ecosystems and habitats	Relevant, always included	Relevance: As a reliable company, LANXESS also takes the impact on neighboring ecosystems into account in its risk assessment. Since 2015 LANXESS carries out a global but country specific risk assessment. Besides others, impacts on ecosystems are tracked. Included are direct and indirect site-, operations-, supply chain-, product and business-impacts related to impacts on the basin's ecosystem. Such impacts include financial, organizational and strategic implications as well as proposed measures. Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. Assessment tools & process: WWF Water Risk Filter + WRI Aqueduct + LANXESS Risk Management Process. The mentioned tools are used to assess current and future trends. Identified risks will be tracked in the LANXESS Risk Management Tool. It covers direct operations, as well as upstream and downstream activities. The process applies the COSO model as framework. The risk identification and assessment takes place twice a year in the context of the forecasting and the budget/planning process. Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. There are specialized committees on company level to oversee risks during the assessment process, e.g. HSEQ committee for environmental, water and climate protection standards. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, not included	Relevance: Occupational health and safety, which includes WASH services, is one of the top priorities of LANXESS. Since 2015 LANXESS carries out a global but country specific risk assessment. Besides others, risks arising health and safety issues are tracked. Included are direct and indirect site-, operations-, supply chain-, product and business-impacts related to the aspect of health and safety. Such impacts include financial, organizational and strategic implications as well as proposed measures. Objective of risk identification is to determine risks that could interrupt operations, affect the reasonable expectation of achieving the company's strategy and business objectives or materially impact the license to operate. Assessment tools & process: Xact (global safety initiative) + LANXESS Risk Management Process. Identified risks will be tracked in the LANXESS Risk Management Tool. It covers direct operations, as well as upstream and downstream activities. The process applies the COSO model as framework. The risk identification and assessment takes place twice a year in the context of the forecasting and the budget/planning process. Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed. There are specialized committees on company level to oversee risks during the assessment process, e.g. HSEQ committee for environmental, water and climate protection standards. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment.
Other contextual issues, please specify	Not considered	No additional issues are considered.

