

Welcome to your CDP Water Security Questionnaire 2023

W0. Introduction

W0.1

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

LANXESS is a leading specialty chemicals company with sales of EUR 8.1 billion in 2022. The company currently has about 15,200 employees in 33 countries (production sites in 18 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), ISS ("prime" status), MSCI (AA rating), FTSE4Good, CDP Climate "A" listed and signatory to the UN Global Compact

For LANXESS, acting sustainably means being ready for the future. So we are in a position to withstand uncertain times: We are stable, use resources sparingly, take social responsibility, and do business from a long-term perspective. With this entrepreneurial mindset, which is firmly rooted in our strategy, we take our global responsibility and make an important contribution to the future.

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. 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 five material sustainability topics 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.

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 and products or in the form of steam. In addition, rivers are important for transportation. Through access to drinking water and sanitation facilities 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 households, such applications are used among others to soften water. Ion exchange resins are also used in the 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. Thus contributing to SDG 6 actively.

All data above as per May 15th. 2022.

Forward-Looking Statements: The answers to the questions of the CDP contain forward-looking statements based on current assumptions and forecasts made by LANXESS AG management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. Company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.

W-CH0.1a

(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

(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, 2022	December 31, 2022

W0.3

(W0.3) Select the countries/areas in which you operate.

- Argentina

Australia
Belgium
Brazil
Canada
China
France
Germany
India
Italy
Japan
Mexico
Netherlands
Russian Federation
Singapore
South Africa
Taiwan, China
United Kingdom of Great Britain and Northern Ireland
United States of America

☞ Only countries with LANXESS production sites are listed. The aggregate data refer to all LANXESS production sites in which the company holds an interest of more than 50%.

W0.4

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

EUR

W0.5

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

Companies, entities or groups over which operational control is exercised

☞ The aggregate data refers to all LANXESS production sites in which the company holds an interest of more than 50%.

W0.6

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

No

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	DE0005470405
Yes, a SEDOL code	B1N8XZ3
Yes, a CUSIP number	D5032B102

W1. Current state

W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Vital	<p>Direct use: Good quality fresh water is vital for our production activities, product quality and ensuring long-life of our equipment. More than 99% of total water withdrawn by the company are freshwater amounts withdrawn from surface water, groundwater, rainwater, third-party water and water in the form of steam.</p> <p>Usage: The primary use of freshwater is in the form of cooling water (approx. 80% of withdrawn freshwater). Other uses include steam generation, as a solvent and as a product or process input.</p> <p>What makes it vital: Freshwater is crucial in keeping the maintenance, water pre-treatment costs at minimum and maintaining the good quality of our products. Example: If salt water from seas is used as cooling water, it will cause scaling in the pipes resulting in high maintenance costs. Similarly, using low quality water can lead to corrosion or slime formation inside the piping network.</p> <p>Indirect use: There is an indirect dependency on freshwater because of the energy (in form of steam) and other raw materials supply from a third-party supplier.</p> <p>Usage: Our raw material and energy suppliers use water as coolant, solvent or raw material for their</p>

			<p>own production. For some of our biggest sites in Germany we source steam to meet our energy requirements for production.</p> <p>What makes it vital: The requirements are very product specific and hence, it's vital that our suppliers keep up with the production quality and quantity of supplied goods. Also, we source a lot of steam from third-party suppliers for some of our biggest sites in Germany (makes for 82% of externally bought steam). Using good quality water is a prerequisite for water used to generate steam.</p> <p>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.</p>
<p>Sufficient amounts of recycled, brackish and/or produced water available for use</p>	<p>Not very important</p>	<p>Not very important</p>	<p>Direct use:</p> <p>We have a direct use of very small amounts of brackish water at few of our production sites. The sites take the wastewater from the local community and process it on-site for being utilized in production processes.</p> <p>Usage: It is a readily available source of water for few of our production sites. After treatment it can be used as product and process inputs.</p> <p>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. 1% of total water withdrawn).</p> <p>Indirect use:</p> <p>The brackish water ways are used for transportation purposes by our suppliers and might be used as product or process input.</p> <p>Usage: It is an economically feasible means of transportation.</p> <p>What makes it not very important: Alternative means of transportation or input source can be used which makes this water source not critical for us.</p> <p>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,</p>

			production rates is made or new acquisitions are made.
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W1.2

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

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Continuously	We measure water withdrawals using invoices, flow metering and calculations based on the reported data.	We measure & report environmental data for all our production sites where we hold interest > 50%. Apart from continuous monitoring of collected data on-site, water-related KPIs are reported into central, GRI-compliant data base (HSE Performance Data) on a quarterly basis. After defined control process, data is externally verified & published in our annual report (AR).
Water withdrawals – volumes by source	100%	Continuously	We measure water withdrawals using flow metering, invoices and allocation of data.	We measure & report environmental data for all our production sites where we hold interest > 50%. Apart from continuous monitoring of

				collected data on-site, water-related KPIs are reported into central, GRI-compliant data base (HSE Performance Data) on a quarterly basis. After defined control process, data is externally verified & published in our annual report. We distinguish groundwater, surface/ third party/ rain & sewage water for all sites.
Water withdrawals quality	100%	Continuously	We measure water withdrawals quality by taking samples and perform laboratory testing.	We measure, document and report environmental data for all our production sites in which the company holds an interest of more than 50%. Monitoring: Quality controls of water withdrawals are the responsibility of the production site. According to their permit and operating instructions the personnel on site makes sure to get the amounts and

				quality of water they need for production processes.
Water discharges – total volumes	100%	Continuously	We measure water discharges (total volumes) with invoices, flow metering and calculations based on the reported data.	We measure & report environmental data for all our production sites with LXS interest > 50%. Apart from monitoring data on-site, KPIs are reported into central, GRI-compliant data base (quarterly). After defined control process, data is externally verified & published. We measure total water discharge for all sites. New KPI's for more accurate accounting introduced: 'other discharges to third-party' & 'water given away as energy carrier'.
Water discharges – volumes by destination	100%	Continuously	We measure water discharges (total volumes by destination) with invoices, flow metering and calculations based on the reported data.	We measure & report environmental data for all our production sites with LXS interest > 50%. Apart from monitoring data on-site, KPIs are

				<p>reported into central, GRI-compliant data base (quarterly). After defined control process, data is externally verified & published. New KPIs to record values by source (Discharge to surface water, sea, groundwater & third-party) for treated & untreated waste water & once-through cooling water for all sites.</p>
<p>Water discharges – volumes by treatment method</p>	<p>100%</p>	<p>Continuously</p>	<p>We measure water discharges (volumes by treatment method) with invoices and allocation of discharge data by treatment category (treated or untreated).</p>	<p>We measure & report environmental data for all our production sites with LXS interest > 50%. Apart from monitoring data on-site, KPIs are reported into central, GRI-compliant data base (quarterly). After defined control process, data is externally verified & published. We have dedicated KPI's to record</p>

				volumes of treated & untreated water discharge. All treated water is considered to undergo tertiary treatment.
Water discharge quality – by standard effluent parameters	100%	Continuously	We measure water discharge quality (by standard effluent parameters) by taking samples and perform laboratory testing.	We measure & report environmental data for all our production sites with LXS interest > 50%. Apart from monitoring data on-site, KPIs are quarterly reported into central, GRI-compliant data base. After control process, data is externally verified & published. We measure & report: nitrogen, total organic carbon and heavy metals for all sites. Since 2021, new KPIs like Absorbable Organic Halides and Persistent Organic Pollutants. Sites use internal or external lab results.
Water discharge quality – emissions to water (nitrates,	100%	Continuously	We measure water discharge quality (by emissions to water) by taking	Sampling and laboratory testing We measure &

<p>phosphates, pesticides, and/or other priority substances)</p>			<p>samples and perform laboratory testing.</p>	<p>report environmental data for all our production sites with LXS interest > 50%. Apart from monitoring data on-site, KPIs are quarterly reported into central, GRI-compliant data base. After control process, data is externally verified & published. In addition to TOC (resp. COD) amount, we measure, and report on, nitrogen, phosphorus and heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Sn, Zn, AOX, POP's) and comply with all water-related permit limits and regulations.</p>
<p>Water discharge quality – temperature</p>	<p>100%</p>	<p>Continuously</p>	<p>We measure the temperature of our water discharge with a continuous recording of temperature readings on the sensors.</p>	<p>We measure, document and report environmental data for all our production sites in which the company holds an interest of more than 50%. Monitoring: The Maximum</p>

				<p>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.</p>
<p>Water consumption – total volume</p>	<p>100%</p>	<p>Quarterly</p>	<p>We determine water consumption by calculating with an internal formula & HSE performance data (in line with GRI standards).</p>	<p>We measure & report environmental data for all our production sites with LXS interest > 50%. Apart from monitoring data on-site, KPIs are quarterly reported into central, GRI-compliant data base. After control process, data is externally verified & published. Water consumption calculated according to GRI: water discharge subtracted from withdrawal. Amounts are</p>

				compared on quarterly basis to identify changes and causes.
Water recycled/reused	100%	Continuously	We measure water recycled/ reused with flow metering and calculations (pump capacity*operating hours).	We measure & report environmental data for all our production sites with LXS interest > 50%. Apart from monitoring data on-site, KPIs are quarterly reported into central, GRI-compliant data base. After control process, data is externally verified & published. Dedicated KPI records reused water (mainly cooling water in closed-loops). Either measured through flow-meters or calculated by multiplying pumping capacity & no. of operating hours.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Other, please specify We measure provision of WASH services to all workers on a risk basis - but minimum	We measure the provision of fully-functioning, safely managed WASH services to all workers with a risk based approach. Our method thereby is auditing	Monitoring: Compliance with safety and hygiene standards are regularly verified worldwide in the context of HSE (health, safety,

		every 5 years.	as part of our Compliance checks. Those compliance checks are performed minimum every 5 years.	environment) Compliance Checks. Experts examine the implementation of LANXESS guidelines and local regulations.
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W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	226,800	About the same	Other, please specify Our product portfolio remained largely unchanged in the reporting year.	Much lower	Divestment from water intensive technology/process	The total water withdrawn includes the water bought in the form of steam, third-party wastewater (input) and freshwater from third-party sources along with water drawn from freshwater bodies. The total amount of water withdrawn for the year 2022 was about the same compared to the previous

						<p>year (2021: 217,000 megaliters/year) since our product portfolio remained largely unchanged in the reporting year.</p> <p>Future trends: The future water withdrawal is likely to decrease significantly due to the planned deconsolidation of our high performance materials (HPM) business in 2023.</p>
Total discharges	213,700	About the same	Other, please specify Our product portfolio remained largely unchanged in the reporting year.	Much lower	Divestment from water intensive technology/processes	The total discharge primarily consists of the once-through cooling water, treated and untreated wastewater discharge volumes. The total amount of water discharged in 2022 is about the same as in the last year (2021: 204,000

						<p>megaliters/year) since our product portfolio remained largely unchanged in the reporting year.</p> <p>Future trends: The future our discharge amounts are likely to decrease significantly due to the planned deconsolidation of our high performance materials (HPM) business in 2023.</p>
Total consumption	12,400	About the same	Other, please specify Our product portfolio remained largely unchanged in the reporting year.	Lower	Divestment from water intensive technology/process	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).

