Welcome to your CDP Water Security Questionnaire 2023

W0. Introduction

W0.1

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

Linde plc is a public limited company formed under the laws of Ireland with its principal offices in the United Kingdom.
Linde is a leading global industrial gases and engineering company with 2022 sales of $33 billion. We live our mission of *making our world more productive* every day by providing high-quality solutions, technologies and services which are making our customers more successful and helping to sustain, decarbonize and protect our planet.
The company serves a variety of end markets such as chemicals & energy, food & beverage, electronics, healthcare, manufacturing, metals and mining. Linde's industrial gases and technologies are used in countless applications including production of clean hydrogen and carbon capture systems critical to the energy transition, life-saving medical oxygen and high-purity & specialty gases for electronics. Linde also delivers state-of-the-art gas processing solutions to support customer expansion, efficiency improvements and emissions reductions.

Linde plc shares trade on the New York Stock Exchange (“NYSE”) under the ticker symbol "LIN". Linde issues an annual report (Form 10-K) according to US GAAP. As of 2023, Linde issues a Modified GAAP reporting in accordance with Irish rules.

W-CH0.1a

(W-CH0.1a) Which activities in the chemical sector does your organization engage in?

Bulk inorganic chemicals

Specialty inorganic chemicals

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.

Algeria
Angola
Argentina
Aruba
Australia
Austria
Bahrain
Bangladesh
Belgium
Bermuda
Bolivia (Plurinational State of)
Botswana
Brazil
British Virgin Islands
Bulgaria
Canada
Chile
China
Colombia

Congo
Costa Rica
Curaçao
Cyprus
Czechia
Denmark
Dominican Republic
Ecuador
Estonia
Eswatini
Finland
France
Germany
Greece
Hong Kong SAR, China
Hungary
Iceland
India
Indonesia
Ireland
Israel
Italy
Japan
Kazakhstan
Kenya
Latvia
Lesotho
Lithuania
Luxembourg
Malawi
Malaysia

Mauritius
Mexico
Mozambique
Namibia
Netherlands
New Zealand
Norway
Oman
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Puerto Rico
Republic of Korea
Romania
Saudi Arabia
Serbia
Singapore
Slovakia
Solomon Islands
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Taiwan, China
Thailand
Tunisia

Turkey
Uganda
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United Republic of Tanzania
United States of America
Uruguay
Venezuela (Bolivarian Republic of)
Viet Nam
Zambia

For information on deconsolidation of Russian subsidiaries, please see Linde's 2022 Annual Report, Note 3

W0.4

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

USD

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 financial control is exercised

W0.6

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

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Small Sales Outlets or Workshops: Linde has defined de-minimis values for environmental parameters. If a site falls below those criteria it is not required to report its eKPIs to the group.	Linde runs hundreds of small sales outlets or workshops worldwide with low levels of energy or water consumption, e.g., where water is primarily withdrawn for domestic sanitary use, but not used in any industrial/production process. Linde excludes these sites because their water use is insignificant compared to the amount of water withdrawn by our plants. In addition, many of our smaller sites are leased offices. These sites are not separately metered and we cannot control the type of equipment (for example, use of low flow faucets) used at these sites. This means we do not have financial or operational control over water policies at these sites. Compared to all of Linde operations it is estimated that total water withdrawal of those de-minimis sites is less than 1% of Linde's total water withdrawn.

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	IE00BZ12WP82

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	Important	Neutral	Linde withdrew about 453.8 million cubic meters of fresh water in 2022, including once-through non-contacting cooling water which is returned to its original source with its original water quality after usage. Primary use of water is for cooling and boiler systems. Sufficient availability of fresh water is important for Linde's production processes. Most of our plants use water for cooling purposes, although there are also plant designs which use air-based cooling procedures. About 68% of Linde's non-brackish water is drawn from fresh surface water sources, the rest from industrial/recycled sources. Having access to clean, high quality fresh water reduces the need for treating the water, which saves energy and reduces waste. Linde chose "important" because although water is necessary for our production processes in most plants, we are able to also use industrial or brackish water for our processes and are therefore not dependent only on fresh water. Supply Chain: We do not consider water to be a significant issue in our supply chain. Most of our raw materials (99% per weight) comes from renewable sources incl. air or water. For the rest, a small amount of our suppliers use water to make products we purchase, such as concrete to construct new facilities or paper used in offices. These suppliers are not in water-intensive sectors; however, they might experience water risk at certain locations with very high water stress. For that reason we chose "Neutral" instead of "not very important". Linde has contingency strategies (e.g., alternative sourcing of raw materials) to mitigate such a risk. Future freshwater dependency in both direct and indirect operations is expected to increase in proportion to increases in production and constructing new facilities. However, water use efficiency measures like increasing the number of cooling cycles in our cooling towers are expected to keep these increases in check.

Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	Linde used 211.9 million cubic meters of industrial/recycled water in 2022 and 387.6 million cubic meters of sea water; this is 57% of the total water withdrawn from all sources (fresh water + non-fresh water sources). The direct use of recycled water is mainly for cooling purposes, and is an important strategic water source based on site location for avoiding the use of freshwater available and helping to increase its availability to local communities. We chose "important" for this water source because Linde is not solely depending on recycled/brackish water, but also able to use fresh water sources or realize cooling over air-based systems. Supply Chain: As an industrial gas company, our raw materials consist largely of air and natural gas as a feedstock. 99% of our raw materials by weight are from renewable sources. Therefore, we do not consider water to be a significant issue in our supply chain. A small amount of our suppliers use water to make products we purchase. Those might experience water risk at certain locations with very high water stress. For that reason we chose "Neutral" instead of "not very important". Linde has contingency strategies (e.g. alternative sourcing of raw materials) in case of any procurement issues including potential water issues. Future industrial water dependency in direct operations is dependent on the amount of this water supplied by customers or available from municipal utilities. Linde plc does not foresee any risks associated with its use of recycled/brackish water. We expect an increase in recycled water use and implementation of technology allowing the reuse and recycling of water in areas of water stress. Linde considers future water dependency for indirect operations (suppliers) to remain the same, as most of Linde's input materials (such as air or natural gas) are not dependent on water supply for production and Linde continues to pursue alternative sourcing strategies of raw materials.

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%	Yearly	Data is collected based on flow meters and invoices, and reported annually in a global database, consolidated, and reviewed by the Global SHEQ team	Water withdrawal is a key performance indicator for Linde and is managed as part of the company's sustainable productivity activity to continuously evaluate water use efficiency and areas of improvement. Water withdrawal volumes and discharge are monitored at 100% of the production facilities and reported per our internal standard environmental reporting procedure. Data is collected based on flow meters and invoices, and reported annually in a global database, consolidated, and reviewed by the Global SHEQ team of the company. Data is verified by an external auditor and published once a year in our sustainability report. In addition, as part of Linde 2028 Sustainable Development Targets, facilities that are high water user sites in areas of high water stress plus several sites that set a voluntary target (representing about 4% of Linde total water withdrawal) operate under a Water

				Management Plan, and must report their water figures more frequently, on a monthly basis.
Water withdrawals – volumes by source	100%	Yearly	Data is collected based on flow meters and invoices, and reported annually in a global database, consolidated, and reviewed by the Global SHEQ team	Water withdrawal is a key performance indicator for Linde and is managed as part of the company's sustainable productivity activity to continuously evaluate water use efficiency and areas of improvement. Water withdrawal volumes are monitored at 100% of the production facilities and reported per our internal standard environmental reporting procedure. Data is collected based on flow meters and invoices, and reported annually by water source (following latest GRI criteria) in a global database, consolidated, and reviewed by the Global SHEQ team of the company. Data is verified by an external auditor and published once a year in our sustainability report. In addition, as part of Linde 2028 Sustainable Development Targets, facilities that are high water user sites in areas of high water stress (representing about 4% of Linde total water withdrawal) operate under a Water Management Plan, and report their water figures more

				frequently, on a monthly basis.
Water withdrawals quality	100%	Yearly	Water withdrawal quality is measured through water sample analysis at least annually, or as often as needed Additional testing for specific constituents that pertain to discharge permits are also performed as needed.	Having access to clean and sufficient fresh water for our plant operation worldwide reduces the need for costly measures in treating the water, which saves energy and reduces water use and wastewater discharge. Water withdrawal quality is measured through water sample analysis at least annually, or as often as needed (e.g., by local regulations) to ensure it meets the minimum requirements and specifications intended for its use, primarily for cooling and boiler systems. Additional testing for specific constituents that pertain to discharge permits are also performed as needed. Moreover, 13% of Linde's total fresh water withdrawal is supplied by a municipal utility that provides quality data at the minimum on an annual basis. As part of the global annual environmental data collection process, Linde also collects water data based on its quality according to the SD Report, GRI 303, for an overview of the breakdown between freshwater and other sources.

Water discharges – total volumes	100%	Continuously	Data is collected regularly based on flow meters and invoices, and reported annually in a global database,	Water discharge is a key performance indicator for Linde, monitored at 100% of the production facilities and reported per our internal standard environmental reporting procedure. Data is collected regularly based on flow meters and invoices, and reported annually in a global database, consolidated, and reviewed by the Global SHEQ team of the company. Data is verified by an external auditor and published once a year in our sustainability report. Most water discharge relates to once-through non-contacting cooling water that is returned to its original source with its original water quality after completion of the cooling cycle. In addition, facilities operating under a Water Management Plan must report their water figures on a monthly basis.
Water discharges – volumes by destination	100%	Continuously	Measured regularly with flow meters and reported annually in a global database,	Water discharge is a key performance indicator for Linde, monitored at 100% of the production facilities and reported per our internal standard environmental reporting procedure. Water discharge

				volumes by destination are measured regularly with flow meters and reported annually in a global database, consolidated, and reviewed by the Global SHEQ team of the company. Data is verified by an external auditor and published once a year in our sustainability report. Internal training is provided once per year to ensure terms and definitions are well understood for a reliable and consistent data collection and reporting worldwide across the facilities
Water discharges – volumes by treatment method	Not relevant			95% of Linde's total water discharges are once-through water that is returned unpolluted and without treatment to its original source. 5% of Linde's water discharge is non-once through water, e.g. waste water or water returned back to another industrial process. From those, only some sites need to treat their water before discharge based on their discharge permits. Differentiating by treatment method is therefore not relevant for Linde and Linde does not track or monitor those volumes. Permit exceedances, if any, are generally tracked at the corporate level.