**(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?**

	Relevance & inclusion	Please explain
Customers	Relevant, always included	Relevance: "Valuing Customer Relations" is one of our material topics identified during our materiality analysis process. We value long-term customer relationships, built on trust and knowing, understanding and solving the customer's challenges. Via a central inquiry management system, customers can obtain information on our products, their applications and potential risks as well as product certificates. Feedback from customers gives us valuable information on how we can further improve our products and processes. Method of engagement: If some of our products are used improperly, negative effects on water ecosystems cannot be excluded. Therefore, LANXESS ensures the implementation of binding and voluntary requirements using an electronic safety data system. Safety data sheets in more than 40 languages provide our customers worldwide with data on the materials and inform them of the protective measures required when handling the respective chemicals. Additionally, LANXESS has a market- and customer-oriented complaint management and optimization process in place. In the case of justified complaints, we always aim to find a suitable solution to the problem that occurred together with everyone involved. Particularly in the case of consumer applications – for example, use as an additive in contact with drinking water or food – it is extremely important to us that our products meet high national and international standards. We thereby actively support our customers with the authorization of materials to be used in contact with drinking water, for example, or with further processing of our products into certified goods for end consumers.
Employees	Relevant, always included	Relevance: "Energized and Performing Teams" is another material topic identified during our materiality analysis process. Our ambition is to create a motivating, energetic and health-preserving working environment for all employees, striving for high engagement and impact. We nurture and promote a value-based, performance-orientated culture. We aim to be an attractive employer and to develop peoples' full potential throughout their professional life. By doing so we enable business growth and address global HR trends such as demographic change, globalization, the drive for agility and digitalization as well as cultural and value-based transformation. Method of engagement: Besides negative impacts on the employee's health, improper handling of harmful substances could have a negative impact on water bodies as well. Therefore, employees undergo certain trainings when it comes to product and raw material procurement, handling and storage. Our occupational health management is based on raising all employees' awareness of their own health and motivating them to act on their own initiative and adopt healthy behaviors in their professional and private lives. Six Xact safety rules, the core principles of safe working at LANXESS, address the key points with which all employees – from the factory to the office, regardless of hierarchy and position – can make an active contribution to their own safety and that of their colleagues and the environment. Risk management also includes preventing illegal conduct by our employees. To this end, we obtain extensive legal advice and obligate employees by means of our "Code of conduct – Code for integrity and compliance at LANXESS" to observe the law and our internal directives and to act responsibly.
Investors	Relevant, not included	Relevance: LANXESS's stockholder structure predominantly consists of institutional investors pursuing a growth or value-oriented investment strategy. Investors play an important role in the success and growth of a company. As the focus of investors is increasingly broadening to include ESG-related issues such as water in their portfolio decisions, they are seen as an important water-related stakeholder group. Method of engagement: Although a direct inclusion into the risk management system has not been done in the past, an indirect inclusion can be seen. For example, when it comes to reputational risk of our company in relation to water issues, investors reaction is always considered. Besides that LANXESS actively provides information in the form of different sustainability ratings and questionnaires. Besides CDP Water Security, LANXESS also contributes in the DJSI and Together for Sustainability Ratings. Both of them also assess water-related risks.
Local communities	Relevant, always included	Relevance: Our understanding of sustainable sites also includes being a strong and reliable partner for the people locally and in the respective region and taking responsibility for development of the social environment. Our social commitment is based on our corporate expertise and objectives and focused on education, climate protection, water and culture. We aim to work together with our neighbors to avoid causing inconvenience to them and also securing our social licenses to operate in that area. Method of engagement: To avoid negative impacts on the water security of local communities, LANXESS is committed to water efficiency measures as well as a sufficient effluent treatment in accordance with the local rules. We defined two main goals for our corporate citizenship engagement: (1) Mobilizing resources and people for social commitment and (2) Achieving positive impacts on the company, the environment and society. In the reporting year LANXESS participated in community projects that directly addressed water-related topics.
NGOs	Relevant, sometimes included	Relevance: At basin level we do engage with other water users and management authorities to focus and promote sustainable water management as well as to address shared water risks. As all water users share the context-related risks within a basin, measures must be taken by all water users. The local basin management authorities play an important role in coordinating basin activities. LANXESS aims at maintaining a cooperative relationship with other local users in the area. Potential conflicts with them can lead to reputational damage and a loss of license to operate. Method of engagement: LANXESS is part of several water conservation projects in locations with own operations. Example: In this reporting year we signed the "Low Water Action Plan" for the river Rhine together with other industry partners and the local authorities. This action plan focuses on our three main production sites (Leverkusen, Dormagen, Krefeld-Uerdingen) in Germany. Also, for our USA sites we are a part of the Sparta Aquifer project in Arkansas, an initiative to recover the Sparta Aquifer by using alternative water sources.
Other water users at a basin/catchment level	Relevant, sometimes included	Relevance: At basin level we do engage with other water users and management authorities to focus and promote sustainable water management as well as to address shared water risks. As all water users share the context-related risks within a basin, measures must be taken by all water users. The local basin management authorities play an important role in coordinating basin activities. LANXESS aims at maintaining a cooperative relationship with other local users in the area. Potential conflicts with them can lead to reputational damage and a loss of license to operate. Method of engagement: LANXESS is part of several water conservation projects in locations with own operations. Example: In this reporting year we signed the "Low Water Action Plan" for the river Rhine together with other industry partners and the local authorities. This action plan focuses on our three main production sites (Leverkusen, Dormagen, Krefeld-Uerdingen) in Germany. Also, for our USA sites we are a part of the Sparta Aquifer project in Arkansas, an initiative to recover the Sparta Aquifer by using alternative water sources.
Regulators	Relevant, always included	Relevance: LANXESS aims at complete compliance with the rules, regulations and permit limits laid down by national, state and local government authorities. Our sites continuously keep themselves informed about the current or future changes in regulations that are anticipated by engaging with local stakeholders and authorities. Any deviations can potentially lead to reputational damage and in worst case a cancellation of the license to operate. Methods of engagement: Experts examine implementation of LANXESS guidelines and local regulations for safe operation of our plants on-site via targeted spot checks in audits whose frequency is geared toward the respective risk profile. Compliance with safety standards must be regularly verified worldwide for every plant via audit opinions. The LANXESS HSE compliance checks (health, safety and environment) also include water-related regulatory topics like water withdrawal limits or effluent limits in waste water streams.
River basin management authorities	Relevant, sometimes included	Relevance: At basin level we do engage with other water users and management authorities to focus and promote sustainable water management as well as to address shared water risks. As all water users share the context-related risks within a basin, measures must be taken by all water users. The local basin management authorities play an important role in coordinating basin activities. LANXESS aims at maintaining a cooperative relationship with other local users in the area. Potential conflicts with them can lead to reputational damage and a loss of license to operate. Method of engagement: LANXESS is part of several water conservation projects in locations with own operations. Example: In this reporting year we signed the "Low Water Action Plan" for the river Rhine together with other industry partners and the local authorities. This action plan focuses on our three main production sites (Leverkusen, Dormagen, Krefeld-Uerdingen) in Germany. Also, for our USA sites we are a part of the Sparta Aquifer project in Arkansas, an initiative to recover the Sparta Aquifer by using alternative water sources.
Statutory special interest groups at a local level	Relevant, always included	Relevance: Our understanding of sustainable sites also includes being a strong and reliable partner for the people locally and in the respective region and taking responsibility for the development of the social environment. Our social commitment is based on our corporate expertise and objectives and focused on education, climate protection, water and culture. We aim to work together with our neighbors to avoid causing inconvenience to them and also securing our social licenses to operate in that area. Method of engagement: To avoid negative impacts on the water security of local communities, LANXESS is committed to water efficiency measures as well as a sufficient effluent treatment in accordance with the local rules. We defined two main goals for our corporate citizenship engagement: (1) Mobilizing resources and people for social commitment and (2) Achieving positive impacts on the company, the environment and society. In the reporting year LANXESS performed projects that directly addressed water-related topics.
Suppliers	Relevant, sometimes included	Relevance: At LANXESS, raw materials, other materials, equipment and services are subject to globally standardized requirements with regard to safety and environmental protection. "Resilient Sourcing" is another material topic identified during our materiality analysis process. Our value chains start from a diverse, sustainable raw material portfolio. We engage with our suppliers and relevant stakeholders to improve the working and environmental conditions in the global supply chains. This helps us to minimize potential supply interruptions and ensure business continuity. Method of engagement: We engage with our suppliers also with regards to water. LANXESS has a Supplier Code of Conduct in compliance to which our suppliers are expected to safeguard and protect the environment. They are expected to strive to cut their use of resources, waste and emissions also with regards to water. Our suppliers are evaluated based on the magnitude of dependency we have on them in addition to the size and scale of our suppliers portfolio. Along with this we use other evaluation reports. Example: The Together for sustainability report (TfS) for suppliers. The TfS Assessments and TfS Audits focus majorly on environmental topics including water. These evaluation processes verify if a supplier has a related environmental policy in place; action of water management (awareness training, reduction of water intake, water recycling, measures to minimize water quality impacts), and ask the supplier to report on specific water KPIs (total water consumption). From both the TfS Assessments and TfS Audits a Corrective Action Plan is generated, and shared between the inviting company (LANXESS) and the supplier. This Corrective Action Plan is used as discussion and incentive to ensure continuous improvement. Re-assessments and re-audits are also used as effective way to measure improvement.
Water utilities at a local level	Relevant, always included	Relevance: Third party sources of water supply is the primary source of water supply for LANXESS. It makes for around 80% of our total water withdrawal amount. Therefore, local water utilities are an important stakeholder in ensuring the continuation and success of our business. Engaging with the local water providers helps us to minimize potential supply interruptions and ensure business continuity. Working with water utilities that do not act responsibly can result in regulatory consequences and fines as well as damage to our reputation. Method of engagement: LANXESS has a Supplier Code of Conduct which is applied to local water utilities under our procurement strategy. In compliance to this code our suppliers are expected to safeguard and protect the environment. They are expected to strive to cut their use of resources, waste and emissions also with regards to water. We majorly engage with local water utilities on our sites to ensure sustainable water abstraction and discharge to third parties. We ensure proper handling of wastewater released to the third parties at local level. Example: In terms of water quality the permit limits are mandatory to be adhered to by the third party wastewater treatment plants.
Other stakeholder, please specify	Not considered	No additional stakeholders are considered.