						<p>LANXESS's water consumption is calculated by subtracting the volume of treated and untreated wastewater, and sold waste steam and other discharges to third-party (total water input) from the total water withdrawal amounts (total water output).</p> <p>The resulting consumption amount in 2022 is about the same compared to the previous year (12,700 megalitres/year) since our product portfolio remained largely unchanged in the reporting year. The consumption values and the calculation basis are available in our Annual Report. The provided figures do not</p>
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						<p>balance out according to the CDP formula. As water is a local topic, water balances are calculated on site level and on a quarterly basis. This explains the deviation from the provided formula as negative balances are also leveled out on site level.</p> <p>In general, compared to water withdrawal amounts, the water consumption of LANXESS is very low due to the main usage of withdrawn water as once-through cooling water. As this once-through cooling water is uncontaminated, it is released back to the environment at optimum temperature in</p>
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							<p>accordance with local permits.</p> <p>Future trends: The future water consumption is likely to decrease due to the planned deconsolidation of our high performance materials (HPM) business in 2023.</p>
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W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	1-10	Lower	Increase/decrease in efficiency	About the same	Maximum potential volume reduction already achieved	WRI Aqueduct	The water withdrawal data for all our sites is evaluated and monitored in our internal HSE database. On a yearly basis we use the online



								<p>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 along with choosing a chemical industry specific analysis. 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</p>
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								<p>annual renewable supply, accounting for upstream consumptive use. The production sites in the locations identified with a high baseline water stress percentage (40%-80%; >80%) are considered to be in water stress areas. In the reporting year 2022 a total of 14 sites were identified to be located in water stress areas. These water stress sites are spread across 8 countries. Most of these sites are relatively small with only one</p>
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								<p>production unit. Only two of the water stress sites have multiple production units operating at their location. The overall water withdrawal from these 14 water stress sites amounted for approximately 2% of the total LANXESS water withdrawal for this reporting year. This remained about the same compared to the previous year (2021).</p> <p>The water withdrawal from the water stress areas for reporting year (4,200</p>
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								<p>megaliters) is lower compared to previous year (4,500 megaliters). The reason for the lower withdrawal amounts can be attributed to different water-efficiency projects that we have implemented at our water stress sites such as installing two more efficient cooling towers at our production site in Latina (Italy). Furthermore our production volume has slightly decreased from 2021 to 2022.</p> <p>Five-year forecast: With our</p>
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								<p>local water stewardship program, we have set ourselves the goal of implementing water stewardship measures at our water risk sites by the end of 2023. To this end, we first identified our water risk sites and then developed and implemented measures such as action plans, collaborations and multi-stakeholder water projects. Many of the efficiency projects have already been implemented, which is why we expect our water withdrawal</p>
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								to remain roughly the same over the 5-year trend. Since only 0.1 from our total 4.2 million m ³ water withdrawal in water-stress areas belong to our HPM business unit which will be de-consolidated in the next reporting period, we do not expect large changes from this curve-out.
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W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	73,800	Much higher	Mergers and acquisitions	Fresh surface water is an important and a readily available source of water

					<p>for approximately a quarter of our sites. Primary use of this water is as cooling water. Most of this cooling water is released back to the water bodies with no contamination as there is no contact with the chemical processes.</p> <p>The amount of fresh surface water intake in 2022 was much higher compared to the previous year (57,500 megaliters). The reason behind is the acquisition of Emerald Kalama Chemicals (EKC) in 2021. While EKC's water figures were only partially consolidated in fiscal 2021 because EKC was acquired during the year, in the fiscal 2022, EKC's water figures were fully consolidated leading to a significant increase.</p> <p>Future trends: Our future water</p>
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					<p>withdrawal from Fresh surface water is likely to decrease due to the deconsolidation of our high performance materials (HPM) business in 2023.</p>
Brackish surface water/Seawater	Not relevant				<p>Water withdrawal from Brackish surface water/sea water is not a relevant withdrawal source for LANXESS. Being a chemical company, the major water use is for cooling purposes and brackish surface or seawater is not suitable for being used as cooling water. This type of water can cause scaling and fouling in the piping network. Which may lead to increased maintenance costs.</p> <p>Future trends: The situation is likely to stay unchanged as long as the asset portfolio stays the same.</p>

Groundwater – renewable	Relevant	4,500	About the same	<p>Other, please specify</p> <p>Our product portfolio remained largely unchanged in the reporting year.</p>	<p>Groundwater withdrawal amount constitutes for approximately 2% of our overall water withdrawal amounts . However, it is a very important source of high 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 of our groundwater supply comes from renewable sources as the sites using groundwater are not located in the countries where the groundwater sources are typically non-renewable (e.g. North Africa, Central Asia etc.). The groundwater supply in 2022 was about the same to that of the previous year (4,600 megaliters). The</p>
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					<p>reason for the similar consumption amounts can be attributed to the fact that our product portfolio remained largely unchanged in the reporting year.</p> <p>Future trends: The situation is expected to be similar, except for when a change in production rates or product and asset portfolio takes place.</p>
Groundwater – non-renewable	Not relevant				<p>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.</p> <p>Since, LANXESS does not have sites located in the countries where the groundwater supply is typically non-renewable (e.g. North Africa, Central Asia</p>

					<p>etc.). We consider the groundwater volumes we use as renewable.</p> <p>Future trends: For coming years we are planning to include separate KPIs for recording these values. But the situation is likely to stay the same except for new acquisitions in the future.</p>
Produced/Entrained water	Not relevant				<p>There is no produced water amounts that's recorded for any of our sites, since these amounts are negligible in most of the cases and non-existent. Therefore, this category is irrelevant for LANXESS.</p>
Third party sources	Relevant	148,500	About the same	Other, please specify Our product portfolio remained largely unchanged in the reporting year.	<p>Third party sources are the primary water source for us. It makes for around 70% of our total water withdrawal. It includes water from third party or municipal providers (main volumes) as well as water taken in the form of steam</p>

				<p>& wastewater from third-party sources (Example: At one of our Indian sites sewage water of a nearby community is used for production processes after treatment on-site). We mainly use this water as a coolant (85% of total third party water supply), other uses are as solvents, process input and drinking water. The water used for cooling is uncontaminated and is released back to the environment. Compared to the previous year (154,900 megaliters) the amounts remained about the same since higher production volumes stayed stable because we now purchase water directly at some sites and not via third party suppliers.</p> <p>Future trends: The situation is</p>
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					expected to be similar, except for when a change in production rates or product and asset portfolio takes place.
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W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	84,381.97	Much higher	Change in accounting methodology	<p>Relevance: Discharges to surface water (legally permitted destination for few of our sites for once-through cooling water/ treated water on-site) make 39% of our total discharges.</p> <p>Volumes: Mainly contains once-through cooling water, steam condensate & water internally treated at LANXESS owned wastewater treatment plants. At our treatment facilities this water is discharged after relevant quality checks. Sophisticated alert systems prevent accidental</p>

					<p>discharges. We record this in our HSE performance database. For 2021, this values was 68,711 megalitres, for 2022 this was 84,381.97 megaliters. The reason for higher amounts in 2022 is the acquisition of Emerald Kalama Chemicals (EKC) in 2021. While EKC's water figures were only partially consolidated in fiscal 2021 in 2022, EKC's water figures were fully consolidated leading to a significant increase. Future trends: Our future water discharge to fresh surface water is likely to decrease due to the deconsolidation of HPM) business in 2023.</p>
Brackish surface water/seawater	Relevant	446.21	About the same	<p>Other, please specify</p> <p>Our product portfolio remained largely unchanged in the reporting year.</p>	<p>Relevance: Although the amount of discharges to this source are very small, it is a readily available source of discharge for few of our sites. It makes for 0.21% of our overall discharges.</p> <p>Volumes: This amount mainly</p>

					<p>contains steam condensate and the water internally treated at a LANXESS owned wastewater treatment facility. At our treatment facilities this water is discharged after relevant quality checks. Sophisticated alert systems are installed to prevent accidental discharges.</p> <p>We record this value under a specific KPI in our HSE performance database.</p> <p>The discharge to brackish/ seawater was 2021: 443.73 megaliters and 2022: 446.21 megaliters. The reason for the similar discharge amounts is due to comparable production volumes in 2021 and 2022.</p> <p>Future trend: Likely to remain the same unless a change in product volumes or asset portfolio takes place.</p>
Groundwater	Relevant	717.39	Much higher	Change in accounting methodology	Relevance: Although the discharges to groundwater are very

					<p>small, it is a readily available source of discharge for few of our sites. It makes 0.33% of our overall discharges.</p> <p>Volumes: This amount mainly contains the water internally treated at a LANXESS wastewater treatment facility . At our treatment facilities this water is discharged after relevant quality checks. Sophisticated alert systems are installed to prevent accidental discharges.</p> <p>We record this value under a specific KPI in our HSE performance database from the year 2021. The discharge to groundwater was 2021: 5.8 megaliters and 2022: 717.39 megaliters. The reason for higher amounts in 2022 is a redeclaration of water related data in our production site in El Dorado.</p> <p>Future trend: Likely to remain the same unless a change in product volumes or</p>
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					asset portfolio takes place.
Third-party destinations	Relevant	130,312.09	About the same	Other, please specify Our product portfolio remained largely unchanged in the reporting year.	<p>Relevance: This is the primary discharge source for most of our biggest sites. (Example: Our biggest site in Germany is located in a chemical park, where a third-party utilities provider is responsible for complete water handling). It makes for almost 60% of our overall discharges.</p> <p>Volumes: This amount primarily constitutes of cooling water for release to the environment, wastewater for treatment, sold waste steam and other miscellaneous discharges to third-party entities.</p> <p>We record this value under a specific KPI in our HSE performance database from the year 2021. The discharge to third party destination in 2022 was 130,411.62 megalitres and in 2021 136,888.96 megaliters.</p>

					<p>The reason for the similar discharge amounts is that the effect of the full consolidation of the newly acquired EKC sites on the indicator "third party discharge" is negligible.</p> <p>Future trend: Likely to remain the same unless a change in product volumes or asset portfolio takes place.</p>
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W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	15,568	About the same	Other, please specify Our product portfolio remained largely unchanged in the reporting year.	81-90	The tertiary treatment level of discharge water is relevant for LANXESS. It makes for around 7% of our overall water discharge volumes. Relevance:

						<p>Being a chemical company we use some water as process input. Water which is contaminated with chemicals and is therefore thoroughly treated at tertiary level which is the highest level of treatment available to prevent any potential contamination to the environment, upon releasing this water.</p> <p>Compliance and regulations: Both the third-party and LANXESS own wastewater treatment plants operate according to the respective national or locally</p>
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						<p>applicable regulations. The discharge limits are adhered to as specified in the local permits. At LANXESS owned treatment plants sophisticated alarm systems are installed to prevent any accidental discharges. A continuous in stream quality check and additional lab-tests are carried out as per requirement. In case of an incident, mitigation measures are predefined and come to action. The discharge streams are subjected to an immediate stoppage as the first-step by default.</p> <p>Measurement method and</p>
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						<p>constituents:</p> <p>We record this value under a specific KPI in our HSE database. The sites also report the volumes they release to a third-party wastewater treatment facility for further treatment under this KPI.</p> <p>Approximately 82% of our sites report discharges to a third-party facility for treating their water to tertiary level and discharging it according to the local permits. The rest of the sites have their own treatment facility and treat the wastewater on site.</p> <p>Compared to the last year values (16,221</p>
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						<p>megaliters), the reason for the similar amounts is due to comparable production volumes and a negligible effect of the full EKC consolidation on this indicator.</p> <p>Future trend: The trend for the coming years is likely to remain the same unless there is a change in product or asset portfolio.</p>
Secondary treatment	Not relevant					<p>Being a chemical company, we have a major use of water as cooling water. The cooling water does not come in direct contact with the chemical processes and stay uncontaminated. However, we</p>

						<p>also use some amount of water as a process input, which results in contamination of this water. We treat any contaminated water to the highest level of treatment, that is the tertiary level. The treatment is not limited to secondary or primary level of treatment in case the water has come in contact with the chemical processes, we treat it to the maximum level before releasing it back to the environment.</p> <p>Therefore, the wastewater volumes treated to the secondary treatment level is not relevant for LANXESS.</p>
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<p>Primary treatment only</p>	<p>Not relevant</p>					<p>Being a chemical company, we have a primary use of water as cooling water. The cooling water does not come in direct contact with the chemical processes and stay uncontaminated. However, we also use some amount of water as a process input, which results in contamination of this water. We treat any contaminated water to the highest level of treatment, that is the tertiary level. The treatment is not limited to secondary or primary level of treatment in case the water has come in contact with the chemical</p>
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						<p>processes, we treat it to the maximum level before releasing it back to the environment.</p> <p>Therefore, the wastewater volumes treated to the primary treatment level is not relevant for LANXESS.</p>
Discharge to the natural environment without treatment	Relevant	79,684.46	Much higher	Mergers and acquisitions	21-30	<p>The water volumes discharged to the natural environment without treatment is a relevant category for LANXESS. These volumes make for around 37% of our overall discharges. Relevance: Being a chemical company we use water primarily as cooling water. This cooling water does not come in</p>

					<p>contact with the chemical processes and is not contaminated . After checking relevant quality parameters like temperature, pH and other local permit specific parameters if any, this water is directly released to the local water bodies.</p> <p>Compliance and regulations: The release of the cooling water to the environment is done according to the local permits and environmental guidelines specified by the local authority. The quality parameters and limits specified in the local permits is adhered to</p>
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					<p>strictly. To prevent any contamination in case of accidental releases sophisticated alarm systems are installed. In case of an incident, mitigation measures are predefined and come to action.</p> <p>Measurement method and constituents: This volume of directly discharged water to the natural environment without treatment was recorded under a specific KPI from 2021. In 2021 this amount was lower with 63,073 megaliters. The reason for higher amounts in 2022 is the acquisition of Emerald Kalama Chemicals</p>
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						<p>(EKC) in 2021. While EKC's water figures were only partially consolidated in fiscal 2021 in 2022, EKC's water figures were fully consolidated leading to a significant increase.</p> <p>Future trend: The trend for the coming years is likely to remain the same unless there is a change in product or asset portfolio.</p>
Discharge to a third party without treatment	Relevant	120,605.68	About the same	Mergers and acquisitions	21-30	<p>The water volumes discharged to a third party without treatment is a relevant category for LANXESS. Around 56% of overall discharges are made to a third-party.</p> <p>Relevance: Being a global company, we</p>

