

Linde PLC

2024 CDP Corporate Questionnaire 2024

<Note: Supply chain information redacted>

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[Terms of disclosure for corporate questionnaire 2024 - CDP](#)

Contents

C1. Introduction

(1.3) Provide an overview and introduction to your organization.

(1.3.2) Organization type

Select from:

Publicly traded organization

(1.3.3) Description of organization

Linde plc is a public limited company formed under the laws of Ireland with its principal offices in the United Kingdom. Linde is the largest industrial gas company worldwide and is a major technological innovator in the industrial gases industry. Its primary products in its industrial gases business are atmospheric gases (oxygen, nitrogen, argon, and rare gases) and process gases (carbon dioxide, helium, hydrogen, electronic gases, specialty gases, and acetylene). The company also designs and builds equipment that produces industrial gases and offers customers a wide range of gas production and processing services such as olefin plants, natural gas plants, air separation plants, hydrogen and synthesis gas plants and other types of plants. Linde is in the business of resource transformation and uses electricity and other fuels for energy and as feedstock. Linde's business and production processes are energy-intensive. For its hydrogen production Linde in most cases uses natural gas as a feedstock, this accounts for the majority (73%) of Linde's scope 1 emissions. The rest stems from using natural gas as energy in production plants, from distribution and release of other GHGs. The majority (approximately 90%) of Scope 2 emissions derives from electricity consumption by Linde's air separation units, which produce atmospheric gases. Responsible management of water is an essential element of Linde's sustainability strategy. Water scarcity and lack of access to clean water are global challenges affecting individuals, community, and industry, and the availability of water is projected to be further impaired by the effects of climate change. Linde utilizes water in its operations, primarily for cooling processes and in hydrogen production. Linde makes efforts to conserve water and impacts on water are minimized: More than 75 percent of global freshwater withdrawal is returned to its original source, at same or better quality. Linde's applications bring benefits to society, including clean water applications. In 2023, Linde's applications provided clean drinking water to 225 million people globally. Linde plc shares trade on the ("NASDAQ") under the ticker symbol "LIN". Linde issues an annual report (Form 10-K) according to US GAAP. Since 2023, Linde has issued a Modified GAAP report in accordance with Irish rules.

[Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

| | End date of reporting year | Alignment of this reporting period with your financial reporting period | Indicate if you are providing emissions data for past reporting years |
|--|----------------------------|---|---|
| | 12/31/2023 | Select from: <input checked="" type="checkbox"/> Yes | Select from: <input checked="" type="checkbox"/> No |

[Fixed row]

(1.4.1) What is your organization’s annual revenue for the reporting period?

32854000000

(1.5) Provide details on your reporting boundary.

| | Is your reporting boundary for your CDP disclosure the same as that used in your financial statements? |
|--|--|
| | Select from: <input checked="" type="checkbox"/> Yes |

[Fixed row]

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

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

No

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

Yes

(1.6.2) Provide your unique identifier

IE00BZ12WP82

CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:

No

Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

Yes

(1.6.2) Provide your unique identifier

LIN

SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

No

LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:

No

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

No

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:

No

[Add row]

(1.8) Are you able to provide geolocation data for your facilities?

| | Are you able to provide geolocation data for your facilities? | Comment |
|--|---|---|
| | Select from: <input checked="" type="checkbox"/> No, this is confidential data | Due to issues of security and business sensitivity, Linde does not provide geolocation data for all facilities. |

[Fixed row]

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

Select from:

- Yes, we have mapped or are currently in the process of mapping our value chain

(1.24.2) Value chain stages covered in mapping

Select all that apply

- Upstream value chain
 Downstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

- Tier 1 suppliers

(1.24.7) Description of mapping process and coverage

*Linde has a process of identifying stakeholders (suppliers and customers). In many cases, information may include where these stakeholders operate where they operate along with their relationship to Linde. This process is in the very early stages for the majority of our value chains and ongoing.
[Fixed row]*

(1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

(1.24.1.1) Plastics mapping

Select from:

- No, and we do not plan to within the next two years

(1.24.1.5) Primary reason for not mapping plastics in your value chain

Select from:

Judged to be unimportant or not relevant

(1.24.1.6) Explain why your organization has not mapped plastics in your value chain

Linde's waste management and the company's Zero Waste Program considers numerous waste streams with the goal of eliminating waste at the source. This includes the reducing plastic waste and pollution. At this time, this oversight is deemed reasonable as plastics are not largely prevalent in operations. Linde understands the global importance of reducing plastics and will continue to review this issue, evolution in operations and supply chain practices, and will consider increasing vigilance if the amount of plastics in operations and supply chain suggests the need for specific mapping.

[Fixed row]

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) From (years)

0

(2.1.3) To (years)

2

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Annual financial reporting covers one year.

Medium-term

(2.1.1) From (years)

3

(2.1.3) To (years)

10

(2.1.4) How this time horizon is linked to strategic and/or financial planning

In 2019, we set medium-term sustainable development targets for 2028,.

Long-term

(2.1.1) From (years)

11

(2.1.2) Is your long-term time horizon open ended?

Select from:

Yes

(2.1.4) How this time horizon is linked to strategic and/or financial planning

In 2021, we set long-term climate change targets for 2035 and established our 2050 carbon neutrality ambition. In late 2023, commencing in 2024, we have new targets, which extend our decarbonization investments and increase our commitments for quantitative water reduction and waste management by 2035.

[Fixed row]

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

| | Process in place | Dependencies and/or impacts evaluated in this process |
|--|---|---|
| | Select from: <input checked="" type="checkbox"/> Yes | Select from: <input checked="" type="checkbox"/> Both dependencies and impacts |

[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

| | Process in place | Risks and/or opportunities evaluated in this process | Is this process informed by the dependencies and/or impacts process? |
|--|---|--|--|
| | Select from: <input checked="" type="checkbox"/> Yes | Select from: <input checked="" type="checkbox"/> Both risks and opportunities | Select from: <input checked="" type="checkbox"/> Yes |

[Fixed row]

(2.2.2) Provide details of your organization’s process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

(2.2.2.1) Environmental issue

Select all that apply

- Climate change
- Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- Dependencies
- Impacts
- Risks
- Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

- Direct operations
- Upstream value chain
- Downstream value chain

(2.2.2.4) Coverage

Select from:

- Full

(2.2.2.5) Supplier tiers covered

Select all that apply

- Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

- Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

- Annually

(2.2.2.9) Time horizons covered

Select all that apply

- Short-term
- Medium-term
- Long-term

(2.2.2.10) Integration of risk management process

Select from:

- Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

- Sub-national
- National

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

- IBAT for Business
- WRI Aqueduct

Enterprise Risk Management

- Enterprise Risk Management
- Internal company methods
- Stress tests

International methodologies and standards

- IPCC Climate Change Projections

Other

- External consultants
- Internal company methods
- Materiality assessment
- Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

- Drought
- Heavy precipitation (rain, hail, snow/ice)

- Tornado
- Heat waves
- Cold wave/frost
- Cyclones, hurricanes, typhoons

Chronic physical

- Changing precipitation patterns and types (rain, hail, snow/ice)
- Changing temperature (air, freshwater, marine water)
- Heat stress
- Increased severity of extreme weather events
- Temperature variability

Policy

- Carbon pricing mechanisms
- Changes to national legislation

Market

- Availability and/or increased cost of raw materials
- Changing customer behavior

Reputation

- Increased partner and stakeholder concern and partner and stakeholder negative feedback

Technology

- Transition to lower emissions technology and products

Liability

- Exposure to litigation
- Non-compliance with regulations

- Flood (coastal, fluvial, pluvial, ground water)
- Storm (including blizzards, dust, and sandstorms)

(2.2.2.14) Partners and stakeholders considered

Select all that apply

- Customers
- Employees
- Investors
- Suppliers
- Regulators

- Local communities

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

- No

(2.2.2.16) Further details of process

Linde's Risk Management department is responsible for devising a standardized Linde-wide risk management process. Those with local responsibility for risk in the operating units are responsible for the implementation of this standard process. The identification, assessment of and response to climate-related risks is integrated into this company-wide process. Risk identification: The management team of each operating unit within Linde assesses the main risks affecting that unit on an ongoing basis, i.e., more than once a year. In addition, global functions are asked to report risks affecting their area of responsibility. The areas covered by the risk assessments include internal processes and resources; the economic, financial, legal and regulatory environment; and social and ecological aspects including risks resulting from climate change. In addition, potential risks affecting suppliers or customers (which in turn could have a negative impact on Linde) are considered and reported. Such up- or down-stream risks are also monitored by the regional and global procurement functions, customer relationship management and business development functions. The risk management process allows for the identification of short-term risks, as well as risks with a medium- or long-term horizon and impact. Through this process, Linde has defined our 4 risk areas related to climate change that pose inherently substantive impacts: regulatory risks, market risks, reputational risks and physical risks. Information pertaining to these risks is maintained for further tracking. The risk and opportunities identification process is complemented by scenario analysis which is used to explore and develop an understanding of how the physical and transition risks of climate change may impact Linde's businesses, strategies, and financial performance. This analysis is coordinated centrally by the Clean Energy team, taking into account climate-change scenarios and projections such as those from IEA or IPCC.

[Add row]

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

(2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

- Yes

(2.2.7.2) Description of how interconnections are assessed

The interconnectedness of dependencies, impacts, risks and opportunities is increasingly part of the approach at Linde. The following describes some examples of how these are assessed independently, as well as examples of how Linde approached analyzing and assessing interconnections. Dependencies: The analysis of dependencies begins with the assessment of materiality, determination of priority factors, and design, combined with the business model at Linde. Linde's business depends on a natural resource (the air). The company's mission and business model make clear the goal to create more value with fewer resources. Its priority factors are aimed at reducing operational impacts and maximizing environmental contributions. Therefore, at the launch of new processes, careful attention is given resource efficiency. The company's policies (including, for example, Linde's Water Position Statement) confirm the focus on efficient use of natural resources upon which the company's processes are dependent. Risk Management: Risks from the supply of energy and from natural catastrophes, such as extreme weather, are managed by the company's bottom-up and top-down risk management processes. Assessing opportunities: Linde's business development teams assess market trends, customer behavior, and requirements and share those trends with the R&D and technology functions. As noted in the discussion of dependencies, Linde's business model is incumbent upon making more with less-- and this meaningfully translates often into benefits that Linde applications bring to customers. Teams propose solutions for the short, medium and long term which address those changing market conditions and customer requirements. Opportunities are evaluated up and down the value chain, and collaboration with suppliers or customers is taking place in several instances. Solutions and strategies are first discussed within the appropriate function (clean energy, for such applications, or the water team for water-related applications). Material and strategic issues/innovations that tackle important market trends/new requirements are proposed to the Executive Leadership Team. Impacts: Linde analyzes the organization's impacts on natural systems, including ecosystems, land, air and water. Example of interconnections: Opportunity: Linde has estimated up to 50B in investments in clean energy over the next decade, including growth in hydrogen. Dependency: Linde utilizes water in its operations, primarily for cooling processes and in hydrogen production. Linde makes efforts to conserve water and estimate how dependence upon water changes/ can be minimized as business grows. Risk: Linde teams analyze the risk to production and to communities, especially for example, for operations in areas of high-water-stress. Water management planning and targets help address. Impacts: Impacts on water are also minimized: More than 75% of global freshwater is returned at same or better quality.

[Fixed row]

(2.3) Have you identified priority locations across your value chain?

(2.3.1) Identification of priority locations

Select from:

Yes, we have identified priority locations

(2.3.2) Value chain stages where priority locations have been identified

Select all that apply

Direct operations

(2.3.3) Types of priority locations identified

Sensitive locations

- Areas of limited water availability, flooding, and/or poor quality of water

Locations with substantive dependencies, impacts, risks, and/or opportunities

- Locations with substantive dependencies, impacts, risks, and/or opportunities relating to water

(2.3.4) Description of process to identify priority locations

Continuing from the example of water used in the previous question, one set of priority locations in our direct operations are sites that withdraw relatively high amounts of water in areas of high water stress. The scope is high-water use (hi-hi) sites, defined as sites exceeding 50,000 m³/year of water withdrawal, excluding once-through, noncontact cooling water. Sixty-four sites were defined as in scope for this target in 2023. Areas of water stress are defined by the WRI Aqueduct Global Water Risk Atlas Tool (2019 version). We determined “high stress” to mean that the baseline water stress was “high” or “extremely high.” In addition, businesses are encouraged to voluntarily use local determinants of water risk.

(2.3.5) Will you be disclosing a list/spatial map of priority locations?

Select from:

- No, we have a list/geospatial map of priority locations, but we will not be disclosing it

[Fixed row]

(2.4) How does your organization define substantive effects on your organization?

Risks

(2.4.1) Type of definition

Select all that apply

- Qualitative
- Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

- Direct operating costs

(2.4.3) Change to indicator

Select from:

- Absolute decrease

(2.4.5) Absolute increase/ decrease figure

30000000

(2.4.6) Metrics considered in definition

Select all that apply

- Frequency of effect occurring
- Time horizon over which the effect occurs
- Likelihood of effect occurring

(2.4.7) Application of definition

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. 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.

Opportunities

(2.4.1) Type of definition

Select all that apply

- Qualitative
- Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

- Other, please specify :potential future capital investments

(2.4.3) Change to indicator

Select from:

- % increase

(2.4.6) Metrics considered in definition

Select all that apply

- Frequency of effect occurring
- Time horizon over which the effect occurs
- Likelihood of effect occurring

(2.4.7) Application of definition

Linde's business development teams are assessing market trends and customer behavior and requirements on an ongoing basis, and sharing those with the R&D and technology functions. These teams elaborate and propose solutions for the short, medium and long term which address those changing market conditions and customer requirements. Opportunities are evaluated up and down the value chain, whereas collaboration with suppliers or customers is taking place in several instances. Solutions and strategies are first discussed within the clean energy function. Material and strategic issues/innovations that tackle important market trends/new requirements are proposed to the Executive Leadership Team on a regular basis. For example, Linde sees a large potential for clean energy based upon potential investments in the near future: In a decarbonized future, clean hydrogen will play a pivotal role in enabling the global energy transition, supporting society in decarbonizing industry, providing sustainable fuels and supporting the clean energy mix. Within our own portfolio, we expect to see investment opportunities of up to 50 billion over a decade in clean energy projects. We weigh such opportunities carefully, driven by purpose and guided by our vision to be the best performing global industrial gases and engineering company.

[Add row]

(2.5) 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?

(2.5.1) Identification and classification of potential water pollutants

Select from:

- Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

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. Much of Linde's water discharges are once-through cooling water. For these sites, water returns to its original source at equal or better quality. For sites with operating permits/licenses, regulatory agencies define pollutants and threshold levels in wastewater discharges. 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. 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 has processes to reduce freshwater withdrawal and wastewater production and protect freshwater sources from substances which might harm humans and eco-systems.

[Fixed row]

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

Row 1

(2.5.1.1) Water pollutant category

Select from:

- Other nutrients and oxygen demanding pollutants

(2.5.1.2) 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.

(2.5.1.3) Value chain stage

Select all that apply

- Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

(2.5.1.5) 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 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 Linde determines and follows through on the appropriate corrective and preventive actions. Success metrics: In 2023, Linde had 0 significant fines related to water quality, related to BOD.

Row 2

(2.5.1.1) Water pollutant category

Select from:

- Other nutrients and oxygen demanding pollutants

(2.5.1.2) 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.

(2.5.1.3) Value chain stage

Select all that apply

- Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

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

(2.5.1.5) 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. Success metrics: In 2023, Linde had 0 significant fines related to water quality, related to COD.

[Add row]

C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.1.1) Environmental risks identified

Select from:

Yes, only within our direct operations

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

Risks exist in our operations, but not in our supply chain or downstream.

Water

(3.1.1) Environmental risks identified

Select from:

No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

- Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

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.

Plastics

(3.1.1) Environmental risks identified

Select from:

- No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

- Not an immediate strategic priority

(3.1.3) Please explain

Very little plastic is used in operations for the gases business. Linde's principal business is the production of air products that are not comprised of plastic parts. In non-production areas of our business such as homecare, we sell or distribute products containing plastics.

[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.1.1.1) Risk identifier

Select from:

Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

Cold wave/frost

(3.1.1.4) Value chain stage where the risk occurs

Select from:

Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

United States of America

(3.1.1.9) Organization-specific description of risk

Linde plants may be impacted by the occurrence of acute weather extremes such as cold and frost. In the U.S. along the Gulf of Mexico, Linde operates several air separation units, large steam methane reformers and PSA units. Extreme cold temperatures could cause significant damage to these plants and could result in the plants halting production. Damage to a plant's equipment could result in lost revenue from loss of production. It could take up to one year to bring the plant back on line, and total financial impact of such an event per plant could be 100 million, the majority of which would be loss of revenue due to decreased production.

(3.1.1.11) Primary financial effect of the risk

Select from:

- Decreased revenues due to reduced production capacity

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

- Short-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

- About as likely as not

(3.1.1.14) Magnitude

Select from:

- Medium-high

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The effect of the risk on the overall financial position of the company would be minimal. A financial effect of 100 million is only 0.3% of Linde's 2023 revenue.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

- Yes

(3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

100000000

(3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

100000000

(3.1.1.25) Explanation of financial effect figure

The reported financial impact figure is gross (before mitigation activities) and based on a low probability scenario of a major natural disaster of high severity, which could cause considerable damage to one or several plants in that area and lead to considerable down time of up to one year. Based on evaluations from insurance companies regarding such major events, it is estimated that such an event could lead to about 100,000,000 of financial impact for a plant of average size or a plant cluster in an exposed area. This includes operating cost and capital to restore the plant itself, as well as lost revenues which represent the major part of the impact. Based on a specific disaster plan/scenario for one of Linde's major plants, it is estimated that 20% of financial impact (20 million) would be due to damage to property, plant and equipment and to restore the plant; and the rest (80 million) would be lost business/revenues. Lost revenues are calculated based on the assumption of a downtime of one year, which is the amount of time needed to bring the plant back into working condition after a major natural disaster. One year is considered realistic, as it may take 1-2 months for repair work to begin (e.g., after a major flood), and there can be long procurement lead times to order high value replacement parts/components, which then need to be installed, tested, etc.

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

Other infrastructure, technology and spending, please specify

(3.1.1.27) Cost of response to risk

200000

(3.1.1.28) Explanation of cost calculation

Linde annually spends in excess of 20K above normal business costs to study its natural catastrophe risk. The risk analysis service provides, among other items, detailed evaluations by geography of emerging hurricane and flooding vulnerability and likelihood of incidence of extreme weather. In addition, Linde spends annually 180K for a Loss Control Program which includes 20 surveys/ year by risk engineers from the leading insurer. 20K 180K 200K

(3.1.1.29) Description of response

To manage these risks, Linde evaluates direct and indirect business risks through business impact analysis, then establishes appropriate priorities and policies; invests in facilities with suitably resilient design and technology; consults with vendors, insurance providers and industry experts; and conducts regular reviews of the business risks with management. Examples of Risk Responses: Asset level risks are assessed during project development using documented procedures and criteria. Linde also has a Business Continuity Planning process through which businesses can evaluate their operational assets and develop plans that can be implemented in the event of an impairment of the asset. Additionally, Linde works with its insurance providers to evaluate the risk from all perils including extreme weather or flooding. The insurer uses rigorous standards to identify and quantify exposures to Linde assets. Based on their recommendations, Linde may make investments in infrastructure that adapts to or mitigates risks from climate change. Linde currently procures risk transfer insurance from highly rated insurance

companies for catastrophic claims in excess of 5MM in total property damage as well as risk transfer insurance coverage for business interruption. Case Study: Winter Storm Uri hit the Gulf Coast in Feb, 2021 with an extended period of below freezing temperatures, resulting in numerous shutdowns and minor damage for Linde plants. Utility interruptions occurred across Linde's fleet of plants, interrupting production and supply of industrial gases. Sites experiencing damage due to freezing temperatures were retrofitted with best practice methods of protection: insulation and heat tracing of water and wet process piping, plastic piping replaced with more resilient materials, and standard operating procedures implemented to prepare sites for future hard freezes. New projects in development and execution are being designed with these increased levels of protection.

[Add row]

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

Climate change

(3.1.2.1) Financial metric

Select from:

Revenue

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

80000000

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

Less than 1%

(3.1.2.7) Explanation of financial figures

This is based upon the assumption, considering if one plant becomes vulnerable to the risk of cold/frost. As per our response to and for the purposes of 3.1.1, the loss of revenue from a single ASU has been estimated at 80,000,000

[Add row]

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

(3.3.1) Water-related regulatory violations

Select from:

No

(3.3.3) Comment

The company reports significant violations with significant fines or non-monetary sanctions in the year the violation occurred (not the year the fine was paid) in its SD Report annually. Significant violations are those costing more than 10,000. There were no such fines in 2023. Additionally, Linde is not aware of any significant non-monetary sanctions.

[Fixed row]

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Select from:

Yes

(3.5.1) Select the carbon pricing regulation(s) which impact your operations.

Select all that apply

- EU ETS
- UK ETS
- Korea ETS
- Germany ETS
- Fujian pilot ETS

- Beijing pilot ETS
- Shanghai pilot ETS
- California CaT - ETS
- Singapore carbon tax

(3.5.2) Provide details of each Emissions Trading Scheme (ETS) your organization is regulated by.

Beijing pilot ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0.6

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

112772

(3.5.2.6) Allowances purchased

15680

(3.5.2.7) Verified Scope 1 emissions in metric tons CO₂e

0

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

128452

(3.5.2.9) Details of ownership

Select from:

Facilities we own and operate

(3.5.2.10) Comment

The amount of allowances based on latest available information; under review.

California CaT - ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0.43

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

45201

(3.5.2.6) Allowances purchased

10419

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

70911

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

Facilities we own and operate

(3.5.2.10) Comment

The amount of purchased allowances is estimated, as purchases are in process as of the time of the disclosure through CDP.

EU ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

8.2

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

581686

(3.5.2.6) Allowances purchased

100000

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

1363699

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

Facilities we own and operate

(3.5.2.10) Comment

The amount of allowances based on latest available information; under review.

Fujian pilot ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0.1

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0.6

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

147384

(3.5.2.6) Allowances purchased

6000

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

16200

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

137184

(3.5.2.9) Details of ownership

Select from:

Facilities we own and operate

(3.5.2.10) Comment

The amount of allowances based on latest available information; under review.

Germany ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0.01

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

0

(3.5.2.6) Allowances purchased

2162

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

2162

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

Facilities we own and operate

(3.5.2.10) Comment

The amount of allowances based on latest available information; under review.

Korea ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0.25

(3.5.2.2) % of Scope 2 emissions covered by the ETS

4.11

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

1027477

(3.5.2.6) Allowances purchased

0

(3.5.2.7) Verified Scope 1 emissions in metric tons CO₂e

40868

(3.5.2.8) Verified Scope 2 emissions in metric tons CO₂e

88937

(3.5.2.9) Details of ownership

Select from:

Facilities we own and operate

(3.5.2.10) Comment

The amount of allowances based on latest available information; under review.

Shanghai pilot ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0.7

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

142604

(3.5.2.6) Allowances purchased

6000

(3.5.2.7) Verified Scope 1 emissions in metric tons CO₂e

0

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

148064

(3.5.2.9) Details of ownership

Select from:

Facilities we own and operate

(3.5.2.10) Comment

The amount of allowances based on latest available information; under review.

UK ETS

(3.5.2.1) % of Scope 1 emissions covered by the ETS

0.95

(3.5.2.2) % of Scope 2 emissions covered by the ETS

0

(3.5.2.3) Period start date

01/01/2023

(3.5.2.4) Period end date

12/31/2023

(3.5.2.5) Allowances allocated

122101

(3.5.2.6) Allowances purchased

0

(3.5.2.7) Verified Scope 1 emissions in metric tons CO2e

253210

(3.5.2.8) Verified Scope 2 emissions in metric tons CO2e

0

(3.5.2.9) Details of ownership

Select from:

Facilities we own and operate

(3.5.2.10) Comment

*The amount of allowances based on latest available information; under review.
[Fixed row]*

(3.5.3) Complete the following table for each of the tax systems you are regulated by.

Singapore carbon tax

(3.5.3.1) Period start date

01/01/2023

(3.5.3.2) Period end date

12/31/2023

(3.5.3.3) % of total Scope 1 emissions covered by tax

(3.5.3.4) Total cost of tax paid

0

(3.5.3.5) Comment

Total carbon tax is not known, at time of reporting.

[Fixed row]

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Linde participates in GHG emissions trading programs wherever they apply: California's Greenhouse Gas Cap and Trade program, Singapore's carbon tax, EU and UK ETS and three pilot emissions trading schemes in China, as well as Korea and Germany. In 2023, approximately 1,628,000 metric tons of Scope 1 emissions (approximately 10 percent) were subject to a form of carbon legislation, over a cap-and-trade scheme, ETS or a form of carbon taxation. Approximately 84 percent of these emissions was covered by the EU ETS and U.K. ETS schemes. Other regulations include the California CAT and the Singapore carbon tax, for example. Linde's strategy for complying with these systems is embedded in our overall climate strategy. In order to manage risk from current and emerging carbon legislation, Linde actively monitors regulatory developments, increases relevant resources and training as needed; consults with vendors, insurance providers and industry experts; incorporates GHG provisions in commercial agreements; conducts regular sensitivity analyses of the impacts of potential energy and raw material cost increases; presents to the Leadership Team and Board on various cost scenarios under different potential GHG tax regimes; and explores renewable energy options. Linde's commercial contracts routinely provide rights to recover increased electricity, natural gas and other costs that are incurred by the company. Linde estimates that in a majority of cases, the price increases incurred by carbon legislation can be passed on to customers over Linde's standard contracts. Linde also includes information on carbon risk (e.g., from emerging legislation) and selected climate KPIs in each investment proposal to the Executive Leadership Team. The company presents GHG intensity and related climate KPIs monthly to the CFO and management team. In addition, the company has recently implemented an internal carbon price reflecting climate-related risks, including risk from carbon legislation, in order to be used to inform investment decisions and carry out scenario evaluations. To further manage the risk from carbon legislation and comply with current and future carbon schemes, the company has enterprise-wide energy and climate goals that require GHG intensity improvements at hydrogen plants and energy savings from all business units. These goals are achieved through a range of emissions reduction measures, e.g., use of abatement technology and continuous improvement in energy efficiency. However, efficiency measures can only mitigate the risk from carbon legislation to a certain extent. Until new technologies like CCS or green hydrogen are widely applied, industries like the chemical industry will still be subject to different emission regulation schemes or not be able to completely comply with the reduction paths targeted by regulators. However, regulatory bodies acknowledge that, for our industry, the required reductions in emissions cannot happen in the short term and need to be balanced with economic viability. Therefore, Linde receives free allowances from regulators for a substantial part of its emissions that are subject to cap-and-trade schemes. For the EU ETS, it has been decided that Linde will receive free allowances for the 4th trading period starting 2021, although there is no guarantee of the exact amount of those allowances. Linde also receives free allowances for the UK ETS. Case Study: At several sites in Europe, Linde operates Steam Methane Reformers, which use a natural gas feedstock to produce Hydrogen and Carbon Monoxide for pipeline customers and capture the excess heat as steam. In order to operate, these plants have to comply with the rules of the EU Emissions Trading Scheme. Each plant has, therefore, been allocated a benchmark emission in metric tons of CO₂/year; however, to incentivize

efficiency and promote emission reductions, the actual number of free allowances each EU ETS installation receives decreases every year. To minimize the number of CO2 allowances it has to procure to make up that shortfall, Linde has a target to improve GHG efficiency at all its H2 plants by 4% by 2028; in the EU, this has reduced Linde's average CO2 emissions compared with business-as-usual. To accomplish these reductions, Linde benchmarks all of its production processes against one another and runs many of them through remote operating centers coordinated by the Global Center of Excellence. Centralizing control and performance through the operating centers facilitates the implementation of process improvements and allows best practices to be shared more rapidly across sites. In 2022, Linde's H2 plants achieved a 6.7% cumulative reduction in GHG intensity compared to 2018.

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.6.1) Environmental opportunities identified

Select from:

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

Water

(3.6.1) Environmental opportunities identified

Select from:

No

(3.6.2) Primary reason why your organization does not consider itself to have environmental opportunities

Select from:

Opportunities exist, but none anticipated to have a substantive effect on organization

(3.6.3) Please explain

Linde has a healthy eco-portfolio, which delivers Linde revenue associated with the sale of gases in applications that bring environmental and/or social benefits; see the Business Model table. In 2023, Linde generated 55 percent of gases revenue, or 17 billion, from its Sustainability Portfolio. The Sustainability Portfolio includes sales from Linde's eco-portfolio (12 billion) and social portfolio (5 billion). The eco-portfolio includes applications that have environmental and social benefits, such as

oxygen and carbon dioxide for wastewater treatment, desalination and aquaculture. Water applications exist as a part of these existing opportunities, and Linde teams are dedicated to the growth in such areas. However, these do not represent the most substantive opportunities in the context of this disclosure.
[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

- Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Products and services

- Increased sales of existing products and services

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

- Downstream value chain

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

- Australia
- Canada
- Germany
- Singapore

(3.6.1.8) Organization specific description

Linde has an opportunity to increase revenue from increased demand for low-carbon hydrogen applications. Hydrogen is Linde's biggest growth opportunity. The IEA projects a roughly 4 times increase of worldwide hydrogen production between 2019 and 2050. (Sustainable Development Scenario). If the assumptions of this scenario are correct, for Linde, potential annual revenues from hydrogen could increase from 3 billion to 8 billion. We expect increased revenues in countries that have already adopted hydrogen strategies, such as Australia and Canada. An example of increased revenue from green hydrogen: In April 2023, Linde announced a long-term agreement to supply green hydrogen to Evonik, a leading specialty chemicals company. Linde will build, own and operate a 9 MW industrial scale electrolyzer and use hydroelectric power to produce green liquid hydrogen. Evonik will use green hydrogen to manufacture methionine, an essential component in animal feed. The new supply agreement supports the planned expansion of Evonik's existing facility and will help Evonik limit its GHG emissions in Singapore.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

- Increased revenues resulting from increased demand for products and services

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

- Medium-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

- Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

- High

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The anticipated financial effect of the opportunity represents a future potential 15% increase in total revenue from increased sales of green hydrogen (an increase of 5 billion in revenue compared to 2023 revenue of about 32 billion).