**(W3.3d) 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.**

The opportunity and risk management process is based on the COSO standard and consists among others of the following process steps.

**(1) Opportunity and Risk Identification:**

Objective of the risk Management (RM) process is the early detection and creation of transparency of material opportunities and risks, that could lead to a deviation from our targets and to implement measures to mitigate these risks and to exploit the opportunities, respectively.

**a) Process responsibility:** The BU and GF Heads and Country Representatives are ultimately responsible for the opportunity/risk management in their unit. They organize the bottom-up assessment of opportunities and risks in the respective unit and the submission to the RM software.

**b) Process:** A risk catalogue is defined in order to systematize the collection of opportunities and risks and to ensure that all material risks and opportunities are taken into account. Relevant water-related topics are: Environment and technology, procurement/logistics, political relations, corporate strategy, innovation management. All users may report opportunities and risks in all risk categories. However, for clear responsibilities and to avoid duplications, for each risk category it is determined which organizational units are primarily responsible for identifying and assessing relevant risks. E.g. Risks regarding the availability of water for individual sites are identified by Global Procurement.

**(2) Assessment process:**

Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed twice a year in the context of the forecasting and the budget/planning process. Opportunities and risks are potential deviations from set targets and are assessed in regard to their impact on the EBITDA or net income depending on the risk type. In addition, there are specialized committees on company level to oversee risks during the assessment process, e.g. HSEQ committee for environmental, energy and climate protection standards. In addition to the financial dimension, risk owners also assess the potential reputational impact on the Group for each risk and the potential impact on society and environment. These assessments are qualitative.

**(3) Risk Steering Process:**

After the identification and assessment the appropriate risk management strategy is determined:

- a) Limitation of risks / (exploitation of opportunity) by implementing measures that limit the risk,
- b) Transfer of risks,
- c) Setting up a provision, and
- d) Acceptance of risk.

The appropriate approach is selected based on the risk appetite. All opportunities and risks are assessed before and after measures.

The Risk Owners submit the information in the RM software, the Risk Champions review and discuss the findings with their heads of department and approve the risks and opportunities in the Risk software. All opportunities and risks are then analyzed and prioritized by GF Controlling. GF Controlling compiles the top risks and opportunities (in terms of the expected financial impact as well as impact on LANXESS's reputation and Impact on society & environment) together with the measures. The Corporate Risk Committee takes over the main oversight function. It is responsible for the structure and implementation of the Group-wide Risk Management process. CRC is made up of senior executives, analyses, validates and monitors the Group's risk profile as well as the key opportunities, risks and measures, including climate and water-related risks and opportunities.

Direct operations: Due to the tracking of water-related KPIs at all LANXESS production sites, risks in form of increasing trends in water demand or waste water loads can be identified on a quarterly basis and integrated into the LANXESS Risk Management Process twice per year. Additionally to that LANXESS uses certain tools to assess risks like current and future water stress of all sites worldwide. WWF Water Risk Filter and WRI Aqueduct are used once per year. The results are integrated into the LANXESS Risk Management Process as soon as substantial financial or strategic impact is identified.