				Linde does not expect this to become relevant in the future.
Water discharge quality – by standard effluent parameters	76-99	Quarterly	measured and tracked at the site and regional level based upon the national or regional regulations,	Linde monitors its water discharge quality at 100% of the production facilities. Data are reported in the global reporting system based on its quality following the GRI 303 , which focuses on Total Dissolved Solids (TDS) content. Moreover, monitoring requirements are measured and tracked diligently at the site and regional level where specific effluent quality parameters vary depending on the national or regional regulations, including for example Total Suspended Solids (TSS), Total dissolved solids, Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD), metals, oil and grease, and temperature. Frequency of monitoring and way of measurement are dictated by regulation and permit conditions (e.g., sending samples monthly to laboratory and receiving analytical report). Overall compliance to the environmental discharge permits per local regulations as well as exceedances are tracked at the corporate level.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Not relevant			More than 75 percent of global freshwater withdrawal is returned to its original source, at same or better quality. In 2022, more than 91% of Linde's total water discharges is once-through water which is returned unpolluted and without treatment to its original source. Linde monitors discharge quality by standard effluent parameters and temperature. (See above and below.) These are not priority substances and we do not expect them to become relevant in the future. Permit parameters and monitoring, if any required, are managed by SHEQ at the site level.
Water discharge quality – temperature	76-99	Continuously	Monitoring frequency and requirements depend on the specific local requirements. Temperature is measured with thermometers and tracked diligently at the site and regional level where those national or regional regulations apply.	Linde monitors its water discharge temperature at 100% of the production facilities where discharge permits are applicable by local regulations. Monitoring frequency and requirements depend on the specific local requirements. Temperature is measured with thermometers and tracked diligently at the site and regional level where those national or regional regulations apply. Overall compliance to the environmental

				discharge permits per local regulations as well as exceedances are tracked at the corporate level.
Water consumption – total volume	100%	Yearly	Data is collected based on water withdrawal and discharge through flow meters and invoices, and reported annually in a global database	Water consumption volumes are monitored at 100% of the production facilities and reported per our internal standard environmental reporting procedure. Data is collected based on water withdrawal and discharge through flow meters and invoices, and reported annually in a global database, consolidated, and reviewed by the Global SHEQ team of the company. Note: Plants under Water Management Plan Scope (high usage in high-water-stress areas) report monthly. Data is verified by an external auditor and published once a year in our sustainability report. Linde monitors fresh water consumption as well as net water consumption accounting for all non-freshwater sources including third party/recycled and brackish water. Linde constantly works to improve its net water usage through optimization, efficiency projects and innovation.

Water recycled/reused	76-99	Monthly	The measurement is mostly conducted using flowmeters. Results, for example, from cycle frequency, are tracked and reported monthly to operations.	Water used in some of Linde's production process is circulated/re-used several times before discharging. This is measured locally by each site where this applies (e.g., sites with cooling towers, number of cycles). The measurement is mostly conducted using flowmeters. Results, for example, from cycle frequency, are tracked and reported monthly to operations.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Yearly	This is assured as part of the company's normal management process at 100% of its sites and offices globally under Linde's control.	Linde recognizes the human right to water access and sanitation. In its minimum requirement procedure for Occupational Health and Safety (OHS) for site engineering, Linde ensures access to safe drinking water, sanitation, and hygiene by providing fully functioning WASH services at the workplace, facilities and living accommodations under the company's direct control. These are outlined under the Adequate General Working Conditions Standard to protect employee health including provisions for clean water, toilet and washing facilities, as well as safe and clean eating facilities/area.

				Linde's global water policy outlines the company's commitment to provide clean and fully functioning wash services to all its employees worldwide. This is assured as part of the company's normal management process at 100% of its sites and offices globally under Linde's control. Housing or other accommodation, where provided to workers, is clean and safe.

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	1,053,300	Higher	Increase/decrease in business activity	Higher	Increase/decrease in business activity	In 2022, Linde's total water withdrawal increased by 8.4% compared to 2021. Total volume withdrawn include fresh water sources (43%) and non-freshwater (57%) sources such as industrial/recycled water and brackish / seawater typically returned to its original source with no substantial impact on its quality. The increase in total withdrawal volume

						is predominately based on an increase of seawater withdrawal of 30% due to two plant start-ups, one with significant amount (>80 million m3) of brackish/seawater and another using recirculating third party recycled and industrial water sources. Note that freshwater withdrawal decreased by 0.7%. Also note that more than 75% of that water is once-through water and returned to source no substantial impact on water quality. Linde focuses its water management efforts on sites located in water stressed regions. Fresh water withdrawal in areas with high or extremely high water stress decreased by 4% compared to 2021. Future trend: While Linde continues efforts to reduce total water withdrawal by improving our water use efficiency onsite, Linde expects total water withdrawal to continue to grow as a result of increased business activity and especially the start-up of new sites.

						However, the vast majority (90% in 2022) of that water is once-through water and is returned to the source with similar or same water quality as withdrawn. Efforts continue in order to minimize use of fresh water.
Total discharges	965,000	Higher	Increase/decrease in business activity	Higher	Increase/decrease in business activity	In 2022, 87% of Linde's water discharges are from once-through cooling water systems with water returned back to its original source of supply with similar quality as withdrawn. In 2022, Linde's total water discharges increased by 8% compared to 2021. The increase is mainly driven by an increase in brackish/seawater discharges . These volumes are returned to the source of supply with no substantial impact on its quality as they are used in once-through non-contacting cooling systems. Larger non-fresh water sources come mainly from increased production activities. For example, the one start-up noted above had significant withdrawal (>80 million m3), and also same level of discharge of brackish/seawater to its source. Discharge volume (freshwater sources)

						decreased by 2%. Discharge volumes of non-fresh water increased by 15%. Water discharge for waste water increased by 15%. Future trend: With increasing business activities/new plant start-ups and resulting increase in water withdrawal, water discharges are expected to grow at about the same rate.
Total consumption	88,300	Higher	Increase/decrease in business activity	Higher	Increase/decrease in business activity	Total water consumption increased by 10% compared to 2021. This is a direct result of the increase in both water withdrawal and water discharge. Linde's sales increased by 8% from 2021 to 2022, with one contributor is higher production volumes (and plant start-ups noted above) which also leads to higher use of energy, and water for cooling purposes. Nevertheless a majority of water withdrawal is fed back to the eco-

						system as once-through water without harming the environment. While one new startup was added in an area of high-water-stress, contributing to the increase in water consumption in water-stressed areas due to the withdrawal of other/third party water, Linde saw an decrease overall in consumption of freshwater in areas of high water stress. Water consumption in areas of high or extremely high water stress decreased by 2% compared to 2021. Future trend: Due to business growth and new plant start-ups water consumption might still grow, however increased water recycling and use of industrial and brackish water returned as once through water will keep consumption increases, especially of freshwater sources, at a very moderate level.

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	Higher	Increase/decrease in business activity	Higher	Increase/decrease in business activity	WRI Aqueduct	Water withdrawal for sites located in areas of water stress represented 4% of Linde's total water withdrawal in 2022, compared to 3% in 2021 and 4% in 2020. The increase is partly due to an increase in water withdrawals from sites located in areas of water stress, predominately one new start-up with withdrawals of 100 million m3) The absolute volume of water withdrawn by increased compared to 2022, mainly due to an increase in business activity. This includes one site located in a water stressed areas and another new start-up with

								withdrawals of 80+ million m3. We expect the proportion of withdrawals from sites in water stressed areas to remain at relatively the same range over the next five years, even as business activity increases. Maintaining the proportion will be possible due to our continued focus on efficiency gains at these sites.

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	385,400	Lower	Increase/decrease in business activity	This category is relevant because 37% of Linde's total water withdrawals are sourced from fresh surface water (rivers and lakes). This water is primarily used for cooling and steam production.

					Volume of fresh surface water was 0.2% less than 2021 (low to about the same) About 91% of fresh surface water withdrawn is returned to its original source with its original water quality after usage.
Brackish surface water/Seawater	Relevant	387,600	Much higher	Increase/decrease in business activity	This category is relevant because approximately 36% of total water withdrawal is from brackish/se water sources. Water withdrawals of brackish water increased almost 30% from the previous year, which is much higher (>10% increase is considered much higher). This is mainly due to increases in business activity/production (mostly due to the plant start-up mentioned above) It is noted that almost all (99%) of brackish water withdrawn was returned unpolluted to the sea.
Groundwater – renewable	Relevant	10,400	Much higher	Increase/decrease in business activity	This category is relevant because, even though groundwater is a small portion compared to other sources, 1% of total water withdrawal is from groundwater and it is the best source of water for the few sites using it. Water is withdrawn from wells that are naturally replenished from the water table.

					Water withdrawal increased by 13% compared to 2021 due to an increase in outputs at those sites using groundwater. Although low volume, this is considered "much higher" as it is >10% increase.
Groundwater – non-renewable	Not relevant				This source is not relevant because Linde does not withdraw any water from non-renewable groundwater sources.
Produced/Entrained water	Not relevant				Produced water typically occurs onsite when the water condensate from compressing air at different stages in the process is recovered and reused back in the facility. The amount of water produced depends largely on ambient conditions and is insignificant compared to the total water withdrawal, therefore not tracked.
Third party sources	Relevant	269,900	Lower	Increase/decrease in efficiency	This source is relevant because more than 25% of total withdrawal is from third party sources. A majority of this is recycled/industrial water (79% of third party sources) and the remainder is fresh surface water from municipal sources. This source decreased from 2021 by almost 3%. In addition to efficiency improvements, this is contributable to changes in water sources.