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

Yes

(3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

5000000000

(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

5000000000

(3.6.1.23) Explanation of financial effect figures

In its 2020 Energy Technologies Perspectives paper the IEA projects a roughly 4 times increase of worldwide H2 production from 2019 through 2050, under the Sustainable Development Scenario (SDS). If the assumptions of the SDS are correct, for Linde – with hydrogen-related revenues of more than 2 billion in 2019 – this could mean a very low estimate for potential annual hydrogen-related revenues of more than 8 billion in the long-term, assuming the same market share and product pricing, an increase of over 5 billion from today. Therefore, the estimate of 5 billion is a low estimate and, given our advantages in building off an existing business and infrastructure, a case could be made that this would represent the very low end of our expected hydrogen growth. NOTE: The financial impact calculation is based on IEA SDS scenario projections. Under the assumptions of this model, the incremental growth in Linde's Hydrogen business works out to around 5B by 2050, as per above. However, it is noted that Linde's internal estimates suggest a range much higher than this. Financial Impact Figure Calculation: The figure reported under "potential financial impact figure" is the additional sales opportunity in the long term. It is calculated as 2019 revenues of 2 billion X 4 (which is the expected increase in worldwide production) 8 billion future annual hydrogen-related revenues, minus 3 billion in current revenues (2022) 5 billion/year additional hydrogen-related revenues in the long term. NOTE: The above financial impact calculation is based on IEA SDS scenario projections. Under the assumptions of this model, the incremental growth in Linde's Hydrogen business works out to around 5B by 2050, as per above. However, it is noted that Linde's internal estimates suggest a range much higher than this.

(3.6.1.24) Cost to realize opportunity

100000000

(3.6.1.25) Explanation of cost calculation

Linde intends to invest 1 billion in decarbonization projects through 2028. The figure of 1 billion is cumulative over 10 years. To calculate the annual cost to realize the opportunity, we assume an equal amount is invested each year: 1 billion divided by 10 years 100 million per year. This assumption is supported by the amount invested from 2018: Linde invested 542 million in decarbonization projects in total over these five years, making the 5-year average more than 100 million (108.4MM).

(3.6.1.26) Strategy to realize opportunity

Linde's strategy to realize the opportunity from increased demand for hydrogen is focused on investments in decarbonization projects. Linde has SD targets in place to invest more than 1 billion in decarbonization projects and spend at least 1/3 of its R&D budget on decarbonization by 2028. Depending upon the level of growth, future investments in H2 capacities could range between 1 billion to in excess of 5 billion over the course of the decade. Linde has a clean energy team to focus and accelerate activity in this area. The company is investing across the H2 value chain to accelerate the clean energy transition with a higher renewable power mix and significant operating and capital efficiencies. We will pursue competitive low-carbon sources of H2, including the energy efficient conversion of our existing SMRs with CCS, new ATR's with CCS, new electrolysis with renewable power, feedstock from biomethane, and the development of new low-carbon technologies. Case study: In September 2022, Linde announced that it will build a 35-megawatt PEM (Proton Exchange Membrane) electrolyzer to produce green hydrogen in Niagara Falls, New York. The new plant will be the largest electrolyzer installed by Linde globally and will more than double Linde's green liquid hydrogen production capacity in the United States. The plant is expected to start up by 2025. This project is the first of several electrolyzers Linde expects to build in the U.S. to address green liquid hydrogen demand.

[Add row]

(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.

Climate change

(3.6.2.1) Financial metric

Select from:

CAPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

50000000000

(3.6.2.4) Explanation of financial figures

Linde remains committed to decreasing our own emissions footprint as we strive toward our 2035 absolute GHG reduction goal. In a decarbonized future, clean hydrogen will play a pivotal role in enabling the global energy transition, supporting society in decarbonizing industry, providing sustainable fuels and supporting the clean energy mix. Within our own portfolio, we expect to see investment opportunities of up to 50 billion over a decade in clean energy projects. We weigh such opportunities carefully, driven by purpose and guided by our vision to be the best performing global industrial gases and engineering company.

[Add row]

C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

(4.1.1) Board of directors or equivalent governing body

Select from:

Yes

(4.1.2) Frequency with which the board or equivalent meets

Select from:

Quarterly

(4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

Executive directors or equivalent

Non-executive directors or equivalent

Independent non-executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

Per the Proxy: " Board Diversity The Board believes that gender and minority representation is a key element in achieving the broad range of perspectives that the Board seeks among its members. Therefore, diversity is among the important factors the Nominating and Governance Committee considers when nominating Board candidates. " Director & Nominee Selection Criteria... The qualities and skills sought in director nominees are governed by the projected needs of the Board at the time the Nomination and Governance Committee considers adding a new director or renominating incumbent directors. Consistent with the board's corporate Governance Guidelines, the Committee seeks to build and main a Board that contains a range of experiences, competencies, and perspectives that is well-suited for

advice and counsel to, and oversight of, the Company's business and operations. In doing so, the Committee takes into account a variety of factors, including: (1) the Company's strategies and its market, geographic and regulatory environments, both current and projected, (2) the mix of experiences, competencies, and perspectives (including gender, ethnic and cultural diversity) currently represented on the Board... "

(4.1.6) Attach the policy (optional)

Board Director Nominations and Diversity.pdf

[Fixed row]

(4.1.1) Is there board-level oversight of environmental issues within your organization?

Climate change

(4.1.1.1) Board-level oversight of this environmental issue

Select from:

Yes

Water

(4.1.1.1) Board-level oversight of this environmental issue

Select from:

Yes

Biodiversity

(4.1.1.1) Board-level oversight of this environmental issue

Select from:

No, and we do not plan to within the next two years

(4.1.1.2) Primary reason for no board-level oversight of this environmental issue

Select from:

- Judged to be unimportant or not relevant

(4.1.1.3) Explain why your organization does not have board-level oversight of this environmental issue

Linde does not have dependencies on biodiversity for our products and we do not have significant impacts on biodiversity from our operations. Therefore, there are not targets associated with biodiversity at this time. Should the materiality of these issues change, such issues would be included in reporting to the board. Linde Sustainability assesses the dependencies and impacts as stated in the Position Statement on the Importance of Ecosystems.
[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

- Board chair
- Board-level committee

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

- Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

- Board mandate

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

- Scheduled agenda item in some board meetings – at least annually

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- Reviewing and guiding annual budgets
- Overseeing the setting of corporate targets
- Monitoring progress towards corporate targets
- Approving and/or overseeing employee incentives
- Monitoring the implementation of the business strategy
- Monitoring the implementation of a climate transition plan
- Overseeing and guiding the development of a business strategy
- Monitoring compliance with corporate policies and/or commitments

(4.1.2.7) Please explain

Sustainable Development including climate change is overseen by the Board and Linde's executive leadership and integrated throughout the company. The Board provides oversight to Linde's corporate strategy and reviews and guides major plans of action and risk management policies; these all include climate change. The Board also monitors progress against performance objectives and goals, which include achievement of our climate change targets. The VP, Clean Energy, briefed the board on Linde's hydrogen strategy or Linde's decarbonization opportunities and strategy. In 2023, the EVP&CHRO and VP Sustainability reported to the Board regularly on climate-related topics such as Linde's hydrogen strategy or Linde's decarbonization opportunities and strategy. Climate-related issues have been a topic at 80% of Board meetings held in 2023 Examples: in January 2023, the Linde Board reviewed Linde's 2022 performance towards its 2028 Sustainable Development Targets as well as its science-based 2035 GHG reduction target - to reduce absolute scope 1 and 2 emissions by 35% from a 2021 baseline – and its 2050 net zero ambition. The Sustainability Committee also reviewed progress on several environmental aspects, including GHG reduction and Scope 3 emissions reporting and continued strategy.. In 2023, the Board also reviewed the development of new targets, including the new commitment to decarbonization, expanded Zero Waste target, and the new target for sustainability training of employees, all announced in 2024. Linde's Board Sustainability Committee is responsible, per the charter for "oversight over the Company's programs, policies, practices and strategies related to environmental matters generally and... strategy, policies, risks and opportunities related to climate change... [and] other environmental matters including... water conservation and management..."

Water

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

- Board chair
- Board-level committee

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

- Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

- Board mandate

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

- Scheduled agenda item in some board meetings – at least annually

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- Overseeing the setting of corporate targets
- Monitoring progress towards corporate targets
- Reviewing and guiding innovation/R&D priorities
- Approving and/or overseeing employee incentives
- Overseeing and guiding major capital expenditures
- Overseeing reporting, audit, and verification processes
- Monitoring the implementation of a climate transition plan
- Overseeing and guiding the development of a business strategy
- Monitoring compliance with corporate policies and/or commitments

(4.1.2.7) Please explain

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 2023, the Vice President Sustainability briefed the Board on progress towards the company's 2028 sustainable development targets, incl. performance against the water target, as well as the development of the new water reduction 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. Linde's Board Sustainability Committee is responsible, per the charter for "oversight over the Company's programs, policies, practices and strategies related to environmental matters generally and... strategy, policies, risks and opportunities related to climate change... [and] other environmental matters including... water conservation and management...." 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.

[Fixed row]

(4.2) Does your organization's board have competency on environmental issues?

Climate change

(4.2.1) Board-level competency on this environmental issue

Select from:

Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- Integrating knowledge of environmental issues into board nominating process
- Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)
- Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

- Executive-level experience in a role focused on environmental issues

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

[Fixed row]

(4.3) Is there management-level responsibility for environmental issues within your organization?

Climate change

(4.3.1) Management-level responsibility for this environmental issue

Select from:

Yes

Water

(4.3.1) Management-level responsibility for this environmental issue

Select from:

Yes

Biodiversity

(4.3.1) Management-level responsibility for this environmental issue

Select from:

No, and we do not plan to within the next two years

(4.3.2) Primary reason for no management-level responsibility for environmental issues

Select from:

- Not an immediate strategic priority

(4.3.3) Explain why your organization does not have management-level responsibility for environmental issues

Linde does not have dependencies on biodiversity for our products and we do not have significant impacts on biodiversity from our operations. Linde does have longstanding practices for assessment of biodiversity impacts, and this is led by the Sustainability function. Linde's approach is to avoid operations near protected areas. In fact, because most of Linde's sites are located in industrial areas, protected areas are not typically within close proximity to the facilities. If periodic surveillance finds site(s) within close proximity of a protected area, Linde will work to understand possible impacts and to minimize, restore, and/or offset, as appropriate, working with local stakeholders. Because sites recognized as important to biodiversity may change over time, Linde periodically conducts a surveillance of the locations of its global industrial gas production facilities and their proximity to protected areas, based on data provided by the International Union for Conservation of Nature (IUCN). This surveillance is conducted at least every three years.

[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- Other C-Suite Officer, please specify :Senior Vice President/Chief Accounting Officer (SVP/CAO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

- Managing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

- Measuring progress towards environmental corporate targets
- Measuring progress towards environmental science-based targets
- Setting corporate environmental targets

Strategy and financial planning

- Implementing a climate transition plan

Other

- Providing employee incentives related to environmental performance

(4.3.1.4) Reporting line

Select from:

- Reports to the Chief Financial Officer (CFO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- Half-yearly

(4.3.1.6) Please explain

The SVP/CAO has global responsibility for Sustainability and reports to the Chief Financial Officer. VP Sustainability and heads the Sustainability function, which is responsible for monitoring performance against Linde's climate change targets, among other things. Operational targets relating to climate change are reported by all businesses monthly against the targets into the Center of Excellence and to the VP Sustainability. Close monitoring of achievement of these targets provides regular insight into the company's overall performance in the areas of energy management, GHG emissions intensity, the amount of renewable energy sourced, the benefits to customers in reducing their GHG emissions from the use of Linde products and applications, and the amount of revenue the company earns from products with climate change and other environmental and health benefits. These targets directly address the key climate-related risks and opportunities identified by Linde's Board of Directors in the Annual Report (10-K) as material to the business. The CHRO is the highest Linde executive responsible for environmental issues and compliance. The SHEQ department, under the VP SHEQ reporting to the CHRO, has oversight over safety and risks, including risks related to environment and climate change. The department is responsible for the global SHEQ management system and the development of global methodologies (including GHG accounting), policies and standards as well as the monitoring of compliance with those. The SHEQ team is also responsible for the periodic collection of safety and environmental KPIs, including data on energy and GHG emissions. The EVP&CHRO also is also responsible for compensation programs at Linde. This EVP is the senior executive reporting to Linde's Human Capital Committee.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- Other C-Suite Officer, please specify :Senior Vice President/Chief Accounting Officer (SVP/CAO)

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

- Measuring progress towards environmental corporate targets
- Setting corporate environmental targets

Other

- Providing employee incentives related to environmental performance

(4.3.1.4) Reporting line

Select from:

- Reports to the Chief Financial Officer (CFO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- Half-yearly

(4.3.1.6) Please explain

Linde's SVP/CAO is a member of Linde's Executive Team, reporting to the CFO. She is globally responsible for the global Sustainability function. She has global responsibility to integrate issues of sustainability into the business, to manage risks (for people and the environment incl. water). She is the executive liaison to the Sustainability Committee. She is the senior executive responsible for sustainability target setting and progress. The EVP/CHRO manages expenditures related to environmental programs. He is also responsible for compensation programs at Linde and is the senior executive reporting to Linde's Human Capital Committee. The VP Sustainability, equivalent to the Chief Sustainability Officer is responsible to review performance of Linde's environmental targets incl. for water. The VP Sustainability regularly reports to the Sustainability Board Committee, inc. on performance against environmental targets.

[Add row]

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

Climate change

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

7

(4.5.3) Please explain

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%. For 2023, the design was maintained and continued. The Human Capital Committee noted examples of actions that support the Company's strategic objectives in determining 2023 variable compensation payouts, including GHG reduction.

Water

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

2

(4.5.3) Please explain

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 water aspects factor into one element of the payout: sustainability, The Human Capital Committee noted examples of actions that support the Company's strategic objectives in determining 2023 variable compensation payouts, including achieving water management planning at more than 60% of high-water-use sites in areas of high water stress, a goal on track for 2028.

[Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

- Chief Executive Officer (CEO)

(4.5.1.2) Incentives

Select all that apply

- Bonus - % of salary

(4.5.1.3) Performance metrics

Targets

- Progress towards environmental targets
- Achievement of environmental targets
- Organization performance against an environmental sustainability index

Emission reduction

- Reduction in emissions intensity
- Increased share of renewable energy in total energy consumption
- Reduction in absolute emissions

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- Both Short-Term and Long-Term Incentive Plan, or equivalent

(4.5.1.5) Further details of incentives

The timeframe of the performance indicator(s): Variable compensation is a part of annual salary. The annual compensation program through variable compensation balances the need for management to deliver annual results with the desire to meet multi-year growth expectation. In recognition of the importance of the Company's standards for, and impacts from, environmental, social, and governance (ESG) considerations, the non-financial component for the Company's annual performance-based variable compensation program is 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%. Absolute GHG reduction is weighted at 20%.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

The program design includes a component measuring annual performance against pre-established goals related to reducing greenhouse gas ("GHG") emissions. This component comprises 20% of the strategic non-financial performance payout. Additionally, the program incentivizes achievements in sustainability among other values. (This includes factors other than GHG reduction, and includes overall sustainability performance and targets). The values component is tied to 60% of the strategic non-financial performance payout, divided upon several aspects. The Human Capital Committee noted examples of actions that support the Company's strategic objectives in determining 2023 variable compensation payouts, including achieving highest score of any industrial gases company in the 2023 S&P Global Sustainability Assessment and ranking #2 among 500 companies in the chemicals sector, as well as progress toward absolute GHG reduction goal and releasing full inventory of Scope 3 emissions, in line with commitment to set Scope 3 reduction targets in 2025-26.

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

- Chief Executive Officer (CEO)

(4.5.1.2) Incentives

Select all that apply

- Bonus - % of salary

(4.5.1.3) Performance metrics

Targets

- Progress towards environmental targets

Resource use and efficiency

- Improvements in water efficiency – direct operations

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- Both Short-Term and Long-Term Incentive Plan, or equivalent

(4.5.1.5) Further details of incentives

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 2023 variable compensation payouts, including achieving highest score of any industrial gases company in the 2023 S&P Global Sustainability Assessment and ranking #2 among 500 companies in the chemicals sector.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

The program design includes a component measuring annual performance and incentivizing achievements in sustainability among other values. (This includes water). The values component is tied to 60% of the strategic non-financial performance payout, divided upon several aspects.
[Add row]

(4.6) Does your organization have an environmental policy that addresses environmental issues?

| | |
|--|---|
| | Does your organization have any environmental policies? |
| | Select from: <input checked="" type="checkbox"/> Yes |

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

(4.6.1.1) Environmental issues covered

Select all that apply

Water

(4.6.1.2) Level of coverage

Select from:

Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

Direct operations

- Downstream value chain

(4.6.1.4) Explain the coverage

Global, Applicable to all Linde Operations

(4.6.1.5) Environmental policy content

Environmental commitments

- Commitment to comply with regulations and mandatory standards
- Commitment to take environmental action beyond regulatory compliance

Additional references/Descriptions

- Acknowledgement of the human right to water and sanitation

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

- Yes, in line with the Paris Agreement
- Yes, in line with another global environmental treaty or policy goal, please specify :UN SDG 12: Responsible Consumption and Production

(4.6.1.7) Public availability

Select from:

- Publicly available

(4.6.1.8) Attach the policy

Water Position Statement_ Linde.pdf

Row 2

(4.6.1.1) Environmental issues covered

Select all that apply

- Climate change

(4.6.1.2) Level of coverage

Select from:

- Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

- Direct operations

(4.6.1.4) Explain the coverage

Applicable to global operations and our value chain.

(4.6.1.5) Environmental policy content

Environmental commitments

- Commitment to comply with regulations and mandatory standards

Climate-specific commitments

- Commitment to net-zero emissions

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

- Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

(4.6.1.7) Public availability

Select from:

- Publicly available

(4.6.1.8) Attach the policy

Sustainable Development and Climate Change Position Statement _ Linde.pdf

Row 3

(4.6.1.1) Environmental issues covered

Select all that apply

Biodiversity

(4.6.1.2) Level of coverage

Select from:

Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

Direct operations

(4.6.1.4) Explain the coverage

Biodiversity aspects: Global industrial gas production facilities Deforestation aspects: All Linde sites, globally

(4.6.1.5) Environmental policy content

Environmental commitments

Commitment to comply with regulations and mandatory standards

Commitment to stakeholder engagement and capacity building on environmental issues

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

Yes, in line with another global environmental treaty or policy goal, please specify :UN SDG 15 - Life on Land

(4.6.1.7) Public availability

Select from:

Publicly available

(4.6.1.8) Attach the policy

Ecosystem Position Statement _ Linde.pdf

[Add row]

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

Yes

(4.10.2) Collaborative framework or initiative

Select all that apply

Science-Based Targets Initiative (SBTi)

Task Force on Climate-related Financial Disclosures (TCFD)

UN Global Compact

(4.10.3) Describe your organization's role within each framework or initiative

Linde has had its GHG targets validated by the Science-Based Targets Initiative. In 2022, Linde strengthened its commitment to sustainability and became a signatory to the United Nations Global Compact (UNGC), the world's largest corporate sustainability initiative. Linde aims to align its strategy and activities with the UNGC's Ten Principles. Linde is a TCFD Supporter and are part of a community that see the TCFD recommendations as a useful framework to increase transparency on climate-related risks and opportunities. Linde works to implement TCFD recommendations and publishes a TCFD Index annually.

[Fixed row]

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

- Yes, we engaged directly with policy makers
- Yes, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

- Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

(4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

- Paris Agreement
- Sustainable Development Goal 6 on Clean Water and Sanitation

(4.11.4) Attach commitment or position statement

Climate Commitment and Water Position Statement.pdf

(4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

- No

(4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

Linde has a strong global ethics and compliance program. Linde maintains a detailed oversight process to ensure our activities are conducted in a legal, ethical and transparent manner and are consistent across business units and geographies. This includes oversight by the Chief Compliance Officer and an annual program review by the Board of Directors. Linde's Government Relations department provides regular reporting on such activities to the Chief Compliance Officer and reports to the General Counsel. In addition, all Linde employees are certified on issues related to doing business with the government, complying with anti-trust and competition laws, and the U.S. Foreign Corrupt Practices Act (FCPA). Finally, there is coordination with the Vice President Sustainability, and General Counsel to ensure consistency of public policy advocacy with Linde's global sustainability strategy, including our energy and GHG strategy and targets, which are aligned with the Paris Agreement. The Vice President Sustainability works closely with Government Relations and participates in cross-functional groups to review advocacy positions that have an environmental or climate change impact. In turn, Government Relations has a seat on the Sustainable Development Council, which meets quarterly.

[Fixed row]

(4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

Row 1

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Regulatory framework and legislation encouraging the production and use of clean hydrogen

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

Climate change

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Energy and renewables

Alternative fuels

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

Global

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

Other, please specify :Linde may engage with political decision-makers in the U.S. (e.g., United States Congress), in Europe, etc. . This may be done through meetings, submission of proposals or inquiries, etc.

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

The two largest public policy advocacy issues for 2023 related to the promotion of clean hydrogen production and carbon capture policies. Decarbonization is a priority for Linde, with the goal of investing in decarbonization technologies in large capital projects, where the primary aim of Linde and/or its customers is to reduce GHG emissions or advance the use of low-carbon fuels and energy. Global progress and adoption of hydrogen and other alternatives to fossil fuels is key to global reduction of GHGs and Linde's commitment to its own climate change targets. The company is developing several carbon capture and sequestration projects, a key part of the strategy for 35 percent absolute GHG reduction by 2035.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

- Paris Agreement

Row 2

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Legislation and regulation establishing a framework for the promotion and increased use of clean hydrogen in the EU (e.g. delegated acts defining renewable and low carbon hydrogen under the EU Renewable Energy Directive, as well as the "Hydrogen Decarbonised Gas Market package")

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

- Climate change

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

- Subsidies on products or services

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

- Regional

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

- EU27

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

- Support with minor exceptions

(4.11.1.7) Details of any exceptions and your organization's proposed alternative approach to the policy, law, or regulation

Linde argued for greater flexibility in accounting for low-carbon hydrogen under the RED III industry quotas and advocated a pragmatic approach to promoting the use of both renewable and low-carbon hydrogen which allow a shift away from fossil fuels and can therefore play an important role in achieving climate targets and climate neutrality in 2050.

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- Other, please specify :Linde may engage with political decision-makers in the U.S. (e.g., United States Congress), in Europe, etc, . This may be done through meetings, submission of proposals or inquiries, etc.

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

The two largest public policy advocacy issues for 2023 related to the promotion of clean hydrogen production and carbon capture policies. Decarbonization is a priority for Linde, with the goal of investing in decarbonization technologies in large capital projects, where the primary aim of Linde and/or its customers is to reduce GHG emissions or advance the use of low-carbon fuels and energy. Global progress and adoption of hydrogen and other alternatives to fossil fuels is key to global reduction of GHGs and Linde's commitment to its own climate change targets. The company is developing several carbon capture and sequestration projects, a key part of the strategy for 35 percent absolute GHG reduction by 2035.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

- Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

- Paris Agreement

Row 3

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Tax credit for carbon oxide sequestration (Section 45Q)

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

- Climate change

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

- Taxes on products or services

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

- National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

- United States of America

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

- Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- Other, please specify :Linde may engage with political decision-makers in the U.S. (e.g., United States Congress), in Europe, etc, . This may be done through meetings, submission of proposals or inquiries, etc.

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

The two largest public policy advocacy issues for 2023 related to the promotion of clean hydrogen production and carbon capture policies. Decarbonization is a priority for Linde, with the goal of investing in decarbonization technologies in large capital projects, where the primary aim of Linde and/or its customers is to reduce GHG emissions or advance the use of low-carbon fuels and energy. Global progress and adoption of hydrogen and other alternatives to fossil fuels is key to global reduction of GHGs and Linde's commitment to its own climate change targets. The company is developing several carbon capture and sequestration projects, a key part of the strategy for 35 percent absolute GHG reduction by 2035.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

- Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

- Paris Agreement

Row 4

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Linde advocated for favorable conditions in the context of the carbon oxide sequestration credit scheme (section 45Q) As outlined in question C12.3, Linde ensures that its advocacy activities are consistent with Linde's global sustainability strategy and its energy and greenhouse gas strategy, which is aligned with the Paris Agreement.

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

Climate change

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Low-impact production and innovation

Low environmental impact innovation and R&D

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

United States of America

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

Other, please specify :Linde may engage with political decision-makers in the U.S. (e.g., United States Congress), in Europe, etc. . This may be done through meetings, submission of proposals or inquiries, etc.

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

The two largest public policy advocacy issues for 2023 related to the promotion of clean hydrogen production and carbon capture policies. Decarbonization is a priority for Linde, with the goal of investing in decarbonization technologies in large capital projects, where the primary aim of Linde and/or its customers is to reduce GHG emissions or advance the use of low-carbon fuels and energy. Global progress and adoption of hydrogen and other alternatives to fossil fuels is key to global reduction of GHGs and Linde's commitment to its own climate change targets. The company is developing several carbon capture and sequestration projects, a key part of the strategy for 35 percent absolute GHG reduction by 2035.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

Paris Agreement

Row 5

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

- Climate change

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Low-impact production and innovation

- Low environmental impact innovation and R&D

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

- National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

- United States of America

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

- Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- Other, please specify :Linde may engage with political decision-makers in the U.S. (e.g., United States Congress), in Europe, etc, . This may be done through meetings, submission of proposals or inquiries, etc.

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

The two largest public policy advocacy issues for 2023 related to the promotion of clean hydrogen production and carbon capture policies. Decarbonization is a priority for Linde, with the goal of investing in decarbonization technologies in large capital projects, where the primary aim of Linde and/or its customers is to reduce GHG emissions or advance the use of low-carbon fuels and energy. Global progress and adoption of hydrogen and other alternatives to fossil fuels is key to global reduction of GHGs and Linde's commitment to its own climate change targets. The company is developing several carbon capture and sequestration projects, a key part of the strategy for 35 percent absolute GHG reduction by 2035.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

Paris Agreement

[Add row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

- Other trade association in Europe, please specify :European Industrial Gases Association (EIGA)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

- Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

- Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that EIGA is confident that the Industrial Gases sector is well-placed to be a key partner for a thriving, carbon-neutral Europe that meets its 2050 goals, in part through the successful deployment of hydrogen. In this context, EIGA calls for sufficient reliable and affordable electricity from renewable sources to enable industry to meet ambitious climate policy targets but also warns against significant increases in production costs. EIGA stresses the need for continued protection of energy-intensive industries from carbon leakage and urges policymakers to avoid intersectoral market distortions (e.g., inequality for outsourced production of industrial gases) which would counteract the broadly recognized environmental & economic benefits of industrial gases products.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 2

(4.11.2.1) Type of indirect engagement

Select from:

Indirect engagement via a trade association

(4.11.2.4) Trade association

Global

Other global trade association, please specify :Hydrogen Council

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that The Hydrogen Council believes that hydrogen has a key role to play in the global energy transition by helping to diversify energy sources worldwide, foster business and technological innovation as drivers for long-term economic growth, and decarbonize hard-to-abate sectors. Using its global reach to promote collaboration between governments, industry, and investors, it provides guidance on accelerating the deployment of hydrogen solutions around the world. Moreover, the Hydrogen Council serves as a resource for safety standards and an interlocutor for the investment community, while identifying opportunities for regulatory advocacy in key geographies.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

- Paris Agreement

Row 3

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

- American Chemistry Council

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

- Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

- Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that The American Chemistry Council (ACC) believes in collaboration to develop effective solutions to further reduce GHG emissions and energy use in the operations of its member companies and is committed to developing and deploying clean manufacturing technologies and promoting the adoption of emissions-reducing solutions. Many ACC members have set emission reduction targets and goals and are implementing strategies to make meaningful reductions. ACC is also committed to sharing progress — through Responsible Care, ACC members publicly report their GHG intensity and energy use and have reduced their GHG emissions intensity.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 4

(4.11.2.1) Type of indirect engagement

Select from:

Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

Other trade association in North America, please specify :Louisiana Chemical Association

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that The Louisiana Chemical Association (LCA) and its member companies are committed to finding real solutions both to reduce greenhouse gas (GHG) emissions in their operations and to protect the jobs that the chemical industry supports throughout the state. LCA and its member companies support state and federal policies and initiatives on climate change that are aligned with the following principles: 1. Based in science. Emissions reduction policies should involve the scientific community and the resultant recommendations should be technologically and economically reasonable. 2. Support the objectives of the Paris Climate Agreement. 3. Keep Louisiana's chemical industry competitive. Climate policies must protect Louisiana chemical manufacturers' ability to attract major investment opportunities that bring high-salaried jobs and beneficial tax base. 4. Develop low- and lower-carbon energy choices through development of innovative products and technology. Low- and lower-carbon energy choices should be part of the solution to reduce GHG emissions without impairing competitiveness. 5. Recognize that the transition to lower-carbon energy options and economy requires patience. 6. Recognize and account for early actions to reduce GHG emissions and to make allowances for fixed-process emissions. 7. Support carbon pricing. 8. Encourage carbon capture, utilization, and storage (CCUS). 9. Exempt minimal to no-GHG emitting feedstocks.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

- Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

- Paris Agreement

Row 5

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

- Other trade association in North America, please specify :NY Chemical Council

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The New York State Chemistry Council is directly associated with the American Chemistry Council (see previous entry) and we are advised that the organization shares their policy on climate change.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 6

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

- Other trade association in North America, please specify :Texas Association of Manufacturers

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

- Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

- Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that the Texas Association of Manufacturers (TAM) knows that being pro-business and pro-environment are not mutually exclusive policy objectives. Texas manufacturers have been working diligently over several decades to improve air quality in Texas and are leading innovators in technologies to protect and improve the environment. TAM supports environmental policies that are based on sound science and that protect the environment while allowing the economy to grow. Texas manufacturers are keeping their promise to deliver responsible environmental stewardship through a commitment to improving sustainability practices, increasing energy efficiency and reducing emissions. The industry has led the way in driving a sea change in the way businesses address climate change and advance sustainable manufacturing.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 7

(4.11.2.1) Type of indirect engagement

Select from:

Indirect engagement via a trade association

(4.11.2.4) Trade association

Global

Other global trade association, please specify :American Chamber of Commerce in Germany (AMCHAM Germany)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that AmCham Germany supports the goal of greenhouse gas neutrality by 2050 and welcomes the commitment by the new US administration to the Paris Climate Agreement. Guided by common goals, the transatlantic alliance must be revitalized in order to create a global level playing field with compatible CO2 pricing mechanisms in energy and climate policy. In accordance with the energy triangle AmCham Germany believes that competitive prices, supply security and climate protection lays the groundwork for the efficiency of existing and future regulations and supports a transparent and reliable development path - in line with the 2030 and 2050 climate targets - without creating a double burden for companies.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

- Paris Agreement

Row 8

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

Global

- Other global trade association, please specify :Clean Energy Partnership

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

- Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

- Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that the Clean Energy Partnership, a strong industry partnership, is in pursuit of a goal: to establish green mobility with hydrogen and fuel cells. As an energy carrier and feedstock, green hydrogen has the potential to be a game changer for a successful transport and energy transition. Therefore, it is essential to create the regulatory framework needed for a timely market ramp-up. Politicians and industry must now join forces to translate the defined goals into reality and identify and remove obstacles. In line with the 2050 climate targets, with decarbonized mobility and an economy that will remain strong going forward.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 9

(4.11.2.1) Type of indirect engagement

Select from:

Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

Other trade association in Europe, please specify :Deutscher Wasserstoff-Verband (DWV) e.V.