Other stages of the value chain, e.g. suppliers: Together for Sustainability is the foundation for our sustainability engagement with suppliers. One of the key pillars within both the TFS Assessments and TFS Audits, are the focus on environmental topics including water and water management. These processes would verify if a suppliers has a related environmental policy in place; Action of water management (awareness training, reduction of water intake, water recycling, measures to minimize water quality impacts), and ask the supplier to report on specific water KPIs (total water consumption). The results are integrated into the LANXESS Risk Management Process as soon as substantial financial or strategic impact is identified.

**W4. Risks and opportunities**

## W4.1

### (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

### (W4.1a) How does your organization define substantive financial or strategic impact on your business?

Substantive financial or strategic impacts are defined for several dimensions.

Each opportunity and risk is measured in three dimensions, of which one is quantitative and two of qualitative dimensions:

#### a) Financial Impact (quantitative)

#### b) Impact on LANXESS's reputation (qualitative)

#### c) Impact on society and environment (qualitative)

#### a) Financial Impact

Regarding Financial Impact, all opportunities and risks have a substantive financial or strategic impact, if they met one of the following criteria: i) Opportunities and risks with more than €1 million EBITDA-impact after countermeasures, ii) Risks which have an expected EBITDA impact, that was reduced by more than €10 million through the implementation of countermeasures, iii) New opportunities or risks with an impact of more than €5 million after measures must be reported ad-hoc. Opportunities and risks having an impact on several BUs are aggregated for an evaluation of the impact on corporate level (e.g. low Rhine water). These thresholds guarantee that the information is comprehensive and not just limited to material risks or risks that could jeopardize the future of the company as a going concern..

#### b+c) Impact on LANXESS's reputation and on society and environment

If a risk is evaluated with highest ranking in category b) or c) it will be also marked as risk with substantive impact. Risk and opportunities can be identified not only for direct operations, but also for upstream and downstream activities.

#### Example:

*Situation:* Longer periods of drought can mean that rivers carry less water. For LANXESS, this is particularly crucial for the Rhine, as the Lower Rhine sites are the largest location for LANXESS, and shipping is essential for the supply of raw materials as well as the transport of products.

*Task:* In order to assess the risk and define countermeasures, a precise extent of the risk at business unit level is necessary.

*Action:* The risk champions of all business units were asked to assess the risk and define countermeasures. First of all, the storage capacities and storage ranges were considered. Next, alternative supply routes such as road or rail were identified and evaluated. Prices, including premium due to scarce availability, were used for this analysis.

*Result:* LANXESS has a consolidated view of the risk, including possible countermeasures. This risk was qualified as substantive.

## W4.1b

### (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?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	3	1-25	For our three sites located in the Rhine basin (Germany), one water-related risk was identified, that exceeded the internally defined threshold of the risk management process. Due to the experience of the last five years, a low level of the river Rhine was identified as feasible risk scenario. Implications could be lower loading capacities and limitations in ship supply.

## W4.1c

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

Country/Area & River basin

Germany	Rhine
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Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

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

Unknown

Comment

For our three sites located in the Rhine basin (Germany), one water-related risk was identified, that exceeded the internally defined threshold of the risk management process. Due to the experience of the last five years, a low level of the river Rhine was identified as feasible risk scenario. Implications could be lower loading capacities and limitations in ship supply.

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W4.2

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(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/Area & River basin**

Germany	Rhine
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**Type of risk & Primary risk driver**

Physical	Seasonal supply variability/inter annual variability
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**Primary potential impact**

Supply chain disruption

**Company-specific description**

Insufficient supply with raw materials and feedstock due to strong limitations in ship and barge transportation in case of low level of river Rhine could lead to serious impacts in production volumes or even shutdowns of plants.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

High

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

We do not disclose data at this level of detail.

**Primary response to risk**

Amend the Business Continuity Plan

**Description of response**

As risk mitigation measure alternative logistics and supply options were developed. As water risks are shared risks for all stakeholders in a basin, LANXESS signed the "Low Water Action Plan" for the river Rhine together with other industry partners and the local authorities. This action plan focuses on the above mentioned sites.

**Cost of response**

**Explanation of cost of response**

We do not disclose data at this level of detail.

W4.2c

(W4.2c) 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?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	LANXESS suppliers are seen and treated as an extension of our value chain. We believe that our suppliers are business partners, and the aim is to foster long-term corporate partnerships that drive success and add value for society. This can only be achieved on the basis, among other things, of the extent to which our business partners share our social and environmental values. Although the procurement spends is an important factor, we also look at various other factors to identify risks. These factors include, but are not limited to, contract duration, strategic importance, business impact, previous CSR ratings, category and country risks. Positive steps and improvements have been made in the formalization of our risk based approach of identification of suppliers. This will strengthen and support our focus on sustainability as supplier CSR rating will be fundamental in the decision making process.