					<p>have some sites where we have a third-party entity which handles our discharged water in accordance to our local permits. For example, one of our big sites in Germany, Leverkusen is situated in a Chemical park, where we have a central third-party utility provider who handles all our water which needs treatment and also the cooling water amounts which can be released directly to a local water body. Therefore, this is a relevant category for us.</p> <p>Compliance and regulations: The release of the water</p>
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					<p>to a third-party is carried out according to the agreed procedures as specified in the contracts between the two parties. LANXESS collaborates only with verified and locally permitted wastewater treatment plants, wherever we use these services globally.</p> <p>Measurement method and constituents: The discharge volumes to a third-party without treatment were recorded under a specific KPI from 2021 onward. This volume primarily consists of once-through cooling water, sold</p>
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						<p>waste steam volumes and other discharges like waste steam or warm water used as a energy carrier to a third-party entity. Compared to 2021 (126755205.46 megaliters) it is about the same, as the full consolidation of EKC has a negligible effect of this indicator.</p> <p>Future trend: The trend for the coming years is likely to remain the same unless a change in product or asset portfolio.</p>
Other	Not relevant					<p>We have no water volumes treated under a special treatment technique.</p>

W1.2k

(W1.2k) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

	Emissions to water in the reporting year (metric tonnes)	Category(ies) of substances included	List the specific substances included	Please explain
Row 1	109.37	Phosphates Priority substances listed under the EU Water Framework Directive	Priority substances: Persistent Organic Pollutants (POPs) and Adsorbable Organic Halogen Compounds (AOX)	<p>Pollutants identified and classified: At the site-level, the pollutants identified and tested are in accordance with the permit requirements and the product portfolio. The relevant pollutants identified and classified by LANXESS at the central-level are of global significance and are periodically reviewed and updated by the central sustainability department. As of 2022, the pollutants that are recorded and reported at central-level are heavy metals (example: arsenic, cadmium, chromium, copper, mercury, nickel, lead, zinc, tin), total organic content (f.e. organic carbon, nitrogen, inorganic and organic phosphorous), Adsorbable Organic Halogen Compounds (AOX), Persistent Organic Pollutants (POPs).</p> <p>Measurement of results: In 2022 a total of 109.37 metric tons (phosphorus, AOX, POPs) was recorded. In 2021 it was 348.64 metric tons.</p>

W1.3

(W1.3) Provide a figure for your organization’s total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	10,012,000,000	226,800	44,144.6208112875	Based on the trend of the last 6 years, it can be assumed that the

				<p>value will remain on this level or even decrease.</p> <p>Generally, LANXESS uses “Water withdrawal in relation to sales [m³/k€]” as an important KPI. Data from 2017 onward is publicly available in the LANXESS ESG Factsheet. Since 2017 water withdrawal in relation to sales decreased by 41%.</p>
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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 (Total Sum)

Product name

Corporate Water Consumption Intensity

Water intensity value (m3/denominator)

2.88

Numerator: water aspect

Total water consumption

Denominator

Ton

Comparison with previous reporting year

Higher

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 higher compared to the previous year (2021: 2.67; 2022: 2.88). The main

reason behind is a decrease in production volumes sold (in tons) (4295 kt) compared the last year's production volume sold (4754 kt). We calculate the water intensity as total water consumption (in m3) divided by the volume of sold products (in tons).

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.

Trend: The intensity is likely to reduce in the coming years. In order to manage the reduction of water consumption, LANXESS derived a target on reducing specific water consumption on a year-to-year basis by 2%. This target illustrates our approach of continuous improvement. LANXESS also has a special focus on the water risk sites, where reduction projects are planned or under discussion. The LANXESS Water Program, started in 2020, provides the strategic framework for our commitments. The three steps of the program are designed to promote sustainable water management:

- (1) Global water management: Regulatory compliance, transparent reporting, performance and targets
- (2) Local water stewardship: Risk assessment and management approach
- (3) Beyond the gates: Social engagement and impact valuation

Additionally, in accordance with the product stewardship topic, all important product related environmental criteria like emissions, water consumption and waste generation values are critically being assessed and reviewed internally, this can result in implementing specific water projects aimed at reducing product water intensity in coming years. Furthermore, a change in product portfolio and production rate can cause a shift in the amounts.

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances
Row 1	Yes

W1.4a

(W1.4a) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain

<p>Other, please specify</p> <p>LANXESS Product sustainability Monitor</p>	<p>Less than 10%</p>	<p>LANXESS Product Sustainability Monitor:</p> <p>The management and long-term development of our product portfolio is based on the LANXESS Product Sustainability Monitor. Using this analytical tool, we identify products that are produced in a particularly sustainable manner as well as products where we see potential for improvement, and have been increasing the sustainability performance of our portfolio for years.</p> <p>Using the LANXESS Product Sustainability Monitor, we divide our portfolio into four categories:</p> <p>(1) Energizers: outstanding sustainability performance,</p> <p>(2) Performers: sustainable according to the current state of the art,</p> <p>(3) Transitioners: do not yet fulfill all LANXESS sustainability requirements, monitoring and active steering to reduce their environmental impact</p> <p>(4) Roadmap: serious sustainability concerns (chemical end products with more than 0.1% by mass of substances with the properties of substances of very high concern (SVHC)), roadmaps to products find replacements with safe and sustainable alternatives. We do not market new chemical end products in this category.</p> <p>In 2022, we already generated 79% of our total sales with products that fulfill our sustainability requirements. Only 17% of our sales were attributable to products classified as Transitioners. We generate only around 4% of our sales with roadmap products. By 2023, we want to develop a specific action plan for all these products.</p>
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W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement
Suppliers	Yes
Other value chain partners (e.g., customers)	Yes

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

Assessment of supplier impact

Yes, we assess the impact of our suppliers

Considered in assessment

Supplier dependence on water

Supplier impacts on water availability

Supplier impacts on water quality

Number of suppliers identified as having a substantive impact

13

% of total suppliers identified as having a substantive impact

Less than 1%

Please explain

Together for Sustainability (TfS) is the foundation for our Sustainability engagement with suppliers. TfS Assessments & Audits focus on environmental topics including water management. This verifies if a suppliers has a water-related environmental policy and actions on water management in place (awareness training, reduction of water intake, water recycling, measures to minimize water quality impacts).

Based on the TfS Scorecards generated, detailed analysis are done on the water chapter, and suppliers with Improvement areas that are classified as “High” are reported as substantive. The Strategic Buyer is informed and the supplier is encouraged to take action on these improvement areas. This report is periodically done to ensure continuous improvement.

Preference is given to a supplier with a favorable score. The supplier has access to the TfS Academy with hundreds of learning nuggets, to educate and assist the close out of the findings.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization’s purchasing process?

Suppliers have to meet specific water-related requirements	
Row 1	Yes, suppliers have to meet water-related requirements, but they are not included in our supplier contracts

W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization’s purchasing process, and the compliance measures in place.

Water-related requirement

Reporting against a sustainability index with water-related factors (e.g., DJSI, CDP Water Security questionnaire, etc.)

% of suppliers with a substantive impact required to comply with this water-related requirement

100%

% of suppliers with a substantive impact in compliance with this water-related requirement

100%

Mechanisms for monitoring compliance with this water-related requirement

- On-site third-party audit
- Supplier self-assessment
- Supplier scorecard or rating

Response to supplier non-compliance with this water-related requirement

Retain and engage

Comment

Together for Sustainability (TfS) is the foundation for our Sustainability engagement with suppliers. TfS Assessments & Audits focus on environmental topics covering water & water management additional to numerous other topics. This verifies if a suppliers has a water-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).

TfS generates supplier scorecards based on the information received from the suppliers and on the outcomes of the assessments and audits. Preference is given to a supplier with a favorable score, thereby incentivizing the participation, reporting and improvement. On behalf of its members (e.g. LANXESS), the TfS generates a Corrective Action Plan (CAP) on the basis of the Assessments & Audits to ensure continuous improvement.

W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement

Information collection

Details of engagement

- Collect water management information at least annually from suppliers
- Collect information on water-related risks at least annually from suppliers
- Collect water quantity information at least annually from suppliers (e.g., withdrawal and discharge volumes)

% of suppliers by number

26-50

% of suppliers with a substantive impact

Less than 1%

Rationale for your engagement

Background:

As founding member of the Together for Sustainability (TfS) initiative for the Chemical Industry, we value this initiative as core in our engagement for supplier-related sustainability. TfS acts based on a holistic understanding of sustainability, which includes, among other things, water related issues.

On behalf of its members, TfS requests suppliers to report and to participate in either a TfS Audit, and or TfS Assessment. Both yield a score, which is used in LANXESS's supplier management processes (see below). Scorecard, and Corrective Action Plans generated are available for all member companies to review.

Explanation of the coverage of our engagement:

LANXESS's selection of suppliers for reporting follows two aims: (a) avoiding supplier related risks, (b) encouragement for sustainability. Thus, this request for reporting is also a cornerstone of our supplier engagement strategy. We focus this engagement in order to make it as efficient and effective as possible.

A number of key factors are considered for the identification of suppliers to participate in this initiative.

Although the procurement spend is the most important factor (In the year 2022 we had a spend coverage of 74%), we look at various other factors that have a significant impact on the supplier relationship: contract duration, strategic importance, business impact, CSR ratings, category and country risks.

Impact of the engagement and measures of success

Beneficial water-related outcomes of our engagement:

As outlined above, Together for Sustainability (TfS) is the foundation for our Sustainability engagement with suppliers. TfS Assessments & Audits focus on environmental topics covering water & water management additional to numerous other topics.

This verifies if a suppliers has a water-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).

TfS generates supplier scorecards based on the information received from the suppliers and on the outcomes of the assessments and audits. They are reported to LANXESS on monthly basis and are also presented when the Strategic Buyer (as defined above) presents his purchasing strategy as part of the balanced scorecard. Preference is given by LANXESS to a supplier with a favorable score, thereby incentivizing the participation, reporting of the required information and improvement.

On behalf of its members (e.g. LANXESS) the TfS generates a Corrective Action Plan (CAP) on the basis of the Assessments & Audits. This CAP is used in discussions with

the supplier to ensure continuous improvement. Further to this the Supplier has access to the TfS Academy with hundreds of learning nuggets, in 7 different language to educate and train them, to assist the close out of the findings in the CAP.

To conclude, the described mechanism yields a strong incentive for suppliers to improve on water management (awareness training, reduction of water intake, water recycling, measures to minimize water quality impacts) and their specific water KPIs (total water consumption).

How success is measured:

Jointly, suppliers' reporting and respective assessment/audits by TfS forms a revolving process. Realization of measures suggested in the Corrective Action Plan (CAP) improves the scoring. Thus we measure success by (a) the improvement of the scoring results of our suppliers over time, (b) the percentage of our suppliers requesting to report actually adhering to this request.

In the year 2022, 1,545 new supplier Assessments were initiated by TfS members via EcoVadis, and 5,477 re-assessments were conducted as well as a further 1,363 existing assessments shared with TfS.

Comment

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W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

Type of stakeholder

Investors & shareholders

Type of engagement

Education / information sharing

Details of engagement

Educate and work with stakeholders on understanding and measuring exposure to water-related risks

Run an engagement campaign to educate stakeholders about your water-related performance and strategy

Share information about your products and relevant certification schemes

Rationale for your engagement

LANXESS's stockholder structure predominantly consists of institutional investors which play an important role in the success and growth of the company. The focus of investors is increasingly broadening to include ESG-related issues such as water in their portfolio decisions. Examples: When it comes to reputational risks in relation to water issues, investors reaction is always considered.

Within the last three years, there have been numerous developments to improve LANXESS' sustainable water management and provide more transparent information to investors, e.g.:

1. LANXESS developed a comprehensive Water Risk Assessment method. It's carried out at regular intervals. The results are reported transparently.
2. LANXESS defined a comprehensive set of water-related targets to underline its water engagement and management strategies.
3. LANXESS provides comprehensive water-related information. The "Water Background Paper" contains current key figures, descriptions of the risk assessment method and information on the identified water risk sites. The "ESG Factsheet" compiles a comprehensive set of water-related data (water withdrawal, wastewater volume, water consumption, wastewater loads, water stress sites).
4. Expansion of participation (e.g. CDP water) and improvements in water-related sections of sustainability ratings and indices (e.g. MSCI; DJSI, EcoVadis).