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that the DWV is committed to a sustainable hydrogen economy and the development of a green hydrogen economy as part of a sustainable energy supply in order to efficiently achieve climate and environmental protection targets and climate neutrality across all sectors and industries. DWV advocates for the implementation and optimization of the necessary market in Germany as well as favorable technological and regulatory framework conditions for the hydrogen economy in the areas of plant construction, production, transport infrastructure and application technologies.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 10

(4.11.2.1) Type of indirect engagement

Select from:

Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

Hydrogen Europe

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that Hydrogen Europe is the leading organization representing European based companies and stakeholders that are committed to moving towards a (circular) carbon neutral economy. Hydrogen Europe's vision is to propel global carbon neutrality by accelerating European hydrogen industry and to be the industrial key partner of the Clean Hydrogen partnership.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 11

(4.11.2.1) Type of indirect engagement

Select from:

Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

German Chemical Industry Association (VCI)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that climate protection is a key concern for VCI and the chemical and pharmaceutical industry in Germany. The industry is committed to the 2-degree target and has described in a roadmap how greenhouse gas neutrality can be achieved technologically in its production by 2050. In this context, VCI has co-founded the "Chemistry4Climate" platform to develop concrete concepts for achieving greenhouse gas-neutral chemistry in 2050 together with other affected and involved stakeholders. In order to achieve climate protection targets, a stable climate and energy policy framework is required to ensure investment security. The VCI roadmap revealed that particularly competitive electricity prices are an essential prerequisite for the economic viability of climate-friendly technologies. Against this background, VCI calls for competitive prices for electricity and hydrogen, sufficient quantities of green electricity, and the rapid expansion of energy infrastructures to make the transformation of the economy a reality.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

- Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

- Paris Agreement

Row 12

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

- Other trade association in Europe, please specify :Verband Deutscher Maschinen- und Anlagenbauer (VDMA)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that from the perspective of the VDMA, the climate policy goals are ambitious, but not impossible as technical solutions to significantly reduce greenhouse gas emissions are already available today. VDMA is calling on policymakers to accelerate the expansion of renewable energies by improving planning and permitting processes, while at the same time establishing global emissions trading opportunities, a true hydrogen economy and common standards for sustainable product design to enable a well-functioning secondary raw materials market.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 13

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

- Other trade association in Europe, please specify :Verein der Bayerischen Chemischen Industrie

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

- Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

- Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

The chemical industry in Bavaria is contributing to climate protection. It has done so in the past and will continue to do so in the future - in particular through its products, which help to reduce CO2 directly or enable contributions by other technologies indirectly, but also by reducing its own emissions. We are advised that the VBCI believes that climate protection measures and industrial policy must be well coordinated and that investments in low-CO2 processes will only be made by

companies that are sufficiently profitable and can expect economic success from the investment. In this context, the VBCI calls for affordable electricity to minimize "carbon leakage" and prevent migration of industry abroad, which may cause less CO2 emissions in Germany, but significantly more CO2 emissions in total.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 14

(4.11.2.1) Type of indirect engagement

Select from:

Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

Other trade association in Europe, please specify :HYPOS - Hydrogen Power Storage & Solutions East Germany

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that HYPOS represents a network of over 100 members from industry, SMEs and research working together to build a green hydrogen economy. Green hydrogen technology can already make a valuable contribution to the cost-efficient design of the energy turnaround. In the medium to long term, electricity-based hydrogen technology is the key technology for achieving climate targets and successfully shaping the energy system transformation.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

- Paris Agreement

Row 15

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

- Other trade association in Europe, please specify :Wirtschaftsrat der CDU

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

- Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

- Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that the Wirtschaftsrat believes that ambitious climate targets and efficient climate protection can only be achieved with market-driven solutions and innovations. Innovative, climate-friendly technologies "Made in Germany" can become the engine for investments after the coronavirus pandemic. While the transition from a linear economy based on fossil raw materials to a circular economy based on renewable energies offers enormous opportunities in the form of new markets for innovative technological approaches, climate change also poses immense challenges for business and society. With the legally binding phase-out of nuclear energy and coal-fired power generation in Germany, it will be essential not only to significantly expand renewable energies but also to replace base-load capable and controllable power generation capacities due to the lack of sufficient storage facilities. At the same time, the high cost of electricity place a burden on industry and consumers and must be reduced to an internationally acceptable level. In this context, the Wirtschaftsrat calls for a market-based orientation of the economy along the lines of the climate protection targets and for an integrated and European energy and climate policy to provide opportunities for sustainable growth while maintaining global competitiveness and security of supply.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

Row 16

(4.11.2.1) Type of indirect engagement

Select from:

Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

Other trade association in Europe, please specify :Deutsches Aktieninstitut

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that the Deutsches Aktieninstitut is committed to a strong capital market that enables companies to finance themselves well and contribute to the prosperity of society. Climate change and the resulting necessary transition to a resource-conserving and climate-neutral economy require a comprehensive transformation process. Not only production processes and operational organization, but also corporate business models must be put to the test in order to achieve the goal of net zero greenhouse gas emissions by 2050. This poses new challenges for business and policy-makers. Alongside growing transparency requirements, in particular sustainable finance is on the political agenda. In this context, Deutsches Aktieninstitut calls to ensure that the new requirements and the plethora of new legal provisions are designed in a targeted and practical manner. For a successful transformation toward a carbon-neutral economy, the perspective of the business community should also be taken into account when developing the standards for sustainability reporting.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

- Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

- Paris Agreement

Row 17

(4.11.2.1) Type of indirect engagement

Select from:

- Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

- Other trade association in North America, please specify :Clean Hydrogen Future Coalition

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

- Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

We are advised that the Clean Hydrogen Future Coalition relies on models from the Intergovernmental Panel on Climate Change (IPCC) and others that predict that global efforts to mitigate climate change will fall short of the 2C target if the global energy system - from power generation to all end-use sectors - does not make fundamental technological changes, and therefore that clean hydrogen is one of the most viable technological pathways to achieve these climate goals. The Clean Hydrogen Future Coalition therefore aims to support policies that will catalyze investments in the full value chain of clean hydrogen economy, as well as those that address the technology development and infrastructure needs that will scale a clean hydrogen economy in the U.S.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

0

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on policy, law or regulation

Select all that apply

Paris Agreement

[Add row]

(4.12.1) Provide details on the information published about your organization’s response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

(4.12.1.1) Publication

Select from:

- In voluntary sustainability reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply

- Climate change
- Water
- Biodiversity

(4.12.1.4) Status of the publication

Select from:

- Complete

(4.12.1.5) Content elements

Select all that apply

- | | |
|--|--|
| <input checked="" type="checkbox"/> Strategy | <input checked="" type="checkbox"/> Water accounting figures |
| <input checked="" type="checkbox"/> Governance | <input checked="" type="checkbox"/> Water pollution indicators |
| <input checked="" type="checkbox"/> Emission targets | |
| <input checked="" type="checkbox"/> Emissions figures | |
| <input checked="" type="checkbox"/> Value chain engagement | |

(4.12.1.6) Page/section reference

Climate Change section (strategy): pages 19-21 Performance Against Targets (including emissions and water targets): pages 24-32 Stakeholder engagement: pages 37-42 Governance: pages 33-35 Energy Data: pages 62-64 GHG data: pages 68-75 Water data: pages 64-67 Biodiversity: page 67

(4.12.1.7) Attach the relevant publication

Linde-2023-sustainable-development-report.pdf

(4.12.1.8) Comment

Linde's Sustainable Development report is aligned with GRI and TCFD.

Row 2

(4.12.1.1) Publication

Select from:

In mainstream reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply

Climate change

(4.12.1.4) Status of the publication

Select from:

Complete

(4.12.1.5) Content elements

Select all that apply

Dependencies & Impacts

Risks & Opportunities

(4.12.1.6) Page/section reference

"Environmental Matters," including Climate Change and Costs Relating to the Protection of the Environment on pages 25-26 Also Risk Factors, esp. pages 10 and 12

(4.12.1.7) Attach the relevant publication

2023-annual-report-to-security-holders.pdf

(4.12.1.8) Comment

*Linde 2023 Annual Report to Shareholders
[Add row]*

C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

Climate change

(5.1.1) Use of scenario analysis

Select from:

Yes

(5.1.2) Frequency of analysis

Select from:

Annually

Water

(5.1.1) Use of scenario analysis

Select from:

Yes

(5.1.2) Frequency of analysis

Select from:

Annually

[Fixed row]

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

- IEA SDS

(5.1.1.3) Approach to scenario

Select from:

- Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

- Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

- Policy
- Market
- Liability
- Reputation
- Technology
- Acute physical
- Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

- 1.5°C or lower

(5.1.1.7) Reference year

2020

(5.1.1.8) Timeframes covered

Select all that apply

2050

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

Consumer sentiment

Regulators, legal and policy regimes

Global regulation

Macro and microeconomy

Domestic growth

Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Linde is aligned with the Paris Accords and evaluated multiple scenarios, including IEA's sustainable development scenario (SDS) which is consistent with limiting global warming to well below 2 degrees C. As more and more governments are committing to a below 2 degrees or 1.5 degrees world, Linde considered this a valid scenario for its analysis. Using the scenario assumptions, Linde assessed transition risks and opportunities, and analyzed specific actions needed to respond to those risks and to define an appropriate GHG mitigation strategy. Our analysis was both qualitative and quantitative. Parameters: The scope of Linde's scenario analysis and climate risk assessment is company-wide whereas focus lies on its industrial gases operations contributing to a majority of scope 1 and 2 emissions. Linde used several growth projections from the SDS specific to the chemical industry, hydrogen and power sector, outlined in IEA's latest Energy Technology Perspectives (ETP) paper. Important financial parameters included the expected sales growth, regional carbon prices, cost of investments (e.g. to retrofit existing H2 facilities with CCS) and potential government support through subsidies or other incentives. Assumptions: The SDS projects chemical sub-sector emissions to continue to grow for the next 5 years due to worldwide business growth and new technologies still scaling up, but then to decline, reaching close to zero by 2070. The SDS further predicts blue and green hydrogen to represent 80% of worldwide H2 production by 2050. The power sector is expected to achieve net zero after 2050. This projection is supported by assumptions on economic and regulatory conditions like a stronger policy push through carbon taxation, a trajectory for the decarbonization of the power sector, as well as the availability of negative emissions technologies to offset certain hard to abate emissions. Analytical Choices: The time horizon for the scenario analysis was through 2050. Projections were based on Linde's short and mid-term business/production outlook and longer-term outlook based on average economy growth.

(5.1.1.11) Rationale for choice of scenario

Linde is aligned with the Paris Accords and evaluated multiple scenarios, including IEA's sustainable development scenario (SDS) which is consistent with limiting global warming to well below 2 degrees C. As more and more governments are committing to a below 2 degrees or 1.5 degrees world, Linde considered this a valid scenario for its analysis. Using the scenario assumptions, Linde assessed transition risks and opportunities, and analyzed specific actions needed to respond to those risks and to define an appropriate GHG mitigation strategy. Our analysis was both qualitative and quantitative.

Water

(5.1.1.1) Scenario used

Water scenarios

WRI Aqueduct

(5.1.1.3) Approach to scenario

Select from:

Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

Acute physical

Chronic physical

(5.1.1.7) Reference year

2010

(5.1.1.8) Timeframes covered

Select all that apply

2040

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

Changes to the state of nature

Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Assumption and Uncertainties: -- Future water risk projections are based on climate scenarios (e.g., SSP 3 RCP 7.0, SSP 1 RCP 2.6). -- The hydrological models used, such as PCR-GLOBWB 2, make assumptions about water flow, usage, and climate impacts. -- The Atlas relies on various data sources, including climate models, hydrological data, and socio-economic information. The accuracy and completeness of these data sources can vary

(5.1.1.11) Rationale for choice of scenario

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 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.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

No SSP used

(5.1.1.3) Approach to scenario

Select from:

- Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

- Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

- Policy
- Market
- Liability
- Reputation
- Technology
- Acute physical
- Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

- 2.5°C - 2.9°C

(5.1.1.7) Reference year

2000

(5.1.1.8) Timeframes covered

Select all that apply

- 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

- ☑ Changes to the state of nature
- ☑ Climate change (one of five drivers of nature change)

Direct interaction with climate

- ☑ On asset values, on the corporate

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

For its scenario analysis Linde 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. The risk analysis was context based, this means it was conducted on a single asset basis considering regional specifics, and covered the majority of assets, e.g., Linde evaluated which sites will be exposed to high water stress in the next 20 years according to different future climate scenarios. Linde furthermore calculated the impact of climate variables like temperature and ambient contaminants (e.g. under 500 ppm CO₂) on its plant operations (e.g., impact on energy consumption/cost), using a self-developed tool. Result of the Scenario analysis: 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. Based on the scenario analysis and risks determined, Linde developed a context-based climate adaptation plan taking into account technical and regional specifics of each site. This plan covers 100% of industrial gases production assets. Generally, for all new plants the physical parameters are assessed, and plant designs are adapted to meet the projected short, mid and long-term physical climate parameters and risks, e.g. increasing risk of flooding. In addition, long-term activities related to R&D and innovation are carried out, for example new plant designs or solutions for reduced fresh water consumption.

(5.1.1.11) Rationale for choice of scenario

Although Linde has committed to contribute to a well-below 2 degrees world by its own climate strategy and targets, Linde wanted to analyse the potential business impacts in case this goal cannot be reached worldwide, and temperature would rise beyond 2 degrees.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

- ☑ IEA NZE 2050

(5.1.1.3) Approach to scenario

Select from:

- Qualitative

(5.1.1.4) Scenario coverage

Select from:

- Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

- Market
- Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

- 1.5°C or lower

(5.1.1.7) Reference year

2021

(5.1.1.8) Timeframes covered

Select all that apply

- 2030
- 2050

(5.1.1.9) Driving forces in scenario

Regulators, legal and policy regimes

- ✓ Global regulation
- ✓ Level of action (from local to global)

Macro and microeconomy

- ✓ Domestic growth
- ✓ Globalizing markets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Linde used several growth projections from the NZE specific to the chemical industry, hydrogen and power sector. Important financial parameters included the expected sales growth, regional carbon prices, cost of investments (e.g. to retrofit existing H2 facilities with CCS) and potential government support through subsidies or other incentives. Assumptions: NZE predicts hydrogen growth that is quite complementary to Linde's growth. Low-emission hydrogen is expected to be scaled up to reach total production of 95 Mt by 2030- about half of global hydrogen production and consisting of two-thirds green hydrogen and one-third blue hydrogen-- as well as calling for the enabling infrastructure, including hydrogen-dedicated infrastructure, renewable generation capacity and CO2 transport and storage infrastructure. This projection is supported by assumptions on economic and regulatory conditions including large growth in renewable energy (estimated at 2700 TWh by 2030 to support hydrogen production), and the availability of negative emissions technologies to offset certain hard to abate emissions, all in addition to increased technical and production capacity to support the growth of hydrogen production.

(5.1.1.11) Rationale for choice of scenario

Linde evaluated the Net Zero Emissions by 2050 (NZE) scenario, which is consistent with limiting global warming to 1.5 degrees C. As more and more governments are committing to a below 2 degrees or 1.5 degrees world, Linde considered this a valid scenario for its analysis and future consideration. Using the scenario assumptions, Linde assessed transition risks and opportunities, and analyzed specific actions needed to respond to those risks and to define an appropriate GHG mitigation strategy.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

- ✓ RCP 6.0

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

- No SSP used

(5.1.1.3) Approach to scenario

Select from:

- Qualitative

(5.1.1.4) Scenario coverage

Select from:

- Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

- Acute physical
- Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

- 3.5°C - 3.9°C

(5.1.1.7) Reference year

2000

(5.1.1.8) Timeframes covered

Select all that apply

- 2050
- 2100

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature
- Speed of change (to state of nature and/or ecosystem services)
- Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

The risk analysis was context based, this means it was conducted on a single asset basis considering regional specifics, and covered the majority of assets, e.g., Linde evaluated which sites will be exposed to high water stress in the next 20 years according to different future climate scenarios. Linde furthermore calculated the impact of climate variables like temperature and ambient contaminants (e.g. under 500 ppm CO₂) on its plant operations (e.g., impact on energy consumption/ cost), using a self-developed tool.

(5.1.1.11) Rationale for choice of scenario

Although Linde has committed to contribute to a well-below 2 degrees world by its own climate strategy and targets, Linde wanted to analyse the potential business impacts in case this goal cannot be reached worldwide, and temperature would rise beyond 2 degrees.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

- RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

- No SSP used

(5.1.1.3) Approach to scenario

Select from:

- Qualitative

(5.1.1.4) Scenario coverage

Select from:

- Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

- Acute physical
- Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

- 2.5°C - 2.9°C

(5.1.1.7) Reference year

2000

(5.1.1.8) Timeframes covered

Select all that apply

- 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

- Changes to the state of nature
- Number of ecosystems impacted
- Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Linde 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. The analysis focused on Linde gas production plants which represent over 80% of Linde's global revenues and are dependent on water for their production process.

(5.1.1.11) Rationale for choice of scenario

Linde used the RCP 4.5 scenario to further assess water-related impacts from climate change, mainly drought (water scarcity) and extreme weather events that could lead to flooding.

[Add row]

(5.1.2) Provide details of the outcomes of your organization's scenario analysis.

Climate change

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- Risk and opportunities identification, assessment and management
- Strategy and financial planning
- Resilience of business model and strategy
- Capacity building
- Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

- Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

Linde used the NZE scenario to explore transition risks as well as opportunities. This has helped inform the transition planning process, and it is reflected in our Climate Transition Plan. (NB: Scenario analyses also inform target setting, and various sources of information, including scenario analyses, help inform the need for targets, such as the expanded decarbonization investment target recently introduced.) As a result of this and other scenario analyses Linde gained more clarity on

important business aspects, including the potential growth of grey, blue and green H2 which is a key sector for Linde. Linde also explored the projections around the power industry (up-stream risks) as well as how this scenario may impact customers and markets (downstream risks). E.g., there are risks connected to structural market changes and different customer demands, especially in the area of H2. Technological risks include cost of R&D and low-carbon investments with the risk that new applications are not successful, or not economically viable, or competition. Any of these could also have a negative impact on reputation. As with other scenarios, Linde sees a clear opportunity for hydrogen. The growing demand for H2 and search for new, viable technologies, is a considerable opportunity for Linde as a technology leader in this area. Linde's own decarbonization investments and growth of renewable energy are complementary. The scenario analysis further revealed the financial risks connected to energy costs, especially important for ASU operations, which may be affected by both access to sufficient low carbon energy in the regions where needed and risks of rising energy cost. Decision informed by the results: Linde plans to have several large H2 facilities in the US equipped with CCS by the end of the decade.

Water

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- Risk and opportunities identification, assessment and management
- Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

- Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

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. 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 wastewater management and offers applications and solutions to produce sufficient amounts of drinking water, e.g. with its SOLVOCARB application. (NB: Scenario analyses also inform target setting, and various sources of information, including scenario analyses, help inform the need for targets, such as the new quantitative target developed in 2023, with the aim to reduce 20% water withdrawal by sites with high water use in high water stress regions.)

[Fixed row]

(5.2) Does your organization's strategy include a climate transition plan?

(5.2.1) Transition plan

Select from:

- Yes, we have a climate transition plan which aligns with a 1.5°C world

(5.2.3) Publicly available climate transition plan

Select from:

- Yes

(5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

- No, and we do not plan to add an explicit commitment within the next two years

(5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

Linde gases are used across just about every industry and country in the world. For example, applications include hydrogen for clean fuels. Linde is helping to power the decarbonization of public transport by delivering the enabling refueling technologies and hydrogen gas for back-to-base refueling stations such as the RVK reference project in Cologne Germany. By building out the H2 refueling infrastructure with flexible and modular refueling solutions, we are contributing to the accelerated uptake of clean mobility with zero tailpipe emissions.

(5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

- We have a different feedback mechanism in place

(5.2.8) Description of feedback mechanism

Linde continues to maintain a strong dialogue with investors and other stakeholders regarding its climate change strategy and low-carbon initiatives and has implemented a comprehensive governance structure including Board supervision for those issues. Linde furthermore reports quarterly on its progress against its GHG reduction targets/transition plan during its quarterly earnings call where investors and analysts are given the possibility to pose questions and provide feedback.

(5.2.9) Frequency of feedback collection

Select from:

Annually

(5.2.10) Description of key assumptions and dependencies on which the transition plan relies

Linde envisions a future where hydrogen fuel cells will be widely adopted; green electricity will be available commercially; and energy and fuel markets will be linked. Low-carbon hydrogen will be cost competitive; SMRs will feature additional energy efficiency and CCS; and electrolysis will be available with renewable electricity sources at much greater capacities and will supply a significant share of new hydrogen demand. By 2035, we expect that hydrogen derivatives will become the new energy vector and an essential means to transport low-cost renewable power around the world. To help attain, Linde will continue to participate in the investments and technologies that will reduce global GHG emissions. Linde's trajectory foresees a much earlier decline in absolute emissions, reaching climate neutrality by 2050. Analysis shows that this trajectory equates to an average decline of 4 percent of emissions per year, as compared to business-as-usual emissions. Therefore, Linde considers its 2050 net zero goal to be in-line with the global goal to limit warming to 1.5 degrees. This plan for 2035 and 2050 and beyond is based upon a number of assumptions and dependencies: Dependencies: Achieving this objective will require changes in economic and societal behaviors, government regulation, industry engagement and technology development. Our vision for 2050 includes widespread availability of renewable and low-carbon energy and alternative technologies for production and distribution. Assumptions: Linde's 2050 climate neutrality ambition is based upon IEA's scenario analysis, as described in its latest 2020 ETP paper. This well-below 2 degrees SDS recognized that the chemical sector as a whole is one that is hard to abate and projects the GHG trajectory for this industry as declining after 2030, reaching net zero after 2070.

(5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

See 2023 SDR at <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/2023-sustainable-development-report.pdf> Also see Climate Transition Plan.

(5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

Climate Transition Plan _ Linde.pdf

(5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

No other environmental issue considered

[Fixed row]

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

(5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

- Yes, both strategy and financial planning

(5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

- Products and services
- Upstream/downstream value chain
- Investment in R&D
- Operations

[Fixed row]

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

Products and services

(5.3.1.1) Effect type

Select all that apply

- Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

- Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Linde is a technology leader and at the forefront of innovation in many technology areas, including low-carbon products and services. How climate related risks and opportunities have influenced Linde's business strategy: Linde believes that it can benefit from business opportunities arising from governmental regulation of GHG and other emissions and the increasing demand for low-carbon products and applications. Linde offers several products and applications that help customers and their end users avoid CO2 emissions, such as oxygen used in steelmaking and hydrogen used to make ultra-low sulfur diesel. Linde's strategy is to maintain its focus and expand such offerings in the short, mid and long term. For example, in 2021, Linde implemented a new product line for zero-carbon products "Linde Green" which is currently available in many regions worldwide. Linde has also decided to put a strategic focus on the growing market of hydrogen, especially clean hydrogen. Low-carbon products are an important means of climate change mitigation. Those products will not only help Linde to reduce its own CO2 footprint, but also those of its clients. Case study of a substantial strategic decision influenced by climate-related risks and opportunities: Linde has investigated which technologies are best for answering the world's growing demand for low carbon products and applications and found that hydrogen is seen as one key enabler of the transition to a low-carbon economy. Based on Linde's scenario analysis as well as further market research, Linde expects a strong increase in demand for especially green hydrogen in the mid and long term and has therefore decided to focus its strategy on this growing business area (green hydrogen). Linde's clean energy team and hydrogen organization and entered into multiple collaborations as well as carried out strategic investments to speed up developments and growth in the area of green hydrogen. For example, Linde 's recent project to build, own and operate the world's largest PEM (Proton Exchange Membrane) electrolyzer plant at the Leuna Chemical Complex in Germany: The new 24-megawatt electrolyzer produces green hydrogen to supply Linde's industrial customers through the company's existing pipeline network.

Upstream/downstream value chain

(5.3.1.1) Effect type

Select all that apply

Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

From a supply chain perspective, Linde sees little impact from climate change on Linde's raw material supply, other than for energy – which is reported under "Operations". From a value chain perspective, Linde needs to respond to changes in customer behavior and offer products and services which help customers to become more successful, productive and sustainable. How climate related risks and opportunities have influenced Linde's business strategy: Linde offers several products and applications that help customers and their clients avoid CO2 emissions, such as oxygen used in steelmaking and hydrogen used to make ultra-low sulfur diesel. Linde's strategy is to maintain its focus and expand on such offerings in the short, mid and long term. For example, in 2021, Linde implemented a new product line for zero-carbon products "Linde Green" which is currently available in many regions worldwide. Low-carbon products are an important means of climate

change mitigation. Those products will not only help Linde to reduce its own CO2 footprint, but also those of its clients. Case study of a substantial strategic decision influenced by climate-related risks and opportunities: Linde has investigated which technologies are best for answering the world's growing demand for low carbon products and applications and found that hydrogen is seen as one key enabler of the transition to a low-carbon economy. Based on Linde's scenario analysis as well as further market research, Linde expects a strong increase in demand for especially green hydrogen in the mid and long term and has therefore decided to focus its strategy on this growing business area (green hydrogen). Linde's clean energy team and hydrogen organization entered into multiple collaborations as well as carried out strategic investments to speed up developments and growth in the area of green hydrogen. For example, Linde has a recent project to build, own and operate the world's largest PEM (Proton Exchange Membrane) electrolyzer plant at the Leuna Chemical Complex in Germany. The new 24-megawatt electrolyzer produces green hydrogen to supply Linde's industrial customers through the company's existing pipeline network.

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Linde is a technology leader and at the forefront of innovation in many technology areas, including in low-carbon products and services. How climate related risks and opportunities have influenced Linde's business strategy: Linde believes that it can benefit from business opportunities arising from governmental regulation of GHG and other emissions and the increasing demand for low-carbon products and applications. Linde already offers several products and applications that help customers and their clients avoid CO2 emissions, such as oxygen used in steelmaking and hydrogen used to make ultra-low sulfur diesel. In addition, Linde has set targets to invest more than one third of annual R&D expenditures in low-carbon projects and initiatives by 2028, and to invest 1 billion by 2028 in low carbon projects. Those investments are targeted to find and implement innovative solutions and products/applications that can help mitigate climate change. Case study of a substantial strategic decision influenced by climate-related risks and opportunities: Linde has investigated which technologies are best for answering the world's growing demand for low carbon products and applications and found that hydrogen is seen as one key enabler of the transition to a low-carbon economy. Based on Linde's scenario analysis as well as further market research, Linde expects a strong increase in demand for especially green hydrogen in the mid and long term and has therefore decided to focus its strategy on this growing business area (green hydrogen). Linde's clean energy team and hydrogen organization with a focus on R&D and innovation in the area of clean hydrogen.

Operations

(5.3.1.1) Effect type

Select all that apply

Risks

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

In order to mitigate the adverse effects and risks from climate change, Linde has set several managed targets among its new 2028 sustainability targets, which address operational efficiency. Linde overall aims to reduce its GHG (scope 1 and 2) over EBITDA intensity by 35% by 2028, and absolute scope 1 and 2 emissions by 35% by 2035. Energy efficiency improvements and targets are an important strategic measure to achieve overall emission reduction targets and contribute to cost savings. For example, Linde has a target to realize 1.3 billion in cost savings from sustainable productivity projects by 2028. Case study: Improvements in operational efficiencies are an important lever to reduce energy consumption and thus scope 1 and scope 2 emissions. As part of its climate change targets Linde has set targets for efficiency improvements in several areas. For example, Linde plans to reduce its ASU energy efficiency by 7% and its HyCO GHG intensity by 4% over the 10-year target horizon. In addition, absolute scope 1 emissions from other GHGs are planned to be reduced by 10% by 2028. These targets have a baseline of 2018. With its recently defined 2035 target Linde will take further steps to drastically reduce its absolute emissions and therefore mitigate climate change, which includes setting more challenging operational targets. For example, Linde already achieved its “Other GHG” target in 2021 by more than 300%. Instead of a planned reduction of 10%, a 38% absolute reduction was realized. This is among others due to operational process improvements and the implementation of best practice standards worldwide, e.g. in the area of refrigerants handling and N2O production. Another important lever to reduce GHG emissions is low carbon electricity which is viewed as an important means of climate change mitigation. Linde has set a 10-year target to double the amount of low-carbon electricity sourced, especially through active procurement of renewable electricity. This will lead to changes in the energy supply of the company which will look to source more power from renewable sources (different utility providers) or power which is backed up by RE certificates. In 2022, low carbon electricity procured increased to 18 TWh.