W4.3

(W4.3) 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

W4.3a

**(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.**

**Type of opportunity**

Products and services

**Primary water-related opportunity**

Increased sales of existing products/services

**Company-specific description & strategy to realize opportunity**

Opportunities and not only challenges can be found in water scarcity and pollution. Experts estimate the annual water demand to reach 6,900 bn m<sup>3</sup> in 2030, creating a shortfall of 2,700 bn m<sup>3</sup>. Also, contamination of water supplies is increasing at the same time due to an increasing rate of urbanization and water scarcity due to climate change. This global water supply gap of approx. 40 % creates a business opportunity for LANXESS, as solution provider for water treatment and water extraction technologies. The market for ion exchange resins will grow at a CAGR of 4% from 2019-2024, with higher growth rates for the specialty segments. To accompany this fast market growth and to gain a significant share of this growth, LANXESS invested in R&D collaborations with educational scientific institutes and R&D cooperation with customer and plans to increase its production capacities for ion exchange resins and is as illustrated in following Case Study: Example: Situation: The demand for products to implement water purification is increasing. Task: LANXESS is to expand its production capacities in order to serve the demand for water purification products. Action: LANXESS launched a project in 2019 that analysed the markets in the individual regions in terms of supply demand development, growth potential and differentiation by product group. It also looked at various countries and sites where a new plant could be built. Result: LANXESS announced in 2020, that it is currently planning to build a new production facility, for which it plans to invest a significant amount in the coming years.

**Estimated timeframe for realization**

4 to 6 years

**Magnitude of potential financial impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

50000000

**Potential financial impact figure – maximum (currency)**

100000000

**Explanation of financial impact**

The market for ion exchange resins will grow at a CAGR of 4% from 2019-2024, with higher growth rates for the specialty segment. This will increase the market from 1.6bn€ in 2019 to 1.9bn€ in 2024. LANXESS is a relevant player in the ion exchange resins market. The mentioned growth is based on feasibility studies. If LANXESS manages to generate 15%-30% of this growth, this would lead to a sales increase of 50-100m€.

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**W5. Facility-level water accounting**

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**W5.1**

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(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

**Facility reference number**

Facility 1

**Facility name (optional)**

Niederrhein sites

**Country/Area & River basin**

Germany	Rhine
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**Latitude**

51.021144

**Longitude**

6.982976

**Located in area with water stress**

No

**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)**

149824.44

**Comparison of total withdrawals with previous reporting year**

Lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

89

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

149736

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

133884.9

**Comparison of total discharges with previous reporting year**

Lower

**Discharges to fresh surface water**

125170

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

8715

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

15939.54

**Comparison of total consumption with previous reporting year**

Lower

**Please explain**

As our 3 "Niederrhein-sites" are located within the maximum distance of 60 km to each other and as they have a shared water risk due to the location next to the river Rhine, they are reported as an aggregate of multiple locations in this section. The coordinates of our biggest site, Leverkusen, were chosen. To assess water stress two different tools have been used: WWF Water Risk Filter and WRI Aqueduct. Up to a difference of 5% we assess changes as "about the same", up to 15% as "higher/lower" and more than 15% as "much higher/lower". The figures are measured and reported on a quarterly basis into our HSE Performance Data system.

W5.1a

**(W5.1a) 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?**

The KPI is part of the independent third party audit by PwC (PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft) with limited assurance. The auditor used the ISAE 3000 and the GRI standard. The audits focus on business unit and site information.

**Water withdrawals – volume by source**

**% verified**

76-100

**What standard and methodology was used?**

The KPI is part of the independent third party audit by PwC (PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft) with limited assurance. The auditor used the ISAE 3000 and the GRI standard. The audits focus on business unit and site information.

**Water withdrawals – quality**

**% verified**

76-100

**What standard and methodology was used?**

The KPI is part of the independent third party audit by PwC (PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft) with limited assurance. The auditor used the ISAE 3000 and the GRI standard. The audits focus on business unit and site information.

**Water discharges – total volumes**

**% verified**

76-100

**What standard and methodology was used?**

The KPI is part of the independent third party audit by PwC (PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft) with limited assurance. The auditor used the ISAE 3000 and the GRI standard. The audits focus on business unit and site information.

**Water discharges – volume by destination**

**% verified**

Not verified

**What standard and methodology was used?**

<Not Applicable>

**Water discharges – volume by treatment method**

**% verified**

76-100

**What standard and methodology was used?**

The KPI is part of the independent third party audit by PwC (PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft) with limited assurance. The auditor used the ISAE 3000 and the GRI standard. The audits focus on business unit and site information.

**Water discharge quality – quality by standard effluent parameters**

**% verified**

76-100

**What standard and methodology was used?**

The KPI is part of the independent third party audit by PwC (PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft) with limited assurance. The auditor used the ISAE 3000 and the GRI standard. The audits focus on business unit and site information.

**Water discharge quality – temperature**

**% verified**

Not verified

**What standard and methodology was used?**

<Not Applicable>

**Water consumption – total volume**

**% verified**

76-100

**What standard and methodology was used?**

The KPI is part of the independent third party audit by PwC (PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft) with limited assurance. The auditor used the ISAE 3000 and the GRI standard. The audits focus on business unit and site information.