Impact of the engagement and measures of success

Two relevant examples demonstrating the success of the information and engagements campaign are:

1. Scoring improvement in water-related sustainability ratings and indices like CDP Water Security (started with an B rating, improved to A- in 2022 assessment).
2. Target achievement: LANXESS is well on track to achieve the context-specific water targets for its water risk sites: (a) Introduction of a Water Stewardship program until 2023, (b) reduction of absolute water withdrawal by 15% until 2023 (base year 2019).

W2. Business impacts

W2.1

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

No

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Comment
Row 1	No	In the reporting year LANXESS was not subject to any fines, enforcement orders or other penalties for water-related regulatory violations.

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified
Row 1	Yes, we identify and classify our potential water pollutants	<p>1. Policies and processes: As defined in our directive "Recording and reporting of HSE Performance Data & Performance Indicators" we collect pollutant data from production sites and track quantities. Reported KPIs vary based on production process (permits and standards) and local regulations. The sites permits, prepared in close coordination with the local authorities, contain all relevant parameters that must be monitored due to a certain criticality.</p> <p>2. Standard: Globally, we base our actions on the international standards ISO 9001 and ISO 14001 for quality and environmental management. Additionally we comply with legal requirements and international standards (f.e. UN Globally Harmonized System) for product labeling. Substances are categorized based on toxicity and environmental impact. We strictly adhere to Material Safety Data Sheets (MSDS) guidelines for handling substances, incl. procurement, storage, and spill prevention. Our supplier engagement program, Together for Sustainability (TfS), focuses on environmental aspects, incl. water management too.</p> <p>3. Indicators used: Central-level pollutants such as heavy metals and total organic content, undergo periodic review and updates. Starting in 2021, Adsorbable Organic Halides (AOX) and Persistent Organic Pollutants (POPs) have been included. Additional pollutants are tested quarterly at the site-level. Significant impacts related to water pollutants are integrated into LANXESS Risk Management Process.</p>

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category

Inorganic pollutants

Description of water pollutant and potential impacts

Heavy metals (Inorganic pollutants):

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.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Beyond compliance with regulatory requirements

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Compliance: We are compliant with the locally defined standards and go beyond by using globally standardizes processes defined in our directives.

Operations: The Directive "Process & Plant Safety" defines hazards and safety review processes that have to be considered during routine operations as well as start-up or shut-downs, maintenance, or non-routine operations. Site specific response/emergency plans define mitigation measures for exceptional situations.

Water treatment: At LANXESS we are using water in cycles, wherever possible (e.g. for cooling). Contaminated water is treated either onsite or send to external treatment according to the site permit. Effluent data is monitored via HSE Performance Data to ensure continuous improvements in the handling of discharged water. For the LANXESS owned WWTP, sophisticated alert systems are installed to prevent accidental discharges. A continuous in-stream quality checks and additional lab-tests are carried out before releasing treated water.

Product use: The site personnel is trained on regular basis. Our products are assessed and labeled (MSDS) to prevent pollution from the customers end.

Evaluation method: Decreasing trends in heavy metal concentrations illustrates the success of the approaches. In a 5 year trend analysis from year 2018 a 62% reduction of the heavy metal load was realized in 2022. Even on a year-on-year comparison a reduction was achieved: 2.3 metric tons (2021) & 2.0 metric tons (2022) of heavy metals.

Water pollutant category

Other nutrients and oxygen demanding pollutants

Description of water pollutant and potential impacts

TOC - Total Organic Content (Other nutrients and oxygen demanding pollutants):
 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.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
 Beyond compliance with regulatory requirements
 Industrial and chemical accidents prevention, preparedness, and response
 Provision of best practice instructions on product use
 Water recycling
 Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Compliance: We are compliant with the locally defined standards and go beyond by using globally standardizes processes defined in our directives.

Operations: The Directive "Process & Plant Safety" defines hazards and safety review processes that have to be considered during routine operations as well as start-up or shut-downs, maintenance, or non-routine operations. Site specific response/emergency plans define mitigation measures for exceptional situations.

Water treatment: At LANXESS we are using water in cycles, wherever possible (e.g. for cooling). Contaminated water is treated either onsite or send to external treatment according to the site permit. Effluent data is monitored via HSE Performance Data to ensure continuous improvements in the handling of discharged water. For the LANXESS owned WWTP, sophisticated alert systems are installed to prevent accidental discharges. A continuous in-stream quality checks and additional lab-tests are carried out before releasing treated water.

Product use: The site personnel is trained on regular basis. Our products are assessed and labeled (MSDS) to prevent pollution from the customers end.

Evaluation method: The decreasing trend in TOC concentrations illustrates the success of the management approach. Since 2018 a 45% reduction of the total organic content was realized by 2022. Even on a year-on-year comparison a reduction was achieved: 1.3 thousand metric tons (2021) and 1.1 thousand metric tons (2022) of TOC.

Water pollutant category

Nitrates

Description of water pollutant and potential impacts

Nitrogen (Nitrates):

Nitrogen and phosphorus are important nutrients in aquatic ecosystems. However, when they are present in high concentrations, they can become pollutants that cause eutrophication. This process leads to an increase in suspended particles due to large amounts of macro-algae, which reduces water clarity and can harm aquatic habitats by shading submerged vegetation.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Beyond compliance with regulatory requirements

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Compliance: We are compliant with the locally defined standards and go beyond by using globally standardizes processes defined in our directives.

Operations: The Directive "Process & Plant Safety" defines hazards and safety review processes that have to be considered during routine operations as well as start-up or shut-downs, maintenance, or non-routine operations. Site specific response/emergency plans define mitigation measures for exceptional situations.

Water treatment: At LANXESS we are using water in cycles, wherever possible (e.g. for cooling). Contaminated water is treated either onsite or send to external treatment according to the site permit. Effluent data is monitored via HSE Performance Data to ensure continuous improvements in the handling of discharged water. For the LANXESS owned WWTP, sophisticated alert systems are installed to prevent accidental discharges. A continuous in-stream quality checks and additional lab-tests are carried out before releasing treated water.

Product use: The site personnel is trained on regular basis. Our products are assessed and labeled (MSDS) to prevent pollution from the customers end.

Evaluation: The overall decreasing trend in nitrogen concentrations illustrates the success of the management approach. Since 2018 a 20% reduction of the nitrogen content could be realized. Even on a year-on-year comparison a reduction was achieved: 0.5 thousand metric tons (2021) and 0.4 thousand metric tons (2022) of nitrogen.

Water pollutant category

Phosphates

Description of water pollutant and potential impacts

Phosphorus (Phosphates):

Too much phosphorus can cause increased growth of algae and large aquatic plants.

This can result in decreased levels of dissolved oxygen leading to eutrophication. High levels of phosphorus can also lead to algae blooms that produce algal toxins which can be harmful to human and animal health.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Beyond compliance with regulatory requirements

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Compliance: We are compliant with the locally defined standards and go beyond by using globally standardized processes defined in our directives.

Operations: The Directive "Process & Plant Safety" defines hazards and safety review processes that have to be considered during routine operations as well as start-up or shut-downs, maintenance, or non-routine operations. Site specific response/emergency plans define mitigation measures for exceptional situations.

Water treatment: At LANXESS we are using water in cycles, wherever possible (e.g. for cooling). Contaminated water is treated either onsite or sent to external treatment according to the site permit. Effluent data is monitored via HSE Performance Data to ensure continuous improvements in the handling of discharged water. For the LANXESS owned WWTP, sophisticated alert systems are installed to prevent accidental discharges. A continuous in-stream quality checks and additional lab-tests are carried out before releasing treated water.

Product use: The site personnel is trained on regular basis. Our products are assessed and labeled (MSDS) to prevent pollution from the customers end.

Evaluation via decreasing trends: For 2022 a total of 0.095 thousand tons of phosphorous was recorded. The level of phosphorous in 2022 is much lower compared to the previous year (0.3 thousand tons). The significant decrease can be explained by a

non-routine production at one of our sites in 2021, coming back to routine operations in 2022.

Water pollutant category

Other synthetic organic compounds

Description of water pollutant and potential impacts

AOX - Adsorbable Organic Halides (Other synthetic organic compounds):

AOX is the measure of halogen compounds load at a sampling site such as soil, water or waste. The halogen compounds when found in soil are known to create non-degradable metal complexes, increasing soil toxicity and accumulating in the food chain of aquatic organisms.- When found in water bodies, they are known to produce mutagenic compounds, which when ingested by humans could cause several abnormalities in development and reproduction in humans through long half-lives and mimicking hormone receptors.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Beyond compliance with regulatory requirements

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Compliance: We are compliant with the locally defined standards and go beyond by using globally standardizes processes defined in our directives.

Operations: The Directive "Process & Plant Safety" defines hazards and safety review processes that have to be considered during routine operations as well as start-up or shut-downs, maintenance, or non-routine operations. Site specific response/emergency plans define mitigation measures for exceptional situations.

Water treatment: At LANXESS we are using water in cycles, wherever possible (e.g. for cooling). Contaminated water is treated either onsite or send to external treatment according to the site permit. Effluent data is monitored via HSE Performance Data to ensure continuous improvements in the handling of discharged water. For the LANXESS owned WWTP, sophisticated alert systems are installed to prevent accidental discharges. A continuous in-stream quality checks and additional lab-tests are carried out before releasing treated water.

Product use: The site personnel is trained on regular basis. Our products are assessed and labeled (MSDS) to prevent pollution from the customers end.

Evaluation based on decreasing trends: This was our second year of tracking the AOX volumes on a corporate level. Before 2021 this was measured and tracked on site. A total of 0.0168 thousand metric tons of AOX was recorded for 2022; in 2021 this was still 0.0018 thousand metric tons .

Water pollutant category

Other nutrients and oxygen demanding pollutants

Description of water pollutant and potential impacts

POPs - Persistent Organic Pollutants (Other nutrients and oxygen demanding pollutants):

POPs are the organic pollutants which are found to be resistant to environmental degradation and lead to bio-accumulation. They are easily transported to other locations via wind and water. They accumulate in the food chain causing serious health problems like reproductive and immune system deficits in humans on ingestion.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Beyond compliance with regulatory requirements

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Compliance: We are compliant with the locally defined standards and go beyond by using globally standardizes processes defined in our directives.

Operations: The Directive "Process & Plant Safety" defines hazards and safety review processes that have to be considered during routine operations as well as start-up or shut-downs, maintenance, or non-routine operations. Site specific response/emergency plans define mitigation measures for exceptional situations.

Water treatment: At LANXESS we are using water in cycles, wherever possible (e.g. for cooling). Contaminated water is treated either onsite or send to external treatment according to the site permit. Effluent data is monitored via HSE Performance Data to ensure continuous improvements in the handling of discharged water. For the LANXESS owned WWTP, sophisticated alert systems are installed to prevent accidental discharges. A continuous in-stream quality checks and additional lab-tests are carried out before releasing treated water.

Product use: The site personnel is trained on regular basis. Our products are assessed

and labeled (MSDS) to prevent pollution from the customers end.

Evaluation based on decreasing trends: This was our second year of tracking the POP volumes on a corporate level. Before 2021 it was only measured and tracked on site. The recorded values of POPs for 2022 (0.000001 thousand metric tons) and for 2021 (less than 0.000002 thousand metric tons) are negligible.

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.

Value chain stage

Direct operations
 Supply chain
 Product use phase
 Other stages of the value chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established 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
 International methodologies and standards
 Databases

Tools and methods used

EcoVadis
 WRI Aqueduct
 WWF Water Risk Filter
 COSO Enterprise Risk Management Framework

Contextual issues considered

Water availability at a basin/catchment level
 Water quality at a basin/catchment level
 Stakeholder conflicts concerning water resources at a basin/catchment level
 Impact on human health
 Implications of water on your key commodities/raw materials
 Water regulatory frameworks

Stakeholders considered

Customers
 Employees
 Investors
 Local communities
 NGOs
 Regulators
 Suppliers
 Water utilities at a local level
 Other water users at the basin/catchment level

Comment

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

(1) Opportunity and Risk Identification:

Objective of the Risk Management 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. For the water topic, it includes the risk identified through our LANXESS Water Risk Assessment. Besides others, information from WWF and WRI tools were used.

- a) Process responsibility: The BU and GF Heads and Country Representatives are ultimately responsible for the opportunity/risk management in their unit.
- 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.

(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. HSE sub-committee for health, safety and environment 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.