[Add row]

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

Row 1

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

- Revenues
- Direct costs
- Indirect costs
- Capital expenditures

(5.3.2.2) Effect type

Select all that apply

- Opportunities

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

- Climate change

(5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Revenues: Linde believes that it can benefit in the mid and long term from the higher demand for low-carbon products and applications needed to transition to a low-carbon economy. Linde is factoring in the impact of business opportunities from new low-carbon products and applications into its mid and long-term business plan. Linde has a target to realize at least 50% of annual revenues (excluding Linde Engineering) from its sustainability portfolio through 2028, including low carbon products and services. This is considered in the annual business plan (revenue). Case Study: Linde is investing in low-carbon research and development as well as initiatives and projects with the aim to enable future growth of its hydrogen business. As a result, Linde expects its hydrogen-related revenues to increase in the coming years. In its 2020 Energy Technologies Perspectives paper, the IEA projects a roughly 4 times increase of worldwide H2 production from 2019 through 2050, under the Sustainable Development Scenario (SDS). If the assumptions of the SDS are correct, for Linde – with hydrogen-related revenues of more than 2 billion in 2019. This would mean a low estimate for potential annual hydrogen-related revenues of more than 8 billion in the long-term, assuming same market share and product pricing, an increase of over 5 billion from 2022. Note that this estimate, from 2019 revenue levels, based on SDS represents an increase of 300%, but is still a low estimate and is less than expected by Linde. Additional revenues from new hydrogen business/projects (like green hydrogen projects in Germany or New York, going on-stream in 2022 and 2023) are factored into Linde's short, mid and long-term financial planning. Direct Cost: Cost of energy: Current and emerging GHG regulations are influencing Linde's operating cost / cost of energy. Linde takes into account for its annual budget / financial planning the amount of carbon taxes or carbon credits to be purchased for existing production plants and plants starting operation in the budget year which are or will be subject to carbon taxation. If such fees and charges can be passed through to the customer (e.g., over the sales price) Linde is also considering this in the financial planning (increased sales revenues). Indirect Cost: Linde is an innovation leader. In order to stay ahead of competitors and offer the (low carbon) products and services required by customers, Linde continues to invest in R&D.

[Add row]

(5.4) In your organization’s financial accounting, do you identify spending/revenue that is aligned with your organization’s climate transition?

| | Identification of spending/revenue that is aligned with your organization’s climate transition | Methodology or framework used to assess alignment with your organization’s climate transition | Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy |
|--|--|--|---|
| | <i>Select from:</i> <input checked="" type="checkbox"/> Yes | <i>Select all that apply</i> <input checked="" type="checkbox"/> A sustainable finance taxonomy | <i>Select from:</i> <input checked="" type="checkbox"/> At the organization level only |

[Fixed row]

(5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization’s climate transition.

Row 1

(5.4.1.1) Methodology or framework used to assess alignment

Select from:

- A sustainable finance taxonomy

(5.4.1.2) Taxonomy under which information is being reported

Select from:

- EU Taxonomy for Sustainable Activities

(5.4.1.3) Objective under which alignment is being reported

Select from:

- Total across climate change mitigation and climate change adaption

(5.4.1.4) Indicate whether you are reporting eligibility information for the selected objective

Select from:

Yes

(5.4.1.5) Financial metric

Select from:

Revenue/Turnover

(5.4.1.10) Percentage share of financial metric that is taxonomy-eligible in the reporting year (%)

8

(5.4.1.11) Percentage share of financial metric that is taxonomy non-eligible in the reporting year (%)

92

(5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition

The current EU Taxonomy Regulation (EU) 2020/852 (the Taxonomy) sets forth a classification system for environmentally sustainable economic activities. The Taxonomy differentiates between Taxonomy-eligible and Taxonomy-aligned activities. Taxonomy-eligible activities refer to economic activities that are specifically described in the regulation. Taxonomy-aligned activities refer to economic activities that comply with the technical screening criteria in the regulation and contribute substantially to one or more of the environmental objectives while not significantly harming any of the environmental objectives. Linde currently has no statutory requirements for reporting to the Taxonomy. Nonetheless, for interest to stakeholders, Linde has voluntarily carried out an analysis of its business activities against the Taxonomy to estimate our Taxonomy-eligible activities as it relates to the first two environmental objectives (climate change mitigation and climate change adaptation). The majority of Linde's business activities — the sale of atmospheric gases produced through air separation — are not activities currently included in the Taxonomy. Most of Linde's Taxonomy-eligible activities include those related to the production, storage and distribution of hydrogen, the construction and rental of hydrogen fueling stations, the production of acetylene, the construction and sale or rental of equipment for the production of hydrogen, and the construction and sale or rental of carbon capture technologies or other low-carbon technologies. These economic activities represented approximately 8 percent of Linde's sales revenues in 2023. Capital and operational expenditures spent for Taxonomy-eligible activities represented approximately 21 percent and 11 percent of 2023 consolidated totals, respectively. The revenue and capital expenditures from Taxonomy-eligible activities were collected worldwide and were determined based on Linde's products and projects that fit the Taxonomy activities. Operational expenditures are estimated proportionally, based upon the revenue from the associated product lines. In 2023, the majority of revenue that qualified as Taxonomy-eligible stemmed from the sale of hydrogen. Linde expects that a subset of the Taxonomy activities will also meet the technical screening criteria of the Climate Delegated Act, and may be considered as Taxonomy-aligned activities in future reporting. Revenue KPI The revenue KPI has been calculated as the revenue derived from products and services associated with Taxonomy-eligible economic activities (numerator) divided by Linde consolidated revenue as presented in the Consolidated Statement of Profit and Loss. For further details on our accounting policies regarding revenue recognition,

refer to Note 19 of the consolidated financial statements in Linde's 2023 Annual Report (10k). In 2023, the majority of Taxonomy-eligible revenue related to the sale of hydrogen. **Capital Expenditure KPI** The capital expenditure (Capex) KPI has been calculated as the Capex related to Taxonomy-eligible economic activities (numerator) divided by Linde consolidated Capex, including both capital expenditures and acquisition and investment cash flows, as presented in the Consolidated Statement of Cash Flows. In 2023, the majority of Taxonomy-eligible Capex related to tangible assets associated with the production and sale of hydrogen, including hydrogen production plants and related storage and distribution assets. **Operating Expenditure KPI** The operating expenditure (Opex) KPI has been calculated as the Opex related to Taxonomy-eligible economic activities (numerator) divided by Linde consolidated Opex. The Taxonomy specifically defines Opex as direct non-capitalized costs that relate to research and development, building renovation measures, short-term leases, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets (property, plants and equipment).

Row 2

(5.4.1.1) Methodology or framework used to assess alignment

Select from:

- A sustainable finance taxonomy

(5.4.1.2) Taxonomy under which information is being reported

Select from:

- EU Taxonomy for Sustainable Activities

(5.4.1.3) Objective under which alignment is being reported

Select from:

- Total across climate change mitigation and climate change adaption

(5.4.1.4) Indicate whether you are reporting eligibility information for the selected objective

Select from:

- Yes

(5.4.1.5) Financial metric

Select from:

- CAPEX

(5.4.1.10) Percentage share of financial metric that is taxonomy-eligible in the reporting year (%)

21

(5.4.1.11) Percentage share of financial metric that is taxonomy non-eligible in the reporting year (%)

79

(5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition

The current EU Taxonomy Regulation (EU) 2020/852 (the Taxonomy) sets forth a classification system for environmentally sustainable economic activities. The Taxonomy differentiates between Taxonomy-eligible and Taxonomy-aligned activities. Taxonomy-eligible activities refer to economic activities that are specifically described in the regulation. Taxonomy-aligned activities refer to economic activities that comply with the technical screening criteria in the regulation and contribute substantially to one or more of the environmental objectives while not significantly harming any of the environmental objectives. Linde currently has no statutory requirements for reporting to the Taxonomy. Nonetheless, for interest to stakeholders, Linde has voluntarily carried out an analysis of its business activities against the Taxonomy to estimate our Taxonomy-eligible activities as it relates to the first two environmental objectives (climate change mitigation and climate change adaptation). The majority of Linde's business activities — the sale of atmospheric gases produced through air separation — are not activities currently included in the Taxonomy. Most of Linde's Taxonomy-eligible activities include those related to the production, storage and distribution of hydrogen, the construction and rental of hydrogen fueling stations, the production of acetylene, the construction and sale or rental of equipment for the production of hydrogen, and the construction and sale or rental of carbon capture technologies or other low-carbon technologies. These economic activities represented approximately 8 percent of Linde's sales revenues in 2023. Capital and operational expenditures spent for Taxonomy-eligible activities represented approximately 21 percent and 11 percent of 2023 consolidated totals, respectively. The revenue and capital expenditures from Taxonomy-eligible activities were collected worldwide and were determined based on Linde's products and projects that fit the Taxonomy activities. Operational expenditures are estimated proportionally, based upon the revenue from the associated product lines. In 2023, the majority of revenue that qualified as Taxonomy-eligible stemmed from the sale of hydrogen. Linde expects that a subset of the Taxonomy activities will also meet the technical screening criteria of the Climate Delegated Act, and may be considered as Taxonomy-aligned activities in future reporting.

Revenue KPI The revenue KPI has been calculated as the revenue derived from products and services associated with Taxonomy-eligible economic activities (numerator) divided by Linde consolidated revenue as presented in the Consolidated Statement of Profit and Loss. For further details on our accounting policies regarding revenue recognition, refer to Note 19 of the consolidated financial statements in Linde's 2023 Annual Report (10k). In 2023, the majority of Taxonomy-eligible revenue related to the sale of hydrogen.

Capital Expenditure KPI The capital expenditure (Capex) KPI has been calculated as the Capex related to Taxonomy-eligible economic activities (numerator) divided by Linde consolidated Capex, including both capital expenditures and acquisition and investment cash flows, as presented in the Consolidated Statement of Cash Flows. In 2023, the majority of Taxonomy-eligible Capex related to tangible assets associated with the production and sale of hydrogen, including hydrogen production plants and related storage and distribution assets.

Operating Expenditure KPI The operating expenditure (Opex) KPI has been calculated as the Opex related to Taxonomy-eligible economic activities (numerator) divided by Linde consolidated Opex. The Taxonomy specifically defines Opex as direct non-capitalized costs that relate to research and development, building renovation measures, short-term leases, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets (property, plants and equipment).

Row 3

(5.4.1.1) Methodology or framework used to assess alignment

Select from:

- A sustainable finance taxonomy

(5.4.1.2) Taxonomy under which information is being reported

Select from:

- EU Taxonomy for Sustainable Activities

(5.4.1.3) Objective under which alignment is being reported

Select from:

- Total across climate change mitigation and climate change adaption

(5.4.1.4) Indicate whether you are reporting eligibility information for the selected objective

Select from:

- Yes

(5.4.1.5) Financial metric

Select from:

- OPEX

(5.4.1.10) Percentage share of financial metric that is taxonomy-eligible in the reporting year (%)

11

(5.4.1.11) Percentage share of financial metric that is taxonomy non-eligible in the reporting year (%)

89

(5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition

The current EU Taxonomy Regulation (EU) 2020/852 (the Taxonomy) sets forth a classification system for environmentally sustainable economic activities. The Taxonomy differentiates between Taxonomy-eligible and Taxonomy-aligned activities. Taxonomy-eligible activities refer to economic activities that are specifically described in the regulation. Taxonomy-aligned activities refer to economic activities that comply with the technical screening criteria in the regulation and contribute substantially to one or more of the environmental objectives while not significantly harming any of the environmental objectives. Linde currently has no statutory requirements for reporting to the Taxonomy. Nonetheless, for interest to stakeholders, Linde has voluntarily carried out an analysis of its business activities against the Taxonomy to estimate our Taxonomy-eligible activities as it relates to the first two environmental objectives (climate change mitigation and climate change adaptation). The majority of Linde's business activities — the sale of atmospheric gases produced through air separation — are not activities currently included in the Taxonomy. Most of Linde's Taxonomy-eligible activities include those related to the production, storage and distribution of hydrogen, the construction and rental of hydrogen fueling stations, the production of acetylene, the construction and sale or rental of equipment for the production of hydrogen, and the construction and sale or rental of carbon capture technologies or other low-carbon technologies. These economic activities represented approximately 8 percent of Linde's sales revenues in 2023. Capital and operational expenditures spent for Taxonomy-eligible activities represented approximately 21 percent and 11 percent of 2023 consolidated totals, respectively. The revenue and capital expenditures from Taxonomy-eligible activities were collected worldwide and were determined based on Linde's products and projects that fit the Taxonomy activities. Operational expenditures are estimated proportionally, based upon the revenue from the associated product lines. In 2023, the majority of revenue that qualified as Taxonomy-eligible stemmed from the sale of hydrogen. Linde expects that a subset of the Taxonomy eligible activities will also meet the technical screening criteria of the Climate Delegated Act, and may be considered as Taxonomy-aligned activities in future reporting. Revenue KPI The revenue KPI has been calculated as the revenue derived from products and services associated with Taxonomy-eligible economic activities (numerator) divided by Linde consolidated revenue as presented in the Consolidated Statement of Profit and Loss. For further details on our accounting policies regarding revenue recognition, refer to Note 19 of the consolidated financial statements in Linde's 2023 Annual Report (10k). In 2023, the majority of Taxonomy-eligible revenue related to the sale of hydrogen. Capital Expenditure KPI The capital expenditure (Capex) KPI has been calculated as the Capex related to Taxonomy-eligible economic activities (numerator) divided by Linde consolidated Capex, including both capital expenditures and acquisition and investment cash flows, as presented in the Consolidated Statement of Cash Flows. In 2023, the majority of Taxonomy-eligible Capex related to tangible assets associated with the production and sale of hydrogen, including hydrogen production plants and related storage and distribution assets. Operating Expenditure KPI The operating expenditure (Opex) KPI has been calculated as the Opex related to Taxonomy-eligible economic activities (numerator) divided by Linde consolidated Opex. The Taxonomy specifically defines Opex as direct non-capitalized costs that relate to research and development, building renovation measures, short-term leases, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets (property, plants and equipment).

[Add row]

(5.4.3) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

(5.4.3.2) Additional contextual information relevant to your taxonomy accounting

Linde currently has no statutory requirements for reporting to the Taxonomy. Nonetheless, for interest to stakeholders, Linde has voluntarily carried out an analysis of its business activities against the Taxonomy to estimate our Taxonomy-eligible activities as it relates to the first two environmental objectives (climate change mitigation and climate change adaptation). The current EU Taxonomy Regulation (EU) 2020/852 (the Taxonomy) sets forth a classification system for environmentally sustainable economic activities. The Taxonomy differentiates between Taxonomy-eligible and Taxonomy-aligned activities. Taxonomy-eligible activities refer to economic activities that are specifically described in the regulation. Taxonomy-aligned activities refer to economic activities that comply with the technical screening

criteria in the regulation and contribute substantially to one or more of the environmental objectives while not significantly harming any of the environmental objectives. The majority of Linde's business activities — the sale of atmospheric gases produced through air separation — are not activities currently included in the Taxonomy. Most of Linde's Taxonomy-eligible activities include those related to the production, storage and distribution of hydrogen, the construction and rental of hydrogen fueling stations, the production of acetylene, the construction and sale or rental of equipment for the production of hydrogen, and the construction and sale or rental of carbon capture technologies or other low-carbon technologies. These economic activities represented approximately 8 percent of Linde's sales revenues in 2023. Capital and operational expenditures spent for Taxonomy-eligible activities represented approximately 21 percent and 11 percent of 2023 consolidated totals, respectively. The revenue and capital expenditures from Taxonomy-eligible activities were collected worldwide and were determined based on Linde's products and projects that fit the Taxonomy activities. Operational expenditures are estimated proportionally, based upon the revenue from the associated product lines. In 2023, the majority of revenue that qualified as Taxonomy-eligible stemmed from the sale of hydrogen. Linde expects that a subset of the activities will also meet the technical screening criteria of the Climate Delegated Act, and may be considered as Taxonomy-aligned activities in future reporting.

[Fixed row]

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

(5.5.1) Investment in low-carbon R&D

Select from:

Yes

(5.5.2) Comment

Linde believes that it can benefit from business opportunities arising from governmental regulation of GHG and other emissions and the increasing demand for low-carbon products and applications. Linde is a technology leader and at the forefront of innovation when it comes to low-carbon products and services. Already today low carbon applications and services help Linde customers to avoid CO2. This was about 91 million metric tons of CO2 equivalents in 2023, equaling 2.4 times the (scope 1 and 2) emissions emitted by all Linde operations. Linde has set itself targets to invest more than 33% of its annual R&D budget in low-carbon products and applications until 2028 and to further invest over 1 billion of capital expenditures in low carbon projects till 2028. In 2023, Linde invested 47% of its total annual R&D budget in low carbon product and service developments.

[Fixed row]

(5.5.3) Provide details of your organization's investments in low-carbon R&D for chemical production activities over the last three years.

Row 1

(5.5.3.1) Technology area

Select from:

Unable to disaggregate by technology area

(5.5.3.3) Average % of total R&D investment over the last 3 years

38

(5.5.3.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

69000000

(5.5.3.5) Average % of total R&D investment planned over the next 5 years

45

(5.5.3.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Linde has a SD 2028 target to invest more than one third of the annual R&D Budget to decarbonization. The scope includes annual spend to develop lower-carbon technology for Linde assets or to develop lower-carbon solutions for our customers. Linde invested 47 percent of its 2023 R&D budget (69 million of 146 million total) into decarbonization. Initiatives include developing industry-leading carbon capture technologies, investing in promising green hydrogen technologies and driving operational efficiency to further reduce GHG intensity. These actions are key to achieving steps outlined in the climate transition plan and to the overall 35 by 35 absolute GHG reduction target. For example, carbon capture is a larger part of Linde's strategy to reduce Scope 1 emissions. Linde has already deployed solutions and is still working and doing research to continuously improve applications and increase those more efficiency. For example, in May, 2022, bp and Linde announced plans to advance a major carbon capture and storage (CCS) project in Texas that will enable low carbon hydrogen production at Linde's existing facilities. The development will also support the storage of carbon dioxide (CO2) captured from other industrial facilities – paving the way for large-scale decarbonization of the Texas Gulf Coast industrial corridor. Linde's portion of R&D investment in low-carbon technologies has increased steadily from 2018-2023, from 23% to 47%-exceeding the goal to achieve a 33% share of annual R&D related to decarbonization topics by 2028. Linde is active in several of the technology areas listed in the drop and considers information about the shares of the single R&D activities as part of total R&D budget as business confidential. In each technology area Linde is doing permanent research, this means that there are developments within each technology area which are already in small- and large-scale deployment, others are just in a pilot stage or in the middle of the R&D process. To estimate the average over the next 5 years, the calculation is based upon holding the current level of investment over next two years with some modeling of trend/data from past years.

[Add row]

(5.9) 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?

(5.9.1) Water-related CAPEX (+/- % change)

0

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

0

(5.9.3) Water-related OPEX (+/- % change)

0

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

0

(5.9.5) Please explain

CAPEX due to water included voluntary projects for permanent process efficiency improvements to primary process equipment and control equipment. Based on 2023 projects, increases in expenditures due to such projects and other efforts resulted in approximately 500 million gallons 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 decreased from 2022, This was partly due to continual productivity improvements resulting in water savings. This is also due to focus on water management. In Linde’s 2023 SD report, we report an example from South Latin America. The business has achieved water reduction annually, up to 400 million cubic meters, 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.

[Fixed row]

(5.10) Does your organization use an internal price on environmental externalities?

| | Use of internal pricing of environmental externalities | Environmental externality priced |
|--|---|---|
| | Select from: <input checked="" type="checkbox"/> Yes | Select all that apply <input checked="" type="checkbox"/> Carbon |

[Fixed row]

(5.10.1) Provide details of your organization's internal price on carbon.

Row 1

(5.10.1.1) Type of pricing scheme

Select from:

- Shadow price

(5.10.1.2) Objectives for implementing internal price

Select all that apply

- Drive low-carbon investment
- Incentivize consideration of climate-related issues in decision making

(5.10.1.3) Factors considered when determining the price

Select all that apply

- Existing or pending legislation

(5.10.1.4) Calculation methodology and assumptions made in determining the price

Based on IRA

(5.10.1.5) Scopes covered

Select all that apply

Scope 1

(5.10.1.6) Pricing approach used – spatial variance

Select from:

Uniform

(5.10.1.8) Pricing approach used – temporal variance

Select from:

Static

(5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

85

(5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

85

(5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

Capital expenditure

Opportunity management

(5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

No

(5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

(5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

No

[Add row]

(5.11) Do you engage with your value chain on environmental issues?

Suppliers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

Yes

(5.11.2) Environmental issues covered

Select all that apply

Climate change

Water

Customers

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

Yes

(5.11.2) Environmental issues covered

Select all that apply

Climate change

Investors and shareholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

Yes

(5.11.2) Environmental issues covered

Select all that apply

Climate change

Other value chain stakeholders

(5.11.1) Engaging with this stakeholder on environmental issues

Select from:

No, and we do not plan to within the next two years

(5.11.3) Primary reason for not engaging with this stakeholder on environmental issues

Select from:

Judged to be unimportant or not relevant

(5.11.4) Explain why you do not engage with this stakeholder on environmental issues

Suppliers and customers are two significant stakeholders in Linde's value chain, having primary impacts, risks and opportunities that interconnect to our own operations. We also engage with investors consistently. Engagement with other stakeholders is present, but not at levels that are intended to change over the next several years, as existing mechanisms (for example, communication through published disclosures and reports) has been deemed sufficient.

[Fixed row]

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

Climate change

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

- Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

- Contribution to supplier-related Scope 3 emissions

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

- 100%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

Linde engages with electricity suppliers in order to explore renewable energy sourcing mechanisms and realize efficiency savings which helps decrease non-renewable energy consumption. With higher proportions of renewables in the grid managing power demand is getting increasingly complex and challenging for utility providers. For those Linde normally represents a high-impact customer who can influence the overall grid load and therefore has the capacity to help with demand-side management.

(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

- 26-50%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Water

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

- Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

- Dependence on water
- Impact on water availability

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

- 51-75%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

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.

(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

- 1-25%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

[Fixed row]

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

- Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

- In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to climate change
- Procurement spend
- Regulatory compliance
- Strategic status of suppliers

(5.11.2.4) 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 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. We review suppliers that publicly disclose their environmental performance and use information identified in suppliers' responses to the CDP Climate Change Questionnaire and annual sustainability reports to focus our efforts on climate change initiatives that yield maximum impact.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

- Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

- In line with the criteria used to classify suppliers as having substantive dependencies and/or impacts relating to water
- Procurement spend
- Regulatory compliance
- Strategic status of suppliers

(5.11.2.4) 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.
[Fixed row]

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

Climate change

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

- Yes, environmental requirements related to this environmental issue are included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

- Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Linde's Global Safety and Engineering functions perform supplier audits and assessments, on a planned schedule, for suppliers considered critical to Linde's supply chain. Audits and assessments are conducted based on an evaluation of risks in the supply chain, including safety and environmental risks. As part of the

assessment process, an evaluation of conformance with Linde's terms and conditions, Supplier Code of Conduct and a search of public databases such as EPA's Enforcement and Compliance History Online (ECHO), is performed.

Water

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

Yes, environmental requirements related to this environmental issue are included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Linde's Global Safety and Engineering functions perform supplier audits and assessments, on a planned schedule, for suppliers considered critical to Linde's supply chain. Audits and assessments are conducted based on an evaluation of risks in the supply chain, including safety and environmental risks. As part of the assessment process, an evaluation of conformance with Linde's terms and conditions, Supplier Code of Conduct and a search of public databases such as EPA's Enforcement and Compliance History Online (ECHO), is performed.

[Fixed row]

(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Climate change

(5.11.6.1) Environmental requirement

Select from:

Implementation of emissions reduction initiatives

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

- First-party verification
- Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

- 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

- 100%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

- 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

- 100%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

- Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

None

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

(5.11.6.12) Comment

Linde's Supplier Code of Conduct requires suppliers as follows:..." Suppliers are expected to support Linde's initiatives and targets related to climate change and environmental stewardship and to operate in a manner consistent with the policies and principles of Linde's Sustainability program. As relevant, Suppliers may be requested to: • Engage in dialogue with Linde on Suppliers' sustainability goals. • Define and implement metrics, set objectives, and provide regular progress updates on the results of their company's activities that have the potential to impact the environment, including, for example, efforts focused on: - reducing greenhouse gas emissions, - quantifying carbon footprint from operations, - increasing energy efficiency, - utilizing renewable forms of energy, ---". Linde itself has set ambitious climate targets in alignment with the Paris agreement and is in active dialogue with its suppliers regarding their own emission reduction programs and targets. Many of Linde's suppliers already regularly report on emissions from their operations, and have already set official GHG reduction targets, among other objectives, to set a science-based target or to reach carbon neutrality by 2050. Linde monitors the status of targets and emission reduction initiatives during regular supplier reviews and audits.

Water

(5.11.6.1) Environmental requirement

Select from:

Other, please specify :Efforts to safeguard the quality of water and reducing water consumption

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

100%

(5.11.6.5) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue required to comply with this environmental requirement

Select from:

100%

(5.11.6.6) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue that are in compliance with this environmental requirement

Select from:

100%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

None

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

(5.11.6.12) Comment

Linde's Supplier Code of Conduct: "...Suppliers are expected to support Linde's initiatives and targets related to climate change and environmental stewardship and to operate in a manner consistent with the policies and principles of Linde's Sustainability program. As relevant, Suppliers may be requested to: • Engage in dialogue with Linde on Suppliers' sustainability goals. • Define and implement metrics, set objectives, and provide regular progress updates on the results of their company's activities that have the potential to impact the environment, including, for example, efforts focused on: - reducing greenhouse gas emissions, - quantifying carbon footprint from operations, - increasing energy efficiency, - utilizing renewable forms of energy, - safeguarding the quality of water and reducing water consumption,... - encouraging resource efficiency,..." 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.
[Add row]

(5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

- Emissions reduction

(5.11.7.3) Type and details of engagement

Information collection

- Collect GHG emissions data at least annually from suppliers

Innovation and collaboration

- Collaborate with suppliers on innovations to reduce environmental impacts in products and services

(5.11.7.4) Upstream value chain coverage

Select all that apply

- Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

1-25%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

1-25%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Linde has started an initiative with its relevant supplier groups to collect and evaluate product carbon footprint (“PCF”) information. Our procurement and sustainability groups collaboratively lead this effort. Linde has requested such information from specific suppliers and subsequently has asked suppliers who are not measuring such KPIs so far, to complete a self-assessment and standard PCF calculation for Linde’s products purchased by Linde. Linde regularly follows up with its suppliers on the process. By collecting this information, Linde targets to improve its own scope 3 emission disclosure and gain more transparency about the environmental and climate change impact of each specific supplier. Collecting such information will also form the basis for discussing potential emission reduction initiatives for Linde products. Through this direct engagement and capacity building, we have been successful in advancing supplier awareness of environmental and climate change topics and continue to improve the data accuracy of our most impactful scope 3 emissions. Linde acknowledges that suppliers are measuring their GHG emissions, however in the long-term Linde plans to request and collect PCF information from additional relevant suppliers, and to offer the support needed to do so.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

No, this engagement is unrelated to meeting an environmental requirement

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

Unknown

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

No other supplier engagement

[Add row]

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

26-50%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Linde communicates climate-related information, including our performance, targets, activities, and details of our sustainability portfolio of products, to all of our customers. Linde engages with customers to foster an understanding of Linde's sustainability and climate change activities and further our mission of making our world more productive - which means helping our customers to become more productive. Introduction to and highlights of Linde's SD and climate change activities,

performance and recognition are included in our corporate as well as opportunity-specific business development presentations. It is simply how we do business and how we engage with existing and prospective clients. Linde communicates climate-related information to any customer that requests such data. For example, Linde responds to customer requests through CDP's Supply Chain program and scored well above industry average each year. In addition, Linde provides detailed sustainability and climate-related information to strategic customers over several global supplier portals such as Ecovadis and Integrity Next. We also complete many customer sustainability and climate change surveys, assessments and questionnaires throughout the year, as well as specific information requests by customers, e.g., on Linde's certifications or product carbon footprint. Linde also organizes customer days in each region where we operate, where all customers are invited to discuss any topic, including climate change. Linde has 2 targets that are supported by a strong customer engagement process: to avoid more than two times the GHG emissions from our own operations, and to annually earn 50% revenue from products in our sustainability portfolio. Achieving these targets depends on our customers being aware of our efforts to reduce our own carbon footprint as well as invest in products that will help them reduce their footprint. Customers interested in products that are part of our sustainability portfolio accounted for 54% of Linde's revenue in 2022. A subset of this portfolio helped customers avoid 91 million metric tons of CO₂e emissions in 2023.

(5.11.9.6) Effect of engagement and measures of success

Measure of success: One measurement of the success of our engagement by whether we help customers avoid at least 2 times our own Scope 12 emissions (our threshold is therefore 2X). This is one of our global targets: to enable 2 times avoided emissions than emitted from Linde's global operations. In all, the use of five of Linde's applications enabled 91 million metric tons of CO₂e to be avoided in 2023, which nearly 2.4 times more than Linde's total Scopes 12 emissions. By providing all current and potential customers with information related to our low carbon products and our initiatives to reduce emissions, we expect to see this metric continue to increase over time. We believe that this increased customer interest can be attributed in part to Linde's SD information sharing, our climate change activities and the recognition these have gathered. We've found that the exchange of ideas, practices and performance around sustainability can be a critical element to developing strategic relationships with our customers. We see that sharing of our sustainability and climate activities, targets and performance, has led to improved customer relationships and maintained our high rates of customer retention as customers acknowledge our activities and performance with regards to environment and climate change. In 2023, Linde extended its long-term industrial gas supply agreements with Wanhua in China, including investment in decarbonization to reduce 500,000 tons CO₂e per year.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

- Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

- Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services
- Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

Unknown

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Linde is committed to stakeholder engagement across governance, social, and environmental aspects. This commitment to stakeholder engagement is endorsed by executive leadership at Linde. Identification of stakeholders: Linde has identified relevant stakeholder groups, including: its employees, customers, shareholders, suppliers, government agencies, industry associations and groups, and communities. Linde describes the relevance of each of these groups and means of engagement in its annual Sustainability report. Shareholders: Linde has a strong shareholder focus. Meetings held with investors and broader ESG groups confirmed Linde's ongoing commitment to sustainability. We emphasized that priorities were to retain our respective strong programs, to develop our sustainability and climate change targets and to integrate sustainability globally across Linde. Linde also reports on progress against its sustainable development targets to shareholders during quarterly meetings (transcripts publicly available on website), which always includes ESG information. Linde also responds to investor requests, holds one-on-one meetings, and participates in public events for information about its decarbonization progress and plans.