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	349,900	Lower	Increase/decrease in efficiency	This destination is relevant because 36% of Linde's discharges are to fresh surface water. and because most fresh surface water withdrawn (91%) is returned to its original surface water source with its original water quality. Water discharge to fresh surface water was lower by 2% compared to 2021. This is due to three factors: (1) some productivity and efficiency improvements; (2) reclassifications of water source; and (3) instances where the source has changed (for example, former use of surface water where third-party water is now used) Note: In 2022, through productivity efforts, Linde saved more than 1.5 million cubic meters (400 million gallons) of water in operations.
Brackish surface water/seawater	Relevant	385,900	Much higher	Increase/decrease in business activity	This destination is relevant because 40% of Linde's discharges are to brackish/sea water. A

					small number of plants use sea water, which is predominately returned to the sea with no change in quality. Brackish water discharges increased by 29% from 2021. This is considered "much higher," which we define as an increase of >10%. This is mainly due to an increase in production a new startup, with withdrawal and discharge >80 million cubic meters of sea water.
Groundwater	Not relevant				Linde considers this destination not relevant because less than 1000 megaliters, or about 0.1%, of Linde's withdrawals are returned to groundwater sources.
Third-party destinations	Relevant	229,100	Lower	Increase/decrease in efficiency	This destination is relevant because about 24% of water discharges are to third party municipal and treatment facilities and to a destination where water is recycled and reused in industrial processes. 45,000 megaliters of water discharge in this category was wastewater (non-once-through). Water discharges in this category decreased 2.6% compared to 2021 (considered "lower" as this is <10%) due to lower water withdrawals from third party sources, due to some efficiency improvements and reclassification of sources. Note: In 2022, through productivity efforts, Linde

					saved more than 1.5 million cubic meters (400 million gallons) of water in operations.

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	33,364,000,000	1,053,300	31,675.6859394285	Future trend: While our business grows and sales increase, continued efforts are anticipated to reduce total water withdrawal as we focus on improving our water use efficiency onsite. Since 2021, the efficiency change was insignificant: Efficiency in 2022 was 0.06% lower than 2021. Therefore, we anticipate water withdrawal efficiency to stay relatively stable or decrease slightly in the future.

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

Bulk inorganic chemicals

Product name

All products: For reasons of confidentiality of business data, Linde is reporting water intensity for all products under a single row, rather than per product type.

Water intensity value (m3/denominator)

7.5

Numerator: water aspect

Total water withdrawals

Denominator

Other, please specify

thousand Nm3

Comparison with previous reporting year

About the same

Please explain

The water intensity value represents the ratio of total water withdrawal against our total production volume sold . Water intensity maintained at approximately the same level as 2021.

Water withdrawal intensity depends on type of product produced and also type of production process and how water is used in different production and cooling processes. E.g. water intensity is normally higher for once-through systems (where water is running through and returned to the original source, e.g. river or sea) whereas plants with closed-loop systems where the same water is re-used and circled several times have a lower water intensity.

Although some production increased (notably the startup of plants in 2022 causing an increase of once-through sea water withdrawal), the production proportionately increased. with some productivity improvements overall, the slightly higher portion of sites using once-through water was fairly proportionate to production changes, leading to fairly stable water withdrawal intensity YOY.

Internally, water efficiency metrics are part of the company's sustainable productivity activity. Linde continuously evaluates water use efficiency and areas of improvement to minimize water use in the production process, especially where withdrawals are from freshwater supplies. In 2022, these efforts yielded 1.5 million m3 in water savings (400 million gallons).

Future trend and strategy: While our business grows and sales increase, we expect water intensity to continue to remain stable, and eventually decrease. Water efficiency is managed within Linde's sustainable productivity target, which directs us to save $1.3 billion cumulatively, 2018-2028. This is a managed target, with clear accountability, ongoing reporting to management, and an annual process of review and continuous improvement. In 2022, productivity projects resulted in cumulative savings of $ 712 million. Continued efforts are anticipated in optimization projects across its sites worldwide to reduce total water withdrawal as we focus on improving our water use efficiency onsite as well as our overall intensity ratio.

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
Other, please specify ChemSec SIN list	Less than 10%	LESS THAN 2% OF REVENUE Linde’s customers may use products recognized as chemicals of concern in applications common for certain industries, including electronics. Based upon the specialized needs of these customers, Linde may supply these customers with such products, including carbon

		monoxide, arsine, phosphine, cobalt and formaldehyde. Linde may not necessarily sell each of these products in a given year; however, Linde provides estimates of the sales of these products for purposes of transparency. Linde estimates that any sales from these five products, combined, represent no more than 2% of Linde's global sales. Linde has a longstanding system of product stewardship, an approach to managing product safety that goes beyond regulatory compliance. Linde business, engineering, operations and safety professionals examine the potential environmental, health and safety risks of every new product. The entire life cycle of the product is reviewed — from raw material procurement through manufacturing, distribution, use and disposal. While maintaining operations in a safe, compliant, and environmentally conscientious manner, Linde also seeks alternatives where possible. As part of Linde's SD2028 goals, we have committed to discontinue sales of certain products and continue to work with customers to move to industry-acceptable alternatives.

W1.5

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

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes		
Other value chain partners (e.g., customers)	No	Important but not an immediate business priority	Linde engages throughout the value chain in many ways. However, our most significant engagement on water related issues is with our suppliers.

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
Procurement spend
Other, please specify

Suppliers are normally requested to highlight any risks affecting their production reliability, including environmental risks, such as water risks

Number of suppliers identified as having a substantive impact

200

% of total suppliers identified as having a substantive impact

1-25

Please explain

Linde currently focuses its environmental engagement efforts with critical and strategic suppliers in procurement categories identified to have the greatest environmental impact. Typically, suppliers engaged cumulatively represent at least 80% of total procurement spend. By partnering with our most critical and strategic suppliers on environmental and climate impacts, we reduce our own environmental impact, lower risk in our supply chain and manage costs.

-Linde normally asks suppliers to highlight any risks affecting their production reliability, including environmental risks (incl. water risks) (ex: location, reliability, water security)
-Certain suppliers, including wastewater treatment suppliers, are assessed on their impact to water quality (ex: % reduction of impurities)
-Suppliers may also be assessed for ability to continually supply of water (ex: # of outages)

Linde evaluates suppliers as part of qualification and has a risk-based audit schedule to assess suppliers.

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, water-related requirements are 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

Other, please specify

Compliance with the sustainability requirements in the Supplier Code of Conduct, including sustainability engagement, progress (on targets) in standard or update presentations to Linde, e.g. during periodic reviews, audits, or new bidding processes.

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

1-25

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

1-25

Mechanisms for monitoring compliance with this water-related requirement

Other, please specify

Relevant suppliers provide data or conduct self-assessments in environmental (and other) performance. Linde also has a risk-based supplier audit schedule to assess suppliers.

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

Retain and engage

Comment

Relevant suppliers report through supply contracts, which request that they comply with the sustainability requirements in the Supplier Code of Conduct. Relevant suppliers regularly include information on sustainability engagement and progress (on targets) in standard/update presentations to Linde, e.g. during periodic reviews, audits, or new bidding processes.

Relevant suppliers provide information about environmental management, risks, including for water; and provide data or conduct self-assessments in environmental (and other) performance. Where Linde considers results reported to be unacceptable or critical, suppliers are requested to remedy identified problems within an allotted time period based on a specific corrective action plan.

Water-related requirement

Complying with going beyond water-related regulatory requirements

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

1-25

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

1-25

Mechanisms for monitoring compliance with this water-related requirement

Supplier self-assessment

Other, please specify

Relevant suppliers provide data or conduct self-assessments in environmental (and other) performance. Linde also has a risk-based supplier audit schedule to assess suppliers.

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

Retain and engage

Comment

Linde's Supplier Code of Conduct (SCOC) includes a new Sustainability section:
"Suppliers are expected support Linde's initiatives...." "As relevant, suppliers may be requested to..." "provide updates on... their ... activities,.. for example... efforts focused on safeguarding the quality of water and reducing water consumption..."

(These are not regulatory requirements.)

Relevant suppliers report through contracts, which request compliance with the sustainability requirements in the SCOC. Relevant suppliers regularly include information on sustainability engagement and progress (on targets) in standard/update presentations to Linde, e.g. during periodic reviews, audits, or new bidding processes and provide data or conduct self-assessments in environmental (and other) performance. Where Linde considers results reported to be unacceptable or critical, suppliers are requested to remedy identified problems within an allotted time period based on a specific corrective action plan.

W1.5d

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

Type of engagement

Innovation & collaboration

Details of engagement

Educate suppliers about water stewardship and collaboration

% of suppliers by number

1-25

% of suppliers with a substantive impact

1-25

Rationale for your engagement

Linde currently focuses its environmental engagement efforts with critical and strategic suppliers in procurement categories identified to have the greatest environmental impact. These suppliers represent approximately 80 % of total procurement spend.

By partnering with our most critical and strategic suppliers on environmental and climate impacts, we reduce our own environmental impact, lower risk in our supply chain, and mitigate or decrease our overall operating costs. In conformance with Linde's Supplier Code of Conduct and audit requirements, suppliers provide Linde with information on sustainability initiatives, including projects to optimize water use, which reduces Linde's value chain water footprint. In addition, Linde invests in these supplier relationships by engaging with suppliers to share best practice in water stewardship and collaboration.

Impact of the engagement and measures of success

Linde supports, in cooperation with its suppliers, analyses and action plans that help suppliers improve environmental management and water consumption.