W3.3b

(W3.3b) 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.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	<p>LANXESS Risk Management Process:</p> <p>The risk identification and assessment takes place twice a year. It covers direct operations, as well as upstream and downstream activities.</p> <p>The process is based on a 3 step model:</p> <p>(1) Identification process:</p> <p>Determine risks that could interrupt operations, affect the reasonable expectation of achieving the</p>	<p>(a) Water availability (quality & quantity): As chemical industry we as well as our suppliers highly depend on water for processes and transportation. Not having water available in the needed quality or quantity might lead to production and supply chain risks.</p> <p>(b) Regulatory frameworks: Stricter regulations, such as withdrawal permits, can be a risk for LANXESS and suppliers, especially if the changes in regulations occur in short periods of time. Necessary adjustments to processes and management would have to be made under great time pressure.</p> <p>(c) stakeholder conflicts: At basin level we do engage with other water users and</p>	<p>(a) Employees: Our ambition is to create a health-preserving working environment for all employees. The Xact Program address the key safety points for an active contribution to their own safety and that of their colleagues.</p> <p>(b) Customers: We value long-term customer relationships. To minimize risks in product handling at the customers side, we provide extensive product safety sheets.</p> <p>(c) Suppliers:</p>	<p>Transfer into decision making processes:</p> <p>The decision-making bodies are the different LANXESS committees like Sustainability Committee or Corporate Risk Committee.</p> <p>Depending on the type of identified water related risks, group, BU or site involvement is necessary. Example: To respond to the tense water situation worldwide, LANXESS has set a water efficiency target (year-on-year 2% reduction in specific</p>

<p>company's strategy and business objectives or materially impact the license to operate.</p> <p>(2) Assessment process: Short- (1 year), medium- (1-10 years) and long-term (10-30 years) opportunities and risks are assessed.</p> <p>(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.</p> <p>Tools & methods: The tools WWF Water Risk Filter and WRI Aqueduct tool are mainly used to assess the indicators water stress and future water stress. For the extended</p>	<p>authorities to focus and promote sustainable water management as well as to address shared water risks.</p> <p>As all water users share the context-related risks within a basin, measures must be taken by all water users to mitigate risks.</p> <p>(d) raw materials/commodities: Sourcing raw materials, equipment and services that fulfill globally standardized requirements is crucial for LANXESS. If the supply chain is interrupted due to water shortages for production at suppliers side or impassable waterways, it can result in additional financial expenses or even production disruption at LANXESS side.</p> <p>(e) Human health: Besides negative impacts on the employee's our customer's health, improper handling of harmful substances could have a negative impact on ecosystems. Legally compliant labeling of our products is just as important as training and awareness raising.</p>	<p>Sourcing raw materials, other materials, equipment and services that fulfill globally standardized requirements is crucial for LANXESS. Long-term and trustful relationships minimize our risk of interruptions.</p> <p>(d) Investors: They play an important role in the success and growth of the company. The focus of investors is increasingly broadening to include ESG-related issues such as water in their portfolio decisions.</p> <p>(e) Regulators: LANXESS aims at complete compliance with the rules, regulations and permit limits laid down by national, state and local government authorities (e.g. water withdrawal limits or effluent limits in waste water streams).</p> <p>(f) Communities, water utilities & other water users / NGOs: As all water users share the context-related risks</p>	<p>water consumption).</p> <p>This was approved by the Board and transferred into the so called "HSEQ targets" for the operational implementation in the Business Units. In the upcoming years they have to identify improvement projects, allocate costs and get into budget planning processes.</p> <p>Background regarding risk management process: The identified risks are submitted in the RM software, get reviewed and approved. All opportunities and risks are then analyzed and prioritized by GF Controlling (in terms of the expected financial impact as well as impact on LANXESS's reputation and Impact on society & environment) together with the measures.</p> <p>The Corporate Risk Committee (CRC) takes over the main oversight function. It is responsible for the structure and</p>
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<p>LANXESS Water Risk Assessment also other indicators provided by WWF and WRI are used. For the assessment of water related risks at the suppliers side, EcoVadis Assessments are used. The EcoVadis questionnaire contains questions regarding water policies, water withdrawal rates and waste water loads. LANXESS overall opportunity and risk management process is based on the COSO risk management process: It also relevant for all water-related risk and opportunities.</p>		<p>within a basin, measures must be taken by all water users. 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.</p>	<p>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.</p>
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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?

Definition: Substantive financial or strategic impacts are defined for several dimensions.

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

- a) Financial Impact (quantitative)**
- b) Impact on LANXESS' reputation (qualitative)**
- c) Impact on society and environment (qualitative)**

a) Financial Impact:

Regarding Financial Impact, the quantifiable indicator(s) used to define substantive financial or strategic impact is the expected EBITDA impact. All opportunities and risks including climate related ones have a substantive financial or strategic impact, if they meet one of the following criteria:

- i) Opportunities and risks which have more than 1 m€ expected EBITDA-impact after countermeasures
- ii) Risks which have an expected EBITDA impact, that was reduced by more than 10 m€ through the implementation of countermeasures
- iii) New opportunities or risks which have an expected impact of more than 5 m€ after measures. These opportunities and risks must be reported ad-hoc.

Opportunities and risks having an impact on several Business Units 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. Further these thresholds guarantee, that risks that could jeopardize the future of the company as a going concern, are being detected.

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

If an opportunity or a risk is evaluated with highest ranking (as defined below, i.e. "critical impact") according to an assessment of senior management in category b) or c) it will be also marked as opportunity or risk with substantive impact.

The assessment is qualitative and is divided into five different classes depending on the following criteria for b) & c):

- its impact on people and/or the environment,
- the possibility to remediate consequences and
- the geographical scope of the impact.

b) Categories of qualitative assessment of the impact on LANXESS's reputation :

- No impact
- Minor impact: Limited local complaint/perception, minimal impact on image, minimal change in stakeholder confidence
- Moderate impact: Local media coverage, moderate impact on image, moderate change in stakeholder confidence
- Major impact: National media coverage, significant impact on image, significant change in stakeholder confidence
- **Critical impact: International media coverage, dramatic impact on image, dramatic change in stakeholder confidence**

c) Categories of qualitative assessment of the impact on society and environment :

- No impact
- Minor impact: Limited local impact on people/environment, impact remediable with low use of resources
- Moderate impact: Considerable local impact on people/environment, impact remediable with moderate use of resources
- Major impact: Regional or high local impact on people/environment, impact remediable with substantial use of resources
- **Critical impact: National impact on people/environment, non-remediable consequences (fatalities, loss of resources)**

When assessing a risk with a potential impact on society and environment, a defined group of employees (PTSE, HR and COM) is automatically informed of this risk.

In addition, at the end of the group-wide risk assessment period, all risks that may have an impact on society and environment are reviewed in a defined working group before the risks are reported to and reviewed by the Corporate Risk Committee.

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	7	1-25	<p>In total 7 out of 61 production sites were identified with potential water-related risks.</p> <p>For three of the seven mentioned sites, which are 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 resulting in increasing costs or even loss of production.</p> <p>The other four sites were identified as water risk sites after carrying out the extensive LANXESS Water Risk Assessment. All the four sites are situated in areas with extremely high water stress. Two of the sites are located on two different river basins in India, one in China and one in Italy. In all the river basins, the current water stress is extremely high. In a ten-year pessimistic future scenario, the water supply and demand situation in the basins will remain at a critical level. Implications may include a negative impact on our production volumes and also future expansion plans. We are continuously working to improve our water</p>

			management. It can also be seen as a preparatory step for future.
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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

Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

% 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 resulting in increasing costs or even loss of production.

Country/Area & River basin

India

Narmada

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

Unknown

Comment

The site was identified as water risk site after carrying out the extensive LANXESS water risk assessment. It is situated in a area with extremely high water stress. All identified water risk sites share two water-related targets: (1) Introduction of a Water

Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019).

To assess current and future water stress the WRI Aqueduct tool was used. We are continuously working to improve our water management and become water stewards at the site.

Country/Area & River basin

India

Other, please specify

Chambal river basin

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

Unknown

Comment

The site was identified as water risk site after carrying out the extensive LANXESS water risk assessment. It is situated in a area with extremely high water stress. All identified water risk sites share two water-related targets: (1) Introduction of a Water Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019).

To assess current and future water stress the WRI Aqueduct tool was used. We are continuously working to improve our water management and become water stewards at the site.

Country/Area & River basin

Italy

Other, please specify

Rio Martino

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

Unknown

Comment

The site was identified as water risk site after carrying out the extensive LANXESS water risk assessment. It is situated in a area with extremely high water stress. All

identified water risk sites share two water-related targets: (1) Introduction of a Water Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019).

To assess current and future water stress the WRI Aqueduct tool was used. We are continuously working to improve our water management and become water stewards at the site.

Country/Area & River basin

China

Other, please specify

Dagu river basin

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's total global revenue that could be affected

Unknown

Comment

The site was identified as water risk site after carrying out the extensive LANXESS water risk assessment. It is situated in a area with extremely high water stress. All identified water risk sites share two water-related targets: (1) Introduction of a Water Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019).

To assess current and future water stress the WRI Aqueduct tool was used. We are continuously working to improve our water management and become water stewards at the site.

W4.2

(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

Type of risk & Primary risk driver

Chronic physical

Seasonal supply variability/inter annual variability

Primary potential impact

Supply chain disruption

Company-specific description

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 production sites for LANXESS, and shipping is essential for the supply of raw materials as well as the transport of products. Insufficient supply with raw materials and feed-stock 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. This risk was qualified as substantive.

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)**Potential financial impact figure - minimum (currency)****Potential financial impact figure - maximum (currency)****Explanation of financial impact**

The financial impact of the risk is calculated and available for internal risk assessments, but for confidentiality reasons we do not disclose data at this level of detail.

Primary response to risk

Amend the Business Continuity Plan

Description of response

LANXESS Action plan:

LANXESS developed an step by step response plan for the scenario of low water levels effecting our production sites at the river Rhine.

- Logistics: 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 the analysis. As risk mitigation measure alternative logistics and supply options were developed.

- Crisis management team: In case of a critically low water levels, a predefined crisis management team meets. As the three Lower-Rhine sites are organized in a chemical park, it also consists of other companies and service providers.

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. In order to meet the climate change-related challenges for freight transport on the river Rhine, the plan sets out a total of eight short-, medium- and long-term measures in the fields of "information provision," "transport and logistics," "infrastructure" and "long-term solutions". measures. One example is the creation and utilization of additional storage capacities as well as to increase the availability of low-water suitable ship types. In an interview of the CHEManager the COO of LANXESS calls for more speed in implementation: "These are all valid points, but implementation of the action plan has been slow so far. We urgently need more speed here. We advocate making the "Low Water Rhine" action plan a matter for the federal states and, for example, setting up a commission at the federal state level to drive implementation forward."

Cost of response

0

Explanation of cost of response

The costs for the different responses are calculated and available for internal risk assessments, but for confidentiality reasons we do not disclose data at this level of detail.

Country/Area & River basin

India
Narmada

Type of risk & Primary risk driver

Chronic physical
Water stress

Primary potential impact

Constraint to growth

Company-specific description

As our four water risk sites have negligible amount of water withdrawal, discharge and consumption amounts, when accounted for individually, they are reported as an aggregate of multiple locations in this section. The river basin of our biggest site, Jhagadia, was chosen.

(Facility 4) India 1, Narmada river basin
(Facility 5) India 2, Chambal river basin
(Facility 6) Italy, Rio Martino river basin
(Facility 7) China, Dagu River river basin

The four sites were identified as water risk sites after carrying out the extensive LANXESS water risk assessment. All the four sites are situated in areas with extremely

high water stress in the current and 10-years pessimistic scenario. As chemical production sites, all four sites rely on water for production processes, cooling and/or sanitation. Not having water available in the needed quality or quantity might lead to production risks, in worst case production capacity has to be limited. As our four water risk sites have negligible amount of water withdrawal, discharge and consumption amounts, when accounted for individually, they are reported as an aggregate of multiple locations in this section. An additional reason for the aggregation are the two shared water-related targets: (1) Introduction of a Water Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019). These two target only account for the four Water Risk Sites.

To assess current and future water stress the WRI Aqueduct tool was used. We are continuously working to improve our water management and become water stewards at the site.

Timeframe

More than 6 years

Magnitude of potential impact

Medium-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)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

The financial impact of the risk is calculated and available for internal risk assessments, but for confidentiality reasons we do not disclose data at this level of detail.

Primary response to risk

Establish site-specific targets

Description of response

To specifically address water risk sites identified by the water risk analysis, we decided to define two site-specific targets:

- (1) Introduction of a Water Stewardship program until 2023,
- (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019)

These two target only account for the four Water Risk Sites.