(5.11.9.6) Effect of engagement and measures of success

Linde has achieved leading rankings from analysts. For example, Linde has been rated A in MSCI's ESG Ratings assessment, on a scale of CCC to AAA. This is attributed, in part, to the company's comprehensive decarbonization strategy, including its initiatives to reduce its greenhouse gas emissions intensity by 35% and double the annual purchase of renewable power by 2028.

[Add row]

C6. Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

| | Consolidation approach used | Provide the rationale for the choice of consolidation approach |
|----------------|---|--|
| Climate change | Select from: <input checked="" type="checkbox"/> Financial control | <i>For consistency with financial reporting</i> |
| Water | Select from: <input checked="" type="checkbox"/> Financial control | <i>For consistency with financial reporting</i> |
| Plastics | Select from: <input checked="" type="checkbox"/> Financial control | <i>For consistency with financial reporting</i> |
| Biodiversity | Select from: <input checked="" type="checkbox"/> Financial control | <i>For consistency with financial reporting</i> |

[Fixed row]

C7. Environmental performance - Climate Change

(7.1) Is this your first year of reporting emissions data to CDP?

Select from:

No

(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

| | |
|--|---|
| | Has there been a structural change? |
| | Select all that apply <input checked="" type="checkbox"/> No |

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

| | |
|--|---|
| | Change(s) in methodology, boundary, and/or reporting year definition? |
| | Select all that apply <input checked="" type="checkbox"/> No |

[Fixed row]

(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

- ISO 14064-1
- The Greenhouse Gas Protocol: Scope 2 Guidance
- US EPA Mandatory Greenhouse Gas Reporting Rule
- The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- Other, please specify :California ARB Reg for Rptg of GHG Emiss

(7.3) Describe your organization's approach to reporting Scope 2 emissions.

(7.3.1) Scope 2, location-based

Select from:

- We are reporting a Scope 2, location-based figure

(7.3.2) Scope 2, market-based

Select from:

- We are reporting a Scope 2, market-based figure

(7.3.3) Comment

Linde's reporting boundaries for eKPIs are consistent with the financial reporting boundaries and financial control definition to the greatest extent possible. Linde reports on all eKPIs for all subsidiaries, joint ventures and other holdings within its organizational boundaries whose revenues and EBIT (Earnings Before Interests and Taxes) are included in Linde's financial results. Linde does not collect eKPI data for minority holdings and other holdings which are not reporting their financials. EKPIs for joint ventures which are not fully consolidated into the Group financials (at-equity Joint Ventures) are collected but are only included in external GHG reporting under scope 3. Methodology for reporting scope 2 emissions: Linde reports on all electricity and its resulting scope 2 emissions purchased by the company. Electricity for sites where Linde does not pay the utility bill is excluded from its reported electricity number as well as from the reported scope 2; however, it is tracked

internally for operational purposes and for scope 3 reporting. The main methodology for calculating scope 2 emissions from electricity is the market-based approach, using site-specific emissions factors by plant according to supplier contracts and utility bills where available. For sites where such market-based factors are not known, Linde uses the most recent location-based factors from the IEA and EPA's eGRID factors for the U.S. Linde also calculates Scope 2 emissions using the location-based approach, which applies IEA factors and eGRID emission factors in the U.S. The difference between market-based and location-based emissions are mostly due to certain plants where customers provide the electricity to Linde (which Linde purchases). Some of these plants have a very high market-based emission factor compared to the location-based emission factor, thus market-based scope 2 is higher than location-based.

[Fixed row]

(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

No

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO₂e)

16872000

(7.5.3) Methodological details

Linde defined new sustainable development targets in 2019, which set 2018 as a baseline year for the new company's targets. Those targets include targets relating to GHG emissions. The basis for those targets is a 2018 full-year pro forma value for the complete merged company according to the final organizational structure. Linde has defined 2018 as the base year for its emissions accounting and it is also the base year for its 10-year managed climate change targets. 2018 marks the year of completion of the merger between Praxair Inc. (now known as Linde Inc.) and Linde AG (now known as Linde GmbH) which was effective October 2018. The base year figure provided here is a pro forma figure for the full year of 2018 for the merged organization (final organizational structure after merger, excluding divestitures). The 2018 scope 1 pro forma figure has been externally verified. It follows the same reporting standards, methodologies and boundaries as defined for the new Linde organization in 2019.

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2018

(7.5.3) Methodological details

Not applicable Linde has defined 2018 as the base year for its emissions accounting and it is also the base year for its 10-year managed climate change targets. The year 2018 marks the year of completion of the merger effective October 2018. See <https://www.linde.com/about-linde/corporate-heritage>. Linde uses a market-based Scope 2 figure for measuring progress against its GHG targets. Therefore, Linde did not calculate a 2018 pro forma value for scope 2 using the location-based approach. A location-based scope 2 figure is reported from financial year 2019 onwards.

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

23518000.0

(7.5.3) Methodological details

Linde defined new sustainable development targets in 2019, which set 2018 as a baseline year for the new company's targets. Those targets include targets relating to GHG emissions. The basis for those targets is a 2018 full-year pro forma value for the complete merged company according to the final organizational structure. Linde has defined 2018 as the base year for its emissions accounting and it is also the base year for its 10-year managed climate change targets. The year 2018 marks the year of completion of the merger effective October 2018. See <https://www.linde.com/about-linde/corporate-heritage>. The base year figure is a pro forma figure for the full year of 2018 for the merged organization. The number is different from last year's reported market-based scope 2 base year number, due to a change in market-based emissions factors and reclassification of compressed air purchases (5% deviation from original baseline year value). The restatement of market-based scope 2 number has been externally assured.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

1540000.0

(7.5.3) Methodological details

Linde's Scope 3 Category 1 emissions include emissions from Linde's purchased raw materials. The calculation of carbon emissions from Linde's raw materials procured (except for natural gas and compressed air feedstock) is now based upon a model utilizing input-output tables and data from OECD, EXIOBASE, the U.S. Bureau of Economic Analysis and World Bank. Emissions are calculated based on GWP values from IPCC's AR 5 (2013) for a 100-year time horizon, including carbon feedbacks. To calculate Scope 3 from natural gas feedstock, Linde applies a fuel-based method based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Category 3 for Scope 3 emissions caused in the extraction, production and transportation of fuels and energy. Linde uses emission factors from DEFRA. For compressed air, Linde receives information from the supplier about the specific energy usage to provide that feedstock and calculates the resulting Scope 3 emissions based on the energy consumption and the supplier- and/or plant- specific electricity Scope 2 emissions factors.

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

965000.0

(7.5.3) Methodological details

The calculation of carbon emissions from Linde's capital goods procured is based upon a model utilizing input-output tables and data from OECD, EXIOBASE, the U.S. Bureau of Economic Analysis and World Bank. Linde continues to expand product-specific GHG emissions data from several suppliers of cylinder assets. The product carbon footprint includes the suppliers' own emissions (based on a product-specific calculation) as well as related upstream emissions. The emissions data obtained directly from suppliers is integrated into the overall Category 2 value.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

5060000.0

(7.5.3) Methodological details

The methodology used is based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Category 3, for Scope 3 emissions caused in the extraction, production and transportation of fuels and energy purchased by Linde. For electricity, Linde applies IEA factors for transmission and distribution (T&D) lifecycle losses and total upstream Well-to-Tank (WTT) factors to calculate all the Scope 3 GHG emissions released into the atmosphere from the production, processing and delivery of energy. The calculation is done on a site level for each site for which Linde purchases the power. For thermal energy, a global WTT factor for heat and steam from IEA is applied. The use of IEA factors for WTT estimates was initiated for 2023 due to wide availability of the data set. This change also resulted in a decrease in emissions. For Scope 3 emissions from transport fuels and other fuels consumed (excluding feedstocks), DEFRA factors for fuel- and energy-related emissions are used per relevant category.

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

661000.0

(7.5.3) Methodological details

Linde uses a distance-based method for calculating Scope 3 emissions from outbound deliveries of gases to its clients. Contractor miles driven are collected in each country and business or region and tracked. Linde's Scope 3 emissions resulting from delivery of products by third-party carriers were derived using the same methodology as used to calculate GHG emissions from owned trucks: Emissions from transport are calculated based on actual kilometers driven for commercial and non-commercial vehicles, multiplied by average emissions factors by vehicle type from the "Estimated U.S. Average Vehicle Emissions Rates per Vehicle by Vehicle Type using Gasoline and Diesel (Grams per mile)" from the U.S. EPA, Office of Transportation and Air Quality, personal communication, Apr. 6, 2018. Additionally, Linde considers transport services procured, resulting in emissions from the transport of construction components delivered to Linde Engineering construction sites; this is conducted mostly over sea and air, as well as gas transport falling under this scope, in modes other than trucking. For such non-truck transport, Linde uses a spend-based method.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/31/2022

(7.5.2) Base year emissions (metric tons CO2e)

14000.0

(7.5.3) Methodological details

This category includes estimates based upon global waste generated and landfilled using environmental data tables for such emissions estimates.

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/31/2021

(7.5.2) Base year emissions (metric tons CO2e)

21000.0

(7.5.3) Methodological details

Linde estimates a small amount of emissions from business travel, based on the company's air travel and car rental records, and from data provided by airlines, rental car agencies and travel service providers.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/31/2022

(7.5.2) Base year emissions (metric tons CO2e)

105000.0

(7.5.3) Methodological details

This category includes estimated emissions from commuting to work, estimated from calculations based upon actual distances from office to home for a significant portion of the employee population at one business, combined with average mileage data and emissions estimates for commuters obtained from EPA estimates. This calculation, refined from last year's methodology, confirms the reasonableness of initial estimates used last year and represents continued confidence in Linde's Scope 3 inventory.

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/31/2022

(7.5.2) Base year emissions (metric tons CO2e)

65000.0

(7.5.3) Methodological details

This category includes an estimate of electricity emissions from sites, mostly small offices, rented by Linde, where Linde does not pay for utilities directly, as well as the estimated emissions from Linde's leased passenger cars and light commercial vehicles. For 2023, the methodology for leased office space was refined and is now based on estimates that include such factors as the physical area of sites and estimates of emissions per EPA data, with calculated values then prorated across the global footprint of leased space.

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/31/2022

(7.5.2) Base year emissions (metric tons CO2e)

10000.0

(7.5.3) Methodological details

Linde's operations contain limited business activities where product is transported from its location to another end user. Product lines where such activities exist include welding/material fabrication applications and healthcare. Even in those businesses, product transport activities vary. Linde has estimated these emissions based upon assumptions of frequency of these types of activities relative to its more typical product transport patterns.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/31/2022

(7.5.2) Base year emissions (metric tons CO2e)

1.0

(7.5.3) Methodological details

Linde is at the beginning of numerous value chains and provides many intermediate products with many downstream applications, each of which has a very different GHG profile. This category includes emissions from products, including flouro gases, CO2, CH4 and N2O, based on sales and assumptions for revenue and volumes, as well as assumptions on releases. Due to the nature of gas products, in many cases, the processing of sold intermediate products by third parties (i.e., manufacturers) after sale is not distinctly separate from the use; therefore, the assumptions consider these categories as combined for both Categories 10 and 11.

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/31/2022

(7.5.2) Base year emissions (metric tons CO2e)

7831000.0

(7.5.3) Methodological details

Linde is at the beginning of numerous value chains and provides many intermediate products with many downstream applications, each of which has a very different GHG profile. This category includes emissions from products, including flouro gases, CO₂, CH₄ and N₂O, based on sales and assumptions for revenue and volumes, as well as assumptions on releases. Due to the nature of gas products, in many cases, the processing of sold intermediate products by third parties (i.e., manufacturers) after sale is not distinctly separate from the use; therefore, the assumptions consider these categories as combined for both Categories 10 and 11.

Scope 3 category 12: End of life treatment of sold products

(7.5.1) Base year end

12/31/2022

(7.5.2) Base year emissions (metric tons CO₂e)

7000.0

(7.5.3) Methodological details

Linde is at the beginning of numerous value chains and provides many intermediate products with many downstream applications, each of which has a very different GHG profile. This category includes estimated emissions from the end-of-life disposal of products. Due to the nature of gas products, in many cases, the use of sold products may also include the end of life of the product. Therefore, for flouro gases, CO₂, CH₄ and N₂O, estimates are included in use estimates and are part of Category 11. Linde does have a small portion of products that may have packaging that is eventually disposed or that may be disposed themselves. This small remainder is estimated based upon Linde waste estimations.

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO₂e)

2163000.0

(7.5.3) Methodological details

This category includes emissions for assets such as smaller on-site facilities where the customer pays for the power, and, in many cases, operates the plant. This also includes several major plants where customers pay for the power and where Linde charges a facility fee to the customer. Emissions for those plants where the

customer pays for the power are not included in Linde's Scope 2. Emissions from leased out or charged out entities are calculated on a plant level, using the same calculation methodology as for calculating indirect/Scope 2 emissions for other Linde plants. For plants where the customer pays for the power and the plant-specific emissions factors are not known, Linde uses country emissions factors from the IEA to calculate indirect emissions for those sites. HyCO plants/facilities that are owned by Linde are fully reported under Scope 1, regardless of whether they are leased out or independent on who is running the plant or providing the fuel or feedstock.

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

Franchises do not exist in Linde's operational footprint.

Scope 3 category 15: Investments

(7.5.1) Base year end

12/31/2018

(7.5.2) Base year emissions (metric tons CO2e)

4460000.0

(7.5.3) Methodological details

Linde includes in its Scope 1 and 2 reporting only subsidiaries/holdings that are reporting their financials to the company and whose results are consolidated into the company P&L. Holdings/investments that are reporting their results but are not consolidated into the P&L statement (mainly JVs consolidated at-equity) are not considered for Scope 1 and 2 emissions but are reported as Scope 3 from investments. Linde has large JV operations, especially in China. Linde calculates its emissions due to investments on a plant level. All JVs report their electricity and other fuel consumption into Linde's environmental reporting system. Linde then calculates Scope 3 from such investments for all plants in this category, by adding reported direct emissions from HyCO plants and indirect emissions from ASUs and

other plants, based on reported electricity consumption, multiplied by a country IEA factor. The emissions are allocated proportionally for JVs, based upon share of ownership, as per the GHG Protocol.

[Fixed row]

(7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

16582000

(7.6.3) Methodological details

Hydrogen plants, which represent the largest source of Linde's Scope 1 emissions, consume natural gas, both for fuel and feedstock. To determine Scope 1 emissions, the amount of carbon produced as product is subtracted. In addition, Linde calculates Scope 1 emissions from gas losses (during production and filling processes). These are calculated for nitrous oxide manufacturing and filling facilities, carbon dioxide plants, on-site refrigeration equipment and cylinder filling operations associated with CH₄, SF₆, PFCs, HFCs and NF₃. To calculate Scope 1 emissions from natural gas, Linde uses the reported natural gas factors from each production plant (depending on the mix of hydrocarbons). If a specific natural gas factor is not available or known, Linde uses a chemical natural gas to CO₂ conversion factor from the Department for Environment, Food & Rural Affairs (DEFRA), from the Government of United Kingdom. For other fuels, Linde uses DEFRA factors to convert to CO₂ equivalents. Emissions from transport are calculated based on actual kilometers driven for commercial and non-commercial vehicles, multiplied by average emission factors by vehicle type from the "Estimated U.S. Average Vehicle Emissions Rates per Vehicle by Vehicle Type using Gasoline and Diesel (Grams per mile)" from the U.S. Environmental Protection Agency (s), Office of Transportation and Air Quality, personal communication, Apr. 6, 2018.

[Fixed row]

(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

20700000

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

(7.7.4) Methodological details

The main methodology for calculating Scope 2 emissions from electricity is the market-based approach, using site-specific emissions factors by plant according to supplier contracts and utility bills, where available. For sites where such market-based factors are not known, Linde uses the most recent location-based factors from the IEA and the EPA's eGRID factors for the U.S. The largest electricity user is ASUs, which account for approximately 90 percent of all electricity used. Linde reports on all electricity and its resulting Scope 2 emissions purchased by the company. Electricity for sites where Linde does not pay the utility bill is excluded from its reported electricity number and from the reported Scope 2; however, it is tracked internally for operational purposes and for Scope 3 reporting. Linde continues to move to market-based emissions factors where possible. In some cases, market-based factors may be higher than location-based factors and may result in increases in Scope 2 emissions.. Linde also calculated Scope 2 emissions for 2023 using the location-based approach, which applies IEA factors or state factors such as eGRID emission factors in the U.S. The difference between market-based and location-based emissions are mostly due to certain plants where customers provide the electricity to Linde (which Linde purchases). Some of these plants have a very high market-based emissions factor compared to the location-based emissions factor. Where contractual instruments exist for PPAs, the applicable emissions factors are verified by the businesses. These updates take place at least annually, and they may also be updated during the year as new contractual details become in effect.

[Fixed row]

(7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

(7.8.1) Evaluation status

Select from:

Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO₂e)

3913000

(7.8.3) Emissions calculation methodology

Select all that apply

Supplier-specific method

Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

11

(7.8.5) Please explain

Linde's Scope 3 Category 1 emissions include emissions from Linde's purchased raw materials, which represent more than 95 percent of Linde's emissions from suppliers in this category. This includes raw materials and traded items, including healthcare components or hardgoods sold in Linde's shops, construction components used by Linde Engineering to build customer plants, and purchased feedstock – natural gas for hydrogen plants and compressed air for air separation plants. Procurement categories are determined as appropriate for this category, as opposed to capital goods, based upon sales patterns. The calculation of carbon emissions from Linde's raw materials procured (except for natural gas and compressed air feedstock) is now based upon a model utilizing input-output tables and data from OECD, EXIOBASE, the U.S. Bureau of Economic Analysis and World Bank. Emissions are calculated based on GWP values from IPCC's AR 5 (2013) for a 100-year time horizon, including carbon feedbacks. To calculate Scope 3 from natural gas feedstock, Linde applies a fuel-based method based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Category 3 for Scope 3 emissions caused in the extraction, production and transportation of fuels and energy. Linde uses emission factors from DEFRA.

Capital goods

(7.8.1) Evaluation status

Select from:

Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

704000

(7.8.3) Emissions calculation methodology

Select all that apply

Supplier-specific method

Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

4

(7.8.5) Please explain

Linde calculates Scope 3 Category 2 emissions from the procurement of goods, such as cylinders, tanks, healthcare, automotive or plant components capitalized, as well as production plants operated by Linde. Procurement categories are determined as appropriate for this category, as opposed to purchased goods and services, based upon sales patterns. The calculation of carbon emissions from Linde's capital goods procured is based upon a model utilizing input-output tables and data from OECD, EXIOBASE, the U.S. Bureau of Economic Analysis and World Bank. (See Category 1.) Linde continues to expand product-specific GHG emissions data from several suppliers of cylinder assets. The product carbon footprint includes the suppliers' own emissions (based on a product-specific calculation) as well as related upstream emissions. The emissions data obtained directly from suppliers is integrated into the overall Category 2 value.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.8.1) Evaluation status

Select from:

Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO₂e)

5924000

(7.8.3) Emissions calculation methodology

Select all that apply

Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Scope 3 emissions from fuel-and energy-related activities (including upstream emissions from purchased fuel, purchased electricity and transmission and distribution losses) are a significant source of Scope 3 emissions for Linde because Linde's business is energy-intensive, and energy is a significant cost for Linde. The methodology used is based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Category 3, for Scope 3 emissions caused in the extraction, production and transportation of fuels and energy purchased by Linde. For electricity, Linde applies IEA factors for transmission and distribution (T&D) lifecycle losses and total upstream Well-to-Tank (WTT) factors to calculate all the Scope 3 GHG emissions released into the atmosphere from the production,

processing and delivery of energy. The calculation is done on a site level for each site for which Linde purchases the power. For thermal energy, a global WTT factor for heat and steam from IEA is applied. The use of IEA factors for WTT estimates was initiated for 2023 due to wide availability of the data set. This change also resulted in a decrease in emissions. For Scope 3 emissions from transport fuels and other fuels consumed (excluding feedstocks), DEFRA factors for fuel- and energy-related emissions are used per relevant category.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO₂e)

658000

(7.8.3) Emissions calculation methodology

Select all that apply

Supplier-specific method

Spend-based method

Fuel-based method

Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

82

(7.8.5) Please explain

This category includes emissions related to Linde's inbound and outbound logistics that are paid by Linde and are carried out by external carriers. Linde uses a distance-based method for calculating Scope 3 emissions from outbound deliveries of gases to its clients. Contractor miles driven are collected in each country and business or region and tracked. Linde's Scope 3 emissions resulting from delivery of products by third-party carriers were derived using the same methodology as used to calculate GHG emissions from owned trucks: Emissions from transport are calculated based on actual kilometers driven for commercial and non-commercial vehicles, multiplied by average emissions factors by vehicle type from the "Estimated U.S. Average Vehicle Emissions Rates per Vehicle by Vehicle Type using Gasoline and Diesel (Grams per mile)" from the U.S. EPA, Office of Transportation and Air Quality, personal communication, Apr. 6, 2018. Additionally, Linde

considers transport services procured, resulting in emissions from the transport of construction components delivered to Linde Engineering construction sites; this is conducted mostly over sea and air, as well as gas transport falling under this scope, in modes other than trucking. For such non-truck transport, Linde uses a spend-based method. (See also Category 1.)

Waste generated in operations

(7.8.1) Evaluation status

Select from:

Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO₂e)

14800

(7.8.3) Emissions calculation methodology

Select all that apply

Waste-type-specific method

Other, please specify :EPA WARM estimate

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

This category includes estimates based upon global waste generated and landfilled using environmental data tables for such emissions estimates.

Business travel

(7.8.1) Evaluation status

Select from:

Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

19600

(7.8.3) Emissions calculation methodology

Select all that apply

Supplier-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Linde estimates a small amount of emissions from business travel, based on the company's air travel and car rental records, and from data provided by airlines, rental car agencies and travel service providers.

Employee commuting

(7.8.1) Evaluation status

Select from:

Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

195000

(7.8.3) Emissions calculation methodology

Select all that apply

Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

(7.8.5) Please explain

This category includes estimated emissions from commuting to work, estimated from calculations based upon actual distances from office to home for a significant portion of the employee population at one business, combined with average mileage data and emissions estimates for commuters obtained from EPA estimates. This calculation, refined from last year's methodology, confirms the reasonableness of initial estimates used last year and represents continued confidence in Linde's Scope 3 inventory.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

53900

(7.8.3) Emissions calculation methodology

Select all that apply

Average data method

Asset-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

50

(7.8.5) Please explain

This category includes an estimate of electricity emissions from sites, mostly small offices, rented by Linde, where Linde does not pay for utilities directly, as well as the estimated emissions from Linde's leased passenger cars and light commercial vehicles. For 2023, the methodology for leased office space was refined and is now based on estimates that include such factors as the physical area of sites and estimates of emissions per EPA data, with calculated values then prorated across the global footprint of leased space.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

- Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

9700

(7.8.3) Emissions calculation methodology

Select all that apply

- Average data method
 Other, please specify :average based upon activity estimates for all transportation

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

1

(7.8.5) Please explain

Linde's operations contain limited business activities where product is transported from its location to another end user. Product lines where such activities exist include welding/material fabrication applications and healthcare. Even in those businesses, product transport activities vary. Linde has estimated these emissions based upon assumptions of frequency of these types of activities relative to its more typical product transport patterns.

Processing of sold products

(7.8.1) Evaluation status

Select from:

- Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

(7.8.3) Emissions calculation methodology

Select all that apply

- Average data method
- Spend-based method
- Other, please specify :average data method based upon production values. Note: We combine emissions)

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

25

(7.8.5) Please explain

Linde is at the beginning of numerous value chains and provides many intermediate products with many downstream applications, each of which has a very different GHG profile. This category includes emissions from products, including flouro gases, CO2, CH4 and N2O, based on sales and assumptions for revenue and volumes, as well as assumptions on releases. Due to the nature of gas products, in many cases, the processing of sold intermediate products by third parties (i.e., manufacturers) after sale is not distinctly separate from the use; therefore, the assumptions consider these categories as combined for both Categories 10 and 11.

Use of sold products

(7.8.1) Evaluation status

Select from:

- Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

8528000

(7.8.3) Emissions calculation methodology

Select all that apply

- Average data method

Average product method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

25

(7.8.5) Please explain

Linde is at the beginning of numerous value chains and provides many intermediate products with many downstream applications, each of which has a very different GHG profile. This category includes emissions from products, including flouro gases, CO2, CH4 and N2O, based on sales and assumptions for revenue and volumes, as well as assumptions on releases. Due to the nature of gas products, in many cases, the processing of sold intermediate products by third parties (i.e., manufacturers) after sale is not distinctly separate from the use; therefore, the assumptions consider these categories as combined for both Categories 10 and 11.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

7500

(7.8.3) Emissions calculation methodology

Select all that apply

Average data method

Average product method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

1

(7.8.5) Please explain

Linde is at the beginning of numerous value chains and provides many intermediate products with many downstream applications, each of which has a very different GHG profile. This category includes estimated emissions from the end-of-life disposal of products. Due to the nature of gas products, in many cases, the use of sold products may also include the end of life of the product. Therefore, for flouro gases, CO₂, CH₄ and N₂O, estimates are included in use estimates and are part of Category 11. Linde does have a small portion of products that may have packaging that is eventually disposed or that may be disposed themselves. This small remainder is estimated based upon Linde waste estimations. Although this portion is small and not deemed relevant, Linde will continue efforts to quantify and estimate.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

- Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO₂e)

2756000

(7.8.3) Emissions calculation methodology

Select all that apply

- Average data method
- Asset-specific method
- Site-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

50

(7.8.5) Please explain

This category includes emissions for assets such as smaller on-site facilities where the customer pays for the power, and, in many cases, operates the plant. This also includes several major plants where customers pay for the power and where Linde charges a facility fee to the customer. Emissions for those plants where the customer pays for the power are not included in Linde's Scope 2. Emissions from leased out or charged out entities are calculated on a plant level, using the same calculation methodology as for calculating indirect/Scope 2 emissions for other Linde plants. For plants where the customer pays for the power and the plant-specific emissions factors are not known, Linde uses country emissions factors from the IEA to calculate indirect emissions for those sites. HyCO plants/facilities that are

owned by Linde are fully reported under Scope 1, regardless of whether they are leased out or independent on who is running the plant or providing the fuel or feedstock.

Franchises

(7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

(7.8.5) Please explain

Linde does not report emissions in one category, franchises, as this does not exist in Linde's operational footprint

Investments

(7.8.1) Evaluation status

Select from:

Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

2611000

(7.8.3) Emissions calculation methodology

Select all that apply

Investment-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Linde includes in its Scope 1 and 2 reporting only subsidiaries/holdings that are reporting their financials to the company and whose results are consolidated into the company P&L. Holdings/investments that are reporting their results but are not consolidated into the P&L statement (mainly JVs consolidated at-equity) are not considered for Scope 1 and 2 emissions but are reported as Scope 3 from investments. Linde has large JV operations, especially in China. Linde calculates its emissions due to investments on a plant level. All JVs report their electricity and other fuel consumption into Linde's environmental reporting system. Linde then calculates Scope 3 from such investments for all plants in this category, by adding reported direct emissions from HyCO plants and indirect emissions from ASUs and other plants, based on reported electricity consumption, multiplied by a country IEA factor. The emissions are allocated proportionally for JVs, based upon share of ownership, as per the GHG Protocol.

Other (upstream)

(7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

(7.8.5) Please explain

No other categories exist (cannot delete row)

Other (downstream)

(7.8.1) Evaluation status

Select from:

Not relevant, explanation provided

(7.8.5) Please explain

No other categories exist (cannot delete row)

[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

| | Verification/assurance status |
|--|---|
| Scope 1 | <i>Select from:</i> <input checked="" type="checkbox"/> Third-party verification or assurance process in place |
| Scope 2 (location-based or market-based) | <i>Select from:</i> <input checked="" type="checkbox"/> Third-party verification or assurance process in place |
| Scope 3 | <i>Select from:</i> <input checked="" type="checkbox"/> Third-party verification or assurance process in place |

[Fixed row]

(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:

Annual process

(7.9.1.2) Status in the current reporting year

Select from:

Complete

(7.9.1.3) Type of verification or assurance

Select from:

Reasonable assurance

(7.9.1.4) Attach the statement

2023-ekpi-assurance-statement.pdf

(7.9.1.5) Page/section reference

all, especially pages 1 and 2

(7.9.1.6) Relevant standard

Select from:

ISO14064-3

(7.9.1.7) Proportion of reported emissions verified (%)

100

[Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

(7.9.2.1) Scope 2 approach

Select from:

Scope 2 market-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

Annual process

(7.9.2.3) Status in the current reporting year

Select from:

Complete

(7.9.2.4) Type of verification or assurance

Select from:

Reasonable assurance

(7.9.2.5) Attach the statement

2023-ekpi-assurance-statement.pdf

(7.9.2.6) Page/ section reference

all, especially pages 1 and 2

(7.9.2.7) Relevant standard

Select from:

ISO14064-3

(7.9.2.8) Proportion of reported emissions verified (%)

100

[Add row]

(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Row 1

(7.9.3.1) Scope 3 category

Select all that apply

- Scope 3: Purchased goods and services
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution

(7.9.3.2) Verification or assurance cycle in place

Select from:

- Annual process

(7.9.3.3) Status in the current reporting year

Select from:

- Complete

(7.9.3.4) Type of verification or assurance

Select from:

- Limited assurance

(7.9.3.5) Attach the statement

Linde - Scope 3 Assurance Statement - RY 2023.pdf

(7.9.3.6) Page/section reference

See page 3 for declarations. See pages 1-3 for auditor's statement and background.

(7.9.3.7) Relevant standard

Select from:

- ISAE3000

(7.9.3.8) Proportion of reported emissions verified (%)

[Add row]

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

170000

(7.10.1.2) Direction of change in emissions

Select from:

Decreased

(7.10.1.3) Emissions value (percentage)

0.4

(7.10.1.4) Please explain calculation

*((Change in Scope 1 2 emissions attributed to the reason described in column 1) / (Previous year Scope 12 emissions)) 100: (170,000/38,794,000)*100 0.4*

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

30000

(7.10.1.2) Direction of change in emissions

Select from:

Decreased

(7.10.1.3) Emissions value (percentage)

0.08

(7.10.1.4) Please explain calculation

*((Change in Scope 1 2 emissions attributed to the reason described in column 1) / (Previous year Scope 12 emissions)) 100: (30,000/38,794,000)*100 0.08*

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

700000

(7.10.1.2) Direction of change in emissions

Select from:

Decreased

(7.10.1.3) Emissions value (percentage)

1.8

(7.10.1.4) Please explain calculation

*((Change in Scope 1 2 emissions attributed to the reason described in column 1) / (Previous year Scope 12 emissions)) 100: (700,000/38,794,000)*100 1.8*

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

no change

Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

no change

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

500000

(7.10.1.2) Direction of change in emissions

Select from:

Increased

(7.10.1.3) Emissions value (percentage)

1.3

(7.10.1.4) Please explain calculation

*((Change in Scope 1 2 emissions attributed to the reason described in column 1) / (Previous year Scope 12 emissions)) 100: (500,000/38,794,000)*100 1.3*

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

10000

(7.10.1.2) Direction of change in emissions

Select from:

Decreased

(7.10.1.3) Emissions value (percentage)

0.03

(7.10.1.4) Please explain calculation

*((Change in Scope 1 2 emissions attributed to the reason described in column 1) / (Previous year Scope 12 emissions)) 100: (10,000/38,794,000)*100 0.03*

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

230000

(7.10.1.2) Direction of change in emissions

Select from:

Decreased

(7.10.1.3) Emissions value (percentage)

0.6

(7.10.1.4) Please explain calculation

*((Change in Scope 1 2 emissions attributed to the reason described in column 1) / (Previous year Scope 12 emissions)) 100: (230,000/38,794,000)*100 0.6*

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

no change

Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

no change

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

no additional data
[Fixed row]

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:

No

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Select from:

Yes

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

(7.15.1.1) Greenhouse gas

Select from:

CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

15997798

(7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

CH4

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

55050

(7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

287607

(7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

Row 4

(7.15.1.1) Greenhouse gas

Select from:

HFCs

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

205996

(7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

Row 5

(7.15.1.1) Greenhouse gas

Select from:

Other, please specify :SF6/NF3

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

35725

(7.15.1.3) GWP Reference

Select from:

IPCC Fifth Assessment Report (AR5 – 100 year)

[Add row]

(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply

By business division

(7.17.1) Break down your total gross global Scope 1 emissions by business division.

| | Business division | Scope 1 emissions (metric ton CO2e) |
|-------|------------------------------------|-------------------------------------|
| Row 1 | <i>Air Separation Units (ASUs)</i> | 2414435 |
| Row 2 | <i>CO2 Plants</i> | 873944 |
| Row 3 | <i>Other Global operations</i> | 122143 |
| Row 4 | <i>Hydrogen Production</i> | 12152051 |
| Row 5 | <i>Specialty Gases operations</i> | 462235 |
| Row 6 | <i>Trucking</i> | 557368 |

[Add row]

(7.19) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

| | Gross Scope 1 emissions, metric tons CO2e | Comment |
|---------------------------------|---|---|
| Chemicals production activities | 15993186 | <i>Includes Scope 1 emissions from all gases operations and excludes engineering, other business functions, and trucking.</i> |

[Fixed row]

(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

Select all that apply

By business division

(7.20.1) Break down your total gross global Scope 2 emissions by business division.

| | Business division | Scope 2, location-based (metric tons CO2e) | Scope 2, market-based (metric tons CO2e) |
|-------|------------------------------------|--|--|
| Row 1 | <i>Air Separation Units (ASUs)</i> | <i>19091850</i> | <i>20075741</i> |
| Row 2 | <i>All other operations</i> | <i>587265</i> | <i>548836</i> |
| Row 3 | <i>Hydrogen Production</i> | <i>1005572</i> | <i>937129</i> |

[Add row]

(7.21) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

| | Scope 2, location-based, metric tons CO2e | Scope 2, market-based (if applicable), metric tons CO2e | Comment |
|---------------------------------|---|---|--|
| Chemicals production activities | <i>20097421</i> | <i>21012870</i> | <i>Includes Scope 2 emissions from all gases operations and excludes engineering and other business functions.</i> |

[Fixed row]

(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

Consolidated accounting group

(7.22.1) Scope 1 emissions (metric tons CO2e)

16582000

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

20700000

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

21562000

(7.22.4) Please explain

The Scope 1 and 2 emissions data in Linde's CDP response is for the consolidated accounting group, which is aligned with our financial reporting boundary.

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

0

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

0

(7.22.4) Please explain

We do not have any other entities included in our Scope 1 and 2 emissions data.

[Fixed row]

(7.25) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.

Row 1

(7.25.1) Purchased feedstock

Select from:

Natural gas

(7.25.2) Percentage of Scope 3, Category 1 tCO₂e from purchased feedstock

54

(7.25.3) Explain calculation methodology

To calculate scope 3 emissions from natural gas purchased and used as feedstock Linde applies the same methodology and calculations as for natural gas purchased as fuel/energy, which is based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Category 3 for scope 3 emissions caused in the extraction, production, and transportation of fuels and energy. Linde uses DEFRA factors for calculating scope 3 emissions from fuel/feedstock consumption.

[Add row]

(7.25.1) Disclose sales of products that are greenhouse gases.

Carbon dioxide (CO₂)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

This information is considered business confidential. Linde's annual sales of methane, nitrous oxide, HFCs, PFCs, NF₃ and SF₆, combined, are less than 1% of sales.

Methane (CH₄)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

This information is considered business confidential. Linde's annual sales of methane, nitrous oxide, HFCs, PFCs, NF3 and SF6, combined, are less than 1% of sales.

Nitrous oxide (N2O)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

This information is considered business confidential. Linde's annual sales of methane, nitrous oxide, HFCs, PFCs, NF3 and SF6, combined, are less than 1% of sales.

Hydrofluorocarbons (HFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

This information is considered business confidential. Linde's annual sales of methane, nitrous oxide, HFCs, PFCs, NF3 and SF6, combined, are less than 1% of sales.

Perfluorocarbons (PFC)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

This information is considered business confidential. Linde's annual sales of methane, nitrous oxide, HFCs, PFCs, NF3 and SF6, combined, are less than 1% of sales.

Sulphur hexafluoride (SF6)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

This information is considered business confidential. Linde's annual sales of methane, nitrous oxide, HFCs, PFCs, NF3 and SF6, combined, are less than 1% of sales.

Nitrogen trifluoride (NF3)

(7.25.1.1) Sales, metric tons

0

(7.25.1.2) Comment

This information is considered business confidential. Linde's annual sales of methane, nitrous oxide, HFCs, PFCs, NF3 and SF6, combined, are less than 1% of sales.

[Fixed row]

<7.26 deleted>

(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Row 1

(7.27.1) Allocation challenges

Select from:

Doing so would require we disclose business sensitive/proprietary information

(7.27.2) Please explain what would help you overcome these challenges

Note that we currently do allocate emissions to different customers and have done so for many years. In terms of challenges, note that much of Linde's product carbon footprint is derived from the energy to produce our product. Energy utilization is business sensitive for the Industrial Gas sector. For the purpose of external reporting, emissions are allocated using published industry standard emission factors for production, where those factors are available through benchmark studies, to provide a reliable estimate of emissions to customers, without disclosing confidential or sensitive production information.

[Add row]

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

(7.28.1) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Select from:

No

(7.28.3) Primary reason for no plans to develop your capabilities to allocate emissions to your customers

Select from:

Capabilities to allocate emissions to customers already maximized

(7.28.4) Explain why you do not plan to develop capabilities to allocate emissions to your customers

Please note that we already allocate emissions to customers and have done so for several years. As always, we seek continuous improvement in processes- but largely, we have been able to develop processes that estimate the emissions, based upon industry references, while managing the confidentiality needs and constraints.

[Fixed row]

(7.30) Select which energy-related activities your organization has undertaken.

| | Indicate whether your organization undertook this energy-related activity in the reporting year |
|--|---|
| Consumption of fuel (excluding feedstocks) | Select from: <input checked="" type="checkbox"/> Yes |
| Consumption of purchased or acquired electricity | Select from: <input checked="" type="checkbox"/> Yes |
| Consumption of purchased or acquired heat | Select from: <input checked="" type="checkbox"/> No |
| Consumption of purchased or acquired steam | Select from: <input checked="" type="checkbox"/> Yes |
| Consumption of purchased or acquired cooling | Select from: <input checked="" type="checkbox"/> No |
| Generation of electricity, heat, steam, or cooling | Select from: <input checked="" type="checkbox"/> Yes |

[Fixed row]

(7.30.1) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:

LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

20134000

(7.30.1.4) Total (renewable and non-renewable) MWh

20134000

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:

Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

13016000

(7.30.1.3) MWh from non-renewable sources

28585000

(7.30.1.4) Total (renewable and non-renewable) MWh

41601000

Consumption of purchased or acquired steam

(7.30.1.1) Heating value

Select from:

Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

12000

(7.30.1.3) MWh from non-renewable sources

9648000

(7.30.1.4) Total (renewable and non-renewable) MWh

9660000

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:

Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

8000

(7.30.1.4) Total (renewable and non-renewable) MWh

8000

Total energy consumption

(7.30.1.1) Heating value

Select from:

Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

13036000

(7.30.1.3) MWh from non-renewable sources

58367000

(7.30.1.4) Total (renewable and non-renewable) MWh

71403000

[Fixed row]

(7.30.3) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

Consumption of fuel (excluding feedstocks)

(7.30.3.1) Heating value

Select from:

LHV (lower heating value)

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

0

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

17925000

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

17925000

Consumption of purchased or acquired electricity

(7.30.3.1) Heating value

Select from:

Unable to confirm heating value

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

12930000

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

28409000

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

41339000

Consumption of purchased or acquired steam

(7.30.3.1) Heating value

Select from:

Unable to confirm heating value

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

6340

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

9647000

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

9653340

Consumption of self-generated non-fuel renewable energy

(7.30.3.1) Heating value

Select from:

Unable to confirm heating value

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

7000

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

7000

Total energy consumption

(7.30.3.1) Heating value

Select from:

Unable to confirm heating value

(7.30.3.2) MWh consumed from renewable sources inside chemical sector boundary

12943340

(7.30.3.3) MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

55981000

(7.30.3.4) MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

(7.30.3.5) Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

68924340

[Fixed row]

(7.30.6) Select the applications of your organization's consumption of fuel.

| | Indicate whether your organization undertakes this fuel application |
|---|---|
| Consumption of fuel for the generation of electricity | Select from: <input checked="" type="checkbox"/> No |
| Consumption of fuel for the generation of heat | Select from: <input checked="" type="checkbox"/> Yes |
| Consumption of fuel for the generation of steam | Select from: <input checked="" type="checkbox"/> Yes |
| Consumption of fuel for the generation of cooling | Select from: <input checked="" type="checkbox"/> No |
| Consumption of fuel for co-generation or tri-generation | Select from: <input checked="" type="checkbox"/> Yes |

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

Other biomass

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

Coal

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

Oil

(7.30.7.1) Heating value

Select from:

LHV

(7.30.7.2) Total fuel MWh consumed by the organization

60000

(7.30.7.4) MWh fuel consumed for self-generation of heat

60000

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

Gas

(7.30.7.1) Heating value

Select from:

LHV

(7.30.7.2) Total fuel MWh consumed by the organization

17800000

(7.30.7.4) MWh fuel consumed for self-generation of heat

7211000

(7.30.7.5) MWh fuel consumed for self-generation of steam

816000

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

9773000

(7.30.7.8) Comment

natural gas

Other non-renewable fuels (e.g. non-renewable hydrogen)

(7.30.7.1) Heating value

Select from:

LHV

(7.30.7.2) Total fuel MWh consumed by the organization

2274000

(7.30.7.4) MWh fuel consumed for self-generation of heat

2274000

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

All remaining fuels, mostly comprised of diesel consumption by the transport fleet.

Total fuel

(7.30.7.1) Heating value

Select from:

LHV

(7.30.7.2) Total fuel MWh consumed by the organization

20134000

(7.30.7.4) MWh fuel consumed for self-generation of heat

9545000

(7.30.7.5) MWh fuel consumed for self-generation of steam

816000

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

9773000

[Fixed row]

(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Electricity

(7.30.9.1) Total Gross generation (MWh)

8000

(7.30.9.2) Generation that is consumed by the organization (MWh)

8000

(7.30.9.3) Gross generation from renewable sources (MWh)

8000

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

8000

Heat

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Steam

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Cooling

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

[Fixed row]

(7.30.11) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

Electricity

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

7000

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

7000

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

7000

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Heat

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

0

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

0

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Steam

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

0

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

0

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Cooling

(7.30.11.1) Total gross generation inside chemicals sector boundary (MWh)

0

(7.30.11.2) Generation that is consumed inside chemicals sector boundary (MWh)

0

(7.30.11.3) Generation from renewable sources inside chemical sector boundary (MWh)

0

(7.30.11.4) Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

[Fixed row]

(7.30.14) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in 7.7.

Row 1

(7.30.14.1) Country/area

Select from:

United States of America

(7.30.14.2) Sourcing method

Select from:

Default delivered electricity from the grid (e.g. standard product offering by an energy supplier) from a grid that is 95% or more low-carbon and where there is no mechanism for specifically allocating low-carbon electricity

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

285000

(7.30.14.6) Tracking instrument used

Select from:

Other, please specify :Tracked by site power consumption

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 2

(7.30.14.1) Country/area

Select from:

Mexico

(7.30.14.2) Sourcing method

Select from:

Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

122961

(7.30.14.6) Tracking instrument used

Select from:

Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Mexico

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2013

Row 3

(7.30.14.1) Country/area

Select from:

Ecuador

(7.30.14.2) Sourcing method

Select from:

Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Hydropower (capacity unknown)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

27933

(7.30.14.6) Tracking instrument used

Select from:

Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Ecuador

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2017

Row 4

(7.30.14.1) Country/area

Select from:

Colombia

(7.30.14.2) Sourcing method

Select from:

Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

87280

(7.30.14.6) Tracking instrument used

Select from:

Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Colombia

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2020

Row 5

(7.30.14.1) Country/area

Select from:

Brazil

(7.30.14.2) Sourcing method

Select from:

Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind and solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1370000

(7.30.14.6) Tracking instrument used

Select from:

I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Brazil

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2011

Row 6

(7.30.14.1) Country/area

Select from:

China

(7.30.14.2) Sourcing method

Select from:

Financial (virtual) power purchase agreement (VPPA)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind, solar, and sustainable biomass

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

115000

(7.30.14.6) Tracking instrument used

Select from:

GEC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

China

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 7

(7.30.14.1) Country/area

Select from:

Republic of Korea

(7.30.14.2) Sourcing method

Select from:

Purchase from an on-site installation owned by a third party (on-site PPA)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

792

(7.30.14.6) Tracking instrument used

Select from:

No instrument used

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Republic of Korea

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 8

(7.30.14.1) Country/area

Select from:

New Zealand

(7.30.14.2) Sourcing method

Select from:

Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Large hydropower (>25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

74182

(7.30.14.6) Tracking instrument used

Select from:

NZECS

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

New Zealand

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 9

(7.30.14.1) Country/area

Select from:

Sweden

(7.30.14.2) Sourcing method

Select from:

Physical power purchase agreement (physical PPA) with a grid-connected generator

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Small hydropower (<25 MW)

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

50000

(7.30.14.6) Tracking instrument used

Select from:

GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Sweden

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 10

(7.30.14.1) Country/area

Select from:

Austria

(7.30.14.2) Sourcing method

Select from:

Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind, solar, and hydropower

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

33624

(7.30.14.6) Tracking instrument used

Select from:

GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Austria

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 11

(7.30.14.1) Country/area

Select from:

Poland

(7.30.14.2) Sourcing method

Select from:

Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind and solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

101731

(7.30.14.6) Tracking instrument used

Select from:

I-REC

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Poland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

Yes

(7.30.14.9) Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2008

Row 12

(7.30.14.1) Country/area

Select from:

Germany

(7.30.14.2) Sourcing method

Select from:

Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind and solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

30000

(7.30.14.6) Tracking instrument used

Select from:

GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Germany

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 13

(7.30.14.1) Country/area

Select from:

Spain

(7.30.14.2) Sourcing method

Select from:

Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind, solar, and hydropower

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

96300

(7.30.14.6) Tracking instrument used

Select from:

GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Spain

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 14

(7.30.14.1) Country/area

Select from:

Portugal

(7.30.14.2) Sourcing method

Select from:

Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind, solar, and hydropower

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

39021

(7.30.14.6) Tracking instrument used

Select from:

GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Portugal

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 15

(7.30.14.1) Country/area

Select from:

Netherlands

(7.30.14.2) Sourcing method

Select from:

Project-specific contract with an electricity supplier

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind and solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

435000

(7.30.14.6) Tracking instrument used

Select from:

GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Netherlands

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 16

(7.30.14.1) Country/area

Select from:

Switzerland

(7.30.14.2) Sourcing method

Select from:

Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Nuclear

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

93700

(7.30.14.6) Tracking instrument used

Select from:

GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Switzerland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 17

(7.30.14.1) Country/area

Select from:

United Kingdom of Great Britain and Northern Ireland

(7.30.14.2) Sourcing method

Select from:

Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind and solar

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1320663

(7.30.14.6) Tracking instrument used

Select from:

REGO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

United Kingdom of Great Britain and Northern Ireland

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 18

(7.30.14.1) Country/area

Select from:

United States of America

(7.30.14.2) Sourcing method

Select from:

Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Nuclear

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

573000

(7.30.14.6) Tracking instrument used

Select from:

Other, please specify :Tracked by site power consumption

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

United States of America

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 19

(7.30.14.1) Country/area

Select from:

China

(7.30.14.2) Sourcing method

Select from:

Financial (virtual) power purchase agreement (VPPA)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Nuclear

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

485150

(7.30.14.6) Tracking instrument used

Select from:

Other, please specify :We purchase nuclear power via the power market and assign to our sites by agent.

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

China

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 20

(7.30.14.1) Country/area

Select from:

Sweden

(7.30.14.2) Sourcing method

Select from:

Unbundled procurement of energy attribute certificates (EACs)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Nuclear

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

120000

(7.30.14.6) Tracking instrument used

Select from:

GO

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Sweden

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 21

(7.30.14.1) Country/area

Select from:

Germany

(7.30.14.2) Sourcing method

Select from:

Purchase from an on-site installation owned by a third party (on-site PPA)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :Wind, solar, and hydropower

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

17668

(7.30.14.6) Tracking instrument used

Select from:

Other, please specify : TÜV Nord

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Germany

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 22

(7.30.14.1) Country/area

Select from:

Paraguay

(7.30.14.2) Sourcing method

Select from:

Default delivered electricity from the grid (e.g. standard product offering by an energy supplier) from a grid that is 95% or more low-carbon and where there is no mechanism for specifically allocating low-carbon electricity

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :renewable mix

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

20000

(7.30.14.6) Tracking instrument used

Select from:

Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Paraguay

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 23

(7.30.14.1) Country/area

Select from:

Philippines

(7.30.14.2) Sourcing method

Select from:

Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :renewable mix

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

103000

(7.30.14.6) Tracking instrument used

Select from:

Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

Philippines

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

Row 24

(7.30.14.1) Country/area

Select from:

France

(7.30.14.2) Sourcing method

Select from:

Retail supply contract with an electricity supplier (retail green electricity)

(7.30.14.3) Energy carrier

Select from:

Electricity

(7.30.14.4) Low-carbon technology type

Select from:

Renewable energy mix, please specify :renewable mix

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

22000

(7.30.14.6) Tracking instrument used

Select from:

Contract

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

France

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

No

[Add row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Algeria

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Angola

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Slovakia

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Solomon Islands

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

South Africa

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Spain

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Sri Lanka

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Sweden

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Switzerland

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Taiwan, China

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Thailand

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Tunisia

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Turkey

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Uganda

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Ukraine

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

United Arab Emirates

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

United Kingdom of Great Britain and Northern Ireland

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

United Republic of Tanzania

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

United States of America

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Uruguay

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Venezuela (Bolivarian Republic of)

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Viet Nam

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

Zambia

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

0.00

[Fixed row]

(7.31) Does your organization consume fuels as feedstocks for chemical production activities?

Select from:

Yes

(7.31.1) Disclose details on your organization's consumption of feedstocks for chemical production activities.

Row 1

(7.31.1.1) Fuels used as feedstocks

Select from:

Natural gas

(7.31.1.2) Total consumption

200000

(7.31.1.3) Total consumption unit

Select from:

million cubic feet

(7.31.1.4) Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

55.5

(7.31.1.5) Heating value of feedstock, MWh per consumption unit

280

(7.31.1.6) Heating value

Select from:

LHV

(7.31.1.7) Comment

Figures back calculated using standard conversions as Feedstock is originally measured in MWh as per fuel above. Using the feedstock data provided here and the fuel consumption data provided in 7.30.7 to calculate GHG emissions does not take into account the carbon that leaves HYCO plants as product. Not all of the carbon feedstock is emitted in the form of a greenhouse gas, because a portion is captured and sold as product (for example, Linde sells CO2 to beverage makers for carbonation).

Row 3

(7.31.1.1) Fuels used as feedstocks

Select from:

Heavy fuel oil

(7.31.1.2) Total consumption

220

(7.31.1.3) Total consumption unit

Select from:

thousand metric tons

(7.31.1.4) Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

3412

(7.31.1.5) Heating value of feedstock, MWh per consumption unit

12000

(7.31.1.6) Heating value

Select from:

HHV

(7.31.1.7) Comment

Figures back calculated using standard conversions as Feedstock originally measured in MWh as per fuel above

Row 4

(7.31.1.1) Fuels used as feedstocks

Select from:

Naphtha

(7.31.1.2) Total consumption

260

(7.31.1.3) Total consumption unit

Select from:

thousand metric tons

(7.31.1.4) Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

3800.0

(7.31.1.5) Heating value of feedstock, MWh per consumption unit

13300

(7.31.1.6) Heating value

Select from:

HHV

(7.31.1.7) Comment

Figures back calculated using standard conversions as Feedstock originally measured in MWh as per fuel above. Using the feedstock data provided here and the fuel consumption data provided in 7.30.7 to calculate GHG emissions does not take into account the carbon that leaves HYCO plants as product. Not all of the carbon feedstock is emitted in the form of a greenhouse gas, because a portion is captured and sold as product (for example, Linde sells CO2 to beverage makers for carbonation).

Row 5

(7.31.1.1) Fuels used as feedstocks

Select from:

Other, please specify :Range of fuels and customer waste gases

(7.31.1.2) Total consumption

22000

(7.31.1.3) Total consumption unit

Select from:

million cubic feet

(7.31.1.4) Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

65

(7.31.1.5) Heating value of feedstock, MWh per consumption unit

240.0

(7.31.1.6) Heating value

Select from:

HHV

(7.31.1.7) Comment

Figures back calculated using standard conversions as Feedstock originally measured in MWh, average values calculated across range of fuels consumed as feedstocks

[Add row]

(7.31.2) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

Oil

(7.31.2.1) Percentage of total chemical feedstock (%)

4

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:

No change

Natural Gas

(7.31.2.1) Percentage of total chemical feedstock (%)

85

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:

No change

Coal

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:

No change

Biomass

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:

No change

Waste (non-biomass)

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:

No change

Fossil fuel (where coal, gas, oil cannot be distinguished)

(7.31.2.1) Percentage of total chemical feedstock (%)

11

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:

No change

Unknown source or unable to disaggregate

(7.31.2.1) Percentage of total chemical feedstock (%)

0

(7.31.2.2) Direction of change in percentage of total chemical feedstock from previous year

Select from:

No change

[Fixed row]

(7.39) Provide details on your organization's chemical products.

Row 1

(7.39.1) Output product

Select from:

Specialty chemicals

(7.39.2) Production (metric tons)

0

(7.39.3) Capacity (metric tons)

0

(7.39.4) Direct emissions intensity (metric tons CO2e per metric ton of product)

0

(7.39.5) Electricity intensity (MWh per metric ton of product)

0

(7.39.6) Steam intensity (MWh per metric ton of product)

0

(7.39.7) Steam/ heat recovered (MWh per metric ton of product)

0

(7.39.8) Comment

*This information is considered business confidential.
[Add row]*

(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Row 1

(7.45.1) Intensity figure

0.001161

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

38144000

(7.45.3) Metric denominator

Select from:

unit total revenue

(7.45.4) Metric denominator: Unit total

32854000000

(7.45.5) Scope 2 figure used

Select from:

Market-based

(7.45.6) % change from previous year

0.2

(7.45.7) Direction of change

Select from:

Decreased

(7.45.8) Reasons for change

Select all that apply

Change in renewable energy consumption

Divestment

Change in output

Change in boundary

(7.45.9) Please explain

The continued management of GHG emissions intensity contributed to stable/ slight decrease in intensity. Factors for the 0.2% change include: 1) Divestments 2) Sales (denominator) contributed to a slight decrease in 2023. This is partly due to volume / output 2) stable renewable and low carbon energy with positive impacts in emissions factors 3) Emissions reduction initiatives help lower the numerator. The lowering in emissions is also due to Linde's continuous efforts in productivity and

efficiency measures implemented during the year. Also, activities that support Linde's 35 by 35 goal to reduce absolute GHG emissions contribute to the stability/reduction.

Row 2

(7.45.1) Intensity figure

0.00318

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

38144000

(7.45.3) Metric denominator

Select from:

Other, please specify :EBITDA

(7.45.4) Metric denominator: Unit total

12007000000

(7.45.5) Scope 2 figure used

Select from:

Market-based

(7.45.6) % change from previous year

11

(7.45.7) Direction of change

Select from:

Decreased

(7.45.8) Reasons for change

Select all that apply

- Change in renewable energy consumption
- Divestment
- Change in output
- Change in boundary

(7.45.9) Please explain

The continued management of GHG emissions intensity contributed to stable/ slight decrease in intensity. Factors for the 11% change include: 1) Divestments 2) Relatively large (10%) increase in EBITDA (denominator) increase in 2023, relative to 2022 3) stable renewable and low carbon energy totals, along with increase in positive impacts in emissions factors 4) Emissions reduction initiatives help lower the numerator. The lowering in emissions is also due to Linde's continuous efforts in productivity and efficiency measures implemented during the year. Also, activities that support Linde's 35 by 35 goal to reduce absolute GHG emissions contribute to the stability/ reduction.

[Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

- Absolute target

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.1) Target reference number

Select from:

- Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

- Yes, and this target has been approved by the Science Based Targets initiative

(7.53.1.3) Science Based Targets initiative official validation letter

SBTi Validation Letter _ Linde.pdf

(7.53.1.4) Target ambition

Select from:

- Well-below 2°C aligned

(7.53.1.5) Date target was set

10/10/2021

(7.53.1.6) Target coverage

Select from:

- Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

- Carbon dioxide (CO2)

(7.53.1.8) Scopes

Select all that apply

- Scope 1
- Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

- Market-based

(7.53.1.11) End date of base year

12/31/2018

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

16321000

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

23573000

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

39894000.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

12/31/2035

(7.53.1.55) Targeted reduction from base year (%)

35

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

25931100.000

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

16582000

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

21562000

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

38144000.000

(7.53.1.78) Land-related emissions covered by target

Select from:

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

12.53

(7.53.1.80) Target status in reporting year

Select from:

Underway

(7.53.1.82) Explain target coverage and identify any exclusions

The target covers 100% of Linde's reported Scope 1 2 emissions. The boundary for the target is aligned with our environmental reporting for consolidated entities, meaning the only exclusions are small sales office that consume small amounts of electricity and that are not relevant to Linde's overall footprint. Emissions from these "de minimis" sites are less than 1% of Linde's total energy consumption and are therefore considered de minimis. The target does not include Scope 3 emissions. Linde's 2035 absolute GHG reduction target meets the SBTI criteria, in effect at target application for validation. Scope 3 is not included as it is below 40% of total Scope 1 Scope 2 Scope 3, as provided by the SBTI rules. Nevertheless, Linde has committed to set scope 3 reduction targets by 2025-2026 timeframe. Linde is on track with this commitment, and currently reports all fifteen scope 3 categories. (One category is not relevant for Linde.) For more information on the Scope 3 progress, see the Linde website at: <https://www.linde.com/sustainability/climate-change/scope-3-ghg-emissions>.

(7.53.1.83) Target objective

35% absolute reduction from 2021 to 2035

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

Linde has a climate transition plan that outlines how the company will achieve this target. For example, Linde plans to have its major H2 facilities equipped with carbon capture and storage (CCS) by the end of the decade. As of the end of 2023, the second year reporting this target, Linde has progressed very well, achieving more than 4% reduction in absolute GHG emissions.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

No

[Add row]

(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

(7.53.2.1) Target reference number

Select from:

Int 1

(7.53.2.33) Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.0000000000

(7.53.2.80) Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.0000000000

Row 2

(7.53.2.33) Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.0000000000

(7.53.2.80) Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.0000000000

[Add row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

Net-zero targets

(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

Row 1

(7.54.1.1) Target reference number

Select from:

Low 1

(7.54.1.2) Date target was set

10/21/2021

(7.54.1.3) Target coverage

Select from:

Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

Electricity

(7.54.1.5) Target type: activity

Select from:

Consumption

(7.54.1.6) Target type: energy source

Select from:

Low-carbon energy source(s)

(7.54.1.7) End date of base year

12/31/2018

(7.54.1.10) End date of target

12/31/2035

[Add row]

(7.54.3) Provide details of your net-zero target(s).

Row 1

(7.54.3.1) Target reference number

Select from:

NZ1

(7.54.3.2) Date target was set

10/01/2021

(7.54.3.3) Target Coverage

Select from:

Organization-wide

(7.54.3.4) Targets linked to this net zero target

Select all that apply

Abs1

(7.54.3.5) End date of target for achieving net zero

12/31/2050

(7.54.3.6) Is this a science-based target?

Select from:

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

(7.54.3.8) Scopes

Select all that apply

Scope 1

Scope 2

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

- Methane (CH4)
- Nitrous oxide (N2O)
- Carbon dioxide (CO2)
- Perfluorocarbons (PFCs)
- Hydrofluorocarbons (HFCs)
- Sulphur hexafluoride (SF6)
- Nitrogen trifluoride (NF3)

(7.54.3.10) Explain target coverage and identify any exclusions

The target covers scope 1 and 2 emissions for all entities included in Linde's reporting boundaries. The target is company wide. Note that we measure emissions in terms of CO2 equivalents, to capture the warming impact of different emissions, and have therefore indicated all GHG covered by the target.

(7.54.3.11) Target objective

The world is at the beginning of an energy transformation, and Linde's climate neutrality ambition demonstrates our long-term commitment as an active contributor to the transformation. Tackling climate change is a shared and global responsibility. The long-term effects of carbon-based fuels on the environment and climate require significant changes to the energy supply chain, regulations and society. Linde is poised to contribute across all aspects of managing climate change and reducing GHG emissions.

(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

- Yes

(7.54.3.13) Do you plan to mitigate emissions beyond your value chain?

Select from:

- Yes, and we have already acted on this in the reporting year

(7.54.3.14) Do you intend to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation?

Select all that apply

- No, we do not plan to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation

(7.54.3.15) Planned milestones and/or near-term investments for neutralization at the end of the target

- 35% GHG intensity reduction per EBITDA till 2028. This is a managed target with several operational sub-targets to improve energy and GHG intensity till 2028. - 35% absolute reduction in scope 1 and 2 emissions till 2035. This managed target is intended to be reached by e.g. tripling the amount of low-carbon energy sourced till 2035, and having most large HyCO production plants equipped with carbon capture features by the end of this decade. Linde further plans to expand the usage of renewable feedstock as well as its offer of low-carbon products, like Linde's product line "Linde Green". Milestones between 2035 and 2050 include the transition of Linde's fleet to zero emissions as well as reaching 100% renewable/low-carbon energy sourcing.

(7.54.3.16) Describe the actions to mitigate emissions beyond your value chain

Linde has started to collect supplier-specific emissions data for its products procured and gaining a better understanding of the specific scope 3 impact from its upstream value chain. As per its Supplier Code of Conduct Linde requests its suppliers to contribute to Linde's climate change targets, thus Linde considers to align with individual suppliers on GHG reduction measures and targets in the future.

(7.54.3.17) Target status in reporting year

Select from:

Underway

(7.54.3.19) Process for reviewing target

Targets are consistent with Linde's business model, its mission and values, and the strategic business objectives named by the Board as a basis for variable compensation. Linde's businesses and functions are accountable to deliver these targets. They are embedded into our businesses and operations. Each target is a business KPI and managed as part of the business. As part of its continuous improvement process, Linde conducts a condensed Sustainable Development Materiality Assessment (SDMA) each year to confirm alignment and consider adjustments and improvements. The SDMA will be repeated after 5 years to confirm that the key issues remain relevant. Work has begun for the next five-year cycle. The full SDMA process is described on our website at: <https://www.linde.com/sustainability/selecting-priorities>. The targets were developed with reference to external expectations. These include ESG investors, who look for nonfinancial information as the basis to make better informed investor decisions, such as the SASB. They were also developed with stakeholders interested in understanding Linde's impacts within the context of global needs and planetary boundaries (such as described by the GRI Sustainability Reporting Standards and the UN SDGs). Linde's SD targets contribute to several SDGs. Linde reports the performance against all targets to our stakeholders. For more information, please visit: <https://www.linde.com/sustainability/reporting-center>. As these are managed targets with clear accountability, there is an ongoing reporting to management, and an annual process of review and continuous improvement. These target areas are consistent with Linde's strategic non-financial business objectives considered in determining executive variable compensation awards. Performance against this full slate of targets is reported quarterly to executive leadership, several times per year to the Board's Sustainability Committee, and at least once a year to the full Board of Directors. Operational performance towards targets is reported on a monthly basis to management. The relevance and ambition of targets is reviewed annually by the Vice President, Sustainability, who makes strategic recommendations to the Executive Leadership Team and Board on the need for new targets.

[Add row]

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Select from:

Yes

(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

| | Number of initiatives | Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *) |
|--------------------------|-----------------------|--|
| Under investigation | 0 | `Numeric input |
| To be implemented | 0 | 0 |
| Implementation commenced | 881 | 495000 |
| Implemented | 1380 | 597000 |
| Not to be implemented | 0 | `Numeric input |

[Fixed row]

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

Process optimization

Row 3

(7.55.2.1) Initiative category & Initiative type

Transportation

- Company fleet vehicle efficiency

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

21108

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

- Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

- Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

16000000

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

897210

(7.55.2.7) Payback period

Select from:

- 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

(7.55.2.9) Comment

202 voluntary projects were implemented in 2022, providing permanent reduction in diesel and gasoline use and corresponding GHG emissions from fuel efficiency or route efficiency programs, onsite tank size optimization, trailer size optimization and track engine modifications to maximize fuel economy. The field payback period indicates the average payback period for projects that need some investments. For several projects investments are not required to realize the savings (e.g., improvement of procedures, such as transport routes, which do not need any changes in equipment). Details provided above are for projects which have been fully implemented in the reporting year. There were additional monetary savings and savings in CO2e realized in 2023 from projects which are not yet completed. Capex is estimated. Due to data limitations, this data has been aggregated and summarized.

Row 5

(7.55.2.1) Initiative category & Initiative type

Company policy or behavioral change

Other, please specify :These include many initiatives, including procedure changes, efficiency improvements, change in procurement practices, supply chain engagement, and/or customer engagement- all with increased efficiency, cost reduction and/or sustainability benefit.

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

312500

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

Scope 1

Scope 2 (market-based)

Scope 3: Other (upstream)

Scope 3: Other (downstream)

(7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

12000000

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

700000

(7.55.2.7) Payback period

Select from:

4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

(7.55.2.9) Comment

1170 projects reduced product CO2 through procedure change, efficiency improvements, change in procurement practices, supply chain engagement, and/or customer engagement- all with increased efficiency, cost reduction and/or sustainability benefit. These also include process improvements. Details provided above are for projects which have been fully implemented in the reporting year. There were additional monetary savings and savings in CO2e realized in 2023 from projects which are not yet completed. Capex is estimated Due to data limitations, this data has been aggregated and summarized.

[Add row]

(7.55.3) What methods do you use to drive investment in emissions reduction activities?

Row 1

(7.55.3.1) Method

Select from:

- Financial optimization calculations

(7.55.3.2) Comment

Inputs, especially energy, are a significant portion of Linde's cost stack, therefore savings in energy or other raw or process materials (e.g., water) generally lead to a reduction in Linde's cost financial optimization. Linde's sustainable productivity organization measures the environmental savings in our productivity work along with the financial benefits such optimization measures bring. As part of Linde's SD 2028 sustainable development targets, Linde has defined a target to achieve 1.3 billion savings from sustainable productivity initiatives. Linde's sustainable productivity target measures productivity projects that bring financial and environmental savings in all our EKPI areas, including savings in energy and GHG. All of Linde's new SD targets are managed targets, that means they are tracked periodically by management including annual MC and board oversight and are part of financial management incentives. This target therefore additionally drives management engagement in this area. In 2022, energy and GHG efficiency projects resulted in savings of more than 215 million, and more than 1,000,000 MT CO2e avoided (counting both implemented projects and projects where implementation has commenced but full benefits will accrue in 2022). These projects contributed to a reduction in electricity use as well as reductions in natural gas and fuel use.

[Add row]

(7.73) Are you providing product level data for your organization's goods or services?

Select from:

- No, I am not providing data

(7.73.2) Complete the following table for the goods/services for which you want to provide data.

Row 2

(7.73.2.2) Name of good/ service

Liquid / packaged oxygen & pipeline gaseous oxygen

(7.73.2.3) Description of good/ service

1 standard cubic meter of gaseous or liquified oxygen. Oxygen is obtained on a commercial scale through the liquefaction and distillation of ambient air at air separation plants.

(7.73.2.4) Type of product

Select from:

Final

(7.73.2.5) Unique product identifier

Standard cubic meter

Row 3

(7.73.2.2) Name of good/ service

Carbon dioxide (CO2)

(7.73.2.3) Description of good/ service

1 kg of carbon dioxide.CO2 is sourced as a byproduct and purified, then liquefied for transport. A portion of CO2 is also sourced from ethanol fermentation (a biomass source).

(7.73.2.4) Type of product

Select from:

Final

(7.73.2.5) Unique product identifier

Kilogram

Row 4

(7.73.2.2) Name of good/ service

Liquid / packaged argon & pipeline gaseous argon

(7.73.2.3) Description of good/ service

1 standard cubic meter of gaseous or liquified argon. Argon is obtained on a commercial scale through the liquefaction and distillation of ambient air at air separation plants.

(7.73.2.4) Type of product

Select from:

Final

(7.73.2.5) Unique product identifier

Standard cubic meter

Row 5

(7.73.2.2) Name of good/ service

Liquid / packaged nitrogen & pipeline gaseous nitrogen

(7.73.2.3) Description of good/ service

1 standard cubic meter of gaseous or liquified nitrogen. Nitrogen is obtained on a commercial scale through the liquefaction and distillation of ambient air at air separation plants.

(7.73.2.4) Type of product

Select from:

Final

(7.73.2.5) Unique product identifier

Standard cubic meter

[Add row]

(7.73.3) Complete the following table with data for lifecycle stages of your goods and/or services.

Row 1

(7.73.3.1) Requesting member

Select from:

(7.73.3.3) Scope

Select from:

Scope 1 & 2

(7.73.3.4) Lifecycle stage

Select from:

Cradle to gate

(7.73.3.6) Lifecycle stage under your ownership or control

Select from:

Yes

(7.73.3.7) Type of data used

Select from:

Primary

[Add row]

(7.73.4) Please detail emissions reduction initiatives completed or planned for this product.

Row 2

(7.73.4.1) Name of good/ service

Oxygen

(7.73.4.2) Initiative ID

Select from:

Initiative 2

(7.73.4.3) Description of initiative

Linde's proprietary CONOx system is a practical, low capital cost technology for refiners searching for a way to reduce emissions. Reference: <http://www.praxair.com/industries/refining/fluid-catalytic-cracker-fcc-emissions-reduction>

Row 3

(7.73.4.1) Name of good/ service

High purity Fluorine in the manufacture of semiconductors, flat panel displays and thin film solar panels

(7.73.4.2) Initiative ID

Select from:

Initiative 10

(7.73.4.3) Description of initiative

Linde Electronics has pioneered the use of molecular fluorine (F₂) as a replacement for high GWP fluorinated cleaning gases, such as NF₃ and SF₆, which are currently used to clean CVD chambers in the manufacture of semiconductors, flat panel displays and thin film solar panels. High purity Fluorine gas is the highest performance cleaning gas available, improving productivity on CVD tools, reducing energy consumption and environmental impact, with ZERO Global Warming Potential. Reference Generation-F On-Site Fluorine Generators: https://www.linde-gas.com/en/products_and_supply/electronic_gases_and_chemicals/on_site_gas_generation/generation_f_on_site_fluorine_generation/index.html

Row 4

(7.73.4.1) Name of good/ service

Carbon dioxide for enhanced curing of concrete blocks

(7.73.4.2) Initiative ID

Select from:

Initiative 9

(7.73.4.3) Description of initiative

Carbon dioxide provided by Linde for Carboclave's enhanced curing of concrete blocks enables a reduction in GHG emissions by permanently sequestering CO2 in concrete as well as process efficiency improvements resulting in less fuel consumption and less cement production required. Reference our external partner, Carboclave's video: <https://www.youtube.com/watch?vuog2ir6n7TU>

Row 5

(7.73.4.1) Name of good/ service

Hydrogen in ultra-low sulfur diesel (ULSD) fuel production

(7.73.4.2) Initiative ID

Select from:

Initiative 3

(7.73.4.3) Description of initiative

Hydrogen is provided to refiners to allow them to meet air quality regulations and to hydrotreat diesel fuel to make ultra-low sulfur diesel (ULSD) fuel. This can be burned without emitting sulfur dioxide. Hydrogen provides an additional benefit to ULSD, which is that in combination with a now mandated diesel particulate filter, it eliminates black carbon (BC). Reduction in BC is seen by policy-makers as being a crucial step to delay global temperature increase. Linde's White Papers with more ULSD information can be found on Linde's Climate Change website under "Less Carbon, More Clean": <https://www.linde.com/about-linde/sustainable-development/climate-change>

Row 6

(7.73.4.1) Name of good/ service

Oxygen for steel making

(7.73.4.2) Initiative ID

Select from:

Initiative 1

(7.73.4.3) Description of initiative

White Paper to show energy and CO2e avoided by the use of oxygen from Linde in steelmaking. Impact of Blast Furnace O2 Enrichment. <https://www.linde.com/-/media/linde/merger/documents/sustainable-development/praxair-white-paper-impact-of-blast-oxygen-enrichment-w-disclaimer-r1.pdf?laen&revf2427b7aafa74546b55f72cf5548789d>

Row 7

(7.73.4.1) Name of good/ service

Oxygen, Nitrogen, Argon

(7.73.4.2) Initiative ID

Select from:

Initiative 5

(7.73.4.3) Description of initiative

Production emissions reduction: ongoing research and developments leading to reduction in power to produce atmospheric gases as well as investments in decarbonization projects and renewable power. Reference Linde Sustainable Development targets and performance: <https://www.linde.com/about-linde/sustainable-development/targets-and-performance>

Row 8

(7.73.4.1) Name of good/ service

Oxygen in glass production

(7.73.4.2) Initiative ID

Select from:

Initiative 4

(7.73.4.3) Description of initiative

Linde's OPTIMELT Thermochemical Regenerator system stores waste energy from the hot flue gas in regenerator checkers and subsequently utilizes this heat to preheat fuel. The result is the conversion of fuel to hot syngas – which means you'll need 20% to 30% less fuel to melt your glass, compared to oxy-fuel and air regenerative glass furnaces. It also enables a reduction in GHG emissions due to increased efficiency: <https://www.youtube.com/watch?vXTp3ymxIYe8>

Row 9

(7.73.4.1) Name of good/ service

Bulk and packaged gases

(7.73.4.2) Initiative ID

Select from:

Initiative 7

(7.73.4.3) Description of initiative

Distribution emissions reduction: ongoing research and developments leading to improvements in distribution efficiencies. Reference Linde Sustainable Development targets and performance: <https://www.linde.com/about-linde/sustainable-development/targets-and-performance>

Row 10

(7.73.4.1) Name of good/ service

Onsite, merchant and packaged gases

(7.73.4.2) Initiative ID

Select from:

Initiative 8

(7.73.4.3) Description of initiative

Renewable energy: ongoing effort to source a portion of energy used in gas production from renewable sources. Reference Linde Sustainable Development targets and performance: <https://www.linde.com/about-linde/sustainable-development/targets-and-performance>

Row 11

(7.73.4.1) Name of good/ service

Hydrogen

(7.73.4.2) Initiative ID

Select from:

Initiative 6

(7.73.4.3) Description of initiative

*Production emissions reduction: ongoing research and developments leading to improvements in production energy efficiencies. Reference Linde Sustainable Development targets and performance: <https://www.linde.com/en/about-linde/sustainable-development/targets-and-performance>
[Add row]*

(7.74) Do you classify any of your existing goods and/or services as low-carbon products?

Select from:

Yes

(7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

Row 1

(7.74.1.1) Level of aggregation

Select from:

Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

Other, please specify :Guidelines from the chemical industry for accounting for and reporting greenhouse gas (GHG) emissions avoided along the value chain based on comparative studies," ICCA October, 2003 (updated 2017)

(7.74.1.3) Type of product(s) or service(s)

Other

Other, please specify :Hydrogen used to make ultra-low sulfur diesel fuel (ULSD)

(7.74.1.4) Description of product(s) or service(s)

Hydrogen (H₂) sold to make ultra-low sulfur diesel fuel (ULSD). When used in trucks fitted with diesel particulate filters, it eliminates black carbon. Environmental agencies, including a joint 2011 UNEP and World Meteorological Association report: "Integrated Assessment of Black Carbon and Tropospheric Ozone," see the elimination of black carbon as being the crucial short-term strategy to reduce the rate of global warming. The application of Linde's hydrogen for desulphurization in 2023 led to CO₂ savings of 64 million metric tons. Linde currently calculates its carbon productivity (emissions avoided by usage of Linde's products) for five signature products, for specific applications, in five markets (see further rows). Total revenues for these five signature products represented approximately 8% of Linde revenues in 2023 and led to 91 million MT CO₂e avoided which is nearly 2.4 times more than all scope 1 and 2 emitted by Linde's operations. See 2023 SD Report page 18. See "Addressing the Avoided Emissions Challenge: Guidelines from the chemical industry for accounting for and reporting greenhouse gas (GHG) emissions avoided along the value chain based on comparative studies," ICCA October, 2003 (updated 2017). See also: <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/climate-change/the-role-of-hydrogen-in-removing-sulfur-from-liquid-fuels-w-disclaimer-r1.pdf>

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

Addressing the Avoided Emissions Challenge- Chemicals sector

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

Use stage

(7.74.1.8) Functional unit used

Usage of 1,000 gallons of ULSD fuel in vehicles equipped with particle filters vs. usage of 1,000 gallons of traditional fuel

(7.74.1.9) Reference product/service or baseline scenario used

The baseline scenario is using standard diesel fuel in cars/trucks compared to ultra-low sulfur diesel fuel produced by the application of hydrogen.

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

64000000

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Hydrogen has proven effective in the desulfurization of diesel fuel. Reductions in sulfur and aromatic levels achieved by the use of hydrogen in hydrotreaters at refineries has led to lower black carbon emissions and reductions in equivalent carbon dioxide emissions in diesel engines that use particulate filters. The CO₂e from the production of hydrogen used for hydrotreating is 15 times lower than CO₂e enabled by ultra-low sulfur diesel fuel. Our calculation was based on the following data sources and assumptions: Total hydrogen supplied to all industries in 2023. The percentage of supplied hydrogen to refineries is 32% in Americas and 12,2% in both EMEA and APAC; The percentage of vehicles using DPF is 100% in Americas, 10% in APAC, and 95% in EMEA; CO₂ avoided is 364 metric ton / million standard cubic feet of hydrogen Detailed calculation: A. Carbon Black emissions: 1.2 grams / galB.GWP20: 2200C.CO₂e from Carbon Black emissions (C A x B): 2,640 grams / galD. Organic Carbon emissions: -100E.Net emissions (E C - D): 2,540 grams / galF. Carbon Black Removal by DPF: 90%G.DPM removed by DPF (G E x F): 2,286 CO₂e grams / galH. DPF fuel efficiency penalty: -205.8 CO₂e grams / gall. Net reduction (I G H): 2,080.2 grams / galJ.CO₂ emission from H₂: 129.0 (22.6 CO₂ g / scf of H₂ x 240 H₂ required from H₂ plant (baln internal) / 42 Gallons / barrel)K.CO₂ avoided / CO₂ emitted from H₂ usage ratio (K I / J): 16.1L.Emission: 22.6 MT / 1 MMSCFDM.CO₂ avoided (M K x L): 364 MT / 1 MMSCFD Further details please see at: <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/climate-change/the-role-of-hydrogen-in-removing-sulfur-from-liquid-fuels-w-disclaimer-r1.pdf>

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

8

Row 3

(7.74.1.1) Level of aggregation

Select from:

Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

Other, please specify :Guidelines from the chemical industry for accounting for and reporting greenhouse gas (GHG) emissions avoided along the value chain based on comparative studies," ICCA October, 2003 (updated 2017)

(7.74.1.3) Type of product(s) or service(s)

Power

Other, please specify :Argon used in welding

(7.74.1.4) Description of product(s) or service(s)

Argon, CO2 and mixtures thereof in gaseous stage can be used for different gas shielded arc welding applications. Their main purpose is to enable a controllable stable arc and protect the molten metal against degradation from contact with ambient air. CO2 is often perceived in the industry as "cheapest shielding gas", good enough to cover the metallic molten pool. Where feasible, Linde always encourages users to substitute pure CO2 by Argon-CO2 blends and high CO2 by low CO2 containing blends. Such optimizations offer diverse benefits, e.g.: -Technical: less spatters, less oxidation of alloying elements. -Economical: productivity increase- Occupational Safety and Health risk mitigation: lower fume emission rates. From environmental viewpoint the welding gases are vented to the atmosphere once they fulfilled their role in the arc zone. For the user of welding gases the amount of released CO2 is considered Scope 1 fugitive emission, according to Greenhouse Gas Inventory Guidance: Direct Fugitive Emissions from Refrigeration, Air Conditioning, Fire Suppression, and Industrial Gases (epa.gov) Replacing CO2 by Argon reduces scope 1 emissions at users, every ton CO2 replaced by Argon for welding translates into 1 ton avoided emission on the user's balance card. CO2e savings from using Linde's argon for welding in 2023 were 1.2 million tons CO2e. Linde calculates carbon productivity for five: 2.4X. Total revenues for these five signature products were 8B in 2023.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

Addressing the Avoided Emissions Challenge- Chemicals sector

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

Use stage

(7.74.1.8) Functional unit used

All welding activities (in all industries) globally that use argon instead of CO2 for welding

(7.74.1.9) Reference product/service or baseline scenario used

Consumption of CO2 for welding

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

1200000

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Since argon can be alternatively used in welding applications instead of CO₂, which leads to CO₂ avoidance, we calculated how much carbon dioxide was substituted by argon in welding processes. Our calculation was based on the following data sources and assumptions: To estimate the total argon supplied to all industries in 2023; Based on internal analysis and marketing data we estimate the percentage of supplied argon for all welding applications as 61% of the total volume the percentage of argon that replaced CO₂ in welding applications as 80% from volumes supplied for welding. (Remaining 20% of argon is strictly required in welding applications).

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

8

Row 4

(7.74.1.1) Level of aggregation

Select from:

Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

Other, please specify :Guidelines from the chemical industry for accounting for and reporting greenhouse gas (GHG) emissions avoided along the value chain based on comparative studies," ICCA October, 2003 (updated 2017)

(7.74.1.3) Type of product(s) or service(s)

Power

Other, please specify :Thermal barrier coatings for industrial gas turbine and jet engine efficiency

(7.74.1.4) Description of product(s) or service(s)

Linde's subsidiary Linde Advanced Materials Technologies (LAMT) produces specialty coatings for a range of products, e.g. gas turbines in industry applications, aviation or aerospace. Total CO₂e avoided by use of Linde's thermal barrier coatings in 2023 amounted to 14 million metric tons. <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/climate-change/white-paper-px-thermal-barrier-coatings-reduced-co2-w-disclaimer-r1.pdf>
Linde currently calculates its carbon productivity (emissions avoided by usage of Linde's products) for five signature products, for specific applications, in five markets

(see further rows). Total revenues for these five signature products represented approximately 8% of Linde revenues in 2023 and led to 91 million MT CO2e avoided which is nearly 2.4 times more than all scope 1 and 2 emitted by Linde's operations. See 2023 SD Report page 18.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

Addressing the Avoided Emissions Challenge- Chemicals sector

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

Use stage

(7.74.1.8) Functional unit used

Operation of 1 thermal barrier coated industrial gas turbine or 1 thermal barrier coated aviation engine

(7.74.1.9) Reference product/service or baseline scenario used

CO2 consumption of gas turbine and aviation engine without thermal barrier coatings

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

14000000

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

The estimate of aircraft Gas Turbine CO2 emissions reduction is based on the following data sources and key assumptions: According to Statista data, 25,602 commercial jet aircraft with more 30 seats were in service worldwide in 2023. (This number excludes turbo props, biz jets ad military aircraft.) Based on the airframe size and model year internal marketing data we estimate the share of aircraft with TBC technology in the hot section to 90%. This can include TBC's on HPT airfoils, vanes, combustors and shrouds. The average distance travelled per airplane annually in 2023 is 1,236,372 miles with an average CO2 emission of 53lbs per mile. The average efficiency savings by TBC technology are 2.6% (The improvement in gas turbine efficiency is possible by TBCs as a function of gas turbine pressure ratio and temperature differential across the coating. 2.6% corresponds to a pressure ratio of 30 and a differential temperature of 150 deg. C.).Based on LAMT internal marketing data the current LAMT share in WW advanced TBC coating technology of aero engines is 58%.The estimate of the CO2 emission reduction for the worldwide installation of industrial gas turbines is based on the following data sources and assumptions: Based on publications from the main power generation gas turbine producers – GE, Alstom, Siemens, Ansaldo, Mitsubishi, Solar Turbines and Hitachi; the total number of turbines in 2023 is approx. 22,215 (89% operated by natural gas and 11% by petroleum).The analysis of the worldwide power generation gas turbine installation base yields 46MW as the median power of a turbine. Assuming 3,500 operation hours p.a. we estimate the annually generated electric energy by power generation gas turbines at 3.224 trillion kWh. For the calculation of the related CO2 emission savings we use natural gas as fuel basis with a consumption of 7.43 cft/kWh and petroleum with a consumption of 0.07 gal per kWh. For the TBC efficiency related fuel savings we assume a number of 2,6%, as described before. Furthermore, based on internal marketing data we estimate the percentage of gas turbines coated with LAMT's TBC technology as 8% of the WW volume. Further details please see at: <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/climate-change/white-paper-px-thermal-barrier-coatings-reduced-co2-w-disclaimer-r1.pdf>

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

8

Row 5

(7.74.1.1) Level of aggregation

Select from:

Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

Other, please specify :Guidelines from the chemical industry for accounting for and reporting greenhouse gas (GHG) emissions avoided along the value chain based on comparative studies," ICCA October, 2003 (updated 2017)

(7.74.1.3) Type of product(s) or service(s)

Power

Other, please specify :Krypton used to insulate thermal windows

(7.74.1.4) Description of product(s) or service(s)

Krypton is a product/gas of the air separation process. When using krypton for double pane windows (filling the space between 2 panes) this can drastically increase the thermal barrier and therefore window insulation. Application of Linde's krypton for insulation of windows led to CO2 savings of 1 million metric tons in 2023. CO2e avoided by use of krypton for windows insulation was 1,000,000 metric tons in 2023. see: <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/climate-change/praxair-krypton-for-window-insulation-w-disclaimer-r1.pdf> Linde currently calculates its carbon productivity (emissions avoided by usage of Linde's products) for five signature products, for specific applications, in five markets (see further rows). Total revenues for these five signature products represented approximately 8% of Linde revenues in 2023 and led to 91 million MT CO2e avoided which is nearly 2.4 times more than all scope 1 and 2 emitted by Linde's operations. See 2023 SD Report page 18.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

Addressing the Avoided Emissions Challenge- Chemicals sector

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

Use stage

(7.74.1.8) Functional unit used

1 square foot of window space filled with krypton

(7.74.1.9) Reference product/service or baseline scenario used

Window without krypton used for insulation

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

1000000

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Our calculation is based on a study of window energy consumption in the United States, utilizing state-by-state data available from Energy Information Administration and various housing studies. This study was performed by Linde and included state specific data on window area for different thermal efficiency ratings and CO2 emission rates for different thermal efficiencies based on state energy production. Calculation of the environmental benefit of krypton sales to the window market is based on the following assumptions: All Krypton sold to window manufacturers was utilized in windows that replaced R1 or R2 windows in regions similar to the Northern Energy Star Regions; On average, windows manufactured with krypton for filling have an R value of five; There is a 25% loss of krypton during the window filling process; CO2 emission rate for a given state is the same for heating as for non-heating energy utilization; Europe's energy saving profile is the same as the US (CO2 emission per square foot of window at a given R value and climate is the same for Europe as it is for the US); Window life is 30 years. Further details please see: <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/climate-change/praxair-krypton-for-window-insulation-w-disclaimer-r1.pdf>

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

8

Row 6

(7.74.1.1) Level of aggregation

Select from:

Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

- Other, please specify :Guidelines from the chemical industry for accounting for and reporting greenhouse gas (GHG) emissions avoided along the value chain based on comparative studies," ICCA October, 2003 (updated 2017)

(7.74.1.3) Type of product(s) or service(s)

Power

- Other, please specify :Oxygen used to optimize combustion processes (Oxyfuel technology)

(7.74.1.4) Description of product(s) or service(s)

Oxyfuel combustion can make a valuable contribution to improving the carbon balance of fossil fuel combustion. With this process, coal is combusted in an atmosphere consisting of pure oxygen and carbon dioxide (CO₂). This purer mixture burns at a higher temperature than natural air, thus increasing the efficiency of the combustion process. Additionally, the resultant flue gas is not diluted by nitrogen, but primarily consists of CO₂ and water vapor. The flue gas stream is therefore smaller and easier to handle. This vapor is easily condensable, leaving a highly concentrated CO₂ stream which can be compressed and stored. Linde's oxyfuel technology is especially applied in steel making. The blast furnace hereby requires large amounts of coke as a fuel. In the process high levels of oxygen are added to the hot blast, increasing productivity of the combustion process. The energy saving thus happens during use of the oxygen/oxyfuel technology (use phase). CO₂ savings by applying Linde's oxyfuel technology amounted to 10,400,000 tons in 2023. <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/climate-change/praxair-white-paper-impact-of-blast-oxygen-enrichment-w-disclaimer-r1.pdf> Linde calculates carbon productivity for five signature product applications. Total revenues for these five products represented approximately 8% of Linde revenue in 2023 and led to 91 million MT CO₂e avoided, nearly 2.4X more than scope 1 and 2 from operations.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

- Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

- Addressing the Avoided Emissions Challenge- Chemicals sector

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

- Use stage

(7.74.1.8) Functional unit used

Usage of 1 metric ton of oxygen in blast furnace (blast oxygen enrichment)

(7.74.1.9) Reference product/service or baseline scenario used

Operation of blast furnace without oxyfuel technology

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

10400000

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Our calculation of avoided emissions was based on the difference in emissions during operation of a blast furnace with oxyfuel technology and without. Since oxygen enrichment of the hot blast combined with secondary fuel injection lowers coke rate, it also leads to lower production of coke breeze and coke oven derived electricity. The estimate of the CO2 emission reduction was based on the following data sources and assumptions: Total oxygen supplied to steel industry in 2023; Percentage of oxygen to Integrated Steel Mills by country (it varies by region, e.g. 75% in EMEA, 98% or greater in areas in APAC); Average CO2 saved in blast furnace is approximately 1.54 metric ton / 1 metric ton oxygen Further details please see: <https://assets.linde.com/-/media/global/corporate/corporate/documents/sustainable-development/climate-change/praxair-white-paper-impact-of-blast-oxygen-enrichment-w-disclaimer-r1.pdf>

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

8

[Add row]

(7.79) Has your organization canceled any project-based carbon credits within the reporting year?