The impact of the engagement is a reduction in supplier water consumption of products sold to Linde, and a reduced water risk for the supplier, as well as for Linde (reducing supply chain risks).

Success is measured from reports on water reduction/ other sustainability initiatives. The level of detail provided by suppliers is increasing. On procurement direct categories, suppliers have engaged in the past years in long term programs with clear targets to minimize their activity impact on water. In some cases, they have achieved up to 90% reductions in water use. Example: As part of its general sustainability program and its supply agreement with Linde, two of our global cylinder manufacturers undertook efforts to reduce the CO2e emitted and water used per cylinder sold to Linde. Based on annual sales to Linde, these combined savings were greater than 500MT CO2e and 300,000 cubic meters of potable water.

Comment

Type of engagement

Incentivization

Details of engagement

Offer financial incentives to suppliers reducing your operational water impacts through the products they supply to you

% of suppliers by number

1-25

% of suppliers with a substantive impact

1-25

Rationale for your engagement

Linde currently focuses its environmental engagement efforts with critical and strategic suppliers in procurement categories identified to have the greatest environmental impact. These suppliers represent approximately 80 % of total procurement spend.

By partnering with our most critical and strategic suppliers on environmental and climate impacts, we reduce our own environmental impact, lower risk in our supply chain, and mitigate or decrease our overall operating costs. In conformance with Linde's Supplier Code of Conduct and audit requirements, suppliers provide Linde with information on sustainability initiatives, including projects to optimize water use, which reduces Linde's value chain water footprint. In addition, Linde invests in these supplier relationships by engaging with suppliers to share best practice in water stewardship and collaboration.

To the extent that we can incentivize cost savings and efficiencies, overall quality increases and operational efficiency increases.

Impact of the engagement and measures of success

Suppliers work with Linde and identify efficiencies in their own operations. They are accountable to provide a percentage of efficiency annually.

Comment

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	The company reports violations with significant fines in the year the violation occurred (not the year the fine was paid). Significant fines are those costing more than $10,000. There were no significant fines assessed to Linde for non-compliance with environmental laws or regulations that occurred in 2022.

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	Linde has established a global Responsible Care policy that provides clear directives to all regions / production sites on risk assessment and management throughout the complete product lifecycle to ensure that no harm is done to nature or society from its end-to-end business processes. The sites are subject to risk assessment, which includes evaluation of water quality impacts. Linde has processes to reduce freshwater withdrawal and wastewater production and protect freshwater sources from substances which might harm humans and eco-systems.

		Ex: COD is a metric used to ensure that water bodies /related habitats are not significantly affected by Linde water discharges. Where Linde facilities discharge process water, discharges are governed by discharge permits issued by a regulatory agency. Linde estimated chemical oxygen demand (COD) 1,900MT in 2022 (assured externally) Linde has operating permits/licenses that define pollutant and define threshold levels in wastewater discharges at production sites where it is required based on local governing authorities and water quality programs. When applying for/renewing permits, Linde applies standard protocols per regulatory framework requirements for identifying, measuring and monitoring pollutants, in order to closely manage discharge quality and minimize the environmental impact. Many sites have discharge permit/licenses with limits and requirements for pH, oil & grease, total dissolved solids, total suspended solids, COD.

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

Other nutrients and oxygen demanding pollutants

Description of water pollutant and potential impacts

Chemical Oxygen Demand is the measure of the capacity of water to consume oxygen during the decomposition of organic matter in the water. In other words, it's the amount of oxygen that's needed to oxidize the organic matter present in a quantity of water. E.g. a high COD concentration can lead to algal growth and reduction of oxygen in receiving waters.

Chemical Oxygen Demand is an important water quality parameter because it provides an index to assess the effect discharged wastewater will have on the receiving environment, e.g. a high COD concentration can lead to algal growth and reduction of oxygen in receiving waters.

Several of Linde's plants operate under wastewater discharge permits issued by a government body that require Linde to monitor and manage COD levels.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Industrial and chemical accidents prevention, preparedness, and response
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Water emissions are measured, monitored and tracked diligently per local requirement at the site and regional level. Specific effluent quality parameters vary depending on national and local regulations.

By closely monitoring and tracking compliance with water emissions at the local level, it is ensured that local effluent quality standards are met and water emissions do not exceed allowable thresholds, meaning adverse impacts to the environment are avoided.

Furthermore, at the corporate level COD water emissions as well as water emission intensity trends are closely analysed and reasons for variations or increases are identified, and corrective actions discussed with the sites.

Success is measured by monitoring at the corporate level compliance with local standards (tracking if there were any issues of non-compliance and how many sites were concerned). Linde maintains an incident management system to track potential non-compliances with permits and exceedances. Where incidents are found actions and improvements are investigated. Linde also reviews permit compliance through local and global audits. Permits and monitoring results are reviewed at audits and any actions, improvements or best practices are followed through.

In 2022, Linde had no incidents related to water quality.

Water pollutant category

Other nutrients and oxygen demanding pollutants

Description of water pollutant and potential impacts

Biochemical oxygen demand:
Water quality parameters provide an index to assess the effect discharged wastewater will have on the receiving environment, e.g. a high BOD can lead to
algal growth and reduction of oxygen in receiving waters. Keeping BOD low means minimal impact to receiving waters. Several of Linde's plants operate
under wastewater discharge permits issued by a government body that require to monitor and report on specific water emission levels. Those are
different per site/location.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Industrial and chemical accidents prevention, preparedness, and response
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Overall, the amount of other water emissions for Linde as a whole are insignificant, therefore Linde does not collect those figures globally during its
annual environmental key performance indicator reporting process. Water emissions are measured, monitored and tracked diligently at the site
and regional level where specific effluent quality parameters vary depending on the national or local regulations. They include Biological Oxygen Demand
(BOD), Overall compliance to the environmental discharge permits per local regulations as well as exceedances are tracked at the

corporate
level.
By closely monitoring and tracking water emissions at the local level, it is ensured that local effluent quality standards are met and water emissions do not
exceed allowable thresholds. For example, maintaining low COD and BOD reduces the risk of reducing dissolved oxygen in the receiving waters. This
means that flora and fauna have sufficient oxygen which helps maintain a healthy ecosystem.

Linde maintains an incident management system to track potential noncompliances with permits and exceedances. Where incidents are found actions
and improvements are investigated. Linde also reviews permit compliance through local and global audits. Permits and monitoring results are
reviewed at audits and Linde determines and follows through on the appropriate corrective and preventive actions.

In 2022, Linde had no incidents related to water quality

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

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
Other

Tools and methods used

WRI Aqueduct
Enterprise Risk Management
Internal company methods
External consultants
Scenario analysis
Other, please specify
Water Management Plan (tool to assess current water status, water risks and mitigation actions)

Contextual issues considered

Water availability 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
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers
Employees
Investors
Local communities
Regulators
Suppliers
Water utilities at a local level

Comment

The Linde risk management (RM) department is a global function independent of the business lines and is responsible for devising a standardised Linde-wide RM process, and for risk reporting. Linde’s RM system and procedure covers all regions, business units and sites and includes not only the economic, financial and regulatory environment, but also social and ecological aspects, including water risks. All employees are thereby asked to report risks related to the different stages of the value chain (Linde's own operations, supplier- or customer-related risks) into a standard risk management tool.
The RM process and system allows for reporting of short-, medium- or long-term risks for all 3 stages of the value chain, thus the horizon for risk reporting for all steps of the value chain is greater than 6 years.
The executives in the business units evaluate risks in terms of potential impact of the risk on Linde and the estimated probability of occurrence. For severity, the operating units use a standard scale which has four different risk ratings depending on the financial impact, ranging from low risk to very high risk (=substantive risk). Substantive risks are presented to top management on a regular basis, and to the Board. The risk owner is thereby also asked to propose mitigation actions . In case of substantive risks the Board reviews risks and proposed mitigation actions at each Board meeting and decides if those are appropriate.

In addition, Linde uses the WRI Aqueduct Water Risk Atlas to assess current and future water risk for each site and monthly subscription services to monitor regulatory developments related to water availability and quality. Furthermore, Linde’s Water Management plans (WMPs) program is rolled out to all high water use sites that are in areas of water stress. This includes procedures for water risk assessment and tracking. Linde also consults with external consultants and insurance providers at least annually who use tools to assess risks related to company assets. The risk and opportunities identification process is complemented by scenario analysis which is used to explore and develop an understanding of how the transition and physical risks of climate change – including those related to droughts and other water-related events - may impact Linde’s businesses, strategies, and financial performance. This analysis considers official climate-change scenarios and projections like those of the IEA or IPCC.