We are continuously working to improve our water management. It can also be seen as

a risk mitigation and preparatory step for future. They include site-specific action plans, collaborative and multi-stakeholder water projects to address shared basin risks and best water practices on site. Moreover, we developed a LANXESS-specific Water Stewardship Standard that is based on accepted standards and reflects the special needs of our company. As a cornerstone of these local water stewardship programs, we are committed to reducing 15% of our water withdrawal at these four sites by 2023.

Example for Latina (Italy): In order to be more efficient new cooling-towers were installed and a switch over to existing cooling towers was made wherever possible. This already resulted in huge water savings and a reduction in water withdrawal amounts.
 Example for Nagda (India): No water is discharged outside the site ("zero liquid discharge"). All available water is recycled and recovered for reuse within the site, which leads to huge water savings.

LANXESS Water Stewardship Program:
 In 2019 LANXESS started developing a water stewardship framework that is based on accepted and recognized standards, namely Alliance for Water Stewardship (AWS), European Water Stewardship (EWS) standards. This framework consists of three main steps: (1) data collection, (2) water stewardship questionnaire and (3) a response plan. This helps the employees on our water risk sites with having a systematic understanding of their local water situation and the impact of their activities on it. To step-up as a local water steward, our risk sites have developed a site-specific action-plan for engagement using this framework and will implement the planned actions accordingly. End of 2023 the implementation of the framework and the achievement of predefined goals will be assessed from a corporate function. As a corner-stone of these local water stewardship programs, we are committed to reducing water withdrawal at these four sites. As the implementation of the LANXESS Water Stewardship Program was targeted for 2023, follow-up actions and targets are currently under discussion.

Cost of response

0

Explanation of cost of response

The costs for the different responses are calculated and available for internal risk assessments, but for confidentiality reasons 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 cooperative partnerships that drive success and add value for society. This can only be achieved on the basis, among other

		<p>things, of the extent to which our business partners share our social and environmental values.</p> <p>Our supplier code of conduct makes sure that the suppliers we work with share our principles when it comes to safeguarding the environment. 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 assessment helps us identify any risks that exist in our supply chain and develop countermeasures before it has a substantive impact on our operational activities.</p> <p>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.</p> <p>One example: With low river Rhine levels, risks were identified in our supply chain with regards to logistics and transportation of important raw materials and products. So, as risk mitigation measure alternative logistics and supply options were developed. As water risks are shared risks for all stakeholders in a basin, LANXESS also signed the “Low Water Action Plan” for the river Rhine together with other industry partners and the local authorities, to mitigate these risks at catchment level as a long term solution to this water issue.</p> <p>All these risk identification processes provides us enough time in advance to review and change our supply chain strategies and partners as and when required. That’s why we come to the conclusion that no substantive impact is anticipated at the moment.</p>
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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

Regarding climate adaptation increased water stress in many regions and countries is a direct consequence of climate change. Opportunities and not only challenges can be found in water scarcity and pollution. Experts estimate the annual water demand to reach 6,900 bn m³ in 2030, creating a shortfall of 2,700 bn m³. Contamination of water supplies is increasing at the same time due to an increasing rate of urbanization and water scarcity due to climate change. The need for safe drinking water is increasing as municipal sources vary from rivers to underground water to seawater along coastal areas. All these sources are often polluted and contain a significant amount of dissolved metals. 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 segment. This will increase the market by 300m€ (from 1.6bn€ in 2019 to 1.9bn€ in 2024). LANXESS's approach is winning a significant share of this absolute growth of ~300m€. 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 analyzed 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 planning to build a new production facility, for which it plans to invest a significant amount in the coming years. Due to the tense situation during the Corona years and the energy crisis, final investment decisions were postponed, the opportunity continues to be pursued.

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)

Potential financial impact figure – minimum (currency)

45,000,000

Potential financial impact figure – maximum (currency)

90,000,000

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 by 300m€ (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 45-90m€.

Calculation:

Min: 15%*300m€ = 45m€

Max: 30%*300m€ = 90m€

W5. Facility-level water accounting

W5.1

(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 (3 sites): Facilities 1 , 2 and 3

Country/Area & River basin

Germany

Rhine

Latitude

51.021144

Longitude

6.982976

Located in area with water stress

No

Total water withdrawals at this facility (megaliters/year)

133,341.18

Comparison of total withdrawals with previous reporting year

About the same

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

83.39

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

133,257.79

Total water discharges at this facility (megaliters/year)

128,244.95

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

7,028.16

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

121,216.8

Total water consumption at this facility (megaliters/year)

5,096.22

Comparison of total consumption with previous reporting year

About the same

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 the WRI Aqueduct tool have been used. The total consumption figure is a calculated number by deducting the total water discharge amounts from total water withdrawal amounts. Being a

chemical manufacturing site, water is mainly used as cooling water amounts, which is released back into the environment with no contamination, thus keeping the consumption volumes very small comparatively. The water consumption volumes therefore primarily consist of the evaporation losses (approx. 50%). It can further consist of the water added to the sold products, processes or stored water for fire. The figures are measured and reported on a quarterly basis into our HSE Performance Data system.

As asset and product portfolio are almost unchanged for the mentioned sites, the total water discharge is at the same level as last year.

Facility reference number

Facility 4

Facility name (optional)

India 1

Country/Area & River basin

India
Narmada

Latitude

21.660095

Longitude

73.133931

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

3,118.03

Comparison of total withdrawals with previous reporting year

Lower

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

1,721.2

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

146.33

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1,250.49

Total water discharges at this facility (megaliters/year)

2,218.16

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

1,734.674

Discharges to brackish surface water/seawater

446.21

Discharges to groundwater

0

Discharges to third party destinations

37.28

Total water consumption at this facility (megaliters/year)

899.87

Comparison of total consumption with previous reporting year

Much lower

Please explain

As our four water risk sites have negligible amount of water withdrawal, discharge and consumption amounts, when accounted for individually, the withdrawal, discharge and consumption volumes are reported as an aggregate of the following four sites:

(Facility 4) India 1, Narmada river basin

(Facility 5) India 2, Chambal river basin

(Facility 6) Italy, Rio Martino river basin

(Facility 7) China, Dagu River river basin

The four sites were identified as water risk sites after carrying out the extensive LANXESS water risk assessment. All the four sites are situated in areas with extremely high water stress. An additional reason for the aggregation are the two shared water-related targets: (1) Introduction of a Water Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019). These two targets only account for the four Water Risk Sites. Target achievement is not measured individually, but for the four sites as a group.

The total consumption figure is a calculated number by deducting the total water discharge amounts from total water withdrawal amounts. To assess water stress the WRI Aqueduct tool have been used. We are continuously working to improve our water management and become water stewards at these sites. The measures taken and a

reduction in production volume in the reporting year led to a decrease in total water consumption of the four sites.

Facility reference number

Facility 5

Facility name (optional)

India 2

Country/Area & River basin

India

Other, please specify

Chambal river basin

Latitude

23.442234

Longitude

75.406806

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

3,118.03

Comparison of total withdrawals with previous reporting year

Lower

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

1,721.2

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

146.33

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1,250.49

Total water discharges at this facility (megaliters/year)

2,218.16

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

1,734.674

Discharges to brackish surface water/seawater

446.21

Discharges to groundwater

0

Discharges to third party destinations

37.28

Total water consumption at this facility (megaliters/year)

899.87

Comparison of total consumption with previous reporting year

Much lower

Please explain

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- (Facility 4) India 1, Narmada river basin
- (Facility 5) India 2, Chambal river basin
- (Facility 6) Italy, Rio Martino river basin
- (Facility 7) China, Dagu River river basin

The four sites were identified as water risk sites after carrying out the extensive LANXESS water risk assessment. All the four sites are situated in areas with extremely high water stress. An additional reason for the aggregation are the two shared water-related targets: (1) Introduction of a Water Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019). These two targets only account for the four Water Risk Sites. Target achievement is not measured individually, but for the four sites as a group.

The total consumption figure is a calculated number by deducting the total water discharge amounts from total water withdrawal amounts. To assess water stress the WRI Aqueduct tool have been used. We are continuously working to improve our water management and become water stewards at these sites. The measures taken and a reduction in production volume in the reporting year led to a decrease in total water consumption of the four sites.

Facility reference number

Facility 6

Facility name (optional)

Italy

Country/Area & River basin

Italy

Other, please specify

Rio Martino river basin

Latitude

41.542089

Longitude

12.932682

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

3,118.03

Comparison of total withdrawals with previous reporting year

Lower

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

1,721.2

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

146.33

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1,250.49

Total water discharges at this facility (megaliters/year)

2,218.16

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

1,734.674

Discharges to brackish surface water/seawater

446.21

Discharges to groundwater

0

Discharges to third party destinations

37.28

Total water consumption at this facility (megaliters/year)

899.87

Comparison of total consumption with previous reporting year

Much lower

Please explain

As our four water risk sites have negligible amount of water withdrawal, discharge and consumption amounts, when accounted for individually, the withdrawal, discharge and consumption volumes are reported as an aggregate of the following four sites:

- (Facility 4) India 1, Narmada river basin
- (Facility 5) India 2, Chambal river basin
- (Facility 6) Italy, Rio Martino river basin
- (Facility 7) China, Dagu River river basin

The four sites were identified as water risk sites after carrying out the extensive LANXESS water risk assessment. All the four sites are situated in areas with extremely high water stress. An additional reason for the aggregation are the two shared water-related targets: (1) Introduction of a Water Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019). These two targets only account for the four Water Risk Sites. Target achievement is not measured individually, but for the four sites as a group.

The total consumption figure is a calculated number by deducting the total water discharge amounts from total water withdrawal amounts. To assess water stress the WRI Aqueduct tool have been used. We are continuously working to improve our water management and become water stewards at these sites. The measures taken and a reduction in production volume in the reporting year led to a decrease in total water consumption of the four sites.

Facility reference number

Facility 7

Facility name (optional)

China

Country/Area & River basin

China

Other, please specify

Dagu River river basin

Latitude

36.077696

Longitude

120.426219

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

3,118.03

Comparison of total withdrawals with previous reporting year

Lower

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

1,721.2

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

146.33

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1,250.49

Total water discharges at this facility (megaliters/year)

2,218.16

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

1,734.674

Discharges to brackish surface water/seawater

446.21

Discharges to groundwater

0

Discharges to third party destinations

37.28

Total water consumption at this facility (megaliters/year)

899.87

Comparison of total consumption with previous reporting year

Much lower

Please explain

As our four water risk sites have negligible amount of water withdrawal, discharge and consumption amounts, when accounted for individually, the withdrawal, discharge and consumption volumes are reported as an aggregate of the following four sites:

(Facility 4) India 1, Narmada river basin

(Facility 5) India 2, Chambal river basin

(Facility 6) Italy, Rio Martino river basin

(Facility 7) China, Dagu River river basin

The four sites were identified as water risk sites after carrying out the extensive LANXESS water risk assessment. All the four sites are situated in areas with extremely high water stress. An additional reason for the aggregation are the two shared water-related targets: (1) Introduction of a Water Stewardship program until 2023, (2) reduction of absolute water withdrawal by 15% until 2023 (base year 2019). These two targets only account for the four Water Risk Sites. Target achievement is not measured individually, but for the four sites as a group.

The total consumption figure is a calculated number by deducting the total water discharge amounts from total water withdrawal amounts. To assess water stress the WRI Aqueduct tool have been used. We are continuously working to improve our water management and become water stewards at these sites. The measures taken and a reduction in production volume in the reporting year led to a decrease in total water consumption of the four sites.

W5.1a

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

Water withdrawals – total volumes**% verified**

76-100

Verification standard 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

Verification standard 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 by standard water quality parameters

% verified

76-100

Verification standard 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

Verification standard 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

76-100

Verification standard 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 final treatment level

% verified

76-100

Verification standard 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 – quality by standard water quality parameters

% verified

76-100

Verification standard 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 consumption – total volume

% verified

76-100

Verification standard 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.