Select from:

No

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

Yes

(9.1.1) Provide details on these exclusions.

Row 1

(9.1.1.1) Exclusion

Select from:

Facilities

(9.1.1.2) Description of exclusion

De-minimis: 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 for corporate-wide accounting of environmental metrics. These include Small Sales Outlets or Workshops.

(9.1.1.3) Reason for exclusion

Select from:

Small volume [rainwater]

(9.1.1.7) Percentage of water volume the exclusion represents

Select from:

Less than 1%

(9.1.1.8) Please explain

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. (Note: This is due to small volume, but not related to rainwater. The system would not allow selection of "other" as the cause.) 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.

[Add row]

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

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Yearly

(9.2.3) Method of measurement

Data is collected based on flow meters and invoices, and reported annually in a global database, consolidated, and reviewed by the Global SHEQ team

(9.2.4) Please explain

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. As part of Linde 2028 SD Targets, facilities that are high water user sites in areas of high water stress plus sites that set a voluntary target (representing about 4% of Linde total water withdrawal) operate under a Water Management Plan, and report their water figures on a monthly basis. Also, there is new target for 20% reduction of water withdrawal for these sites.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Yearly

(9.2.3) Method of measurement

Data is collected based on flow meters and invoices, and reported annually in a global database, consolidated, and reviewed by the Global SHEQ team

(9.2.4) Please explain

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 (per 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 our 2028 SD Targets, facilities that are high water user sites in areas of high water stress plus sites that set a voluntary target (representing about 4% of Linde total water withdrawal) operate under a Water Management Plan, and report their water figures on a monthly basis. Also there is new target for 20% reduction of water for these sites.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Yearly

(9.2.3) Method of measurement

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.

(9.2.4) Please explain

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, 12% 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. See SD Report, section responding to GRI 303, for an overview of the breakdown between freshwater and other sources.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

Data is collected regularly based on flow meters and invoices, and reported annually in a global database

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

Measured regularly with flow meters and reported annually in a global database,

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

Not relevant

(9.2.4) Please explain

Approximately 96% of Linde's total water discharges are once-through water that is returned unpolluted and without treatment to its original source. Approximately 4% 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 near future.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

76-99

(9.2.2) Frequency of measurement

Select from:

Quarterly

(9.2.3) Method of measurement

This is measured and tracked at the site and regional level based upon the national or regional regulations,

(9.2.4) Please explain

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 GRI Standard 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)

(9.2.1) % of sites/facilities/operations

Select from:

Not relevant

(9.2.4) Please explain

More than 75 percent of global freshwater withdrawal is returned to its original source, at same or better quality. In 2023, approximately 96% 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

(9.2.1) % of sites/facilities/operations

Select from:

76-99

(9.2.2) Frequency of measurement

Select from:

Continuously

(9.2.3) Method of measurement

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.

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Yearly

(9.2.3) Method of measurement

Data is collected based on water withdrawal and discharge through flow meters and invoices, and reported annually in a global database

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

76-99

(9.2.2) Frequency of measurement

Select from:

Monthly

(9.2.3) Method of measurement

The measurement is mostly conducted using flowmeters. Results, for example, from cycle frequency, are tracked and reported monthly to operations.

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

100%

(9.2.2) Frequency of measurement

Select from:

Yearly

(9.2.3) Method of measurement

This is assured as part of the company's normal management process at 100% of its sites and offices globally under Linde's control.

(9.2.4) Please explain

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.

[Fixed row]

(9.2.2) 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?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

1059700

(9.2.2.2) Comparison with previous reporting year

Select from:

About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

About the same

(9.2.2.5) Primary reason for forecast

Select from:

Increase/decrease in business activity

(9.2.2.6) Please explain

Note: We have indicated about the same, as the change was less than 1%. In 2023, Linde's total water withdrawal increased by 0.6% compared to 2022. 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. Note that freshwater withdrawal also remained essentially flat, at 0.6% below the 2022 levels. Approximately 90% of water is recycled many times through cooling towers before discharge. Also note that more than 75% of that water is once-through water and returned to source no substantial impact on water quality. Future trend: While Linde continues efforts to reduce total water withdrawal by improving our water use efficiency onsite, Linde expects total water withdrawal to remain about the same (similar to this year's trend, with slight but not significant increases.) with the combination of business increases and productivity initiatives. Note that vast majority (90% in 2023) 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

(9.2.2.1) Volume (megaliters/year)

974000

(9.2.2.2) Comparison with previous reporting year

Select from:

About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

About the same

(9.2.2.5) Primary reason for forecast

Select from:

Increase/decrease in business activity

(9.2.2.6) Please explain

Note: We have indicated about the same, as the change was less than 1% In 2023, 88% 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 2023, Linde's total water discharges remained about the same, 0.9% more than in 2022. 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. Trend: With increasing business activities/new plant start-ups and water discharges are expected to remain about the same, similar to this year's trend, with slight but not significant increases.

Total consumption

(9.2.2.1) Volume (megaliters/year)

(9.2.2.2) Comparison with previous reporting year

Select from:

 Lower**(9.2.2.3) Primary reason for comparison with previous reporting year**

Select from:

 Increase/decrease in efficiency**(9.2.2.4) Five-year forecast**

Select from:

 About the same**(9.2.2.5) Primary reason for forecast**

Select from:

 Increase/decrease in efficiency**(9.2.2.6) Please explain**

Note: We have indicated a decrease, as the change was more than 1%-- almost 3% decrease. Total water consumption decreased by 3% compared to 2022.. This is a direct result of efficiencies in production A majority of water withdrawal is fed back to the eco-system as once-through water without harming the environment. Consumption also decreased in areas of high-water-stress. 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, as well as efforts to support the new target for intensity reduction of water, will keep consumption increases, especially of freshwater sources, at a very moderate level.

[Fixed row]

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

(9.2.4.1) Withdrawals are from areas with water stress

Select from:

Yes

(9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

58600

(9.2.4.3) Comparison with previous reporting year

Select from:

Higher

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

Facility expansion

(9.2.4.5) Five-year forecast

Select from:

About the same

(9.2.4.6) Primary reason for forecast

Select from:

Investment in water-smart technology/process

(9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

5.53

(9.2.4.8) Identification tool

Select all that apply

WRI Aqueduct

(9.2.4.9) Please explain

Water withdrawal for sites located in areas of water stress represented 5-6% of Linde's total water withdrawal in 2023, compared to 4% in 2022, 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.) The absolute volume of water withdrawn by increased compared to 2023, mainly due to an increase in business activity. This includes increased usage at a facility site previously identified in the WMP population. We expect the number of sites in areas of high water stress (and tracking those with higher water usage) to increase as water scarcity increases globally. At the same time, we continue to focus on water management. Linde has introduced a new target for intensity reduction of 20% by 2035. Therefore, we expect 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.

[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

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

(9.2.7.1) Relevance

Select from:

Relevant

(9.2.7.2) Volume (megaliters/year)

389400

(9.2.7.3) Comparison with previous reporting year

Select from:

Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

- Increase/decrease in business activity

(9.2.7.5) Please explain

This category is relevant because 43% 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 about 3% more than 2022. About 90% of fresh surface water withdrawn is returned to its original source with its original water quality after usage.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

- Relevant

(9.2.7.2) Volume (megaliters/year)

388900

(9.2.7.3) Comparison with previous reporting year

Select from:

- About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

- Increase/decrease in business activity

(9.2.7.5) Please explain

This category is relevant because approximately 37% of total water withdrawal is from brackish/se water sources. Water withdrawals of brackish water remained stable (slight increase of 0.3%) from 2022 to 2023. It is noted that almost all (99%) of brackish water withdrawn is returned unpolluted to the sea.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

Relevant

(9.2.7.2) Volume (megaliters/year)

6300

(9.2.7.3) Comparison with previous reporting year

Select from:

Much lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in business activity

(9.2.7.5) Please explain

This category is relevant because, even though groundwater is a small portion compared to other sources, at less than 1% of total water withdrawal. This source, which decreased in volume by 40% from 2022 to 2023, 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. Although low volume, this is considered "much lower" as it is 40% decrease in utilization of this source.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

Not relevant

(9.2.7.5) Please explain

This source is not relevant because Linde does not withdraw any water from non-renewable groundwater sources.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

Not relevant

(9.2.7.5) Please explain

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

(9.2.7.1) Relevance

Select from:

Relevant

(9.2.7.2) Volume (megaliters/year)

275100

(9.2.7.3) Comparison with previous reporting year

Select from:

Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in business activity

(9.2.7.5) Please explain

This source is relevant, representing about 21% of total withdrawal from third party sources. A majority of this is recycled/industrial water and the remainder is fresh surface water from municipal sources. This source increased from 2022 by about 2% due to changes in sources at a few sites.
[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

Relevant

(9.2.8.2) Volume (megaliters/year)

353300

(9.2.8.3) Comparison with previous reporting year

Select from:

About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in efficiency

(9.2.8.5) Please explain

This destination is relevant because 36% of Linde's discharges are to fresh surface water. and because the substantial majority (91%) of fresh surface water withdrawn is returned to its original surface water source with its original water quality. From 2022 to 2023, discharge to fresh surface water remained stable, with increase of less than 1% This stability is due to productivity and efficiency improvements. Note: In 2023, through productivity efforts, Linde saved more than 1.9 million cubic meters (500 million gallons) of water in operations.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

Relevant

(9.2.8.2) Volume (megaliters/year)

387200

(9.2.8.3) Comparison with previous reporting year

Select from:

About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in efficiency

(9.2.8.5) Please explain

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 also remained stable, increasing by 0.3% from 2022.

Groundwater

(9.2.8.1) Relevance

Select from:

Not relevant

(9.2.8.5) Please explain

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

(9.2.8.1) Relevance

Select from:

Relevant

(9.2.8.2) Volume (megaliters/year)

233500

(9.2.8.3) Comparison with previous reporting year

Select from:

Higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

Increase/decrease in business activity

(9.2.8.5) Please explain

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. 42,000 megaliters of water discharge in this category was wastewater (non-once-through), from 45,000 in 2022. Water discharges in this category increased about 2% compared to 2022 due to greater water withdrawals from third party sources Note: In 2022, through productivity efforts, Linde saved more than 1.9 million cubic meters (500 million gallons) of water in operations.

[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

- No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.4) Please explain

Linde has assessed sites that are in areas of high-water-stress and that use relatively high volumes of water. These volumes do not represent substantive dependencies. This assessment is performed annually. Areas of water-stress are defined by the WRI Aqueduct Water Risk Atlas. Linde determines sites to be in a high water-stressed area if the Atlas lists the baseline water-stress as “high” or “extremely high.” Linde currently has identified 64 such high-high sites. The location and GPS coordinates for these sites is business-sensitive information and we do not disclose these, as may be requested in 9.3.1.

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

- No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

[Fixed row]

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Row 1

(9.3.1.3) Value chain stage

Select from:

- Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

- Dependencies

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

Yes, withdrawals and discharges

(9.3.1.10) Located in area with water stress

Select from:

Yes

(9.3.1.29) Please explain

Linde does not provide geolocation data for sites due to confidentiality. Therefore, we have grouped all "high-high" sites under the Water Management Plan scope into one row. In 2023, total withdrawal in water-stressed areas was higher than 2022, mostly due to expanded utilization of water at a site already part of the WMP scope. Total water consumption decreased slightly, by about 2%. Total consumption of fresh water stayed largely stable (increase of less than 1%)
[Add row]

(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

(9.3.2.1) % verified

Select from:

76-100

Water consumption – total volume

(9.3.2.1) % verified

Select from:

76-100

[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:

This is confidential

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

(9.5.1) Revenue (currency)

32854000000

(9.5.2) Total water withdrawal efficiency

31003.11

(9.5.3) Anticipated forward trend

*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. The calculated efficiency is 2% lower than 2022.: We anticipate water withdrawal efficiency to stay relatively stable or decrease slightly in the future, with the introduction of the new goal: In 2024 Linde also has introduced a new target to reduce water intensity by 20% by 2035 in areas of high water stress.
[Fixed row]*

(9.6) Do you calculate water intensity for your activities in the chemical sector?

Select from:

Yes

(9.6.1) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

Row 1

(9.6.1.1) Product type

Bulk inorganic chemicals

- Other industrial gases

(9.6.1.2) 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.

(9.6.1.3) Water intensity value (m3/denominator)

7.5

(9.6.1.4) Numerator: water aspect

Select from:

- Total water withdrawals

(9.6.1.5) Denominator

Select from:

- Other, please specify :thousand Nm3

(9.6.1.6) Comparison with previous reporting year

Select from:

- About the same

(9.6.1.7) Please explain

7.5 The water intensity value represents the ratio of total water withdrawal (numerator) against our total production volume sold (denominator). Trend: Water intensity maintained at approximately the same level as 2022. (Reason: stable withdrawal and slightly lower volume) Productivity improvements continued 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. Water withdrawal intensity is relevant. Note that withdrawal intensity depends on type of product produced and 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 there was a slight increase in water withdrawal, total freshwater withdrawal decreased, with production changes. 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 2023, these efforts yielded more than 1.9 million m³ in water savings (500 million gallons). Future trend and strategy: While our business grows and sales increase, we expect water intensity to continue to remain stable over the short term (1-5 years), and eventually decrease (longer term). 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 2023, productivity projects resulted in cumulative savings of 979 million. In 2024, Linde announced a new target for intensity reduction of water withdrawal at high-high sites. The intensity data was critical to developing this target. Efforts contributing to this target will also help to maintain overall intensity levels. Strategic reduction efforts: Optimization projects and design elements to reduce total water withdrawal will continue to assist efforts to reduce water efficiency onsite & our overall intensity ratio [Add row]

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

Row 1

(9.12.1) 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.

(9.12.2) Water intensity value

7.55

(9.12.3) Numerator: Water aspect

Select from:

Other, please specify :total water withdrawals

(9.12.4) Denominator

thousand Nm³

(9.12.5) Comment

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 2022. (less than 1% decrease). 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 2023, these efforts yielded more than 1.9 million m3 in water savings (500 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, aided especially in water-stressed areas by the new target introduced in 2024, which aims to reduce water withdrawal intensity by 20% in high-water-use sites in areas of high-water-stress by 2035.

[Add row]

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

| | |
|--|---|
| | Products contain hazardous substances |
| | Select from: <input checked="" type="checkbox"/> Yes |

[Fixed row]

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

Row 1

(9.13.1.1) Regulatory classification of hazardous substances

Select from:

Other, please specify :ChemSec

(9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

Less than 10%

(9.13.1.3) Please explain

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. Note: We provide this information for full transparency. Linde (and industrial gases companies) are not part of the ChemSec listing.

[Add row]

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

(9.14.1) Products and/or services classified as low water impact

Select from:

Yes

(9.14.2) Definition used to classify low water impact

There are two ways we have classified products 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 2023, only 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.

(9.14.4) Please explain

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. [Fixed row]

(9.15) Do you have any water-related targets?

Select from:

Yes

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

Water pollution

(9.15.1.1) Target set in this category

Select from:

No, and we do not plan to within the next two years

(9.15.1.2) Please explain

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

(9.15.1.1) Target set in this category

Select from:

Yes

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:

No, and we do not plan to within the next two years

(9.15.1.2) Please explain

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

(9.15.1.1) Target set in this category

Select from:

No, and we do not plan to within the next two years

(9.15.1.2) Please explain

Linde has not identified any additional, 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 in 2024 greatly expanded our water water-related targets, including the introduction of a quantitative water intensity reduction target, as described in the next question. We continually to evaluate our targets.

[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

Target 1

(9.15.2.2) Target coverage

Select from:

Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

Reduction in withdrawals per unit of production

(9.15.2.4) Date target was set

12/31/2023

(9.15.2.5) End date of base year

12/31/2021

(9.15.2.6) Base year figure

0

(9.15.2.7) End date of target year

12/31/2035

(9.15.2.8) Target year figure

20

(9.15.2.9) Reporting year figure

0

(9.15.2.10) Target status in reporting year

Select from:

New

(9.15.2.11) % of target achieved relative to base year

0

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

The scope is high-water use (hi-hi) sites, defined as sites exceeding 50,000 m³/year of water withdrawal, excluding once-through, noncontact cooling water.

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

This new target is to achieve 20 percent water intensity improvement at high-water use sites in areas of water stress, by 2035. Commencing in 2024, Linde's new target aims at reducing water usage at hi-hi sites by 2035, from the 2021 baseline. Linde has analyzed the water intensity from sites with water management plans. Additionally, sites have engaged with the water treatment suppliers, engineering, and water experts to plan for optimization of water use and explore alternate water sourcing initiatives to reduce water use. As well, collaboration with stakeholders is important and a key part of water management planning. Building awareness towards water scarcity at the operational level and including local stakeholders into our water availability risk analysis processes are key parts of the process.

(9.15.2.16) Further details of target

See Linde's 2023 SD Report, pages 29, 57, and 17

Row 2

(9.15.2.1) Target reference number

Select from:

Target 3

(9.15.2.2) Target coverage

Select from:

Country/area/region

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

Reduction in total water withdrawals

(9.15.2.4) Date target was set

01/01/2016

(9.15.2.5) End date of base year

12/31/2016

(9.15.2.6) Base year figure

0.0

(9.15.2.7) End date of target year

12/31/2028

(9.15.2.8) Target year figure

5.0

(9.15.2.9) Reporting year figure

2.8

(9.15.2.10) Target status in reporting year

Select from:

Underway

(9.15.2.11) % of target achieved relative to base year

56

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

Linde's team in South America has set a voluntary regional target to continuously improve their WMP site-specific water intensity performance since 2016.

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

The business is on track to achieving this goal, having achieved an overall annual water absolute reduction of more than 400,000 m³. 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.

(9.15.2.16) Further details of target

We are on track to achieving this goal. Approximately, 45 percent of the 11 WMP sites improved their water intensity results compared to the baseline year. See also prior SD Report, 2022 SD Report, page 56, for historical reference on the work for these teams.

Row 3

(9.15.2.1) Target reference number

Select from:

Target 2

(9.15.2.2) Target coverage

Select from:

Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

Increase in investment related to reducing water withdrawals

(9.15.2.4) Date target was set

01/01/2018

(9.15.2.5) End date of base year

12/31/2018

(9.15.2.6) Base year figure

0.0

(9.15.2.7) End date of target year

12/31/2028

(9.15.2.8) Target year figure

100

(9.15.2.9) Reporting year figure

61

(9.15.2.10) Target status in reporting year

Select from:

Underway

(9.15.2.11) % of target achieved relative to base year

61

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

The scope is high-water use (hi-hi) sites, defined as sites exceeding 50,000 m³/year of water withdrawal, excluding once-through, noncontact cooling water. The 2023 results are on track to meet this target: Sixty-four sites were defined as in scope for this target in 2023. Nine of these sites were added voluntarily in the Americas and APAC, based on local assessment of high-water stress. In addition to the voluntary sites in the Americas (8) and APAC (1), the remaining WMP sites are in EMEA (28), APAC (13), and the Americas (14).

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

In 2023, 61% 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, 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.

(9.15.2.16) Further details of target

See Linde's SD Report, page 28

Row 4

(9.15.2.1) Target reference number

Select from:

Target 4

(9.15.2.2) Target coverage

Select from:

Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

Other water withdrawals, please specify :Revenue saved from sustainable productivity projects (which include projects that save water)

(9.15.2.4) Date target was set

01/01/2018

(9.15.2.5) End date of base year

12/31/2018

(9.15.2.6) Base year figure

0

(9.15.2.7) End date of target year

12/31/2028

(9.15.2.8) Target year figure

1300000000

(9.15.2.9) Reporting year figure

979000000

(9.15.2.10) Target status in reporting year

Select from:

Underway

(9.15.2.11) % of target achieved relative to base year

75

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

Linde measures the achievement of this target based on the financial/cost savings achieved. Cumulatively, from 2018-2023, Linde achieved 979 million in productivity savings, along with a reduction of energy and water usage (incl. 500 million gallons reduction in water withdrawal). The cumulative cost savings achieved represent 75% of the target value of 1.3 billion in cumulative cost savings. The scope is all Linde operations. No exclusions.

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

The 2023 results are on track to meet this target. Linde achieved savings of 267 million (cumulatively 979 million). This is 20 percent of all targeted productivity savings in 2023. In 2023, sustainable productivity also saved 1 billion KWh, 381 billion BTU of natural gas, 4 million gallons of diesel fuel, approximately 7 million pounds of waste, 500 million gallons of water and 800 thousand MT CO₂e. The emissions savings estimates count projects where benefits are fully realized as well as projects that were implemented in 2023 and are still accruing benefits. The target assumes that both reported financial savings, and their percentage contribution to all productivity, will increase from the early years of the target period, before achieving a steady state in later years. Continued productivity efforts in each business are part of the operational efforts contributing to this target.

(9.15.2.16) Further details of target

Sustainable productivity projects bring financial and environmental savings in Linde's EKPIs. The target for sustainable productivity is a cumulative savings of 1.3 billion, 2018–2028. See Linde's SD Report, page 28 Linde measures the achievement of this target based on the financial/cost savings achieved. Cumulatively, from 2018-2023, Linde achieved 979 million in productivity savings, along with a reduction of energy and water usage (incl. 500 million gallons reduction in water withdrawal). The cumulative cost savings achieved represent 75% of the target value of 1.3 billion in cumulative cost savings.

[Add row]

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

(11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

- Yes, we are taking actions to progress our biodiversity-related commitments

(11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

- Education & awareness
- Other, please specify :1. Monitored protected areas/ red listed species near production facilities; 2. Surveillance of whether deforestation occurred in eng construction projects; 3. Initiation of Linde's Evergreen program (2023 SD report, page 57); 4. Employee education

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

| | Does your organization use indicators to monitor biodiversity performance? | Indicators used to monitor biodiversity performance |
|--|--|--|
| | Select from: <input checked="" type="checkbox"/> Yes, we use indicators | Select all that apply <input checked="" type="checkbox"/> Response indicators |

| | Does your organization use indicators to monitor biodiversity performance? | Indicators used to monitor biodiversity performance |
|--|--|--|
| | | <input checked="" type="checkbox"/> Other, please specify :Examples of Linde's indicators include: Proximity of global industrial gas production facilities to recognized protected areas, as defined by the International Union for Conservation of Nature (IUCN) |

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

Legally protected areas

(11.4.2) Comment

Linde periodically surveys the locations of its global industrial gas production facilities and their proximity to protected areas, based on data provided by the International Union for Conservation of Nature (IUCN). This surveillance is conducted at least every 3 years. For 2023, Linde conducted an analysis of production sites with respect to biodiversity impact, proximity to protected areas and prevalence of potentially protected species, covering more than 900 sites in 2023. Analysis is ongoing.

UNESCO World Heritage sites

(11.4.2) Comment

Linde periodically surveys the locations of its global industrial gas production facilities and their proximity to protected areas, based on data provided by the International Union for Conservation of Nature (IUCN). This surveillance is conducted at least every 3 years. For 2023, Linde conducted an analysis of production sites with respect to biodiversity impact, proximity to protected areas and prevalence of potentially protected species, covering more than 900 sites in 2023. Analysis is ongoing.

UNESCO Man and the Biosphere Reserves

(11.4.2) Comment

Linde periodically surveys the locations of its global industrial gas production facilities and their proximity to protected areas, based on data provided by the International Union for Conservation of Nature (IUCN). This surveillance is conducted at least every 3 years. For 2023, Linde conducted an analysis of production sites with respect to biodiversity impact, proximity to protected areas and prevalence of potentially protected species, covering more than 900 sites in 2023. Analysis is ongoing.

Ramsar sites

(11.4.2) Comment

Linde periodically surveys the locations of its global industrial gas production facilities and their proximity to protected areas, based on data provided by the International Union for Conservation of Nature (IUCN). This surveillance is conducted at least every 3 years. For 2023, Linde conducted an analysis of production sites with respect to biodiversity impact, proximity to protected areas and prevalence of potentially protected species, covering more than 900 sites in 2023. Analysis is ongoing.

Key Biodiversity Areas

(11.4.2) Comment

Linde periodically surveys the locations of its global industrial gas production facilities and their proximity to protected areas, based on data provided by the International Union for Conservation of Nature (IUCN). This surveillance is conducted at least every 3 years. For 2023, Linde conducted an analysis of production sites with respect to biodiversity impact, proximity to protected areas and prevalence of potentially protected species, covering more than 900 sites in 2023. Analysis is ongoing.

Other areas important for biodiversity

(11.4.2) Comment

Linde periodically surveys the locations of its global industrial gas production facilities and their proximity to protected areas, based on data provided by the International Union for Conservation of Nature (IUCN). This surveillance is conducted at least every 3 years. For 2023, Linde conducted an analysis of production sites with respect to biodiversity impact, proximity to protected areas and prevalence of potentially protected species, covering more than 900 sites in 2023. Analysis is ongoing.

[Fixed row]

C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

| | |
|--|---|
| | Other environmental information included in your CDP response is verified and/or assured by a third party |
| | Select from: <input checked="" type="checkbox"/> Yes |

[Fixed row]

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?

Row 1

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

Climate change

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

Year on year change in absolute emissions (Scope 1 and 2)

(13.1.1.3) Verification/assurance standard

Climate change-related standards

ISO 14064-3

(13.1.1.4) Further details of the third-party verification/assurance process

Linde has the change in Scope 2 emissions verified because it directly relates to Linde's climate change subtarget to double its renewable energy sourcing, which is related to our science-based target validated by SBTi to reduce absolute Scopes 12 emissions by 35% by 2035.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

2023-ekpi-assurance-statement.pdf

Row 2

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

Climate change

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

Fuel consumption

(13.1.1.3) Verification/assurance standard

Climate change-related standards

ISO 14064-3

(13.1.1.4) Further details of the third-party verification/assurance process

Verifying the sources of GHG emissions is an important aspect of ensuring our GHG emissions data is complete and accurate. Verified energy data include total electricity consumption, electricity broken down by renewable and non-renewable, steam, non-renewable fuel consumption, and non-renewable energy consumption.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

2023-ekpi-assurance-statement.pdf

Row 3

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

Water

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Water security

Water withdrawals – volumes by source

(13.1.1.3) Verification/assurance standard

General standards

ISAE 3000

(13.1.1.4) Further details of the third-party verification/assurance process

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

(13.1.1.5) Attach verification/assurance evidence/report (optional)

2023-ekpi-assurance-statement.pdf

[Add row]

(13.2) 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.

(13.2.1) Additional information

*Note the following, by question: 3.1.3 Note that the automatic text entered by CDP here is that risks do not exist in the supply chain or downstream. Note that this refers to risks that are deemed to have a substantive effect and does not suggest that there are no risks present. 4.2 Regarding Education, from Proxy: New Directors who join Linde's Board of Directors participate in a comprehensive director orientation program that involves a review of information developed to present foundational knowledge about Linde. Orientation materials typically include information on Linde's business, industry and strategy, organizational structure, management responsibility, director responsibilities Board and committee structure and policies, coverage of ESG matters, safety, sustainability, risk management, controls, compliance, regulatory landscape, and technology topics. In addition, new directors may also visit Linde operating plants and/or offices. In addition, the Board is presented with ongoing education in order to increase directors' familiarity with Linde's business, industry developments and emerging issues. Such content may be prepared for the entire board or for a specific committee and include presentations from Linde management and/or outside experts. Typical recurring topics include executive compensation trends, corporate governance and public company regulatory trends, cybersecurity, sustainability, risk, and regulatory developments. Periodically, board members also may convene at Linde sites or have opportunities to participate in technology demonstrations. Directors may also participate in third-party-supplied continuing education, for which Linde reimburses the directors for expenses. 4.3.1: Note: The Sustainability Committee meets typically more than half-yearly. The committee met three times in 2023, for example. (There are no options between quarterly and half-yearly.) 4.11.1 and 4.11.2: Linde does not separately track or disclose funding, as this question requests and has indicated 0.. 5.4: For this question, we interpreted the disclosure as alignment with our transition planning according to a Sustainable Finance Taxonomy. Linde discloses, at the organizational level, metrics related to ER Taxonomy "eligible," as defined by the EU Taxonomy (not "aligned," as defined by the EU Taxonomy). This is publicly reported in the 2023 SD report, page 50, and is reported on a voluntary basis (not required by statute). 5.11.1: Note: We have estimated the number of suppliers regarding substantive impacts on water. There are few suppliers in this category. 7.16 and 7.30.16: Country breakdowns for emissions and electricity usage have not been provided due to reasons of business sensitivity. 7.74.1: For revenue from low-carbon products, we have provided the aggregate revenue for all products. Note that certain question rows could not be completed due to errors in the system/portal, as of October 2. We have advised CDP of these form errors. -
[Fixed row]*

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Senior Vice President & Chief Accounting Officer

(13.3.2) Corresponding job category

Select from:

Other C-Suite Officer

[Fixed row]

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

Select from:

No