**Water recycled/reused**

**% verified**

Not verified

**What standard and methodology was used?**

<Not Applicable>

## 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.

	Scope	Content	Please explain
Row 1	Company-wide	Description of business impact on water Description of water-related performance standards for direct operations Commitment to water-related innovation	As the overarching policy the "LANXESS Corporate Policy" does contain a commitment to a comprehensive environmental protection and the improvement of the environmental performance of LANXESS. Water is seen as an integral part of the environment and therefor of this commitment. Additionally the focus on research and development of environmental friendly products is addressed. Besides the corporate policy the "Code of Conduct" addresses the resource water as well.

### W6.2

#### (W6.2) Is there board level oversight of water-related issues within your organization?

Yes

### W6.2a

#### (W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Chief Executive Officer (CEO)	As climate change and water-related issues are multidimensional, the highest level of direct responsibility lies with the Board of Management headed by the CEO of LANXESS. Strategic risks and/ or chances arising from the resource water are analyzed and monitored as part of the annual 'Strategic Portfolio Review' by the Board and presented to the Supervisory Board. Outcomes are considered in the corporate business strategy of LANXESS.
Chief Operating Officer (COO)	The highest level of direct responsibility for directives, strategies and programs with regard to water, water management and waste water as well as for defining HSEQ targets and monitoring their attainment is assigned to LANXESS Chief Operating Officer, who is also part of the Board of Management. HSEQ stands for Health, Safety, Environmental protection (water protection included) and Quality. The COO directs LANXESS's HSEQ Committee, comprising the company's senior executives including the heads of the Business Units and Group Functions. It has responsibility for initiating and monitoring the global implementation of HSEQ directives, strategies and programs. The COO sets up targets and strategies and supervises the Business Units in the implementation process and identifies the relevant reduction projects. Investment projects are then confirmed together with the CFO. After the decision in 2019 for LANXESS to become climate neutral until 2040, the COO initiated the Climate Coordination Committee, to manage and to harmonize the different work streams regarding CO2-topics.
Chief Financial Officer (CFO)	The Chief Financial Officer, who is a board member, is responsible to review the corporate risks and the corporate finance structure. This includes the heading of the Corporate Risk Committee (CRC). The Corporate Risk Committee takes over the main oversight function. It is responsible for the structure and implementation of the Group-wide Risk Management process. CRC is made up of senior executives, analyzes, validates and monitors the Group's risk profile as well as the key opportunities, risks and measures, including climate and water related risks and opportunities.

### W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	Monitoring implementation and performance 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	<p>Corporate Risk Committee: The Corporate Risk Committee as the main oversight function for risks and opportunities analyses and validates the key opportunities and risks and their development from a group perspective as well as the management measures. It is headed by the Chief Financial Officer. If necessary, additional analyses or measures are commissioned. This includes all topics resulting from Climate Change. Every year all strategic topics and measures are discussed by the board in a three-day workshop. One of the topics is water including actual progress against new targets. Board of Management: As climate change is a multidimensional issue, the highest level of direct responsibility lies with the Board of Management headed by the CEO of LANXESS. Strategic risks and/ or chances arising from climate change are analyzed and monitored as part of the annual 'Strategic Portfolio Review' by the Board and presented to the Supervisory Board. Outcomes are considered in the corporate business strategy of LANXESS. HSEQ Committee: LANXESS's HSEQ Committee is headed by the COO. HSEQ stands for Health, Safety, Environmental protection (water protection included) and Quality. This committee comprises of the company's senior executives including the heads of the Business Units and Group Functions. The HSEQ Committee has responsibility for initiating and monitoring the global implementation of HSEQ directives, strategies and programs, as well as for defining HSEQ targets and monitoring their attainment. This includes water and climate related targets and decisions.</p>

W6.3

**(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).**

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

Chief Operating Officer (COO)

**Responsibility**

Both assessing and managing water-related risks and opportunities

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

More frequently than quarterly

**Please explain**

As a member of the Board of Management, the COO has the highest level of direct responsibility for LANXESS operations. The COO also has the highest level of direct responsibility for directives, strategies and programs with regard to water as well as for defining and monitoring of HSEQ targets. As water, as well as climate has become an important corporate-wide issue, responsibility for it has been assigned directly to the COO. The COO not only chairs the HSEQ committee and the Climate Coordination Committee but the overall process for eco efficiency incl. water efficiency and water emission reductions, especially in the case of investment decisions. In this respect the COO brings water related topics to the attention of the Board of Management on a regular basis. The COO monitors the target achievements via the LANXESS HSE performance data. Results are analyzed by the Environmental Sustainability and Corporate Strategy department and brought to the attention of the HSEQ Committee.

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

Safety, Health, Environment and Quality committee

**Responsibility**

Both assessing and managing water-related risks and opportunities

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

More frequently than quarterly

**Please explain**

LANXESS's HSEQ Committee is comprised of the company's senior executives (including the heads of the Business Units and Group Functions) under the direction of the Chief Operating Officer. HSEQ stands for Health, Safety, Environmental protection (water protection included) and Quality. The Committee is coordinated by the Head of the Group Function PTSE (Production Technology Safety and Environment), bearing the responsibility for initiating and monitoring the global implementation of HSEQ directives, strategies and programs, as well as for defining HSEQ targets and monitoring their attainment. The Head of the Group Function PTSE serves as the global representative of the Board of Management in terms of HSEQ management for LANXESS and its affiliates. The Head of the Group Function PTSE directly reports to the COO.