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	Each quarter, Linde employees worldwide report risks related to the different stages of the value chain into a standard risk management (RM) tool. The tool classifies the risks by plant/site and helps to manage, evaluate and track the risk entries (e.g. analyzes by relevance, by country, etc.). The RM process and system allows for reporting of short-, medium- or long-term risks for all 3 stages of the value chain. The executives in the business units categorize each risk in terms of the potential impact of the risk on Linde and the estimated probability of occurrence. For severity, a standard scale is used which has four different risk ratings depending on the financial impact, ranging from low to very high risk (=substantive risk). Risk owners are also asked to propose	The contextual issues listed under W3.3a represent relevant aspects for Linde, as they are either essential for operating the plant (water or raw material availability, regulatory circumstances) as well as avoiding any harm to people (e.g. no wash services) or the environment (negative impact on ecosystems). Involving stakeholder perspectives is the basis for successful business partnerships and success. Each of these issues are included in the risk assessment because of their potential to create a significant risk.	Linde considers investor interests and inputs for its risk assessment. Linde also receives regular enquiries from investors regarding sustainability topics, including topics around climate, energy or water. Customers are an important stakeholder group for Linde. Linde meets with its customers prior to and during plant construction to evaluate water sourcing and treatment solutions. This is further reviewed at regular intervals once the plant is operating. Employees are an integral part to the RM process, as all employees are asked to contribute to efficiency improvements and risk minimization. Also, for risk assessment in all stages of the value chain Linde	The outcome of the risk assessment is presented periodically to management and annually to the Executive Leadership Team and the Board, incl. specific mitigation actions. Information collected about potential water risks and stakeholder concerns are used in regional or site-specific decision making, e.g. relating to method of water sourcing or type of water supply. Substantive risks are reviewed by the Board and considered for strategic decision making, e.g. siting of a new plant.

	mitigation actions which are tracked in the tool. Linde also uses the WRI Aqueduct Water Risk Atlas to assess current and future water risk for all Linde sites and monthly subscription services to monitor regulatory developments related to water availability and quality. Linde's Water Management plans (WMPs) program, rolled out to all high water use sites that are in areas of water stress, includes procedures for water risk assessment and tracking. Linde also consults with external consultants and insurance providers at least annually who use specific tools to assess risks related to company assets. The RM process is complemented by scenario analysis for potential impact on Linde's business.		considers current and future regulatory developments in regions where it operates and in areas considered for siting new facilities. Linde's standard quarterly risk assessment process always includes supplier risk and perspectives. Linde evaluates water risk for some of its strategic suppliers via audits and helps them to establish actions plans and monitor those on a regular basis. Linde also engages with water treatment suppliers who service our sites to optimize and reduce water usage. Risks relating to (local) water utilities and affecting water supply may influence Linde's ability to operate its plants, as water is essential to Linde's production process. Local communities are critical to our license to operate and our reputation as a responsible corporate citizen.	

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?

No

W4.1a

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

When evaluating the potential impact of risks and the expected probability of their occurrence, Linde uses a standard scale devised by the corporate risk management department. This scale has four different risk ratings ranging from low risk to very high risk. Each risk is assigned a risk rating on this standard scale based on its potential impact and probability.

Risks with the highest potential impact (severity) rating are classified as significant (substantive) risks. Those substantive risks, together with their probability of occurrence, are presented in detail to top management on a regular basis.

When analyzing the impact of the risk, Linde considers not only the impact on the financial results of operations, but also the impact on non-monetary aspects such as safety, environment, reputation and strategy.

Monetary aspect/quantifiable indicator: In Linde's risk rating, a substantive financial impact is given when a risk has a potential negative financial impact on company results of more than $30 million.

Non-monetary aspects: Risks which could cause considerable harm to people or the environment (e.g., loss of life) are considered substantive, regardless of their monetary impact.

The definition of substantive impact applies to direct operations only, as suppliers are "neutral" in terms of importance of water quality and quantity and are not expected to present substantive financial impact.

Opportunities are also considered to have a strategic impact for non-monetary reasons such as entering new markets, defending market position, or introducing new technologies, etc.

W4.2b

(W4.2b) Why does your organization not consider itself exposed to water risks in its 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	Linde reports all substantial financial risks and other factors that could significantly impact the company in its annual report (10K). This includes among others physical risks from extreme weather events such as hurricanes and flooding, which are considered climate-related risks. In 2022, during Linde's annual risk assessment process, no direct water-related risks were reported which meet the definition of a substantive financial impact and pose a risk at the corporate level, neither currently nor in the short to mid-term. Risks from water scarcity are currently considered to be low and do not meet the financial threshold of a substantive risk. No such risks were reported in the past by our subsidiaries. Currently, only 4% of water withdrawal are from regions with high water stress. Water is an essential input into Linde's operations. For example, water is used for cooling processes in Linde's ASU operations or for hydrogen production. Therefore, water availability remains a key component of Linde's periodic risk assessment. If an ASU experiences water scarcity, this could impact operations, but we do not expect the impact to be substantive. Linde does acknowledge that water has become a global concern, on par with climate change. While water has not been identified as a risk in Linde's annual report (10k), water-related issues such as availability and exposure are part of two priority factors in our sustainable development materiality assessment to address the importance of this critical resource to operations.

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	Linde does not currently consider the company to be exposed to substantive water risks in our value chain. More than 99% of raw materials required for Linde's production process is not dependent on water. For the remaining raw materials, risks which were reported in previous years during the annual risk assessment process with regards to water issues in the supply chain so far have not met the threshold of a substantive financial risk (only minor or no financial impact on business operations reported), currently and for the short and mid-term. In addition, such risks are very local or asset-related and don't cause any issue at the corporate level. In the long-term future, there might be cases where single suppliers could face water availability issues in areas of high water stress, but it is difficult to predict at which locations this will actually occur. However, Linde has effective contingency strategies to mitigate such potential supply chain risks (e.g. over alternative sourcing). Furthermore, the company engages with its suppliers in energy and water efficiency initiatives and programs, to help minimize the detrimental impact of its own as well as supplier operations on the environment as well as reduce water risk. Example of actions taken that manage the risks so that they do not become substantive: As part of its general sustainability program and its supply agreement with Linde, two of our global cylinder manufacturers undertook to reduce the CO2e emitted and water used per cylinder sold to Linde. Based on annual sales to Linde, these combined savings exceeded 500MT CO2e and 300,000 cubic meters of potable water.

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

Markets

Primary water-related opportunity

Expansion into new markets

Company-specific description & strategy to realize opportunity

The (long-term) impacts of climate change as well as changes in precipitation extremes are leading to water shortages, especially in mega-cities where there are population pressures. This in turn leads to stricter regulation of water quality, e.g. in emerging economies such as China. Moreover, increased water stress as a result of climate change is supposed to lead to shortage of drinking water in regions or countries that didn't experience such issues in the past. This presents a market opportunity for Linde to increase revenue in such countries as we develop and deliver customized systems to help industrial plants and municipalities meet their wastewater management goals and provide clean drinking water.

We work directly with our customers to provide beginning-to-end treatment methods, from needs assessment and treatment strategy to equipment design, installation and industrial supply. We offer a wide range of applications that treat and reuse process water, all while maximizing treatment capacity, reducing VOC emissions, improving safety and reducing costs.

Linde's water technology offerings are supported by a business development group, which is actively investing in innovation and business development.

Case study: Increased urbanization and urban populations growth have exerted significant pressure on urban water demand and expansion of urban water infrastructure. Investments are needed to modernize water infrastructure in many urban areas and municipalities around the world. Enabled by Linde, Tseung Kwan O desalination plant is the first plant to use reverse osmosis to produce potable water from seawater in Hong Kong. With an initial capacity of 135,000 m3/d day (MLD), the equivalent volume is approximately 5% of Hong Kong’s total potable water demand.

Water applications are an important area within Linde's eco and social product portfolio (products which bring environmental or social advantages to customers). Linde defined a target that Linde’s sustainability portfolio should annually exceed 50% of sales revenues, 2018-2028. In 2022, Linde achieved 54%.

By setting a target for our sustainability portfolio, Linde is showing its commitment to serve (new) markets that will see increased

stress on water quality and availability.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4,800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The potential financial implications can be calculated from the size of the market and the size of Linde's opportunity. The major factors driving the industrial wastewater treatment market include depleting freshwater resources and stringent regulations pertaining to emission and treatment of industrial waste. According to the new market research report, "Industrial Wastewater Treatment Market by Type (Coagulants, Flocculants, Biocides & Disinfectants), End-Use Industry (Power Generation, Mining, Chemical) and Region (APAC, Europe, North America, MEA, South America) - Global Forecast to 2024", published by MarketsandMarkets™, the Industrial Wastewater Treatment Market is expected to grow from USD 11.3 billion in 2019 to USD 15.0 billion by 2024, at a CAGR of 5.8%. Wastewater treatment is an important end market for Linde and represented a market opportunity of about $82 million in 2022. Assuming a CAGR of 5.8% this equates to about $4.7 million in growth per year ($82 million x 5.8% = $4,756,000, which we rounded to $4.8million).

Although this revenue is moderate compared to Linde total annual revenues, water applications are regarded as a strategic and growing business field for Linde.

Type of opportunity

Products and services

Primary water-related opportunity

Sales of new products/services

Company-specific description & strategy to realize opportunity

The effects of climate change are increasingly visible on the environment, society and the global economy. Linde expects that in the future demand for products that offer social and environmental benefits will grow, including solutions for water quality and access to drinking water.

Linde's innovation group is continuously improving the existing product portfolio and finding new and efficient solutions which help our customers to become more productive and help sustain our planet. Linde works directly with its customers to provide beginning-to-end water treatment methods, from needs assessment and treatment strategy to equipment design, installation and industrial supply. We offer a wide range of applications that treat and reuse process water, all while maximizing treatment capacity, reducing VOC emissions, improving safety and reducing costs.

Case study: Many regions in North Africa, the Middle East, Australia, the United States and Mexico are already dependent on the desalination of seawater. Worldwide, there are about 12,000 large water desalination plants. To enrich this water with minerals such as calcium and magnesium, its pH value must first be adjusted using a complex acidification process. In 2021, Linde Gas US signed an agreement to supply carbon dioxide to the Massachusetts Water Resources Authority (MWRA) in Boston, MA. In this project, CO2 is used to reduce the pH, as part of the drinking water treatment process. Compared to other acids used in drinking water treatment, CO2 is safer, more sustainable, and often less expensive.

To add the correct dosage of CO2 to the water, Linde engineers have developed the SOLVOCARB system. SOLVOCARB is e.g. in use at the Sydney Desalination Drinking Water Plant. This uses CO2 produced in industrial processes in order to make the blue gold usable. Up to 6,000 tons of this gas flow into the plant yearly. With the help of the CO2, up to 250 million liters of water can be

produced daily – which corresponds to approximately 15 percent of Sydney's water needs.

Linde has a 2028 target that its sustainability portfolio - applications that bring customers sustainability benefits - should annually exceed 50% of annual revenue (excluding Linde Engineering). In the area of water Linde offers solutions for municipal water treatment, application in textiles and pulp and paper, aquaculture and water desalination. In 2022, Linde realized 54% of revenues or $ 16.4 billion with its sustainability portfolio.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

153,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The potential financial implications can be calculated based on an assumption of Linde's top line growth and the target that the sustainability portfolio contributes to 50% of the revenue. 50% of $ 30.6 billion (Linde revenue excluding Linde Engineering) = $ 15.3 billion. If Linde's top line grows 1% per year then this equates to about $153 million of growth in revenue per year from Linde's sustainability portfolio (1% of $15.3 billion = 153 million).

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 stages) covered by the policy Description of business dependency on water Description of business impact on water Commitment to align with international frameworks, standards, and widely-recognized water initiatives Commitment to prevent, minimize, and control pollution Commitment to reduce or phase-out hazardous substances	Water availability is key to the operations of Linde's plants and responsible water management is an important element of Linde's sustainability strategy and long-term targets. Linde recognizes the importance of water-related issues to the business and its operations and manages them under its company-wide water policy (Water Position Statement), is published on the company's website and complements the global Health, Safety and Environmental (HSE) Policy, Linde's Responsible Care Policy, its Ecosystems Policy, and Sustainable Development plan. See: https://www.linde.com/sustainable-development/policies-and-position-statements The water policy forms the basis for Linde's internal operating procedures related to water management described in Linde's water management plan standard. This policy provides clear directives and standards to all sites related to water management and risk assessment. The water policy integrates Linde's contribution towards SDG 6 Clean Water and Sanitation and SDG 12 Responsible Production and Consumption through our product portfolio, as well as our water-related actions. Linde also issues indexes that show alignment with GRI,

		Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities Commitment to stakeholder education and capacity building on water security Commitment to water stewardship and/or collective action Commitment to the conservation of freshwater ecosystems Commitments beyond regulatory compliance Reference to company water-related targets Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	TCFD and SASB. The policy recognizes linkages to climate change. The water policy commits Linde to setting goals & targets. A corporate water target has been established to develop water management plans (WMPs) for sites in areas of high water stress as defined by the WRI Aqueduct Water Risk Atlas mapping tool. WMPs address site-specific water-related issues to quantity, quality and availability, including water reduction and reuse initiatives, and proactive monitoring of water use efficiency to optimize usage onsite. Beyond regulatory compliance, the policy acknowledges the human right to water access and sanitation, by committing to provide fully functioning WASH services at the workplace, facilities and living accommodations under the company direct control. We participate in multi-stakeholder initiatives and community engagement projects, for example to provide clean drinking water and sanitation programs to schools and communities through collaboration with nonprofit organizations. Linde continues to develop innovative applications and technologies that can offer customers solutions to increase the quality of drinking water, treat wastewater and protect water ecosystems. These offerings created shared value and enabled more than 230 million people to have access to safe drinking water in 2022.

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
Board Chair	The full Board of Directors, under the Chair's leadership, has responsibility for water-related issues. How the individual's responsibility is related to water: The Board, under the chair's leadership, is responsible for making decisions on important matters related to environment (including water) and climate change, based upon recommendations from the Board's Sustainability Committee. The Board is furthermore informed by the Sustainability Committee on a regular basis about relevant issues related to strategies, policies, risks and opportunities as well as environmental and climate change performance, including performance towards Linde's sustainability targets. The Board also is responsible for reviewing safety and environmental risk, including water risk, at each Board meeting. In addition, the Board has established a strategic business objective to maintain best-in-class performance in environmental responsibility including water performance. Annual payout of executive variable compensation partly depends on performance in this area, which includes achievement of Linde's sustainable development targets. Water related decisions made in the last two years: In 2021, dedicated Sustainability Board Committee was formed. This Committee of the Board is responsible for oversight of environmental programs, policies, practices and strategies including water conservation and management. In 2022, this Board committee reviewed progress on targets, including water-related targets and performance. In 2022, the Human Capital Committee determined that the Company's performance with respect to the strategic and non-financial goals was favorable and set the Corporate strategic and non-financial payout factor at 140% of target variable compensation (relative to a 200% maximum). This included contribution from ESG Values, which includes sustainability, not including GHG emissions, and environment.

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Monitoring progress towards corporate targets Overseeing major capital expenditures Providing employee incentives Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing innovation/R&D priorities Setting performance objectives	Sustainable development is overseen by the Board and executive leadership and integrated throughout the company. The Linde Board maintains oversight of the company's values and strategy. Each year, it conducts a comprehensive long-term strategic review of the company's outlook and business plans and provides advice and counsel to management regarding the company's strategic issues. Its Audit Committee reviews the guidelines and policies by which Linde undertakes enterprise risk assessment and risk management. The Board has responsibility to review environmental risk at each meeting, including risks from climate change or water-related risks, these may among others include issues such as the impacts of extreme weather, flooding and hurricanes. Issues related to climate change incl. water-related impacts are a topic at almost each Board meeting. In January 2020, the Linde Board approved Linde's 10-year SD Targets, and the targets were announced in February 2020, including a target for water stewardship. In early 2022 and at subsequent meetings in 2022 and 2023, the Vice President Sustainability briefed the Board on progress towards the company's 2028 sustainable development targets, incl. performance against the water target. Performance against those targets will be reviewed at least annually by the full Board of Directors.

			In addition, the Board reviews safety and risk matters at each meeting, these may include climate change issues such as the impacts of extreme weather as well as water-related risks. To reinforce a culture where pay is directly linked to performance and to recognize the contributions of individuals to overall Company results, an individual performance component is included in the annual variable compensation design. The Human Capital Committee of the Board will consider various qualitative factors, including driving the Company's key values (including sustainable development, safety, health & environment, diversity & inclusion, community engagement, and integrity & compliance) and competencies that are important to the success of the Company (see 2023 proxy for details on those values). Sustainable development contains climate change and other environmental issues including water. Formed in 2021, the Sustainability Committee assists the Board with its oversight of the Company's programs, policies, practices and strategies related to environmental matters generally, including: sustainable productivity, water conservation and management, energy consumption, product stewardship and zero waste sites. While water by itself is not considered a material risk, water-related issues are integral to Linde operations and are therefore considered in the risk assessment and for strategy decisions (e.g. where to site new plants, type of plant design, etc.). The Board reviews environmental and safety risks at each meeting, incl. risks from climate change or water-related risks.

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	In order to assess whether Board members have competency on environmental issues, including issues related to water, the following criteria were used: - Current and prior professional experiences of Board members - Participation in trade associations or other councils or committees dealing with environmental issues - Membership in Sustainability or Environmental Board Committees Several Linde Board members have competency and experience in environmental (including water) and climate-related issues, primarily from serving for many years in councils and committees dealing with such matters. Examples: Prof. Dr. h.c. Richenhagen: Prof Dr. Richenhagen has wealth of experience in industry and relevant service corporate boards where he lends expertise in sustainability. He is the Chairman of the Board of AXIOS Sustainable Growth Acquisition Corporation. He also serves as a director of PPG Industries, where he serves on the Human Capital Management and Compensation Committee as well as on the Sustainability and Innovation Committee. He is a member of the Advisory Board of Stihl Holding AG and Co.KG. He also served as a director of Praxair, Inc. from 2015 until 2018. Edward G. Galante, served on the board in 2022: Mr. Galante's competence in environmental issues is grounded on his many years of experience serving as a member of Environmental and Sustainability Board Committees. He is a director of Celanese Corporation, where he is a member of the Environmental, Health, Safety, Quality and Public Policy Committee. He is also a director of Clean Harbors, Inc., where he is Chairman of the Environmental, Safety and Health Committee. He is also a director of Marathon Petroleum Corporation, where he is a member of the Sustainability Committee. He was a member of the Board of Directors of Andeavor Corporation (formerly Tesoro Corporation), where he served on the Environmental, Health and Safety Committee until the company merged into Marathon Petroleum in October 2018.

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)

Other C-Suite Officer, please specify

Executive Vice President and Chief Human Resources Officer (CHRO)

Water-related responsibilities of this position

Setting water-related corporate targets
Monitoring progress against water-related corporate targets
Integrating water-related issues into business strategy
Managing major capital and/or operational expenditures related to low water impact products or services (including R&D)
Providing water-related employee incentives

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Linde's EVP and CHRO is a member of Linde's Executive Team, reporting to the CEO. He is globally responsible for human resources, safety, and the global Sustainability function. He is the highest executive officer responsible for environmental issues and compliance. He has global responsibility to integrate these issues into the business; to manage risk (for people and the environment incl. water); and to manage expenditures related to these programs.

He is also responsible for compensation programs at Linde and is the senior executive reporting to Linde's Human Capital Committee.

He is the senior executive responsible for environmental target setting and progress. The VP Sustainability, equivalent to the Chief Sustainability Officer, reports into the EVP. and is responsible to review performance of Linde's environmental targets incl. for water.

The VP Sustainability regularly reports to the Sustainability Board Committee, incl. on performance against environmental targets.

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	Yes	The Board has confirmed the importance of setting nonfinancial objectives as part of variable compensation to reinforce leadership's focus on maintaining a culture that supports both short- and long-term sustainable results. It has established non-financial goals with respect to elements such as safety, compliance, sustainability and inclusion. These measures are described in Linde's April 2022 proxy statement. Annual pay-out of executive variable compensation depends on performance in several strategic non-financial areas, including environment and climate change (incl. water-related issues). Selected key strategic and non-financial outcomes were included in variable compensation to recognize that these are also critical to measuring our businesses' health and the potential for future success.

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization's water commitments	Please explain

Monetary reward	Corporate executive team Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Operating Officer (COO) Chief Purchasing Officer (CPO) Chief Risk Officer (CRO) Chief Sustainability Officer (CSO) Other, please specify all employees eligible for Variable Compensation are entitled to this incentive	Improvements in water efficiency – direct operations Improvements in wastewater quality – product use Reduction of water pollution incidents Reduction or phase-out of hazardous substances Company performance against a sustainability index with water-related factors (e.g., DJSI, CDP Water Security score, etc.)	Variable compensation is a part of annual salary. LINK TO Incentive Plan: In January 2022, the Human Capital Committee approved the design and goals for the Company's annual performance-based variable compensation program in 2022. In recognition of the importance of the Company's standards for, and impacts from, environmental, social, and governance (ESG) considerations, the non-financial component will now be comprised of three pillars, each with their own weights. See Proxy Statement. The non-financial component is weighted 25% of the total non-financial and financial payout. ESG factors into two elements of the payout: sustainability, not including GHG emissions, and environment are both part of ESG values component, weighted at 60% of non-financial. Relative performance and strategic positioning is weighted at 20%. The 2023 Proxy Statement lists the goals and provides details of the performance and results leading to compensation decision: ESG Values incorporating	The timeframe of the performance indicators is linked to the achievement of targets by 2028. The indicators are monitored continuously, and performance is reviewed and evaluated on the progression towards these targets. These are reviewed by the Human Capital Committee, and examples of achievements are included in the annual Proxy as well as the determined payout. Reduction of water withdrawal and improvements in efficiency are part of Linde's sustainable productivity (SD) activity, and also part of the SD 2028 water target to develop water management plans (WMPs) at sites in areas of high water stress. The WMPs include awareness raising activities, local stakeholders engagement as well as establishing specific procedures (behavior changes) like tracking water figures and water risk monitoring. The Human Capital Committee noted examples of actions that support the Company's strategic objectives in determining 2022 variable compensation payouts, including achieving A level

			sustainability (not incl GHG emissions) and environment are weighted at 60% of non-financial. and tie to the SD 2028 target for 100% water management plans in high-water-stressed areas by 2028 and $1.3B in productivity savings (includes water savings) by 2028 and CDP Water stewardship performance. Tie to 2022 performance and goals: Linde has SD2028 goals to reduce hazardous substances by 2029; Linde's products enable safe water applications for 230 million people; Company is listed in DJSI world, CDP.	recognition on the CDP Water Security Response.
Non-monetary reward	Corporate executive team Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Operating Officer (COO) Chief Procurement Officer Chief Purchasing Officer (CPO)	Improvements in water efficiency – direct operations Company performance against a sustainability index with water-related factors (e.g., DJSI, CDP Water Security score, etc.) Implementation of water-related community project	Implementation of water-related community project	Non-monetary rewards include non-financial awards or recognition to C-suite employees or other employees. Linde has an active employee community engagement program. Each year projects are submitted for recognition in their geographic segments, and then globally. Projects selected are then recognized and financial awards are granted to the benefitting communities or organizations. These are celebrated in Linde's annual Community Engagement brochure,

	Chief Risk Officer (CRO) Chief Sustainability Officer (CSO) Chief Government Relations Officer (CGRO) Chief Technology Officer (CTO) General Counsel Other, please specify All employees - Recognition of employee community engagement in water-related projects			which is published online. For example, one of our projects recognized helped support a local community with water sanitation in India. During the execution of a new project at a local hospital customer, APAC's Bangalore team reached out to community stakeholders and learned of a problem with water sanitation at a nearby school. With the procurement and engineering expertise of the Bangalore team, help from three other nearby Linde sites, and assistance from our construction contractors, it was a problem that could be solved. The team improved the water system by installing new purifiers and piping to optimize efficiency, and the team created a means for water collection for local gardens. The project also included lessons on hand hygiene and water conservation for schoolchildren. The team is proud of the potential health impacts for more than 100 children who study at the school.

				Note: All employees can benefit: Recognition of employee community engagement in water-related projects

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?

No

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)

Linde includes risk factors about catastrophic weather events, such as flooding and drought, in its annual report (Form 10-K in Item 1A Risk Factors). This risk is related to water stress factors, such as availability. This also includes how Linde responds to such risks.

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	11-15	Linde evaluates the effects of water-related issues as operational risks in the regions in which it operates and those in which new sites are planned, particularly in emerging markets. Water issues considered in Linde's long-term business objectives: water availability and quality are key elements integrated in the company's long-term strategy and growth objectives. For example, for every new plant, facility site studies are performed including physical and environmental parameters, such as water availability and potential water risk to plant operation. The scope covers typical production plant lifetime of minimum 15 – 20 years. In addition, Linde's 2028 long-term water target was developed to implement best water management practices and drive water efficiency improvements, particularly addressing the potential risk of water scarcity which would impact Linde's growth objectives. By 2028, 100% of production sites located in areas of highest water stress will have established and implemented a water management plan to adapt to potential and future water shortages. Additionally, as part of Linde productivity activity and portfolio, with support from our regional and global operations excellence teams, processes are in place to optimize water use efficiency and drive reduction opportunities at production sites across various regions. In 2022, these efforts yielded 2 million m3 in water savings and delivered $4 million savings from water-related projects. XXX
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	Water issues considered in Linde's long-term strategy: Water availability and quality were identified as key elements integrated in the company's long-term business strategy and growth objectives. Example on how Linde's future strategy has been influenced by a water-related issue: Every new plant investment is influenced by water-related issues. Each project undergoes a study on physical and environmental parameters, such as water availability and potential

			water risk to plant operation. The scope covers typical production plant lifetime of minimum 15 – 20 years. Design decisions are among others dependent on water availability and/or discharge, or recycle opportunities. Linde uses the CDP scenario toolkit to determine and evaluate long-term physical risks from climate change, including risks from rising sea levels or water scarcity. Those risks are taken into account when assessing (strategic) investments and are the basis to define mitigation actions/adaptation plans (such as specific investments in R&D). In addition, Linde analyzed water availability for next 20 years using WRI Aqueduct Water Risk Atlas, which showed that by 2040, under a more pessimistic scenario, an additional 20% of Linde's sites will see an increase in their baseline water stress level to high or extremely high. This is taken into account in Linde's long term strategic planning and to achieve its long-term objectives.
Financial planning	Yes, water-related issues are integrated	11-15	Linde evaluates the effects of water risks in the regions in which it operates and in the regions in which it plans to build new sites. Water issues are relevant in several ways for Linde's financial planning. The availability of water is one of many factors taken into consideration when determining where to site new plants or for selecting the appropriate plant design. Linde financial planning (including R&D expenses, capital expenditures and OPEX) is impacted by the type of new plants coming on-stream, where those are sited, and the specific plant designs. Water availability and quality are key aspects to consider for a new plant design and are therefore impacting the amount of CAPEX spent as well as operating cost factors. Linde sites are built to last for 15-20 years or longer and elements such as water availability are projected for the life of the plant. Expected future cost of water or measures to mitigate water risk are factored into the financial long-term project plan. For example, a site in North

			America was planned for an area with little available water. The plant was designed to run on closed-system glycol rather than on electricity and water which also impacts the financial business plan of the project.

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

CAPEX due to water included voluntary projects for permanent process efficiency improvements to primary process equipment and control equipment. Based on 2022 projects, increases in expenditures due to such projects and other efforts resulted in approximately 2 million m³ savings of water and are reported in Linde's SD productivity efforts.

OPEX for cost of procured water as part of utilities cost: Water consumption increased from 2021, mainly due to two new plant

startups in 2022. This was partly compensated by continuous productivity improvements resulting in water savings. In Linde's 2022 SD report, we report an example from South Latin America, where the business has achieved an overall water reduction for the past few years, totaling approximately 1.5 million cubic meters of water saved.

Linde does not disclose more information regarding the trend of water-related CAPEX and OPEX or make additional projections, due to its confidentiality.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	Linde used scenario analysis as part of its climate risk assessment to analyze potential long-term physical risks from climate change. Linde evaluated several public scenarios and selected the RCP 2.6 and RCP 4.5 scenarios as a basis for its risk assessment. RCP 2.6 is aligned with Linde's aspiration to contribute to limit global warming to below 2 degrees, whereas the RCP 4.5 is the more conservative scenario. Linde's scenario analysis showed that Linde might be exposed to several acute and chronic physical climate change risks in the long term, resulting e.g. from an increase in mean temperature, higher CO2 concentration in the air, or higher water stress. This could lead to higher operating cost, and in the worst case loss of revenue due to reduced production capacity. For example, by 2040, 20% additional sites could see an increase in their baseline water stress to high or extremely high, for example at plants at the China Coast.

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	Linde wanted to analyze the potential risks in case global warming cannot be limited below 2 degrees, and the impact on its business and company assets. For its scenario analysis Linde therefore applied the general assumptions of the RCP 4.5, including a temperature increase of 2.5-3 degrees, a PPM concentration of 500 by 2050, sea level increase by ~0.3 m by 2050, an increase in climate-related physical impacts (e.g. drought), as well as an increase in extreme weather events. The time horizon was until 2050. This covers the lifetime of Linde's production plants which usually have a contractual run time of 15-20 years. In addition, Linde carried out a specific analysis of future water stress development until 2040, using the WRI Aqueduct Water Risk Atlas (using pessimistic scenario), in order to determine on a site level, if Linde plants	Linde's scenario analysis shows that there are potential long-term threats from catastrophic events or the increase in mean temperature, causing among others higher water stress in regions where Linde operates. Furthermore, Linde's analysis of future water stress using the WRI Aqueduct tool showed that in a pessimistic scenario by 2040, 20% additional Linde sites could see an increase in their baseline water stress to high or extremely high, for example plants at the China Coast. On the other hand, increased levels of water stress could represent a business opportunity for Linde, in existing and new geographic markets, as Linde helps authorities and communities to cope with water issues such as waste water management and offers applications and solutions to produce sufficient amounts of drinking water, e.g. with its SOLVOCARB application.	Management was informed about the outcome of the scenario and risk analysis. As a result, mitigation strategies were defined to address the particular outcomes/risks for specific assets and regional areas. Linde's adaptation plan covers Linde's industrial gases business representing 100% of the company's production assets. It includes contingency plans for immediate reaction, required plant upgrades due to changing physical conditions for the mid-term (e.g., 5-10 years), and long-term (10+ years) activities, e.g., related to R&D and innovation (e.g., new water solutions, applied for new plants). Linde's water target is managed as part of the company's sustainable productivity activity to continuously evaluate water use efficiency and identify areas of improvement in order to optimize water use and consumption. While water has not been identified as a risk in our annual report (Form 10-K), we

		could be subject to high or very high water stress in the long-term. The analysis was focusing on Linde gas production plants which represent over 80% of Linde's global revenues and are dependent on water for their production process. Linde used the WRI Aqueduct Water Risk Atlas tool to map the production sites based on their GPS coordinates and identify the ones with water-stress related risks.		include water-related issues in our risk assessment and strategic decision making, and recognize the importance of this critical and vital resource to our operations. The current and future availability of water is essential for Linde's production processes and therefore considered in (strategic) business decisions, e.g. where to site new plants or for plant design specifications.

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, but we are currently exploring water valuation practices

Please explain

Responsible water management is an essential element of Linde’s sustainability strategy. As such, the company manages water-related issues in a risk-based and stress assessment context, to implement best management measures at sites in areas of high water stress. Linde water target ensures continuous efforts to optimize water use efficiency and identify areas of improvement to reduce water use. We are currently exploring the Water Risk Monetizer tool to assess the true cost of water, which assesses water availability and quality risks, and puts them into financial terms to support better informed decisions and prioritization of water-related investment projects. The outcome is to integrate valuation practices in our strategic planning exercise by utilizing risk-adjusted costs and mitigate future impacts from water scarcity.

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	There are 2 ways to classify a product as a low-water impact product. 1) Low water impact of a product/service during production: A product that has no or only minor impact on a water resource during production (no or little water consumption / pollution). In 2022, only XXX 4% of Linde's water discharge was waste water, the rest was once-through water which was withdrawn and fed back into the original water source without changes to water quality, thus no impact on the water source and ecosystem. 2) Products that help minimize impacts on water: Products for water treatment can help purify water or treat water in a way that it doesn't cause any harm to the environment when discharged. Also, products that help in the recycling and re-use process of water can be considered low water impact, as they help to reduce water consumption.	1) In order to produce Linde's main products, atmospheric gases (e.g. oxygen) different plant designs can be used. Some designs foresee the usage of water for cooling purposes, others are e.g. using air-cooled closed loop cooling systems and operate without using water (thus no water impact). This means that products could have a different impact on water withdrawal/use, depending on the way they are produced. If a Linde product is produced with a production process with no or little water impact (e.g. air cooling systems or once through systems) it can be classified as a low-water impact product. The majority of Linde's products are produced using production processes with low water impact (mostly once-through water systems), some with moderate water impact (cooling towers). 2) Linde offers a wide range of applications that treat and reuse process water, all while maximizing treatment capacity, reducing VOC emissions, improving safety and reducing costs.

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	No, and we do not plan to within the next two years	Linde has not identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on our business. Due to the importance of water from our stakeholders' perspectives, we have set water-related targets, which are described in the next question. We do not plan to set additional water targets.
Water withdrawals	Yes	
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	Linde is committed to providing fully functioning WASH services at the workplace and at living accommodations under the company's direct control. Since we already provide WASH services in 100% of relevant situations, we do not see the need to set a target.
Other	No, and we do not plan to within the next two years	Linde has not identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on our business. Due to the importance of water from our stakeholders' perspectives, we have set water-related targets, which are described in the next question. We continually to evaluate the targets.

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

Company-wide (direct operations only)

Quantitative metric

Other, please specify

% of sites in water-stressed areas with water management plans

Year target was set

2018

Base year

2018

Base year figure

0

Target year

2028

Target year figure

100

Reporting year figure

46

% of target achieved relative to base year

46

Target status in reporting year

Underway

Please explain

In 2022, 46% of the sites within the scope of the target initiated the development of their WMP. These are driven by each operating segment and country business units and rolled out to be monitored at the corporate level with potential replication opportunities identified where possible.

Linde focused on improving the water data reporting systems, and definition in place, increasing reporting frequency from annually to monthly, investigating, identifying and sharing opportunities for improving water efficiency across its operations. Additionally, the sites have engaged with the water treatment suppliers to optimize water use and explore alternate water sourcing initiatives to reduce freshwater use.

Target reference number

Target 2

Category of target

Water withdrawals

Target coverage

Company-wide (direct operations only)

Quantitative metric

Other, please specify

Revenue saved from sustainable productivity projects (which include projects that save water)

Year target was set

2018

Base year

2018

Base year figure

0

Target year

2028

Target year figure

1,300,000,000

Reporting year figure

797,000,000

% of target achieved relative to base year

61.3076923077

Target status in reporting year

Underway

Please explain

Linde measures the achievement of this target based on the financial/cost savings achieved. Cumulatively, from 2018-2022, Linde achieved $797 million in productivity savings, along with a reduction of energy and water usage (incl. 400 million gallons reduction in water withdrawal). The cumulative cost savings achieved represent 61% of the target value of $ 1.3 billion in cumulative cost savings.

Target reference number

Target 3

Category of target

Water withdrawals

Target coverage

Country/area/region

Quantitative metric

Reduction in withdrawals per unit of production

Year target was set

2016

Base year

2016

Base year figure

0

Target year

2028

Target year figure

5

Reporting year figure

2.8

% of target achieved relative to base year

56

Target status in reporting year

Underway

Please explain

Linde's operations in South Latin America has set a public regional target to continuously improve site-specific water intensity performance in areas of high water stress since 2016.

This is a target to improve water withdrawal. The sites have achieved an overall annual water reduction of more than 400,000 cubic meters of water, as of early 2022.

They are on track to achieving this goal. By 2022, 45 percent of the 11 WMP sites improved their water intensity results compared to the baseline year.

Investments were made to optimize cooling and boiler systems operation, to identify and repair water leaks, to collect and reuse rainwater, as well as to recover process condensate and other effluents to use it as make-up water in cooling towers.

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

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	Water withdrawal from municipal supplies, fresh surface water sources, fresh groundwater, once-through cooling water returned to fresh water sources, net fresh water consumption; COD; Net fresh water consumption in water-stressed areas .	Other, please specify ISO 14064-3	Verification protocols specific to water do not exist (like they do for GHGs). Linde's audit also included verification of certain GHG data. The auditors used the same principles in ISO 14064-3 to audit all environmental KPIs. For a copy of the verification statement, see https://www.linde.com/sustainable-development/reporting-center

W10. Plastics

W10.1

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

	Plastics mapping	Please explain
Row 1		Product stewardship is an approach to managing product safety that goes beyond regulatory compliance. It encompasses traditional product safety management as well as human health, environmental, distribution, and design safety management. The core objective of Linde product stewardship activities is to promote continuous improvement in health, safety, and environmental protection for each of our products. Our Responsible Care® Policy reflects Linde's commitments: To design and develop products that can be manufactured, transported, used and disposed of or recycled safely. To work with customers, carriers, suppliers, distributors, employees and contractors to foster the safe and secure use, transport and disposal of chemicals and provide hazard and risk information that can be accessed and applied in their operations and products. To promote pollution prevention, minimization of waste, conservation of energy and the responsible use of natural and other critical resources at every stage of the life cycle of products. To communicate product, service and process risks to stakeholders and listen to and consider their perspectives. Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.

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	Please explain

Row 1		Product stewardship is an approach to managing product safety that goes beyond regulatory compliance. It encompasses traditional product safety management as well as human health, environmental, distribution, and design safety management. The core objective of Linde product stewardship activities is to promote continuous improvement in health, safety, and environmental protection for each of our products. Our Responsible Care® Policy reflects Linde's commitments: To design and develop products that can be manufactured, transported, used and disposed of or recycled safely. To work with customers, carriers, suppliers, distributors, employees and contractors to foster the safe and secure use, transport and disposal of chemicals and provide hazard and risk information that can be accessed and applied in their operations and products. To promote pollution prevention, minimization of waste, conservation of energy and the responsible use of natural and other critical resources at every stage of the life cycle of products. To communicate product, service and process risks to stakeholders and listen to and consider their perspectives. Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.

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		Product stewardship is an approach to managing product safety that goes beyond regulatory compliance. It encompasses traditional product safety management as well as human health, environmental, distribution, and design safety management. The core objective of Linde product stewardship activities is to promote continuous improvement in health, safety, and environmental protection for each of our products. Our Responsible Care® Policy reflects Linde's commitments: To design and develop products that can be manufactured, transported, used and disposed of or recycled safely. To work with customers, carriers, suppliers, distributors, employees and contractors to foster the safe and secure use, transport and disposal of chemicals and provide hazard and risk information that can be accessed and applied in their

		operations and products. To promote pollution prevention, minimization of waste, conservation of energy and the responsible use of natural and other critical resources at every stage of the life cycle of products. To communicate product, service and process risks to stakeholders and listen to and consider their perspectives. Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.

W10.4

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

	Targets in place	Please explain
Row 1		Linde's SD 2028 targets include Zero Waste Target. Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.

W10.5

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

	Activity applies	Comment
Production of plastic polymers		Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.
Production of durable plastic components		Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.
Production / commercialization of durable plastic goods (including mixed materials)		Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.
Production / commercialization of plastic packaging		Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.

Production of goods packaged in plastics		Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)		Linde does not provide this information in this year's CDP disclosure and will consider disclosing in the future.

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	EVP & CHRO: Linde does not have a COO. We consider the function of the EVP & CHRO equivalent to those of COO.	Chief Operating Officer (COO)

SW. Supply chain module

SW0.1

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

	Annual revenue