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 the scope (including value chain	The LANXESS Water Policy consists of three important parts:

		<p>stages) covered by the policy</p> <p>Description of business dependency on water</p> <p>Description of business impact on water</p> <p>Commitment to align with international frameworks, standards, and widely-recognized water initiatives</p> <p>Commitment to prevent, minimize, and control pollution</p> <p>Commitment to reduce or phase-out hazardous substances</p> <p>Commitment to reduce water withdrawal and/or consumption volumes in direct operations</p> <p>Commitment to water stewardship and/or collective action</p> <p>Reference to company water-related targets</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>(1) The LANXESS Corporate Policy as the highest overarching policy containing water-related statements;</p> <p>(2) The LANXESS Water Background Paper describing the water management approach, targets and commitments and</p> <p>(3) The Directive on Environmental Protection Management providing a global standard on managing wastewater, avoidance of incidents and loss mitigation in case of a water related incident.</p> <p>The Water Policy is valid company-wide, covering own operations as well as issues in the value chain and at catchment level. To ensure worldwide availability and implementation the LANXESS Corporate Policy is available in 11 languages. Compliance with internal directives and external regulations is monitored as part of our HSE Compliance Checks.</p> <p>Dependency: As a chemicals company, we are highly dependent on water for cooling (81%), for process purposes (17%) and in the form of steam (2%). Due to the geographical location of many of our sites we indirectly rely on water ways for transportation of products and raw material. The local water stress situation is one of the most important aspects. Only 2% of our total water withdrawal takes place in areas from high or extremely high water stress.</p> <p>Business impact on water: Globally, we aim to decouple economic growth from water consumption and wastewater loads. We are committed to using water more efficiently and to increasing the share of alternative water sources.</p> <p>Targets & Goals: We underline our commitment with four water related targets and goals regarding water withdrawal and water stewardship in water stress areas, water withdrawal efficiency and wastewater loads.</p> <p>Performance standards: Group-wide directives</p>
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		<p>provide global standards on managing wastewater, avoidance of incidents and loss mitigation in case of an incident.</p> <p>Commitments: We recognize the right of access to water and sanitation (WASH) as a fundamental human right and are committed to protecting it. We are aware of our responsibility to contribute to water security and are committed to the responsible use of water. In doing so, we engage in collaboration with other stakeholders, particularly through our local water stewardship programs.</p> <p>Initiatives & standards: To assess water stress we used the WWF water risk filter. The LANXESS Water Stewardship Framework is based the recognized standards from Alliance for Water Stewardship (AWS) and European Water Stewardship (EWS).</p>
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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 or committee	Responsibilities for water-related issues
Chief Executive Officer (CEO)	<p>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.</p> <p>Example of water-related decisions:</p> <p>(1) The CEO in consent with the Board decided four new ambitious water-related targets/goals in 2020: (a) Reduction of specific water consumption by 2% per year (b) Reduction of total organic carbon (TOC) by 2% per year (c) Introduction of a water stewardship program at water risk sites until 2023 (d) Reduction of absolute water withdrawal by 15% at water risk sites until 2023 (baseline 2019)</p> <p>(2) In order to more consistently pursue our sustainability targets, the CEO in consent with the Board agreed on and we established a new committee structure</p>

	at the beginning of 2021. The top decision-making body is the Sustainability Committee, which manages all key issues relating to sustainability, including water topics. The CEO is heading this committee.
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 HSE targets and monitoring their attainment is assigned to LANXESS Chief Operating Officer. HSE stands for Health, Safety and Environmental protection (water protection included). The COO directs LANXESS's HSE Sub-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 HSE 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.
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.
Board-level committee	<p>In order to pursue our sustainability goals even more consistently, a new committee structure was devised. The top decision-making body is the Sustainability Committee (a Board-level committee), which manages all key sustainability issues and includes all Board members. Five Sub-Committees report to the committee and deal with the focus topics of LANXESS's sustainability strategy. One of these Sub-Committees is the Health, Safety and Environment Sub-Committee which takes the ownership for the water topic among other sustainability topics. It comprises the heads of the Group Functions Corporate Development, PTSE (Production, Technology, Safety and Environment), LEX (Legal and Compliance) and selected Business Units.</p> <p>This is no one-time-effort: Our internal sustainability experts systematically examine the existing targets, formulations and indicators in the reporting year, refine them where necessary, and also define new targets for water among other topics.</p>

W6.2b

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

Frequency that water-related issues are a	Governance mechanisms into which water-related	Please explain
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	scheduled agenda item	issues are integrated	
Row 1	Scheduled - some meetings	<p>Monitoring implementation and performance</p> <p>Monitoring progress towards corporate targets</p> <p>Overseeing acquisitions, mergers, and divestitures</p> <p>Overseeing major capital expenditures</p> <p>Overseeing the setting of corporate targets</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Reviewing and guiding corporate responsibility strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding strategy</p> <p>Setting performance objectives</p>	<p>Corporate Risk Committee:</p> <p>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 water-related risk topics.</p> <p>Example: For three of our sites located in the Rhine basin (Germany), one water-related risk was identified and brought to the attention of the corporate risk team: The Insufficient supply with raw materials and feed stock due to strong limitations in ship and barge transportation in case of low level of river Rhine.</p> <p>Board of Management:</p> <p>As water stress and other water-related issues are multidimensional, the highest level of direct responsibility lies with the Board of Management headed by the CEO of LANXESS. Strategic water-related risks and/ or chances 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.</p> <p>HSE Sub-Committee:</p> <p>LANXESS's HSE Sub-Committee is headed by the COO. HSE stands for Health, Safety and Environmental protection (water protection included). This committee comprises of the company's senior executives including the heads of the Business Units and Group Functions. The HSE Sub-Committee has responsibility for initiating and monitoring the global implementation of water-related directives, strategies and programs, as well as for defining HSE targets and monitoring their attainment. This committee is one of five Sub-Committees of the Sustainability Committee.</p> <p>Sustainability Committee:</p>

			<p>In order to pursue our sustainability goals even more consistently, a new committee structure was devised. The top decision-making body is the Sustainability Committee, which manages all key sustainability issues and includes all Board members. Five sub-committees report to the committee and deal with the focus topics of LANXESS's sustainability strategy. One of these sub-committees is the Health, Safety and Environment Sub-Committee which takes the ownership for the water topic among other environmental topics. It comprises besides the heads of the Group Functions Corporate Development, PTSE (Production, Technology, Safety and Environment), LEX (Legal and Compliance) and Business Units.</p>
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W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	<p>Since the climate and water-related issues are particularly important for the chemical industry, which is very water-intensive, the Executive Board has been dealing with this topic for the last couple of years. The Board of Management dealt with water risk assessments, reduction options at water stress sites, water stewardship measures as well as reporting frameworks. It was the Executive Board that decided on the LANXESS Water Program that was initiated in 2020 and the water targets and goals.</p> <p>The COO has been working intensively on which processes can and must be optimized at our water risk sites in order to contribute to the targets and goals. The COO initiated and leads the Health, Safety and Environmental Protection Sub-Committee, to monitor target achievement in terms of reducing total water withdrawal as well as implementing the LANXESS Water Stewardship framework at our water risk sites.</p> <p>The CFO, who is also part of the Board of Management, 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</p>

		responsible for the structure and implementation of the Group-wide Risk Management process. CRC validates and monitors the Group's risk profile as well as the key opportunities, risks and measures, including climate related risks and opportunities.
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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)

Water-related responsibilities of this position

Assessing future trends in water demand
 Setting water-related corporate targets
 Monitoring progress against water-related corporate targets
 Integrating water-related issues into business strategy
 Managing annual budgets relating to water security

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 water targets. The COO not only chairs the HSE Sub-Committee but is responsible for the overall process for eco-efficiency incl. water efficiency and water emission reductions, especially in the case of investment decisions. In this respect several water related topics are reported to the COO: (1) relevant water KPIs (e.g. water withdrawal, consumption, waste water loads) on quarterly basis, (2) Water Stewardship and target achievement at LANXESS water risk sites more frequent than quarterly, (3) results of water risk assessment once a year, (4) Water-related risk and opportunities half-yearly. The COO brings water related topics to the attention of the Board of Management on a regular basis.

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

Chief Financial Officer (CFO)

Water-related responsibilities of this position

Assessing water-related risks and opportunities
 Managing water-related risks and opportunities
 Conducting water-related scenario analysis

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

The CFO, who is also part of the Board of Management, 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. It analyses, validates and monitors the LANXESS' risk profile as well as the key opportunities, risks and measures, including water related risks and opportunities.

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.

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

Sustainability committee

Water-related responsibilities of this position

Assessing future trends in water demand

Assessing water-related risks and opportunities

Monitoring progress against water-related corporate targets

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

In order to pursue our sustainability goals even more consistently, the Sustainability Committee structure was devised. It is the top decision-making body, which manages all key sustainability issues and includes all Board members. Five Sub-Committees report to the committee and deal with the focus topics of LANXESS's sustainability strategy. One of these sub-committees is the Health, Safety and Environment Sub-Committee which takes the ownership for the water topic among other sustainability topics. It comprises besides the heads of the Group Functions Corporate Development, PTSE (Production, Technology, Safety and Environment), LEX (Legal and Compliance) and Business Units. This is no one-time-effort: Our internal sustainability experts systematically examine the existing targets, formulations and indicators in the reporting year, refine them where necessary, and also define new targets for water among other topics.

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?

LANXESS implemented a process to discuss, evaluate and assess its political activities on water risk, water efficiency and other water relevant topics with respect to LANXESS overall strategies in the HSE (Health, Safety, Environment) Sub-Committee. This committee includes members from all internally relevant stakeholder groups.

Of high relevance in terms of water-cooperation are the associations of the chemical industry: (1) VCI (Germany) is committed to international standards for sustainability and works closely with global organizations for the promotion of sustainable development, water protection and efficiency. It maximizes the impact of the German chemical industry on water protection, promotes exchange of ideas and concepts and tries to avoid competitive disadvantage of international markets.

(2) CEFIC (Europe) engages with policy makers from the EU on the key role of the chemical industry in providing water-related solutions and adapt to negative water-related impacts because of climate change. CEFIC advocates for the a business environment in which the chemical industry can realize this potential best. CEFIC functions are to provide a basis for further direct engagement activities.

In the case that new developments are identified as important for LANXESS and require strategic or operational response, they are communicated to the HSE Sub-Committee that drives the response activities. It is led by a board member and is part of the LANXESS Sustainability Committee.

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)

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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	<p>LANXESS sees that water availability and quality are global challenges, today and even more in the future. As a responsible water user and solution provider LANXESS enables the improved availability of high quality water for society through its product. 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.</p> <p>Thus, one of our water related Long-term business objectives integrated into our business strategy is to capitalize on existing business opportunities. The following example illustrates this: Water Experts estimate the annual water demand to reach 6,900 bn m³ in 2030, creating a shortfall of 2,700 bn m³. 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 demand for products to implement water purification is increasing by ~4% p.a. The market for LANXESS specialty products like the Lewatit ion exchange resins, which are also used for microelectronics markets, is increasing even more. LANXESS’s approach is to win a significant share of this absolute growth of ~300m€ in the next 5-10 years.</p>

<p>Strategy for achieving long-term objectives</p>	<p>Yes, water-related issues are integrated</p>	<p>> 30</p>	<p>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 strategic 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.</p> <p>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. We assess our portfolio in terms of economic, environmental and social sustainability.</p> <p>For example to realize the opportunity mentioned earlier the following strategic approach was implemented: 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 between 80m€ and 120m€ in the coming years. Building a new plant is a long-term business decision that has an impact beyond 30 years.</p>
<p>Financial planning</p>	<p>Yes, water-related issues are integrated</p>	<p>> 30</p>	<p>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. As described under "strategic planning", 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 (Example: Planned business growth in the resins business, planning of a new production facility, invest between 80m€ and 120m€ in the coming years).</p>

			<p>Besides that, upgrading of older plants is as well an accepted measure to improve the water efficiency of our portfolio. Investing in new site infrastructure is a long-term business decision that has an impact beyond 30 years.</p> <p>Example: In 2022 LANXESS has commissioned a new wastewater treatment plant (WWTP) at its Belgium Kallo/Antwerp site. We invested around EUR 12 million in the plant (treatment capacity of around 260,000 litres of wastewater per hour). The WWTP was modernized and expanded to comply with stricter environmental legislation. It not only processes the wastewater from the LANXESS plants on the site, for the production rubber chemicals and glass fiber, but also that from two neighboring companies.</p>
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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)

0

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

0

Water-related OPEX (+/- % change)

0

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

0

Please explain

We do not disclose our financial data at this level due to confidentiality reasons.

W7.3

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

Use of scenario analysis	Comment

Row 1	Yes	<p>We have used qualitative and quantitative scenario analysis for water, to support the development of our LANXESS Water Program, which eventually gets translated into our business strategies.</p> <p>Our extensive water risk assessment was developed and used in combination with the scenario-analysis (e.g. Current and Future water risk under pessimistic, optimistic or business as usual scenarios according to SSP2 RCP4.5, SSP2 RCP8.5 and SSP3 RCP8.5) provided by recognized water tools like WWF Water Risk Filter and WRI Aqueduct to make informed water related decisions. This scenario analysis provided the basis for choosing our water risk sites. Site-specific targets and goals were developed for the identified water risk sites, which in turn provides the basis for the business strategy for these sites.</p>
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W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization’s business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related Climate-related Socioeconomic	<p>We used the credible, publicly available tools WRI Aqueduct and WWF Water Risk Filter for assessing future water risks in relation to climate scenarios. Both tools combine different climate scenarios (IPCC Representative Concentration Pathways - RCP and IIASA Shared Socioeconomic Pathways - SSP) to explore future water risks.</p> <p>The most important scenario used is the assessment of future water stress in a 10 years perspective and the pessimistic scenario. The "pessimistic" scenario (SSP3 RCP8.5) represents a fragmented world with uneven economic development, higher population growth,</p>	<p>All LANXESS production sites are assessed once a year. Last assessment was done in first quarter of 2023, based on 2022 data. The combination of current and future water stress and water withdrawal per ton of product is used to identify production sites with the highest potential risk. Using this assessment, we have identified the same four water risk sites as in earlier assessments, namely Jhagadia (India), Latina (Italy), Nagda (India) and Qingdao (China).</p> <p>A high water stress score indicates that much of the available and accessible fresh water is needed to meet human and ecological</p>	<p>The assessment of water stress and other water related risk indicators and scenarios was the basis for the development of the LANXESS Water Program in 2019. The program has a mid-term approach (2019-2023). Targets and goals were derived for the whole group and contextual targets for our four water risk sites. As water, other than CO2, is a local topic which needs to be addressed locally, our four risk sites are the focus of our efforts. To fulfill the reduction target (15% until 2023) as well as the goal to become a water stewardship site (until 2023), strategic decisions must be</p>

		<p>lower GDP growth, and a lower rate of urbanization, all of which potentially affect water usage; and steadily rising global carbon emissions, with CO2 concentrations reaching ~1370 ppm by 2100 and global mean temperatures increasing by 2.6–4.8°C relative to 1986–2005 levels.</p>	<p>demands. Increasing water stress might increase the risk of water supply shortages. As a chemicals company, we mainly rely on water for cooling and process purposes. Extreme water scarcity situations could lead to serious impacts on production volumes or even shutdowns of plants. In addition, stricter regulations, such as withdrawal permits, can be expected. Another risk is that the changes in regulations will occur in shorter periods of time. Necessary adjustments to processes and management would have to be made under great time pressure, which is a potential risk for LANXESS. As a consequence, a high water stress score requires an even more responsible use of water. The less water a site withdraws for production, the lower the risk posed by water scarcity. For that reason the indicator water withdrawal per ton of product in combination with current and future water stress is very important.</p>	<p>made. Technical solutions and investment decisions are needed as well as cooperation's with local communities.</p> <p>Example Latina site (Italy): In order to be more efficient new cooling-towers were installed and a switch over to existing cooling towers was made wherever possible. This already resulted in huge water savings and a reduction in water withdrawal amounts. Multiple flow-meters were installed for more accurate water accounting and an on-site rain water harvesting project was explored to further reduce the fresh water withdrawal from the nearby canal.</p> <p>The target achievement is assessed on regular basis to possibly adjust the strategy. Similar measures and projects are planned at the other water risk sites as well.</p>
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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

We have an internal price for carbon and do not see an immediate need to introduce an internal monetary price to water. As a responsible user, we strive to use water resources with utmost conscience and accountability.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Please explain
Row 1	Yes	<p>Amongst others, water is already an important criteria of the LANXESS Product Sustainability Monitor. The water impact of a product is assessed by contrasting water stress at the production site and the specific water withdrawal of the product. A matrix like that enables us to identify products with a low water impact.</p> <p>The LANXESS Product Sustainability Monitor consist of several different assessment indicators. Two that are related to a sustainable water use are:</p> <p>(1) Water stress: Water stress is defined as the ratio of total annual water withdrawals to total available annual renewable supply in the river basin. Using data provided by WRI Aqueduct Risk Atlas, the current water stress situation is assessed for all LANXESS production sites and included into the LANXESS Product Sustainability Monitor at product level. A low water stress risk level is assessed as a low impact.</p> <p>(2) Specific water withdrawal: the water</p>	<p>Details on LANXESS Product Sustainability Monitor: Using this analytical tool, we identify products that are produced in a particularly sustainable manner as well as products where we see potential for improvement, and have been increasing the sustainability performance of our portfolio for years.</p> <p>We divide our portfolio into four categories:</p> <p>(1) Energizers: outstanding sustainability performance, (2) Performers: sustainable according to the current state of the art, (3) Transitioners: do not yet fulfill all LANXESS sustainability requirements, monitoring and active steering to reduce their environmental impact (4) Roadmap: serious sustainability concerns (chemical end products with more than 0.1% by mass of substances with the properties of substances of very high concern (SVHC)), roadmaps to products find</p>

	<p>withdrawal is the total sum of all water input on the production site. This includes Water from surface water bodies, rain water, groundwater or third party water (also in the form of steam). This value, divided by production volume, forms the specific water withdrawal rate. A low specific water withdrawal rate per ton of product is assessed as a low impact.</p>	<p>replacements with safe and sustainable alternatives. We do not market new chemical end products in this category.</p>
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W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	Yes	
Water withdrawals	Yes	
Water, Sanitation, and Hygiene (WASH) services	No, but we plan to within the next two years	<p>WASH is part of our Water Stewardship Program, so we already have an indirect WASH target. The water stewardship sites have to show activities and provide information regarding:</p> <ul style="list-style-type: none"> - Availability of sanitary and drinking facilities for each gender, - Hygiene standards and inspection/cleaning frequencies, as well as - WASH situation in the catchment. <p>Additionally to our Water Stewardship activities it is possible that we will intensify activities around the topic of WASH in the coming years and also derive explicit goals.</p>
Other	Yes	

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Target coverage

Site/facility

Quantitative metric

Reduction in total water withdrawals

Year target was set

2020

Base year

2019

Base year figure

3,745,571

Target year

2023

Target year figure

3,183,735

Reporting year figure

3,118,030

% of target achieved relative to base year

111.6946938252

Target status in reporting year

Underway

Please explain

This target of 15% absolute reduction in water withdrawal is applicable to our four water risk sites which has to be achieved by 2023 with the base year being 2019. Through different water saving and efficiency projects a total of 16.8% reduction could already be achieved for the reporting year 2022 compared to 2019.

Target reference number

Target 2

Category of target

Water pollution

Target coverage

Company-wide (direct operations only)

Quantitative metric

Reduction in concentration of pollutants

Year target was set

2020

Base year

2021

Base year figure

0.17

Target year

2022

Target year figure

0.16

Reporting year figure

0.1

% of target achieved relative to base year

700

Target status in reporting year

Achieved

Please explain

For this reporting year LANXESS achieved its continuous target of 2% y/y specific TOC reduction in our wastewater volumes. This is a specific target with the indicator kilograms (TOC) per thousand euro sales.

Target reference number

Target 3

Category of target

Water consumption

Target coverage

Company-wide (direct operations only)

Quantitative metric

Reduction in total water consumption

Year target was set

2020

Base year

2021

Base year figure

1.68

Target year

2022

Target year figure

1.64

Reporting year figure

1.24

% of target achieved relative to base year

1,100

Target status in reporting year

Achieved

Please explain

For this reporting year LANXESS achieved its continuous target of 2% y/y specific water consumption values. This is a specific target the indicator being water consumption in cubic meters per thousand euros of sales.

Target reference number

Target 4

Category of target

Other, please specify

Water Stewardship: Introduction of a water stewardship program at LANXESS water risk sites until 2023

Target coverage

Site/facility

Quantitative metric

Other, please specify

Indicator: Percentage of sites that have introduced a water stewardship program, measured against a predefined Water Stewardship framework

Year target was set

2019

Base year

2019

Base year figure

0

Target year

2023

Target year figure

4

Reporting year figure

0

% of target achieved relative to base year

0

Target status in reporting year

Underway

Please explain

The implementation of the developed Water Stewardship framework began in 2021 and the sites already made a good progress. The final assessment of the target will be done for the reporting year 2023.

LANXESS Water Stewardship Program:

They include action plans, collaborative and multi-stakeholder water projects to address shared basin risks and best water practices on site. To facilitate this program, we developed a LANXESS specific water stewardship framework that is based on accepted and recognized standards, namely Alliance for Water Stewardship (AWS), European Water Stewardship (EWS) standards. This framework consists of three main steps namely data collection, water stewardship questionnaire and a response plan to help the employees on our water risk sites with having a systematic understanding of their local water situation and the impact of their activities on it. To step-up as a local water steward, our risk sites have developed a site-specific action-plan for engagement using this framework and will implement the planned actions accordingly. As a corner-stone of these local water stewardship programs, we are committed to reducing water withdrawal at these four sites.

W9. Verification

W9.1

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

Yes

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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. See Annual Report p. 29.
W8 Targets	Progress on water related targets	ISAE 3000	The assessment of the status quo of water-related targets 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. See Annual Report p. 17.

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Value chain stage	Please explain
Row 1	Yes	Direct operations Supply chain Product use phase	Value chain: As a specialty chemicals company the usage of plastics plays a minor role compared to other materials in raw material sourcing. Plastics are mainly used as packaging material. Packaging volumes are tracked by our global procurement team. Direct operations: Plastic waste is tracked being part of our global waste reporting. Compared to other waste streams it plays a minor role. Product use phase: Plastic plays a minor role in our product portfolio, especially after the planned deconsolidation of the high performance materials business unit in 2023.

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Value chain stage	Please explain
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Row 1	Yes	Direct operations	<p>To prevent unintentional release to the environment LANXESS started the "No Plastic Loss" project including assessments and an awareness campaigns. As one important part of the project the usage, handling and disposal of plastic was assessed at all our production sites to identify potential risk of plastic loss and to increase recycling rates. Extensive training material was developed as well as checks and controls to prevent unintended plastic littering. The sites included the topic into regular training and everyday handling as part of their "Tidiness and Cleanliness" routines. During the LANXESS compliance checks the topic of "no plastic loss" is controlled.</p> <p>Example of improvement: One of our German sites uses lidded drums for the disposal of production waste. The drums were previously delivered by the supplier completely wrapped in plastic foil. Since they were exposed to wind and weather outdoors, there was a constant risk that foil particles would come off - and spread into the environment. Moreover, removing the film was not only very labor-intensive, but also entailed the risk of injuring oneself when cutting it open. When changing the supplier in 2022/2023 the site took the opportunity to address the problem. The new supplier does not use foil at all and instead secures the drums with a conveyor belt that can be easily cut and disposed of. This can save 115 kilograms of plastic waste per year and leads to a decrease in packaging costs.</p>
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W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Please explain
Row 1	No, risks assessed, and none considered as substantive	Plastic only plays a minor role in our product portfolio, especially after the planned deconsolidation of the high performance materials business unit in 2023.

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Please explain
Row 1	No – and we do not plan to within the next two years	As plastic plays a minor role in our direct operations as well as our value chain and product portfolio we are not planning to develop plastic-related targets within the next years.

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	Yes	As a specialty chemical company LANXESS produces elastomers and intermediates that can be used for plastic production by our customers. We are acting as solution providers, but aren't active in mass plastic production. The share of plastic polymers in the overall product portfolio is low and will even further decrease after the planned deconsolidation of the high performance materials business unit in 2023.
Production of durable plastic components	No	LANXESS does not produce durable plastic components.
Production / commercialization of durable plastic goods (including mixed materials)	No	LANXESS does not produce durable plastic goods.
Production / commercialization of plastic packaging	No	LANXESS does not produce plastic packaging.
Production of goods packaged in plastics	Yes	As a specialty chemical company the majority of our products reaches our clients in large containers, tanks or metal drums, but we are also using reusable plastic packaging (like IBCs), plastic bags or plastic wrapping.
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	LANXESS has no activities in provision or commercialization of services or goods that use plastic packaging.

W10.6

(W10.6) Provide the total weight of plastic polymers sold and indicate the raw material content.

Row 1

Total weight of plastic polymers sold during the reporting year (Metric tonnes)

Raw material content percentages available to report

Please explain

For confidentiality reasons we do not disclose data at this level of detail.

W10.8

(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.

	Total weight of plastic packaging sold / used during the reporting year (Metric tonnes)	Raw material content percentages available to report	Please explain
Plastic packaging used			We do not disclose data at this level of detail.

W10.8a

(W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.

	Percentages available to report for circularity potential	Please explain
Plastic packaging used		We do not disclose data at this level of detail.

W11. Sign off

W-FI

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

W11.1

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

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

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

No

Please confirm below

I have read and accept the applicable Terms