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

Chief Financial Officer (CFO)

**Responsibility**

Both assessing and managing water-related risks and opportunities

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

More frequently than quarterly

**Please explain**

The Chief Financial Officer chairs the Corporate Risk Committee and supervises all LANXESS investment decisions in the Investment Committee. As water, as well as climate has become an important corporate-wide issues, the CFO assesses and manages climate- and water-related risks and opportunities on a regular basis and therefore more frequently than quarterly. The CFO monitors the target attainment for water and water emission reductions via the HSE performance data that are provided to him by the COO and proceeds with the approval of investment decisions accordingly.

**W6.4**

**(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?**

	Provide incentives for management of water-related issues	Comment
Row 1	No, and we do not plan to introduce them in the next two years	Climate-related incentives exist for higher management level at LANXESS. Extending these incentives to other topics is currently under discussion. It is not excluded that there will also be water-related incentives for upper management in the future.

**W6.5**

**(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**

**(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 Chairman of the Board of Management (CEO) of LANXESS has the highest level of responsibility. The CEO is responsible for the Corporate Communications Group Function and therefore for the Political Relations team. The team coordinates the Group's public affairs activities at the global level. The team's tasks: political communication and positioning of the Group and its strategy regarding politics, administration, associations and non-governmental organizations. This also includes energy, climate and water policy. The relevant stakeholders are addressed locally, regionally, nationally and internationally at all levels. An additional part of the process to align all water-relevant decisions and engagements with the existing policies lies with the expert committees, e.g. the CR Committee (Corporate Responsibility Committee) or the HSEQ Committee (Health, Safety, Environment and Quality Committee). From the highest management level one member of the Board of Management is present in these Committees (COO in HSEQ Committee and Labor Relations Director in CR Committee).

One example for water-related politics and stakeholder engagement is our involvement for the river Rhine (Germany). Together with other industry partners and local politicians we signed the "Low Water Action Plan" in this reporting year to counter the low water level problems with the river Rhine caused by climate change.

**W6.6**

**(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?**

Yes (you may attach the report - this is optional)

**W7. Business strategy**

**W7.1**

**(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?**

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	LANXESS sees that water availability and quality are global challenges, today and even more in the future. As a solution provider LANXESS enables the improved availability of high quality water for society. LANXESS group strategy aims to grow above average in those markets. This is reflected in the set-up of the new segment "Consumer protection" with a focus on agro, water and human protection solutions. LANXESS is a leading supplier of water treatment products and producer of ion exchange resins of which one main application is drinking water treatment. Besides that LANXESS also produces active ingredients, preservatives and disinfectants that are used to keep water clean e.g. within the beverage industry as cold sterilization agent (Velcorin®) or oxidizing agents used for water storage (Oxone™).
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Our long-term goals are integrated into our Corporate Strategy and detailed into business strategies and specific measures. The corporate strategy process is designed to control the strategy implementation on business level annually. Financial targets are set. Additionally we have a good track record with Mergers & Acquisitions activities and continuously scan the market for additional growth opportunities. On a more operational level we regularly review our strategy with the objective of making LANXESS resilient to risks related to water and climate change. As one element we established a "3 dimensional product portfolio sustainability assessment". There, we assess our portfolio in terms of economic, environmental and social sustainability. This enables us to strengthen products that have a significant positive environmental effect and to identify products with a positive contribution in regards to water. Additional to our business objectives we drive our Corporate Sustainability targets. We continuously measure and control relevant water KPIs. Annually we publish all data on water withdrawal, consumption and discharge as well as on emissions in water, integrated in the Annual Report. Our internal process for collecting and processing information consists of the following activities: Ongoing analysis of the production processes and potential savings developed by our experts in the business units and the corporate R&D group leads us to appropriate investment projects.
Financial planning	Yes, water-related issues are integrated	5-10	Climate and water-related risks and opportunities have influenced our financial statements in several ways and since many years. As the related effects are not limited in time, they are of course also influencing our financial planning. Its time horizon is five to ten years. To realize business growth in the water related market segments, short, medium and long-term revenue targets are defined for all relevant Business Units and Segments, e.g. for the new segment "Consumer protection". LANXESS group strategy aims to grow above average in those markets. Revenues are influenced due to the sales of chemical products required for water treatment (e.g. Ion exchange resins for food and pharmaceutical industries, semiconductor industry, the chemical industry, microelectronics and drinking water treatment), and of products being suitable for technologies helping to adapt to climate change and to mitigate its consequences. Besides realizing opportunities for market growth, divestments are as well an accepted measure to improve the water efficiency of our portfolio.

**W7.2**

**(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?**

Row 1

Water-related CAPEX (+/- % change)

Anticipated forward trend for CAPEX (+/- % change)

Water-related OPEX (+/- % change)

Anticipated forward trend for OPEX (+/- % change)

Please explain

We do not disclose data at this level of detail.

**W7.3**

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

	Use of climate-related scenario analysis	Comment
Row 1	Yes	We have used qualitative scenario analysis, to support the development of our climate neutral strategy. The areas considered have been our own direct operations worldwide, meaning Scope 1 and 2 emissions. The time horizon has been up to 2050. We have identified several scenarios being suitable for our purpose: The IEA 2DS scenario has been used to understand the global process of decarbonisation and its implications for the chemical industry as a whole worldwide. Next, we have contributed to the working groups developing the "Roadmap treibhausgasneutrale Chemie in Deutschland" by VCI (German Chemical Industry Association). We have used the decarbonisation paths described as an input of our scenario analysis. We have adopted the underlying assumptions in accordance with our own industrial expertise tailoring them to our technology base, e.g. regarding market readiness of key technologies or availability of hydrogen in the regions we operate.

**W7.3a**

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

No

**W7.4**

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

Row 1

**Does your company use an internal price on water?**

No, and we do not anticipate doing so within the next two years

Please explain

**W8. Targets**

**W8.1**

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	For the reporting year 2019 LANXESS set itself one corporate water efficiency reduction target and the goal to perform an extensive water risk assessment for all LANXESS production sites. Target 1: Reduction of specific water consumption by 2% compared to the previous year For every reporting year LANXESS sets itself a specific water consumption reduction target using revenue as denominator. Due to water scarcity and increasing water prices in certain areas, a reduction in water consumption is seen a risk mitigation measure. On a yearly basis LANXESS HSEQ (Health, Safety, Environment & Quality) experts discuss and define targets for different environmental-related KPIs. One of them is water consumption. Using this approach an improvement in water consumption is visible in the 4-year trend as well as in a year-on-year comparison. Goal 1: Water Risk Assessment to identify main risk sites With the upcoming Water Risk Assessment LANXESS will be able to understand local risks and how to mitigate them. The goal is to assess all production sites by the end of 2020 by using an extensive assessment approach. The main focus will be on the aspect of water stress as well as water withdrawal and consumption volumes. The assessment will also include impact valuation calculation as well as operational, reputational and regulatory risk analyses. As a result of the assessment LANXESS will identify the main risk sites to focus on and derive context-based water targets in the upcoming years. This is the only way to cope with the local character of water risks and come up with measures that are specifically relevant for a certain site.

**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**

Water use efficiency

**Level**

Company-wide

**Primary motivation**

Risk mitigation

**Description of target**

Target 1: Company-wide reduction of specific water consumption by 2% compared to the previous year For every reporting year LANXESS sets itself a specific water consumption reduction target using the total water consumption as a nominator and revenue as denominator. Due to water scarcity and increasing water prices in certain areas, a reduction in water consumption is seen as a risk mitigation measure. On a yearly basis LANXESS HSEQ (Health, Safety, Environment & Quality) experts discuss and define targets for different environmental-related KPIs. One of them is water consumption. Using this approach as an improvement in water consumption is visible in the 4-year trend as well as in a year-on-year comparison.

**Quantitative metric**

Other, please specify (Specific reduction of water consumption (cubic meter per Euro revenue))

**Baseline year**

2018

**Start year**

2018

**Target year**

2019

**% of target achieved**

100

**Please explain**

For reporting year 2019 a 2% reduction target compared to the previous was defined and fulfilled. LANXESS even realized a reduction of almost 3%; therefor the target achievement is assessed to be 100%.

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**W8.1b**

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

**Goal**

Other, please specify (Carry out a Water Risk Assessment to identify main water risk sites)

**Level**

Company-wide

**Motivation**

Risk mitigation

**Description of goal**

With the upcoming Water Risk Assessment LANXESS will be able to understand local risks and how to mitigate them. The Water Risk Assessment method was already developed in the reporting year 2019 and will be carried out in the reporting year 2020. All LANXESS production sites will be assessed on the basis of the 2019 performance data. The corporate HSEQ department is responsible to perform the assessment by using already available performance data, the usage of external assessment tools (e.g. WWF Water Risk Filter or WRI Aqueduct), expert interviews and site specific questionnaires. The main focus will be on the aspect of water stress as well as water withdrawal and consumption volumes. The assessment will also include impact valuation calculation as well as operational, reputational and regulatory risk analyses. As a result of the assessment LANXESS will identify the main risk sites to focus on and derive context-based water targets in the upcoming years. This is the only way to cope with the local character of water risks and come up with measures that are specifically relevant for a certain site.

**Baseline year**

2019

**Start year**

2019

**End year**

2020

**Progress**

Progress is measured by the number of production sites being assessed according to the pre-defined assessment method. As a first step to reach the goal, the Water Risk Assessment method was already developed in the reporting year 2019.

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**W9. Verification**

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**W9.1**

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(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

### W9.1a

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	Total Water withdrawal in water stress areas	ISAE 3000	The KPI is part of the independent third party audit by PwC (PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft) with limited assurance. The auditor used the ISAE 3000 and the GRI standard. The audits focus on business unit and site information.

### W10. 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.

### W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Chief Operating Officer (COO)/ Member of the Board of Management	Chief Operating Officer (COO)

### W10.2

(W10.2) 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)].

No

### SW. Supply chain module

#### SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	

#### SW0.2

(SW0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

Please select

#### SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

Please select

SW1.2

---

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Please select	

SW2.1

---

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

SW2.2

---

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

Please select

SW3.1

---

(SW3.1) Provide any available water intensity values for your organization's products or services.

Submit your response

---

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms