

Making our world more productive



# Sustainable Development Report 2021



# Mission, Vision and Values

## Our Vision

We are committed to fulfilling our vision to be the **best performing global industrial gases and engineering company**, where our people deliver innovative and sustainable solutions for our customers in a connected world.

## Our Mission

We live our mission of making our world more productive every day. Through our high-quality solutions, technologies and services we are making our customers more successful and helping to **sustain and protect our planet**.

## Our Values

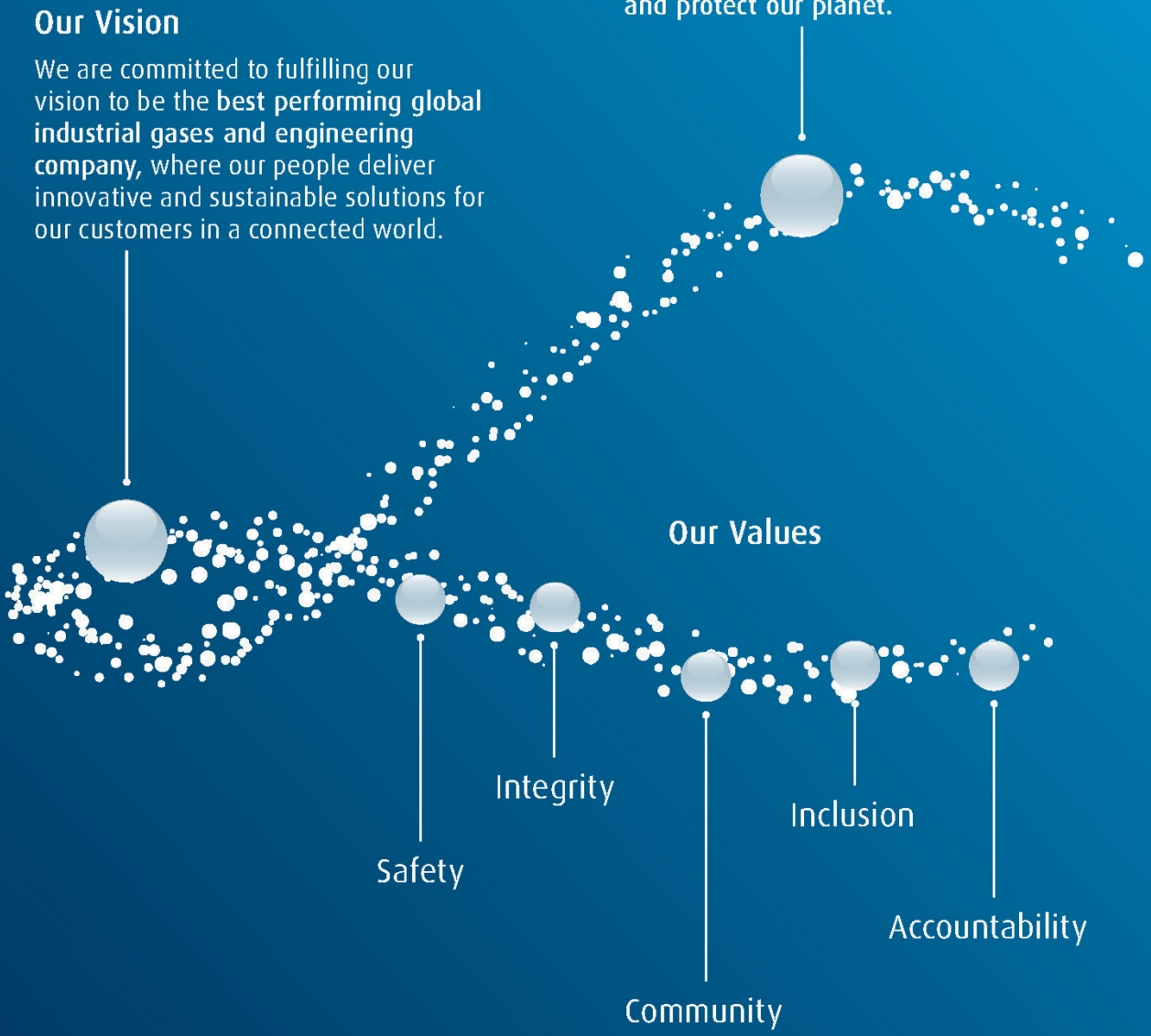
Safety

Integrity

Community

Inclusion

Accountability



# Table of Contents

Message from our CEO .....	04
Message from VP, Sustainability.....	06
About Linde.....	08
Sustainability Reporting Foundations: Frameworks & Transparency .....	12
Materiality, Priorities and Targets: SD 2028 .....	15
Climate Change—Challenge & Opportunity .....	18
Performance Towards Targets.....	24
Governance .....	31
Risk Management .....	34
Engaging Stakeholders .....	35
Economic Topics .....	44
Environmental Topics.....	55
Social Topics .....	75
Assurance.....	110
GRI Sustainability Reporting Standards Content Index.....	114

## GRI References

This report has been prepared in accordance with GRI Standards: Core Option. GRI Standards are referenced throughout and an index is provided on page 114.

## Forward Looking Statement

This document contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are identified by terms and phrases such as: anticipate, believe, intend, estimate, expect, continue, should, could, may, plan, project, predict, will, potential, forecast, and similar expressions. They are based on management’s reasonable expectations and assumptions as of the date the statements are made but involve risks and uncertainties. These risks and uncertainties include, without limitation: the performance of stock markets generally; developments in worldwide and national economies and other international events and circumstances, including trade conflicts and tariffs; changes in foreign currencies and in interest rates; the cost and availability of electric power, natural gas and other raw materials; the ability to achieve price increases to offset cost increases; catastrophic events including natural disasters, epidemics, pandemics such as COVID-19 and acts of war and terrorism; the ability to attract, hire, and retain qualified personnel; the impact of changes in financial accounting standards; the impact of changes in pension plan liabilities; the impact of tax, environmental, healthcare and other legislation and government regulation in jurisdictions in which the company operates; the cost and outcomes of investigations, litigation and regulatory proceedings; the impact of potential unusual or non-recurring items; continued timely development and market acceptance of new products and applications; the impact of competitive products and pricing; future financial and operating performance of major customers and industries served; the impact of information technology system failures, network disruptions and breaches in data security; and the effectiveness and speed of integrating new acquisitions into the business. These risks and uncertainties may cause future results or circumstances to differ materially from adjusted projections, estimates or other forward-looking statements.

Linde plc assumes no obligation to update or provide revisions to any forward-looking statement in response to changing circumstances. The above listed risks and uncertainties are further described in Item 1A. Risk Factors in Linde plc’s Form 10-K for the fiscal year ended December 31, 2021 filed with the SEC on February 28, 2022 which should be reviewed carefully. Please consider Linde plc’s forward-looking statements in light of those risks.

# Message from our CEO

102-14



"I am privileged to lead a passionate and high-performing team of Linde employees. I look forward to growing our impact and continuing to fulfill our commitments to you."

## Dear Stakeholder,

Sustainability underpins so much of what we do at Linde. It is central to our mission of *making our world more productive* and key to how we create value for our customers and our global communities. In this report, we share how our people at Linde are making a difference and how we continue to deliver our environmental, economic and social commitments to you.

In the last year, we communicated our new, ambitious "35 by 35" target to reduce our absolute greenhouse (GHG) emissions 35 percent by 2035, compared to the 2021 emissions base. This target is in-line with the Paris Accords and is a cornerstone for achieving climate neutrality by 2050. Our worldwide teams are actively executing plans towards these goals, including developing carbon capture and storage (CCS) projects in the U.S. Gulf Coast to produce low-carbon hydrogen.

Enabling our customers' sustainability goals remains our priority. Our products help our customers to reduce their carbon footprint and to provide positive environmental impact for our planet. In 2021, we helped our customers avoid more than 88 million metric tons of equivalent carbon dioxide. Our operations also diverted more than 200 million pounds of waste from landfill through our Zero Waste Program and reduced our water usage by more than 500 million gallons of water through productivity efforts.

Our community commitment extends beyond environmental. We are proud of our role as a good citizen in communities across our footprint of approximately 100 countries. Our employees' commitment is evident through the impact made through approximately 400 community engagement projects conducted last year. These projects address compelling concerns, such as access to education and food insecurity. Through their personal engagement, our employees are helping to make our communities more resilient.

We remain committed to an equitable, inclusive world. Approximately 40 percent of our philanthropic contributions were diversity-related in 2021. Within our company, diversity and inclusion are a top priority, and we are well on track to exceed our "30 by 30" goal of 30 percent female representation globally by 2030.

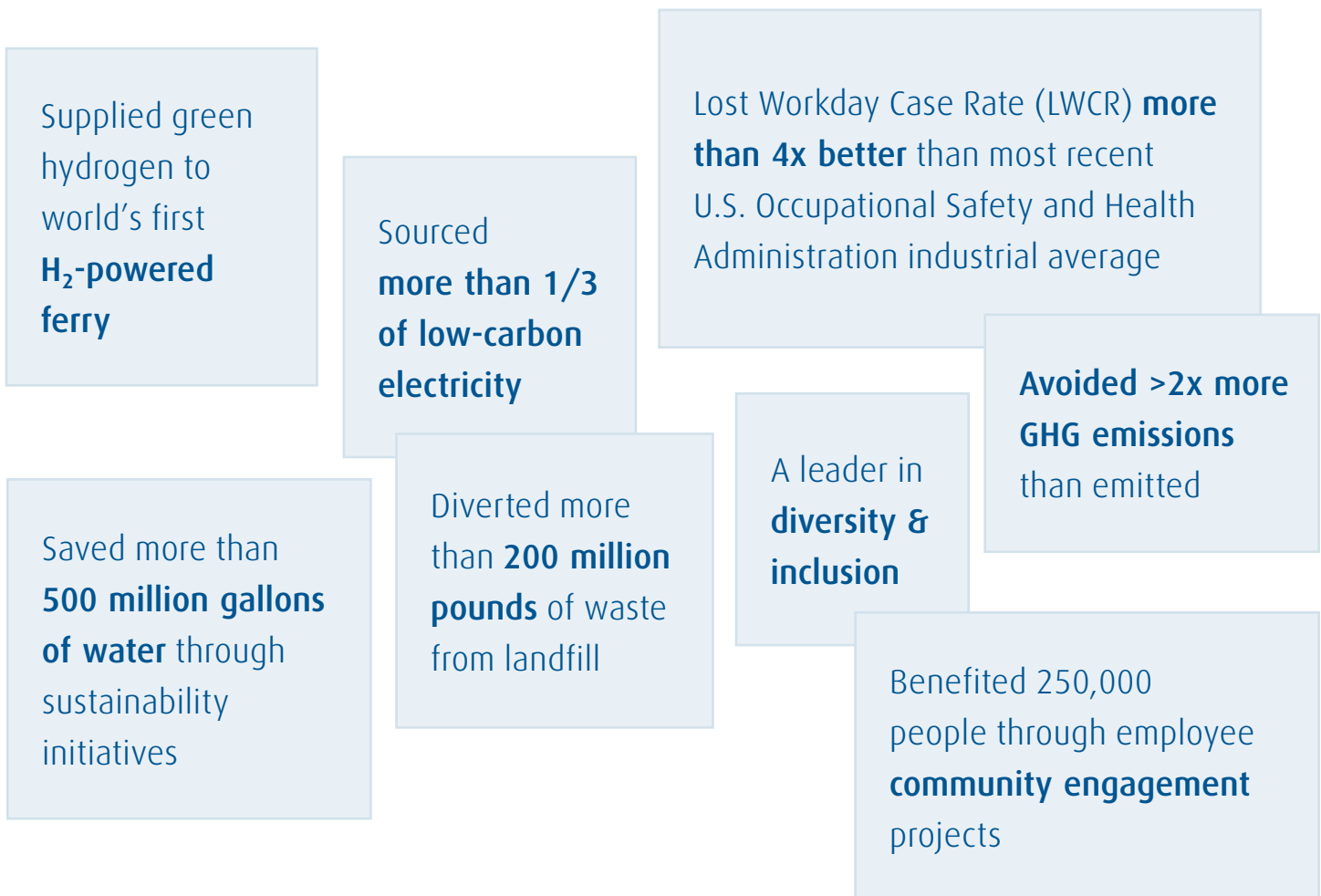
Linde continues to be recognized for excellent sustainability performance. Last year, Linde celebrated its unique position in the chemicals industry with 19 consecutive years of inclusion in the Dow Jones Sustainability World Index (DJSI World). Linde was named to CDP's A-List for Water Security and remains at the Leadership level for the CDP Climate Change response. We were also reconfirmed as one of the World's Most Ethical Companies by Ethisphere.

Let me assure you, we do not rest on these achievements and remain committed to maintaining the highest standards and performance upon which our stakeholders — investors, employees and global communities — have based their confidence.

I am privileged to lead a passionate and high-performing team of Linde employees. I look forward to growing our impact and continuing to fulfill our commitments to you.

Sanjiv Lamba  
Chief Executive Officer

# Sustainable Development



## Awards & Recognition

### Climate Change & Environment

- CDP Climate Change Leadership level (A-)
- CDP Water Security, A List
- DJSI Environmental Dimension: 99<sup>th</sup> percentile

### People & Community

- DiversityInc Noteworthy Company
- Forbes' America's Best Employers for Diversity
- 100 Best Corporate Citizens

### Integrity & Compliance

- 2021 World's Most Ethical Companies

# Letter from VP, Sustainability



## Dear Stakeholder,

Over the course of the year, we have the pleasure of connecting with our stakeholders in various ways. Our annual sustainability report is one such opportunity. We are pleased to share information on our performance, key initiatives and progress against our own sustainability goals and those of the global community.

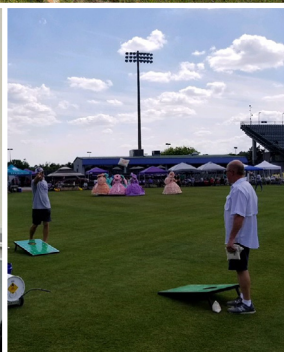
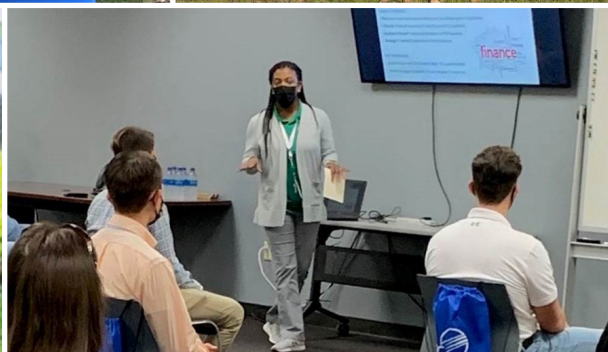
Sustainability is woven throughout Linde. Across our organization, we are working together every day to meet the complex expectations of the global sustainability community and to provide the level of transparency you have come to expect from us. We are not alone on this journey. Our customers, suppliers and other experts are working with us to tackle long-term concerns, such as climate change. For this, we have a vision that extends through 2028, 2035 and beyond. We are dedicated to providing opportunities that help make our communities stronger now and in the future.

I am excited about the ways Linde is connecting across boundaries. Together, we are living our mission of *making our world more productive*.

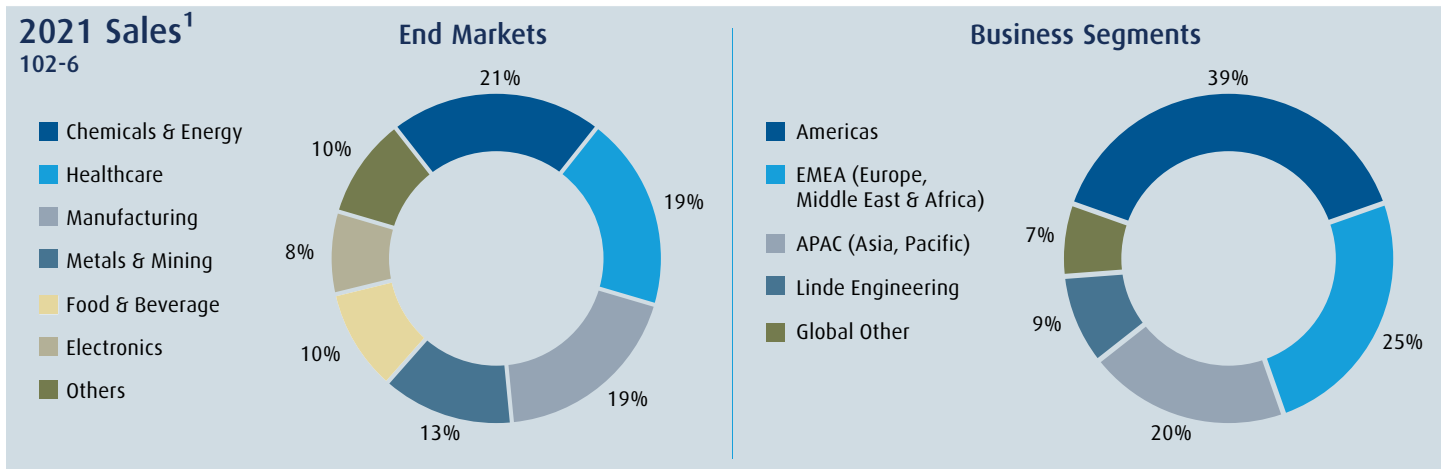
A handwritten signature in black ink that reads "Tamara". The signature is fluid and cursive, with a long, sweeping underline that extends to the left.

Tamara E. Brown  
Vice President, Sustainability

# Living the Mission: The Faces of Linde



# About Linde



(1) Total sales excluding Linde Engineering

## Mission, Vision and Values

Linde’s Sustainable Development Report (SDR) demonstrates how we deliver on our mission of *making our world more productive*. We live our mission every day by providing high-quality solutions, technologies and services that are making our customers more successful and helping to sustain and protect our planet.

Our vision is to be the best performing global industrial gases and engineering company, where our people deliver innovative and sustainable solutions for our customers in a connected world.

Linde’s values are safety, integrity, community, inclusion and accountability.

## Ethics and Integrity 102-16

Responsible corporate governance is a key prerequisite for Linde’s business success. This means ensuring compliance with the law, rules and regulations, and voluntary commitments. Linde strives continuously to achieve its goals ethically and with the highest integrity. Interaction between management, employees and Linde’s business partners is expected to be transparent and respectful, consistent with our Code of Business Integrity (CBI). Linde’s governance of ethics and integrity is described in the management approach section for Material Economic Aspects, page 45.

## Organization

Linde is a leading global industrial gases and engineering company with 2021 sales of \$31 billion. The reporting currency is the U.S. dollar. All amounts are shown in U.S. dollars (\$), unless stated otherwise. The company employs more than 72,000 people globally and serves a diverse group of industries in approximately 100 countries.

Approximately 84 percent of Linde’s 2021 sales were generated from industrial gases operations in three geographic segments—Americas; Europe, Middle East and Africa (EMEA); and Asia Pacific (APAC). The remaining 16 percent is related primarily to the Engineering segment, and to a lesser extent, Other operating segments.

## Business Model 102-2, 102-9

Linde’s business model is to transform air and other process gases into applications that, in many cases, help customers become more energy and resource efficient or provide social benefits.

Linde’s industrial gas processes transform natural resources into environmental and social value and impact; see the Business Model table, page 10. Principal business operations are to make atmospheric gases from raw materials in the air and electricity, and process gases, mainly hydrogen, from natural gas or industry byproducts, together with steam. The outputs of these processes, or our product applications, serve multiple end markets. More than two thirds of sales are underpinned by fixed fees or resilient end-markets (e.g., healthcare, food and beverage, electronics), as well as portions of sales to chemicals and energy, metals and manufacturing, which provide some protection from market swings.

Many of Linde’s applications bring environmental, economic and social benefits to our customers, communities and the planet. Our “sustainability portfolio” applications are shown in the “Outputs” rows, by end market. The benefits that they enable are shown in the “Outcomes” rows, by gas.

For example, Linde’s oxygen helps steelmakers save energy, allows sustainable aquaculture to thrive and serves hundreds of thousands of patients needing medical oxygen. Its hydrogen helps oil refiners to make ultra-low sulfur diesel (ULSD), which helps improve air quality, thereby improving the environment and human health. Linde’s high-performance surface coatings help improve energy efficiency in jet engines and machine turbines. These outcomes deliver multiple longer-term impacts and sustainable business value.

For more information about the company’s business model and products and services, please visit <http://www.linde.com/>.

## Creating Economic, Environmental and Social Value

Linde’s business model creates additional enduring value that amplifies our mission of *making our world more productive*. The Business Model table shows a range of Linde’s inputs and activities,



and the output and outcomes of these beyond those described in our Business Model table. For example, Linde values the safety of its employees and contractors and invested approximately 5 million hours of safety training in 2021. One outcome of this effort is that Linde's safety record is several times better than industry benchmarks, which gives us confidence that our employees and contractors return home safely at the end of their day.

Linde's products contribute positively to the health and wellbeing of our customers. Homecare and hospital patients worldwide benefit from our medical gases, devices, services and therapies, especially in respiratory care. For example, during the COVID-19 pandemic, Linde medical oxygen was crucial to healthcare responders and their patients in many countries. In the United States, Lincare is a leading provider of home respiratory-therapy products and services.

Linde gases also play an important role in tackling the global challenge of access to clean water. An ever-growing population and industrial activity, along with stringent environmental regulations, puts additional pressure on wastewater treatment plants across the globe to treat increasing volumes of wastewater—adding oxygen effectively increases plant capacity. As access to drinking water becomes more scarce, the market for desalination has expanded, particularly in drought-susceptible areas. Carbon dioxide, which is often sourced from industry byproducts, can be used in the re-mineralization step as a safer alternative to mineral acids. In Australia and other areas, for example, Linde carbon dioxide helps desalinate water used for municipal water supplies. In 2021, Linde

gases enabled more than 225 million people to have access to safe drinking water, more than half of whom were in APAC (approximately 130 million people).

The long-term impact of these activities is difficult to measure or attribute directly to one company. However, we can demonstrate how they contribute to the 17 global United Nations Sustainable Development Goals (UN SDGs) introduced by the UN to eradicate poverty, protect the planet and guarantee prosperity for all by 2030. The "Impact" column of the table on page 11 shows the SDGs most relevant to Linde, which are referenced in Linde's Sustainable Development targets.

There are many examples of how Linde's activities contribute towards the SDGs, including efforts to further SDG 12: Responsible Production and Consumption. SDG 12.2 is "By 2030, achieve the sustainable management and efficient use of natural resources." Linde's broad range of resource intensity targets address this issue. The company also takes direct action on SDG 12.6: "Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle."

In the table, we can observe, for example, how Linde contributes to SDG 7.2: "Increase the share of renewable energy by 2030." Linde will actively contribute to this target by doubling the purchase of low-carbon energy by 2028. Please refer to page 26 for more details on this target.








# Business Model 102-2

This chart provides some examples of the applications and benefits from some of Linde's products.

Inputs	Product Stewardship	Managing environmental and safety aspects through the product life cycle from raw materials sourcing and supplier engagement to operations, distribution and customer use.							
	Raw Materials	Air and Electricity			Natural Gas or Industry Byproducts, Water (Steam)	Industry Byproduct, Natural Wells	Byproducts from Natural Gas Processing	Metals and Metalloids	
Activities	Products	O <sub>2</sub>	N <sub>2</sub>	Ar	H <sub>2</sub>	CO <sub>2</sub>	He	Materials	
	Business Operations	Atmospheric Gases			Process & Spec Gases			Other Products (Including Surface Coatings)	
Outputs	2021 End Markets (% revenue)	Examples of Significant Product Applications				Eco & Joint Eco and Social Benefits Portfolio		Social Benefits Portfolio	
	Healthcare (19%)	Hypoxia					Medical gas, MRIs		
	Manufacturing (19%)	Fuel	Autoclave	Welding, window insulation	Fuel	Welding	Welding	Coatings	
		Water treatment				Water treatment			
	Chemicals & Energy (21%)	Refinery processing & water treatment	Inerting, blanketing, purging		Diesel & gasoline reformulation & manufacture of ammonia, methanol	Replacing acids in industrial processes; synthesis & separation; carbon capture	Leak detection	Coatings	
	Metals (13%)	Steelmaking, glass, non-ferrous metal processing	Inerting, metals processing	Stainless steel production	Heat treatment of stainless steel				
	Electronics (8%)		Inerting			Cleaning & inerting	Inerting	Electronics processing	
	Food & Beverage (10%)	Modified Atmosphere Packaging, aquaculture	Freezing, chilling, preservation				Cryogenic freezing		
							Beverage carbonation		
Other Markets (10%)						Laboratories			
Outcomes	Examples of environmental, economic and social benefits	Human health and safety, productivity, product quality							
		Fewer emissions of NOx, SOx, VOCs							
		More energy-efficient industrial production	Safety	Fewer GHG emissions More energy efficiency	Fewer black carbon and GHG emissions	Cleaner manufacturing	Fewer environmental releases	Improved product durability, essential for solar PV	
	Cleaner drinking water, medical O <sub>2</sub>	Freezing & preserving food, medical samples		Better air quality	Water treatment & desalination	MRIs, LCDs, diving gases, airbags	Chrome cadmium replacement		
Impact		Delivering Sustainable Value (see page 11)							

Key: Magnetic resonance imaging (MRI); Volatile organic compound (VOC); Liquid crystal display (LCD)

# How We Create Economic, Environmental and Social Value

INPUT AND ACTIVITIES →	OUTPUT AND OUTCOMES →	IMPACT
<p><b>Employees</b></p> <p>A global corporation with a presence in approximately 100 countries</p>	<ul style="list-style-type: none"> <li>Supported 72,327 employees globally, with personnel expenses totaling \$5.9 billion in 2021, including salaries, benefits, Social Security contributions and pensions, and share-based compensation</li> <li>Positive trend in employee engagement based upon global survey</li> </ul>	<p>UN SDG*</p>
<p>Committed to Diversity and Inclusion</p>	<ul style="list-style-type: none"> <li>27% female employees worldwide; (28% female professional employees worldwide)</li> <li>Trained approximately 1,200 leaders on unconscious bias</li> <li>Consistently listed on major Diversity and Inclusion indices</li> </ul>	<p><b>3</b> GOOD HEALTH AND WELL-BEING</p> 
<p>Commitment to Safety: Approximately 5 million hours of safety training delivered in 2021 to employees and contractors</p>	<ul style="list-style-type: none"> <li>Achieved Lost Workday Case Rate (LWCR) 4X better than the U.S. Occupational Health and Safety Administration all industries industrial average</li> </ul>	
<p><b>Customers and Investors</b></p> <p>Shareholder focus</p>	<ul style="list-style-type: none"> <li>Delivered 29 consecutive years of dividend growth</li> </ul>	
<p>Customer-centric, capital-intensive operations</p>	<ul style="list-style-type: none"> <li>Adjusted after-tax return on capital**: 17.7%</li> <li>Industry-leading sale of gas project backlog of \$3.5 billion</li> </ul>	<p><b>8</b> DECENT WORK AND ECONOMIC GROWTH</p> 
<p>Local business model</p>	<ul style="list-style-type: none"> <li>Linde manufactures and distributes nearly all its products and manages 2+ million industrial customers on a regional basis</li> </ul>	
<p><b>Innovation</b></p> <p>Technology Innovation</p>	<ul style="list-style-type: none"> <li>Conducted first-ever commercial scale trial for low-carbon steel heating with hydrogen, which enables substantial reductions in carbon emissions</li> <li>Delivered 55% of revenue from applications that bring environmental and social benefits</li> <li>Commenced construction of the world's first hydrogen station for fuel-cell powered passenger trains</li> <li>Demonstrated electrolysis expertise: currently building world's largest PEM electrolyzer (24 megawatts)</li> </ul>	<p><b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> 
<p><b>Natural Resources</b></p> <p>Resource productivity</p>	<ul style="list-style-type: none"> <li>Delivered productivity in line with business strategic objectives</li> <li>Realized \$187 million savings from sustainable productivity, including avoiding &gt;500 million gallons of water usage and 696,000 MT CO<sub>2</sub>e***</li> </ul>	<p><b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 
<p>39.9 million MT CO<sub>2</sub>e direct and indirect GHG**** emissions</p>	<ul style="list-style-type: none"> <li>17 TWh low-carbon energy sourced (40% of all energy)</li> <li>Enabled 88 million MT CO<sub>2</sub>e to be avoided by customers from five of Linde's key technologies</li> </ul>	<p><b>7</b> AFFORDABLE AND CLEAN ENERGY</p> 
<p>80 million m<sup>3</sup> water consumed</p>	<ul style="list-style-type: none"> <li>Enabled more than 225 million people to have access to safe drinking water through gases used for water treatment and desalination</li> </ul>	
<p><b>Society</b></p> <p>Commitment to Ethics and Integrity</p>	<ul style="list-style-type: none"> <li>Maintained strong compliance culture through Code of Business Integrity, which has been implemented globally</li> </ul>	
<p>\$9.7 million in funding for social projects and initiatives</p>	<ul style="list-style-type: none"> <li>Supported more than 1,150 organizations in 50 countries</li> </ul>	<p><b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS</p> 
<p>60,000 employee volunteer hours contributed</p>	<ul style="list-style-type: none"> <li>Impacted 250,000 people, including 100,000 children and students, through employee community engagement projects</li> </ul>	
<p>Healthcare business</p>	<ul style="list-style-type: none"> <li>Provided crucial support to hospitals and healthcare facilities during the COVID-19 pandemic</li> <li>Cared for 165,000 COVID-19 patients at home in the U.S. through Lincare's respiratory care services</li> </ul>	<p><b>8</b> DECENT WORK AND ECONOMIC GROWTH</p> 

\* UN SDG: United Nations Sustainable Development Goals  
 \*\* Adjusted after-tax return on capital is a non-GAAP measure. For definition and reconciliation, please see Appendix to the Investor Teleconference Presentation Fourth Quarter 2021.  
 \*\*\* CO<sub>2</sub>e: CO<sub>2</sub> equivalents  
 \*\*\*\* GHG: Greenhouse gas

# Sustainability Reporting Foundations: Frameworks & Transparency

## 102-11 Precautionary Principle or approach

Linde supports the Precautionary Principle as defined in Principle 15 of the Rio Declaration: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

## 102-12 External Initiatives

Linde's Code of Business Integrity (CBI) and corporate policies are provided on its website at: <https://www.linde.com>.

- Linde's CBI makes clear its commitment to values such as ethics, integrity, fairness, diversity, compliance and human rights.
- Linde's CBI and Human Rights Policy also confirm that Linde abides by the principles of the International Bill of Human Rights enacted by the United Nations and does not condone or engage in discrimination; harassment; violations of privacy, slavery or servitude; restrictions on free assembly; or unfair employment practices. Linde commits to adhering to these human rights principles and expects similar standards to be observed by all with whom it conducts business. Linde's Human Rights Policy is provided on the company's website at: <https://www.linde.com/sustainable-development/policies-and-position-statements/human-rights-policy>.
- UN Global Compact
- Linde's global environment, health, safety and security program conforms to the Responsible Care Management System® (RCMS®) requirements, as verified by a third party. Management is committed to the new Responsible Care Global Charter and its Six Elements, and to Responsible Care Guiding Principles that are stated in Linde's Commitment to Stakeholders. Both are provided on the company's website at: <https://www.linde.com/about-linde/safety>.

## 102-45 Entities included in the consolidated financial statements

See [2021 Annual Report \(10-K\)](#) for consolidated financial statements.

## 102-46 Defining report content and topic boundaries

Linde's 2021 Directors' Report and Financial Statements provides non-financial information in accordance with Irish rules for reporting. Linde's annual Sustainable Development Report (this report) provides additional quantitative and qualitative non-financial information the company believes to be relevant to stakeholders and key to driving long-term sustainable results and disclosures based on the Global Reporting Initiative (GRI) Sustainability Reporting Standards.

In the sustainability reporting ecosystem, the GRI Sustainability Reporting Standards are one of several key frameworks and

standards for voluntary disclosure. They are designed to provide sustainability information of relevance to a broad range of stakeholders, such as employees and potential employees, communities, customers, suppliers, regulators and the general public. Linde is also aligned with other reporting frameworks; see the "Reporting Frameworks Applied" section.

This report scope is for the full Linde plc organization and for the calendar year 2021.

Information is provided from entities where Linde is the majority shareholder (more than 50 percent) and certain joint ventures (JVs). It excludes data from entities where Linde has a minority interest.

### Principles for Defining Report Content and Quality

Consistent with the GRI Standards and to define the content and the quality of data and narrative in this report, the company followed the principles of being context-driven, inclusive, material, responsive and complete, and had data externally assured in Priority Factor (PF) areas.

### Data Consolidation and Reporting

Various databases are managed across Linde to aggregate data. Data is collected from the businesses and other corporate functions, including Safety, Health, Environment & Quality (SHEQ), Human Resources (HR), Finance, Operations, Center of Excellence (COE), which includes Procurement and Productivity, Research & Development (R&D), Sales, Sustainable Development and the Global Giving Program. Consolidated information is housed in various corporate databases. Linde uses a licensed global sustainability reporting software program to integrate data reporting for sustainable development.


Performance data is reported against the Linde Sustainable Development 2028 (SD 2028) targets to a management team.

See 103-1, 103-2 and 103-3 for management discussion and analysis (MD&A) for economic, environmental and social topics.

### Reporting Frameworks Applied

This report draws on these voluntary reporting frameworks:

GRI Sustainability Reporting Standards (GRI SRSS): This report has been prepared in Accordance with the GRI Standards: Core option. For the GRI Content Index Service, GRI Services reviewed that the GRI Content Index is clearly presented and the references for all disclosures included align with the appropriate sections in the body of the report. See the Content Index at the end of this report.

Those standards that are considered material are marked within this Annex by the following symbol: 

1. The Task Force on Climate-Related Financial Disclosures (TCFD) framework was used to ensure that disclosures about climate change are linked to information about financial performance in mainstream financial reports. See Linde TCFD Index at: <https://www.linde.com/about-linde/sustainable-development/reporting-center>.
2. The International Integrated Reporting Framework provides a framework for investors and other stakeholders to gain greater

insight into the medium- and long-term sustainability of a company. It proposes that a company should report how it manages all its six capital flows: financial capital as well as human, intellectual, manufactured, natural, and social and relationship (sometimes referred to collectively as "social capital"), and the connectivity between them.

3. Sustainability Accounting Standards Board (SASB) Standard for the Chemicals Sector (Version 2018-10): This provides sector standards and KPIs that are considered materially relevant to Environmental, Social and Governance (ESG) investors. See Linde SASB Index at: <https://www.linde.com/about-linde/sustainable-development/reporting-center>.

### 102-48 Restatements of information

The following are restatements from the Linde's 2020 Sustainable Development Report:

- Usage of compressed air for power was formerly reported in Scope 2. This is now reported in Scope 3 as this is not procured electricity.
- Linde continues to move to market-based emissions factors where possible. Restatements are made in accordance with its [GHG Recalculation policy](#). Linde has updated its Scope 2 emissions for 2018, 2019 and 2020.
- As a result of the use of updated market-based emissions factors, the following values have been restated accordingly for 2018, 2019 and 2020: renewable and low-carbon energy, fossil fuel electricity. These recalculations affect the GHG intensity and reported proportion of

renewable and low-carbon energy represented in total purchased electricity.

- Waste values have been restated for 2020 due to a reporting update for non-hazardous waste in North Latin America.
- Linde is restating VOC emissions for 2018, 2019 and 2020 due to the discovery of an additional source of VOCs affecting one site's reporting. For full transparency, prior years have been restated.

### 102-49 Changes in reporting

See 102-48 for restatements

#### Reporting Pro Forma 2018 and Reporting of Numbers for Linde's SD 2028 Targets

Data is reported consistent with Linde's 2020 Sustainable Development Report and utilizes pro forma information.

"Pro forma" definition: Pro forma means a calculated number or result that is not related to the official financial boundaries, reporting scope or period. A pro forma number serves as an indicator of what the result of a newly merged company would theoretically look like if the new company had reported for the complete year and applied new company reporting boundaries and methodologies. As an example, financial reporting for 2018 was based on a full year of Linde Inc. (formerly named Praxair, Inc.) results plus two months of Linde GmbH (previously Linde AG), as the merger legally took place at the end of October 2018. The 2018 pro forma result, in contrast, reflects the complete combined 2018 calendar year.

# 2028 Sustainable Development Targets\*



\* For more information about all of Linde's SD 2028 targets, please visit our website at [www.linde.com/sustainable-development/targets-and-performance](http://www.linde.com/sustainable-development/targets-and-performance)

# Materiality, Priorities and Targets: SD 2028

102-47

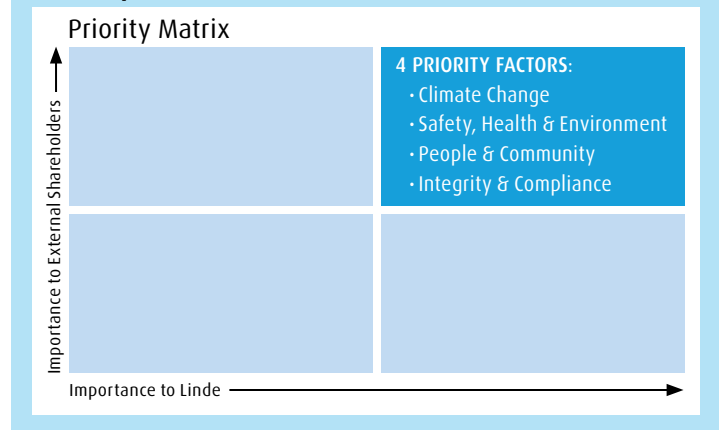
Linde's ambitious Sustainable Development 2028 (SD 2028) targets are our roadmap and plan for the next several years. The targets are organized in four categories, or Priority Factors (PFs), that we consider relevant to the company and its internal and external stakeholders: Climate Change; Safety, Health & Environment; People & Community; and Integrity & Compliance. The PFs are shown in the box: Priority Factors.

Within the four PFs are 10 subset areas covering 20 targets. The Climate Change targets span Linde's full value chain, from pre-investment and R&D to operations, customers and growth strategy. These are discussed in the Climate Change section. Our PF for Safety, Health & Environment is supported by targets for personnel safety, distribution safety and product safety, and in the environment area, for sustainable productivity, water and waste. The People & Community PF has targets for diversity and inclusion, community engagement and global giving. In the Integrity & Compliance category, we are targeting 100 percent of employees and contractors certified in our code of ethics and compliance.

This set of targets has several features worth noting:

1. Commencing in 2018, they are 10-year targets that set a long-term strategy for sustainable development at Linde. They 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.
2. 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.
3. The targets were developed with reference to external expectations. These include ESG investors, who look for non-financial information as the basis to make better informed investor decisions, such as the Sustainability Accounting Standards Board (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). Our SD

## Priority Factors













targets contribute to several SDGs, as shown in the table on value creation on page 11, and in the Targets table. Linde publishes indexes that show how its SD strategy and targets align with the GRI Standards, TCFD and SASB; and an ESG Report – Summary for Investors. For more information, please visit: <https://www.linde.com/about-linde/sustainable-development/reporting-center>.

4. 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. The full SDMA process is described on our website at: <https://www.linde.com/sustainable-development/selecting-priorities>.

### Beyond SD 2028

Supplementing the comprehensive SD 2028 targets are our latest climate change commitments, Linde's 35 by 35 plan and 2050 climate neutrality ambition. See more on these new parts of our climate strategy on page 17.

# Sustainable Development Targets 2018–2028\*

<b>Climate Change</b> 	<b>Safety, Health &amp; Environment</b> 	<b>People &amp; Community</b> 	<b>Integrity &amp; Compliance</b> 
<b>Decarbonization Investment &amp; Innovation</b> <ul style="list-style-type: none"> <li>• &gt;\$1 billion in decarbonization initiatives</li> <li>• &gt;1/3 annual R&amp;D budget to decarbonization</li> </ul>	<b>Occupational and Distribution Safety</b> <ul style="list-style-type: none"> <li>• Achieve annual operational safety better than industry levels (LWCR, TRCR)</li> <li>• Achieve annual Commercial Vehicle Incident Rate (CVIR) of &lt;2.5/million km</li> </ul>	<b>Diversity &amp; Inclusion</b> <ul style="list-style-type: none"> <li>• Achieve 30% representation of women globally by 2030</li> </ul>	<b>Integrity &amp; Compliance</b> <ul style="list-style-type: none"> <li>• Confirm 100% annual certification to Linde's Code of Business Integrity</li> </ul>
<b>GHG Reduction: Achieve 35% intensity reduction in GHG vs. EBITDA</b> <ul style="list-style-type: none"> <li>• &gt;2x low-carbon power sourcing, primarily from active renewable electricity</li> <li>• Improve energy &amp; GHG intensity                             <ul style="list-style-type: none"> <li>• 4% for HyCO GHG</li> <li>• 7% for ASU energy</li> <li>• 10% for distribution fleet GHG</li> </ul> </li> <li>• 10% absolute reduction in GHG emissions from other GHG</li> </ul>	<b>Health/Product Stewardship</b> <ul style="list-style-type: none"> <li>• Zero global sales of coating slurries that contain hexavalent chrome by 2029 (surface coatings)</li> </ul>	<b>Employee Community Engagement</b> <ul style="list-style-type: none"> <li>• Contribute 550 CE projects by 2028</li> <li>• Integrate Community Needs Assessments into Engineering project design phase (U.S. only)</li> </ul>	
<b>Innovative &amp; Sustainable Solutions</b> <ul style="list-style-type: none"> <li>• Contribute &gt;50% annual sales from Sustainability Portfolio</li> <li>• Enable &gt;2x annual carbon productivity</li> </ul>	<b>Environment</b> <ul style="list-style-type: none"> <li>• Achieve \$1.3 billion Sustainable Productivity</li> <li>• Implement Water Management Plans at 100% relevant sites</li> <li>• Achieve Zero Waste at 450 sites</li> </ul>	<b>Global Giving</b> <ul style="list-style-type: none"> <li>• Increase environmental/ climate-related philanthropic spend by 50%</li> </ul>	
		 	 

\* See Performance Towards Targets for definitions of scope and boundary of each target. All targets run 2018 – 2028 except where otherwise noted.



# Road to Climate Neutrality\* 2028 – 2050

## 2028

35 % Reduction  
of **GHG  
Intensity**<sup>1</sup>

Status: Ahead of Goal

**Achievements include:**

- Realized steady GHG intensity reduction since 2018
- Increased active procurement of renewable and low-carbon energy
- Commenced discussions for several “blue and green” hydrogen projects

## 2035

35 % Reduction  
of **Absolute  
GHG Emissions**

Status: Well Underway

**Activities include:**

- Develop CCS<sup>2</sup> projects
- Utilize renewable feedstock
- Source 3x more renewable and low-carbon energy

## 2050

Climate Neutral<sup>3</sup>

Status: Roadmap in Place

**Activities include:**

- Deploy widespread use of CCS and renewable feedstocks
- Transition fleet to zero emissions
- Target sourcing of ~100 % renewable/low-carbon power
- Address remainder through negative emissions projects

\* Aligned with the Paris Accords. Targets relate to all of Linde’s Scope 1 and Scope 2 emissions.

<sup>1</sup> Greenhouse gas (GHG) emissions/Adj. EBITDA.

<sup>2</sup> Carbon capture and sequestration.

<sup>3</sup> Requires strong policy and regulatory support.

# Climate Change—Challenge & Opportunity

The effects of climate change are increasingly visible on the environment, society and the global economy. Climate change is not a distant threat. It is happening now. Linde has the technology, resources and people to help address climate change. For more than 100 years, we have been providing solutions to help solve global energy challenges. Our company's mission of *making our world more productive* is fully aligned with the goals of addressing the global challenges of sustainable energy and climate change. Through our high-quality solutions, products, technologies and services, we are making our customers more successful and helping to sustain and protect our planet.

## TODAY

Linde is in the business of resource transformation. We use fuels for energy and as feedstock. Our business and production processes are therefore energy-intensive, making the cost and availability of energy important for Linde. Our total carbon footprint in 2021 was about 39.9 million tons of CO<sub>2</sub>e, where 41 percent stems from direct carbon dioxide emissions, mostly from our hydrogen plants, and 59 percent from indirect emissions from our electricity consumption, mostly from air separation. This energy use, in turn, delivers innovative and sustainable solutions for our customers. In many cases, these solutions improve the productivity, energy use and GHG emissions for our customers or end users. In fact, we calculate that in 2021, Linde gases, principally oxygen and hydrogen, enabled our customers to avoid 88 million metric tons of CO<sub>2</sub>e, which is more than twice as much GHG avoided than emitted from all our operations. See page 20.

As the electric grid decarbonizes by using more low-carbon and renewable sources, Linde's indirect GHG emissions will decrease. In addition, Linde actively contributes to grid decarbonization in multiple ways:

- Linde's business proposition is that it is more reliable and more energy efficient for our customers to outsource the production of industrial gases than to insource. Linde's energy efficiency is world-class, and we continue to improve it each year, which leads to financial savings as well as reductions in energy and GHG emissions..
- Many of Linde's cryogenic air separation (ASU) plants are designed to include "buffer" inventories to retain reliable supply in case of power failure. This has allowed Linde to participate in demand-response programs. In periods of peak energy demand, Linde can interrupt its grid power use and effectively reduce grid electric load (by the equivalent of 40,000 homes from a single location). Linde's design investment can provide ancillary service for grid operators to maintain reliable electric power service as wind and solar energy become a greater part of our resource mix.
- Forty percent of all Linde electricity (17 TWh) is currently sourced from low-carbon and renewable power. Of that, 3.5 TWh is directly or actively sourced. Linde electricity use in the UK is almost 100 percent renewable using wind and almost 100 percent in Brazil using hydroelectric. Low-carbon and renewable electricity is also sourced in the United States, where both hydro and nuclear power are used, as well as in Colombia, India, Spain, the Philippines and other geographies.

Hydrogen is a key enabler of the clean energy transition. It is a versatile, clean and safe energy carrier that can be used as fuel for power or in the industry as feedstock. At the point of use, it produces zero emissions, and it can be stored and transported at high energy density in liquid or gaseous form. It can be combusted or used in fuel cells to generate heat and electricity.

We are at the beginning of this transition. Conventional processes are dominant today in refining, chemical production and other manufacturing processes (steel, electronics and other applications). R&D and emerging technologies are starting to change the landscape, but hydrogen fuel cell vehicles (HFCVs) are not yet widely adopted, green fuels and materials are still at pilot stages and hydrogen for energy storage is still in the development stage.

Most hydrogen is produced by steam methane reforming (SMR) using natural gas, or recovered as a byproduct from other industrial processes. Water electrolysis is emerging as an effective low-carbon source of hydrogen production, but SMRs remain the dominant technology to produce hydrogen on a large scale.

# Key Actions to 2035 and Beyond!



## Developing Science-Based Targets

In October 2021, Linde announced its new 35 by 35 target, committing to reduce absolute Scope 1 and 2 GHG emissions by 35 percent by 2035 compared to 2021 emissions as a baseline, and a defined roadmap to achieve climate neutrality by 2050. These targets reflect Linde's alignment with the goals of the Paris Agreement and culminated nearly a year of work between Linde's business segments, Energy Management, Clean Energy, Sustainability and R&D. Corporate Fellow Minish Shah led the modeling of GHG trajectories to ensure alignment with well-below 2 degrees scenario.



## Increasing Renewable Energy Utilization

Linde's energy management team in India signed several long-term power contracts in 2021 to source renewable energy by setting up photovoltaic systems and wind turbines at nine ASU sites. These contracts, which are in various stages of implementation, help Linde source at a rate that is less expensive than if obtained from the grid. All projects are planned to be fully commissioned by 2024. BS Anuradha, who is Associate Director of Power Management, and all the team members are proud of these efforts, which will more than triple renewable energy as compared to 2021 and reduce Scope 2 GHG emissions by 20 percent!



## Going Linde Green

In eight European countries, all of Linde's electricity purchases from the grid are zero-carbon. Additionally, in 2021, Linde put in place an agreement to supply nitrogen generated from renewable electricity to one of the largest pipeline customers in Europe and extended its Linde Green product range of liquefied gases with zero-carbon impact to more countries. To guarantee a pipeline of additional renewable, Linde has continued to negotiate more long-term Power Purchase Agreements, including in Sweden, where power from Statkraft's hydropower plant in Bassalt, pictured above, came online in 2022. *Picture credit: Statkraft*



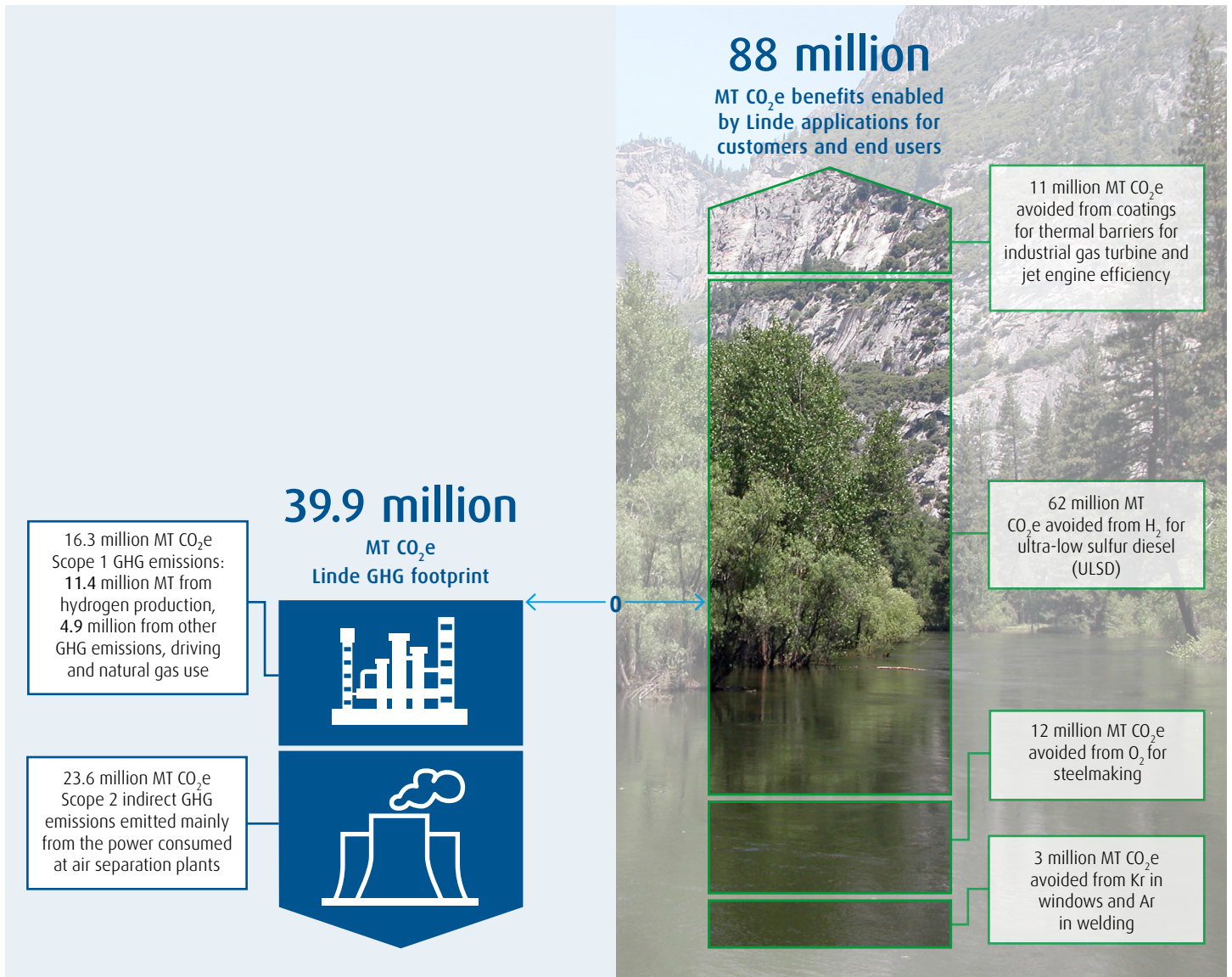
## Lowering Fleet Emissions

One part of Linde's vision for 2050 is a zero-emissions fleet. Linde has already taken steps, including evaluations of both hydrogen fuel cell- and electric-powered vehicles. Working together with fuel manufacturers, Linde Gas & Equipment has evaluated renewable diesel, which in many cases, can be phased in progressively without modification to truck engines. Testing of this technology has begun in some geographies, including California, Washington and Oregon. GHG emissions from transportation can be reduced by up to 83 percent using renewable diesel compared to fossil diesel.

# Applications Enable 2.2x Carbon Productivity

Linde is a company in the business of resource transformation in a world that is dealing with climate change. Below are our 2021 actual results as reported by Linde plc entities. We demonstrate that a subset of Linde applications allow our customers or their end users to avoid more than twice the GHG emissions of all Linde operations. In 2021, total GHG emissions were 39,9 million MT CO<sub>2</sub>e, versus 88 million MT CO<sub>2</sub>e avoided by our customers or end users, based upon several applications as shown below.

Again in 2021, a subset of Linde applications enabled more than twice the GHG benefit than was emitted in all global operations.



Values are based on 2021 reported and consolidated results from Linde plc subsidiaries following Linde plc reporting standards.  
CO<sub>2</sub>e = CO<sub>2</sub> equivalents

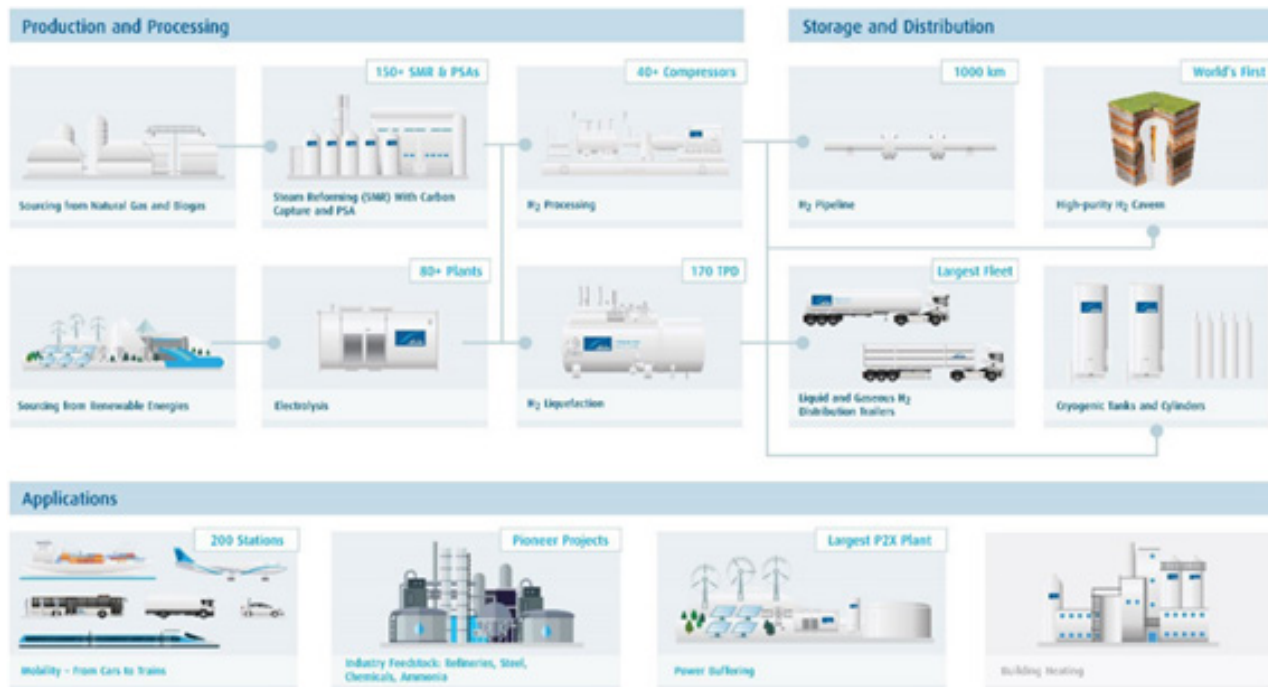
# Leading the Transition to Low Carbon Energy

Hydrogen is the most abundant element in the universe. Even though it is light and small, hydrogen is a powerful energy carrier and can, for example, be used to store excess renewable energy. Hydrogen is transported underground through extensive pipeline networks or by truck, as a cryogenic liquid or high-pressure gas, to be used in a wide range of applications, from mobility to heavy industries. Due to its versatility, hydrogen is proving to be a key enabler of the transition to low and zero-carbon energy (clean energy), to help meet climate change targets. At Linde, we have been harnessing the power of hydrogen for over 100 years and are making continued investments in effective and economic ways to deliver gray, blue and, ultimately, green hydrogen. We can produce hydrogen from a range of feedstocks and natural resources. Using processes like steam reforming, we generate gray hydrogen from natural gas, liquefied petroleum gas (LPG) or naphtha. This is the most common hydrogen production process today. Gray hydrogen can be converted into blue hydrogen by adding carbon capture and storage technologies to the production process. We produce green hydrogen using electrolysis powered by renewable energy. An alternative green hydrogen production method is steam reforming using biomethane as feedstock. Gray and blue hydrogen are important steppingstones on the path to green hydrogen as they allow the necessary frameworks and infrastructures to be developed in the interim while green hydrogen production reaches the necessary scale.

As the world's leading industrial gas and engineering company, Linde covers the full spectrum of the hydrogen value chain. We can

help customers and stakeholders navigate through the complexities of the transition to a zero-carbon economy. Our engineers work with customers in identifying their path to zero emissions and Linde has become a leader in designing, building and operating plants and facilities to meet our customers' needs. Clean hydrogen is a cornerstone of our Clean Energy strategy which is built around 1) providing solutions to mitigate and manage carbon emissions, and 2) developing clean hydrogen technologies to facilitate the transition to low-carbon fuels and applications. We are aligned with the Paris Accords and contribute to accelerating the transition to a clean energy economy. We also support the TCFD, an Index showing the alignment between Linde's reporting and the TCFD Guidelines which is available at: <https://www.linde.com/about-linde/sustainabledevelopment/reporting-center>.

Advocacy is another way in which we actively drive the transition to clean energy: Linde is a founding member of the Hydrogen Council and participates in many other hydrogen and climate change forums and advocacy groups, such as the Sustainable Markets Initiative and the Hydrogen Forward Coalition. Today, Linde has the largest liquid hydrogen production capacity and distribution system in the world. We also operate the world's first commercial high-purity hydrogen storage cavern, which, coupled with an unrivaled pipeline network of approximately 1,000 kilometers, enables us to reliably supply our customers. With more than 200 hydrogen refueling stations and 80 hydrogen electrolysis plants installed worldwide, we are at the forefront of the energy transition.



Linde's Capabilities Across the Hydrogen Value Chain

### Linde’s Pathway to Climate Neutrality: 2028, 2035, 2050

The next three decades will represent a period of great activity for the world and the quest to address climate change. Our strategy includes three milestones, 2028, 2035, and 2050, and that strategy is based upon a vision of the evolution across the world during this period.

#### 2028:

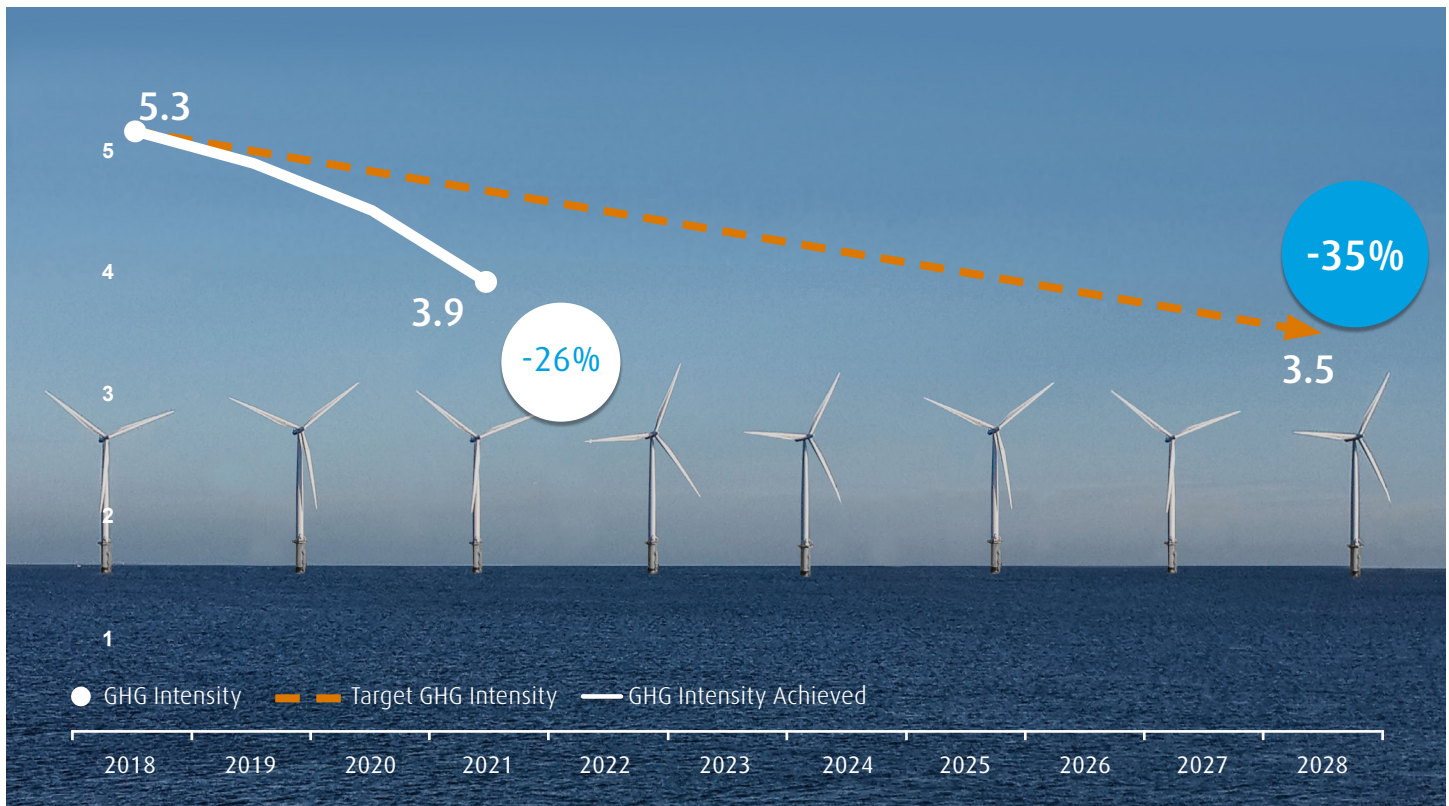
Our assumptions for this time horizon are that industrial-level decarbonization continues to accelerate. New technologies will be piloted and demonstrated. Green fuels and materials will be scaling, and the feasibility for hydrogen usage as an agent of decarbonization in multiple applications will be growing. SMRs will continue to be used for most large-scale hydrogen production. They will become more efficient, and many will incorporate carbon capture and/or use feedstocks and power from renewable sources. Electrolysis for green hydrogen production from renewable power will be available at capacities greater than 100 MW. Linde’s six climate change targets through 2028 (with a 2018 baseline) follow the full value chain from investment to customer and environmental benefits. They are consistent with Linde’s mission and are critical to continuing the company’s sustainability leadership. These are management targets; our businesses are accountable for achieving them. Linde will invest more than \$1 billion in decarbonization initiatives and triple the amount of clean hydrogen production. The company is investing across the hydrogen value chain to accelerate the clean energy transition with a higher global renewable power mix and significant operating and capital efficiencies. We will pursue

competitive low-carbon sources of hydrogen, including energy efficient SMRs and ATRs with carbon capture, electrolysis with renewable power, and pilot new low-carbon technologies. Our R&D will have a decarbonization focus. Key projects include advanced thermal barrier coatings and advanced sealing technologies; improving global plant efficiency, energy optimization, logistics and operations optimization; and flexible operations to support demand-side management and allow for higher utilization of renewably produced electrical power. It also includes the development of alternative gas separation technologies to allow alternative process concepts with higher efficiency and a lower carbon footprint. In the steel industry, projects include the decarbonization of the integrated mill, heat recovery, direct reduced iron technologies and electrochemistry initiatives.

Not all barriers to decarbonization can be overcome in the short term. However, we will continue to invest in optimizing operational efficiency to meet our commitment to substantially increase our focus on low-carbon and renewable energy to continue reducing carbon emissions.

The SD 2028 target of 35 percent improvement in Linde GHG intensity 2018 – 2028 is measured against adjusted EBITDA\*. This target was chosen to show efficiency against a business denominator. EBITDA is one of the non-GAAP measures reported by Linde plc. Achieving this target will depend on a range of external variables that are not in our control, from global economic trends to government regulations to currency fluctuations. We remain committed to managing business growth while optimizing operational GHG emissions. In 2021, Linde reduced its GHG intensity by 26 percent from the baseline year; see Performance Towards Targets. In relation to Scope 1 or direct GHG

### Goal of 35% improvement in Linde GHG intensity 2018–2028\*



\* Scope 1 and 2 emissions (in million MT) divided by adjusted EBITDA in billion USD. Calculation for 2018 uses adjusted pro forma EBITDA. Calculation for 2019 onward uses adjusted EBITDA. Adjusted EBITDA is a non-GAAP measure. For definition and reconciliation, please see Appendix to the Investor Teleconference Presentation Fourth Quarter 2021.

emissions, we target improving Scope 1 GHG intensity for hydrogen plants (HyCOs) (4 percent improvement within the target horizon) and our distribution vehicles (10 percent) and reducing our absolute GHG emissions from other sources (e.g., refrigerant filling losses, nitrous oxide [N<sub>2</sub>O] emissions) by 10 percent. In relation to Scope 2 or indirect GHG emissions, Linde aims to improve its operational efficiency and GHG intensity at ASU plants (7 percent within the target horizon). Linde's largest medium-term opportunity to affect its GHG footprint is in Scope 2 electricity. We continue to leverage our scale and geographic distribution to procure reliable and affordable sources of renewable electricity through active procurement of new direct renewable energy contracts, Power Purchase Agreements (PPAs) or Renewable Energy Credits (RECs).

#### By 2028, we expect to have achieved:

- 35 percent improvement in GHG intensity versus EBITDA – from 5.31 to 3.45.
- Hold Scope 2 GHG emissions flat or reduced at the same time as we substantially increase our power use.
- More than 2x low-carbon power procured.
- Overall, renewable energy and low-carbon energy sources are projected to increase from 35 percent to more than 50 percent (all power).
- Development of blue and/or green hydrogen projects.

We have implemented several additional measures to help us better manage our carbon footprint, achieve our long-term targets, and assess the long-term risks of climate change. Linde's Clean Energy organization was launched to focus and accelerate activity in this area. The GHG emissions from new investments are calculated and integrated into considerations in Capital Investment Committee decisions for every project. They are then considered in the selection of the technology solution and project risks across the project development cycle. To help mitigate potential physical risks from climate change, Linde has developed a tool to explore future climate change scenarios that could impose additional operational costs on production processes from factors like higher ambient temperature or air quality deterioration/higher carbon dioxide parts per million (PPMs) in the atmosphere at our locations. Physical risks are considered in planning. Impacts and mitigations are considered as part of periodic business reviews.

#### 2035:

In 2028, the target horizon for our 10-year managed climate objectives will end. Linde has recognized the degree of its stakeholders' interest in climate change and the importance of impact globally. The company responded in 2021: Teams assessed then-current targets and began working on more aggressive goals, as well as the plans to achieve.

Our 2035 target is science-based and aligned with the Paris Accords goal to reduce global warming to well below 2°C. Linde continues efforts toward validation of this target and has worked with others in

industry through the first SBT Chemicals Stakeholder Advisory Group, which is the working group that is developing guidance for the chemicals sector. (More information is available at: <https://sciencebasedtargets.org/companies-taking-action/>.) As our latest climate commitment demonstrates, we are active in advancing the world towards ambitious GHG reduction in the chemical industry using scenario analysis (utilizing Sustainable Development Scenario).

We can envision 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.

Achieving this objective will require changes in societal behaviors, government regulation, industry engagement and technology development. Linde will continue to participate in the investments and technologies that will reduce global GHG emissions.

#### By 2035, we expect to have achieved:

- 35 percent reduction in absolute GHG emissions from our 2021 inventory.
- More than 3x low-carbon power procured.
- Execution of CCS projects at some of Linde's largest SMRs that will, with other efficiency efforts, reduce Scope 1 emissions.

#### 2050:

The world is at the beginning of an energy transformation, and Linde's climate neutrality ambition demonstrates our long-term commitment to be an active contributor to the transformation.

Our vision for 2050 includes widespread availability of renewable and low-carbon energy and alternative technologies for production and distribution. 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 Sustainable Development Scenario (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.

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.

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.

# Performance Towards Targets

Linde's 2028 Sustainable Development (SD 2028) targets set a long-term, 10-year action plan with commitments from leadership and all levels of the organization. These are managed targets with clear accountability, 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, and at least once a year to the full Board of Directors. Operational performance towards targets is reported on a monthly basis to management.

Linde began providing ESG performance results versus its climate change targets in 2020, the only chemicals company on the DAX and S&P 500 to report quarterly ESG performance against its targets.

Most targets run from the 2018 base year, the first year of our combined company, for 10 years to 2028. This chapter provides a summary dashboard of the SD 2028 targets and performance against these targets for 2021.

In 2021, Linde announced an additional climate change target, "35 by 35," which is a commitment to reduce absolute Scope 1 and 2 emissions by 35 percent in 2035. This managed target runs from the 2021 base year, and performance against this target will be provided in future reporting.





## Climate Change 103-1, 103-2, 103-3

Priority Factors	Linde Targets*	2018	2019	2020	2021	Target	Status
Climate Change	Invest in decarbonization initiatives, cumulative \$ million	14	66	128	299	1,000	↗
	Direct >33% of R&D budget to decarbonization, cumulative %	23	25	26	27	>33	↗
	Contribute >50% revenue from sustainability portfolio, annual %	n/a	53	54	55	50	↑
	Enable >2x GHG benefits, annual	2.5x	2.7x	2.3x	2.2x	>2.0x	↑
	35% absolute reduction in Scope 1 and 2 emissions by 2035, 2021 baseline, cumulative % (million tons CO <sub>2</sub> e)	n/a	n/a	n/a	n/a	-35% (25.9)	n/a
	35% Improvement in GHG intensity vs. EBITDA, cumulative %, (intensity MMT CO <sub>2</sub> e/\$ billion)	(5.3)	-8.1% (4.9)	-16.1% (4.5)	-26.2% (3.9)	-35% (3.5)	↗
	4% HyCO GHG intensity improvement, cumulative %	0	-3.4	-7.1	-9.3	-4.0	↗
	7% ASU energy intensity improvement, cumulative %	0	-0.6	-0.5	-1.7	-7.0	↗
	10% fleet GHG intensity improvement, cumulative %	0	-0.9	-7.2	-7.5	-10.0	↗
	10% absolute reduction in other GHG emissions, cumulative %	0	0	-9.3	-38	-10.0	↑
	>2x low-carbon power sourcing, primarily from active renewable electricity, cumulative TWh	14	14.3	15.3	17.0	>28.0	↗
<b>Legend</b>	*All Targets terminate in 2028, unless specified otherwise					↑ achieved; ↗ on track; ↘ behind target	

### Invest and Innovate in Decarbonization

Linde has four targets in the area of decarbonization and growth.

- Invest >\$1 billion in decarbonization initiatives

The scope is capital projects of more than \$2 million, 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. Since 2018, Linde has invested a cumulative \$299 million. For 2021, this includes investment in Linde's first PEM electrolyzer facility in North America, in Niagara Falls, NY.

- Direct at least one-third of Linde's 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 27 percent of its 2021 R&D budget (\$144 million) into decarbonization (2020: 26 percent). Initiatives include developing industry-leading carbon capture technologies, investing in promising green hydrogen technologies and driving operational efficiency to further reduce GHG intensity.

- Contribute more than 50 percent of revenue from our Sustainability Portfolio

The scope is annual Linde revenue associated with the sale of gases in applications that bring environmental and/or social benefits; see the Business Model table. In 2021, Linde generated 55 percent of gases revenue, or \$15 billion, from its Sustainability Portfolio. The Sustainability Portfolio includes sales from Linde's eco-portfolio (\$10 billion) and social portfolio (\$5 billion). The eco-portfolio includes applications that have environmental and social benefits, such as oxygen for blast furnaces in steel; hydrogen for ultra-low sulfur diesel (ULSD); and oxygen and carbon dioxide for wastewater treatment, desalination and aquaculture. The social portfolio includes applications with target social benefits. Examples are oxygen for respiratory care and helium for MRI technology.

For the eco-portfolio, R&D developed a simplified Life Cycle Assessment (LCA)-based screening methodology to determine and update which applications are included. A simplified LCA includes part of the four stages of a product lifecycle of raw material acquisition, manufacturing, use/reuse/maintenance and recycle/waste management (e.g., it assesses one or two of the stages completely, or analyzes all four stages to lesser depth). All (100 percent) of Linde's products under development were evaluated in-depth in the first three stages (e.g., cradle to grave). For environmental impacts, we use Environmental Key Performance Indicators (EKPIs): energy (electricity, natural gas and fuel); air emissions and direct and indirect GHG emissions; waste (hazardous and non-hazardous); water; and ozone depleting substances (ODSs).

- Enable >2X more GHG to be avoided per year than are emitted in all Linde operations

The scope is GHG benefits from a subset of Linde applications that enable demonstrable GHG benefits, versus Linde's 2021 total direct and indirect (Scopes 1 and 2) GHG emissions. In 2021, a subset of its applications enabled 88 million MT CO<sub>2</sub>e to be avoided—48 million MT more than its GHG emissions or 2.2x times more. See "Linde Applications Enable 2.2x Carbon Productivity."

Methodology: End-user-avoided carbon dioxide emissions are calculated in accordance with the International Council of Chemical Associations (ICCA) guidelines. Avoided emissions arise from efforts by multiple partners along the respective value chains. Linde's contribution has been characterized as fundamental in enabling the avoided emissions. 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), at: [https://icca-chem.org/wp-content/uploads/2020/05/ICCA-2017\\_Addressing\\_guidelines\\_WEB.pdf](https://icca-chem.org/wp-content/uploads/2020/05/ICCA-2017_Addressing_guidelines_WEB.pdf).

## Optimize Operational Energy Use and GHG Emissions

Linde's 2021 Scope 1 GHG emissions were 16.3 MM MT CO<sub>2</sub>e. This represents a slight increase in emissions compared to 2020 by 0.5 percent, driven by an increase of hydrogen production, offset by improved HyCO GHG intensity due to higher byproduct sourcing. Results were also impacted by a considerable decrease in other GHG emissions; see "Other GHG emissions reduction target."

Scope 1 GHG emissions were caused mainly (70 percent) by hydrogen production in SMRs. An additional 21 percent is derived from ASUs or other production operations, where plants run on natural gas. Approximately 5 percent of Scope 1 emission were caused by "other" sources of GHG (e.g., nitrous oxide or other plants), and 4 percent is from driving. Targets to improve GHG intensity in hydrogen production, other GHG emissions and driving address those emissions.

Linde's Scope 2 GHG emissions were 23.6 MM MT CO<sub>2</sub>e. This represents a 5.7 percent increase versus 2020. The 2021 result is driven by higher production volumes, offset by efficiency improvements. The value reflects increased usage of market-based emissions factors for several plants that previously used location-based factors. Scope 2 GHG emissions are caused by the use of electricity and steam, a portion of which comes from fossil fuel sources. Electricity is principally (90 percent) used by air separation plants and is tracked with the air separation energy efficiency target. An additional 5 percent of the electricity is used in hydrogen production. Targets to improve energy efficiency in ASUs and to increase low-carbon power sourcing address this issue.

In order to show GHG efficiency against a business denominator, Linde selected EBITDA, which is one of the non-GAAP measures reported by Linde plc. It reflects the size of the business for which the emissions are being reported and the efficiency improvements that are being targeted. Adjusted EBITDA is a non-GAAP measure. For definition and reconciliation, please see Appendix to the Investor Teleconference Presentation Fourth Quarter 2021. Linde's 2021 adjusted EBITDA was \$10.2 billion. This GHG intensity analysis complements the absolute GHG reduction target announced in 2021.

- Achieve a 35 percent absolute reduction of Scope 1 and 2 emissions by 2035

The scope is all Scope 1 and Scope 2 GHG emissions for Linde globally. The target is aligned with the Paris Accords goal to limit global warming to well below 2°C. Progress against this new target will be reported in Linde's 2022 Sustainable Development Report.

- Achieve 35 percent GHG intensity improvement versus EBITDA

The scope is Linde's combined Scope 1 + Scope 2 GHG emissions versus EBITDA. In 2021, Linde's GHG intensity was 3.9 MMT CO<sub>2</sub>e/\$ billion, representing 26 percent GHG intensity improvement over 2018, resulting from increased renewable energy availability and sourcing as well as strong EBITDA growth as a consequence of increased production and turnover. In early 2022, Linde estimated an improvement of 24 percent. Upon final audit, improvement was confirmed to be 26 percent.

- Achieve 7 percent improvement in ASU energy intensity

The scope is Linde ASU facilities worldwide where Linde pays for the power and has operational control, including 50 percent majority-held joint ventures. The 2021 results represented a strong improvement versus 2020, from 0.5 percent cumulative reduction to 1.7 percent. This progress partly compensates the negative productivity impacts from lower production volumes during the pandemic. The improvements

were achieved through targeted productivity efforts and capital investments, along with the startup of large plants incorporating state-of-the-art ASU equipment and processes. See GRI 302-1 for information on electricity consumption, GRI 302-3 for energy intensity, and GRI 302-4 for energy reduction activities.

- Achieve 4 percent improvement in hydrogen GHG intensity

The scope is Linde hydrogen facilities worldwide. The 2021 results were a 9.3 percent improvement versus 2018 (4 percent YOY), mainly due to increased byproduct sourcing in 2021.

Performance against this target was not expected to be linear. It reflects changes in production volumes, the effect of project startups, the implementation of projected technology innovations, and an increase in byproduct hydrogen sourced.

- Achieve 10 percent improvement in trucking GHG emissions intensity

The scope is all Linde commercial driving operations (bulk and packaged gases combined) where the driver is a Linde employee. The 2021 results were a 7.5 cumulative percent GHG intensity improvement against the baseline.

The target is calculated by multiplying the number of miles driven and fuel used in each geography by GHG emissions factors and dividing by volume of product delivered. 2021 performance continued to improve due to logistics efficiency projects, fleet renewal and new technology deployment—despite efficiency pressure effects from various government-imposed COVID-related minimum supply chain stocking levels. Contractor driving is reported as Scope 3 at GRI 305-3.

- Achieve a 10 percent absolute reduction in other GHG emissions

The scope is most "other GHG emissions" from a range of Scope 1 GHG emissions sources, calculated into CO<sub>2</sub> equivalents—refrigerant losses from cylinder refilling operations; N<sub>2</sub>O emissions from N<sub>2</sub>O plants and cylinder filling; and methane releases from helium and CO<sub>2</sub> plants, which account for most of Linde's other GHG emissions. In 2021, these emissions were 0.9 MM MT CO<sub>2</sub>e (2020: 1.5). 2021 results were a 38 percent improvement over the baseline, representing an early achievement of the target, which was originally set for 2028. This performance improvement was achieved by best practices and programs in refrigerants and N<sub>2</sub>O. Methane improvement is due to new recovery and use processes, among other factors.

- >2x low-carbon power sourcing, primarily from active renewable electricity

The scope is all Linde operations within our GHG reporting boundary. The target is on track. In 2021, the company sourced 17 million MWh low-carbon energy, or 40 percent of all its purchased electricity. Progress on this target was not expected to be linear. Low-carbon electricity is defined as electricity produced from non-fossil sources including renewables (e.g., solar, wind, biomass, geothermal, hydro) and other low-carbon sources. The target includes passive electricity (e.g., from the grid) and active sourcing over PPAs, RECs, certificates and sourcing contracts for specific facilities. It considers all energy consumption where Linde purchases the electricity. It excludes electricity where Linde is not the purchaser.

Linde actively sourced 2.8 TWh renewable electricity and 0.7 TWh low-carbon power in 2021. Linde electricity use in the UK is almost 100 percent renewable using wind and almost 100 percent in Brazil using hydroelectric. Low-carbon and renewable electricity is also sourced in the United States, where both hydro and nuclear power are used, as well as in Colombia, India, Spain, the Philippines and other geographies.



## Safety, Health & Environment 103-1, 103-2, 103-3

Priority Factors	Linde Targets*	2018	2019	2020	2021	Target	Status
Safety, Health & Environment	\$1.3 billion in sustainable productivity, cumulative \$ million	92	176.5	310	497	1,300	↗
	Water Management Plans (WMPs) at high-water-use sites in areas of high-water stress (# sites in scope, % WMPs implemented)	n/a	22 (73%)	67 (20%)	67 (36%)	100%	↗
	Achieve Zero Waste to Landfill at 450 sites	217	210	286	360	450	↗
	Annually achieve operational safety better than industry levels for Lost Workday Case Rate (LWCR)	0.32	0.23	0.21	0.22	1.00	↑
	Annually achieve annual operational safety better than industry levels for Total Recordable Case Rate (TRCR)	0.74	0.57	0.51	0.54	3.10	↑
	Annually achieve Commercial Vehicle Incident Rate (CVIR) of <2.5 per million kilometers driven	2.05	2.17	1.7	2.08	<2.50	↑
	Zero global sales of coating slurries that contain hexavalent chrome by 2029 (Surface Coatings)	On track, see reporting section following					
<b>Legend</b>	*All Targets terminate in 2028, unless specified otherwise					↑ achieved; ↗ on track; ↘ behind target	

### Environment

In addition to its investment targets, aimed at addressing climate change, Linde has defined three environmental targets: sustainable productivity or eco-efficiency, reduction of waste and management of water. All three programs are baselined with 2018 data from legacy Praxair only. From 2019, the data reflects the Linde plc organization.

- Save \$1.3 billion from sustainable productivity

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. The 2021 results are on track to meet this target. Linde achieved savings of \$187 million (cumulatively \$497 million), or 38 percent of all targeted productivity savings. Environmental protection costs in 2021 included approximately \$13 million in capital expenditures and \$42 million of expenses.

The scope is all Linde operations. In 2021, sustainable productivity also saved 875 million kWh, 1,800 billion BTU of natural gas, 6 million gallons of diesel fuel, approximately 24 million pounds of waste, 514 million gallons of water and 696,000 MT CO<sub>2</sub>e. CO<sub>2</sub>e savings count projects where benefits are fully realized and projects that were implemented in 2021 and are still accruing benefits. Based on our experience with rolling out this program at Praxair over almost a decade from 2010, 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.

- Implement Water Management Plans (WMPs) at high-water use sites in areas of water stress

The scope is high-water use (hi-hi) sites, defined as sites exceeding 50,000 m<sup>3</sup>/year of water withdrawal, excluding once-through, non-contact cooling water. The 2021 results are on track to meet this target: Sixty-seven sites were defined as in scope for this target in 2021. WMPs were implemented at 36 percent of applicable sites.

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; sites thus defined are included in this target scope.

Linde's main uses of water include cooling and boiler systems for the production of steam for the SMR process to make hydrogen. Net freshwater consumption was 99.5 million m<sup>3</sup>.

In 2021, Linde improved its water reporting tool structure and focused on reducing water use through productivity projects. To enhance data quality and water intensity monitoring, Linde increased its water reporting frequency from quarterly to monthly for sites with WMPs. The number of total sites in scope is 67.

Nine of these sites were added voluntarily in South Latin America and APAC, based on local assessment of high-water stress. Of the 67 sites determined to be in scope, 36 percent implemented WMPs by the end of 2021. In addition to the voluntary sites in the Americas (8) and APAC (1), the remaining WMP sites are in EMEA (31), APAC (13), and the Americas (14).

Linde's team in South Latin America has set a voluntary regional target to continuously improve their WMP site-specific water intensity performance since 2016.

They are on track to achieving this goal. At the end of 2021, 45 percent of the 11 WMP sites improved their water intensity results compared to the baseline year. They also achieved an overall water reduction of more than 400,000 m<sup>3</sup>—a reduction of 9.2 percent, compared to 2020.

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

- SD 2028 Target: >450 sites achieve Zero Waste to Landfill

The scope is all Linde operations. At the end of 2021, 360 sites achieved Zero Waste to Landfill. A Zero Waste to Landfill site is defined as one that diverts more than 90 percent process waste or hazardous waste from landfills; this can include incineration for energy recovery. Altogether, 707 sites participated, and approximately 260 million pounds of waste was diverted from landfills. Zero Waste to Landfill helps extend our company's mission and values and promotes circular economic practices. In many cases, the program brings social benefits to local communities, from education to job creation. See GRI 306-2 for more information on waste metrics.

In addition to Linde facilities, six regional offices retained their external recognitions for greening their offices: Bangalore, India; Seoul, South Korea; Burr Ridge, Illinois; The Woodlands, Texas; Danbury, Connecticut; and Tonawanda, New York. See the Green Seal website at: <https://greenseal.org/programs/green-office-partnership>.

## Safety & Health

During 2021, Linde continued to align its safety and environmental standards and procedures for both work processes and product handling to enable employees around the world to execute their jobs safely and to prevent safety incidents relating to operational processes or products. Linde's SD 2028 targets include two for operational safety, one for distribution safety and one for product safety. Increases in 2021 incident rates compared to previous year are mainly due to post-COVID effects like return of staff to Linde offices and plants, higher commuting and more on-road traffic compared to 2020.

- Annually achieve operational safety better than industry levels for Lost Workday Case Rate (LWCR) and Total Recordable Case Rate (TRCR). The scope of these targets are all Linde operations (e.g., for employees and contractors).

**Lost Workday Case Rate (LWCR):** Linde's 2021 LWCR was 0.22 (2020: 0.21), more than four times better than the OSHA all industries industrial average (1.2). Linde's LWCR is defined as the number of Recordable Injury Cases (RICs) plus the number of Recordable Sickness Cases (RSCs) that result in one or more day(s) away from work as a result of a work-related incident or exposure per 200,000 hours worked (for employees and contractors).

**Total Recordable Case Rate (TRCR):** Linde's 2021 TRCR (the number of employee or contractor recordable injuries per 200,000 hours worked) was 0.54 (2020: 0.51). Linde's 2021 TRCR was more than five times better than the OSHA all industries industrial average (2.7). A recordable case is defined as any recordable injury or sickness of an employee, temporary worker or contractor that results from a work-related incident or exposure per 200,000 hours worked.

- Annually achieve Commercial Vehicle Incident Rate (CVIR) of <2.5/million kilometers

The scope is all operations and all employee and contractor commercial vehicle incidents at all severity levels, per million kilometers. The annual vehicle safety target is to maintain Linde's CVIR at <2.5/million kilometers. In 2021, this target was achieved: Linde's global CVIR was 2.08 vehicle incidents per million kilometers (2020: 1.7).

Each high-severity vehicle incident is investigated, and the results from the investigation are reviewed by local leadership and Corporate SHEQ, including root cause analysis and corrective actions. In addition, selected high-severity incidents based on results and learnings are reviewed monthly with corporate and regional leadership. Target scope excludes service vehicles.

Annually, all high-severity vehicle incidents, which are defined by Linde standards and closely aligned with ICCA guidance, are reviewed. As part of this review, an analysis is conducted to identify improvement opportunity areas in which the learnings and conclusions, as identified from the analysis, are used to improve safety standards and/or establish new initiatives and focus areas.

As an example, the learning and conclusions identified from the 2020 analysis resulted in additional 2021 safety initiatives in the areas of addressing driver fatigue and driver distraction in addition to a continued focus in transport contractor management and driver development programs.

- Zero global sales of coating slurries that contain hexavalent chrome [Cr(VI)] by 2029.

The scope is Surface Technologies. Four targets were established in relation to eliminating Cr(VI)-containing slurries and replacing coatings with strontium chromate, which is currently used in several SermeTel® and SermaLon® coatings.

- By 2019: Offer coatings free of strontium chromate.
- By 2021: Offer 100 percent chrome-free slurry product alternatives to the market.
- By 2024: No sales of coating slurries that contain Cr(VI) if chrome-free 2020 alternatives have been developed and qualified by the original equipment manufacturers (OEMs).
- By 2029: No sales of coating slurries that contain Cr(VI).

These targets were prompted by the requirements of REACH\*, but go beyond REACH in that they apply worldwide and will eliminate toxic substances not just in Europe, as required by REACH, but everywhere. Surface Technologies continues to develop additional Cr(VI)-free alternatives to replace legacy SermeTel systems targeted for elimination in 2029. In addition to the three targets to eliminate Cr(VI)-containing slurries, Surface Technologies has expanded its focus and developed replacement coatings that are free of strontium chromate, a chemical that is currently used in several SermeTel and SermaLon coatings.

This target is on track. In 2019, Surface Technologies introduced replacement coatings to major OEMs, and they have been accepted and incorporated into usage, allowing the OEMs to comply with the January 2019 REACH sunset date for strontium chromate. Cr(VI)-free products have been introduced to the market. As of 2021, these alternatives are available for much of the company's portfolio and under testing by several key customers in aviation and energy. Upon the adoption of these products by the aerospace, industrial, and oil and gas industries, we have the potential to reduce our usage of Cr(VI) – containing substances of concern by an estimated 8,000 – 9,000 pounds annually.

\*REACH (the Registration, Evaluation and Restriction of Chemicals) is a European Union regulation that aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. This is done by the four processes of REACH, namely the registration, evaluation, authorization and restriction of chemicals.



## Integrity & Compliance

103-1, 103-2, 103-3

Priority Factors	Linde Targets*	2018	2019	2020	2021	Target	Status
<b>Ethics &amp; Integrity</b>	100% employee certification to Linde Code of Business Integrity (CBI), annual % employees certifying	100	100	100	99	100	↗
<b>Legend</b>	*All Targets terminate in 2028, unless specified otherwise						↑ achieved; ↗ on track; ↘ behind target

### Integrity & Compliance

- Integrity & Compliance: 100 percent certification to Linde's Code of Business Integrity (CBI)

All targeted employees are required to certify CBI compliance, except where law or regulation prohibits inclusion. In 2021, 99.1 percent of required employees certified that they understood Linde's Compliance with Laws and Business Integrity and Ethics policies. Corrective action was put in place in early 2022. See 205-2 for actions in place to verify training for the remaining employees. The reporting certification is achieved annually for Linde's CBI and biennially for additional related areas, such as

Doing Business with the Government; Understanding Anti-Bribery Legislation; Understanding the Foreign Corrupt Practices Act; and others. As indicated in the Governance section, the Board Audit Committee reviews certification of employees' understanding of, and compliance with, the company's Business Integrity and Ethics Policy.

In addition, Linde requires that 100 percent of relevant third parties whose activities could expose Linde to risk adhere to its CBI and Compliance with Laws and Business Integrity and Ethics policies. Linde imposes contractual and training requirements to ensure adherence.

# People & Community 103-1, 103-2, 103-3

Priority Factors	Linde Targets*	2018	2019	2020	2021	Target	Status
People & Community	Achieve 30% representation of women globally by 2030 (% all employees)	n/a	27	27	27	30	↗
	550 employee community engagement projects completed	410	367	317	389	550	↗
	Community impact assessments in engineering project development at all new sites (U.S. only). (% complete): Target commences in 2021	n/a	n/a	n/a	n/a	100	n/a
	Increase environmental/climate-related philanthropic spend by 50% (annual \$ '000, % total)	\$555k	\$654k (18%)	\$684k (23%)	\$884k (59%)	\$832k (50%)	↑
<b>Legend</b>	*All Targets terminate in 2028, unless specified otherwise					↑ achieved; ↗ on track; ↘ behind target	

## Diversity & Inclusion

This PF has four targets: one for Diversity & Inclusion (target year 2030), two for Community and one for Global Giving.

- Diversity & Inclusion: Achieve 30 percent representation of women globally by 2030

The aspirational goal for Linde is to achieve 30 percent female representation at all levels in Linde’s global professional employee population by 2030. In 2021, the overall average percentage of female professionals in the global Linde organization was 27 percent, flat with 2020 but on track to achieve this target. The percentage of female executives in the global Linde organization was 18 percent, an increase from 17 percent in 2020. Women represented 28% of professional employees. The global organizational goal of 30 percent is intended to apply at all management levels and for all business units and functions.

The scope is all Linde employees. Inclusion is a Linde core value. The company embraces diversity and inclusion in order to attract, develop and retain the best talent and build high-performing teams. Linde’s CBI states that employees must not be discriminated against on the basis of their race, color, religion, gender, gender identity, national origin, age, disability, veteran status, pregnancy, sexual orientation or other protected characteristics. Linde’s Board and management have aligned diversity and inclusion with its business strategies and implemented diversity action planning into business processes, performance management and executive compensation. See GRI 405-1 for more information.

## Community Engagement

- Complete 550 projects in community engagement

Target scope is all reported employee-based Linde community engagement activities. Linde reported 389 projects in 2021. Projects are defined as reported by the project team into a Linde database. Linde measures the impact of projects, where applicable, on the community beneficiaries, employees and the company. Analysis shows positive impacts for all three groups. For example, teams report that in 91 percent of projects, the quality of life of the beneficiaries is positively impacted; in 78 percent of projects, teams reported that their own management effectiveness improved; in 85 percent of projects, teams reported positive employee engagement. Results for

baseline year 2018 are as reported for legacy Praxair.

The results for 2021 reflect the continuing pandemic, and teams are judiciously increasing group projects where possible and maintaining a number of virtual events to support the community. Community engagement projects are directed to address local needs. Projects focus on four themes: Education & Diversity (29 percent); Health & Wellness (21 percent); Community Support (32 percent); and Environment (18 percent). See GRI 413-1 for more information.

- Community Relations (U.S.): Community impact assessments in engineering project development at all new sites

The Scope is all new U.S. large capital projects that pass the regular engineering design process and commence construction. Planning for this target has begun; however the target was halted due of the pandemic. Projects are expected to begin in 2022. The community impact assessment is performed by the business and project execution teams during the planning of new and/or significant expansions of Linde sites. It includes a discussion with key stakeholders in the community, which may include representatives from municipalities and community organizations; understanding community needs; and a proposal of potential ways to address these community needs and bring positive impact, especially through social, educational or environmental initiatives.

## Global Giving

- Global Giving: Increase environmental/climate-related philanthropic spend by 50 percent

Target scope is Global Giving donations from corporate and global businesses. The program contributed \$884,000 to environmental-related organizations in 2021, a 59 percent increase from the baseline, achieving the target.

The objective of this target was to direct additional Global Giving funds towards initiatives that will have a positive impact on the environment/climate change and to support Linde’s new Climate Change targets. Linde has long-standing relationships with global environmental non-profit organizations such as The Nature Conservancy and the Arbor Day Foundation. Our company also supports regionally-based environmental programs in various countries, including Mexico, Canada, South Korea, Brazil and India. See GRI 201-1, 203-1 and 413-1 for more information.

# Governance

102-18

## Corporate Governance

A comprehensive review of Linde's corporate governance framework is provided on our website at: <http://www.linde.com/about-linde/corporate-governance>. It is also included in the Proxy Statement for the 2022 Annual General Meeting of Shareholders in the Corporate Governance and Board Matters section. The Proxy Statement also contains a section on Environmental, Social and Governance Highlights.

Linde's Board of Directors consists of 10 Board members. Eight are independent non-executive directors. Linde's CEO serves as an executive director, and the Chairman of the Board was formerly Linde's CEO. The Board currently has five standing committees: Audit Committee, Human Capital Committee, Executive Committee, Sustainability Committee and Nomination and Governance Committee. Each is comprised of only independent directors, except for the Executive Committee, of which the Chair and CEO are members.

The 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. Linde's values are considered integral to its long-term sustainable success, and executive compensation rewards performance in financial and strategic non-financial areas. The Board's role in these areas, as well as in risk management, is described in the company's annual Proxy Statement in the Corporate Governance and Board Matters Section, which is available on Linde's website at: <https://investors.linde.com/regulatory-filings>.

The Board has oversight of key aspects of the corporate governance structure in areas of particular interest to the sustainability community, such as director independence; split roles of Chairman and CEO; appropriate board committees; board effectiveness; shareholder outreach and alignment with long-term shareholder interests; mechanisms to avoid conflicts of interest; board diversity; limits to service; industry experience; and a comprehensive sustainability program.

Board members are nominated by the Nomination and Governance Committee for election by the shareholders. Nominees are elected each year at the Annual General Meeting. The Nomination and Governance Committee believes that each director has an established record of accomplishment in areas relevant to our business and objectives, and possesses the characteristics identified in our Corporate Governance Guidelines as essential to a well-functioning and deliberative governing body, including integrity, independence and commitment.

Each Board member has executive management and director oversight experience in most, if not all, areas that the Board considers critical to the conduct of the company's business, including public policies as they affect global industrial corporations, compliance, corporate governance, productivity management, safety management and sustainable development.

## Governance of Non-Financial Matters

Linde has established five core values: safety, inclusion, accountability, integrity and community. These are the basis of what the company

stands for and how it behaves. A code of ethics has been adopted that provides clear instructions on expected behavior and for reporting concerns about potential non-conformance. This code has been approved by the Linde Board of Directors and is named the Code of Business Integrity (CBI). This document is made widely available to employees and third parties and is posted on the company's website. Governance of Linde's CBI is described in the Performance section as it relates to an SD 2028 target.

It is the view of Linde's Board that non-financial issues are a component of the company's values, culture and performance expectations, and are a basis on which employees drive financial results. The Board has confirmed the importance of setting non-financial objectives as part of variable compensation to reinforce leadership's focus on maintaining a culture that supports both short- and long-term sustainable results. It has established non-financial goals with respect to elements such as safety, environmental responsibility, global compliance, productivity and talent management. These measures are described in Linde's Proxy Statement. Annual payout of executive variable compensation depends on performance in several strategic non-financial areas, including best-in-class performance in safety, environmental responsibility, global compliance, productivity and talent management.

Linde's Board monitors the implementation of its CBI, which includes commitments to adhere to high standards for diversity and inclusion; safety; health; care for the environment and quality; human rights; corporate citizenship; and the prevention of bribery and corruption. The Audit Committee oversees the company's compliance with legal and regulatory requirements. The Human Capital Committee oversees diversity and inclusion policies, objectives and programs to achieve those objectives. The Nomination and Governance Committee periodically reviews the company's guidelines and policies governing its response to important broad public policy issues in the areas of corporate social responsibility and corporate citizenship.

## Alignment with Compensation

Coupled with its assessment of performance related to financial goals, the Human Capital Committee reviewed the strategic actions taken by management that focused on long term sustainable success. After the end of the year, management presented to the Human Capital Committee the degree of achievement in meeting each goal, and for each element, provided its view of the relative degree of importance to long term success. Based on the results, the Human Capital Committee determined that the Company's performance with respect to the strategic and non-financial goals was favorable and set the Corporate strategic and non-financial payout factor at 140% of target variable compensation (relative to a 200% maximum). The table on the next page illustrates the basis for which 2021 variable compensation payouts.

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.

## 2021 Strategic and Non-Financial Performance Goals

Goal	Additional Detail
<p><b>Values: Safety, Compliance, Sustainability and Inclusion</b></p> <ul style="list-style-type: none"> <li>• Zero fatalities with fatality potential event reduction</li> <li>• No significant process safety or environmental events</li> <li>• Best in class recordable injury, lost workday case and vehicle accident rates</li> <li>• Continue to manage COVID-19 risks and protocols</li> <li>• Achieve world class performance in sustainability and continue progress toward greenhouse gas intensity reduction goals</li> <li>• A strong global compliance program and culture focusing on policies, procedures, training, reporting, accountability and verification via audit</li> <li>• Strengthen leadership pipeline, including globally diverse talent, through a single succession planning and performance management approach across the enterprise</li> </ul>	<ul style="list-style-type: none"> <li>• Providing employees with a safe operating environment through investing in state of the art technology and by driving a culture in which safety is a top priority</li> <li>• Rigorous processes and procedures to ensure compliance with all applicable environmental regulations, to meet sustainable development performance targets and to continuously reduce the environmental impact of the Company's operations in the communities in which it operates</li> <li>• Create and maintain a strong ethical culture in every country where Linde operates</li> <li>• All employees accountable for ensuring that business results are achieved in compliance with local laws and regulations and the Company's Code of Business Integrity</li> <li>• Attraction, retention and development of a diverse and engaged workforce through a robust succession planning process</li> <li>• Employee value proposition includes providing strong, dynamic leadership, a challenging work environment, industry-leading performance, competitive pay and benefits, and rewards and recognition for outstanding performance</li> </ul>
<p><b>Strategy</b></p> <ul style="list-style-type: none"> <li>• Position the business for long-term performance</li> <li>• Operationalize the decarbonization strategy</li> <li>• Deliver profitable growth by commercializing new applications, new end-use markets and new business models</li> <li>• Ensure robust backlog execution and positioning for mega projects</li> <li>• Leverage digitalization to support growth, productivity, and automation with demonstrable bottom line impact</li> <li>• Enhance organizational capabilities in productivity tools, processes and practices</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver excellent results in the short-term and over a longer, sustainable period of time</li> <li>• Rigorously assess the quality and future impact of actions taken, as benefits may not be recognized for several years</li> <li>• Monitor the "health" of the organization through pulse surveys</li> <li>• Focus on meeting schedules and cost estimates, starting-up plants reliably and efficiently, and supporting plant availability</li> <li>• Deliver value through continuous innovation to help Linde's customers enhance their product quality, service, reliability, productivity, safety, and environmental performance</li> <li>• Work across disciplines, industries and sectors, with employees, customers, suppliers and a range of other stakeholders to get more output utilizing fewer resources and with less environmental impact</li> </ul>
<p><b>Relative Performance</b></p> <ul style="list-style-type: none"> <li>• Strong performance relative to peer companies</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to be the best performing industrial gases company in the world</li> <li>• Assess how well we anticipate and manage adversity to optimize results</li> <li>• Determine if management's actions appear more or less effective than those of Linde's peers</li> <li>• Appropriately respond to macroeconomic or other external factors unknown at the time financial goals were established</li> </ul>

**Examples of 2021 actions include:**

- Exemplary support for patients through supplies of medical oxygen to hospitals during the global pandemic. Lincare was able to service the critical oxygen needs of 165,000 patients at home.
- Reliably and cost effectively delivered products and services to customers, despite the challenges posed by the pandemic and global supply chain issues.
- Environmental Sustainability efforts made good progress with reduction in GHG intensity, which was down -26 percent by year-end and on track to achieving -35 percent by 2028. (In early 2022, this was originally estimated at -24 percent). In addition, Linde announced new absolute GHG emission reduction targets of 35 percent by 2035 and climate neutrality by 2050 (GHG emission reduction targets relate to Linde's Scope 1 and 2 emissions).
- Dedicated Clean Energy team set up to develop and pursue opportunities for low-carbon intensity Hydrogen in mobility, energy and industrial end markets.
- Significant increase in the number of sites participating in the Zero Waste program, up to 700 sites from 500 sites in the previous year. Also reduced 500 million gallons of water in operations through sustainable productivity initiatives.
- Approximately 250,000 people benefited from nearly 400 global employee community engagement projects.
- Delivered efficiency improvement of 5.5 percent through the organization.
- Launched "Strengthening the Pipeline" program providing employee sponsorship and development for a diverse group of more than 200 high performers as part of efforts towards meeting "30 by 30" gender representation goal.
- Received public recognition:
  - Dow Jones Sustainability World Index: only chemical company recognized for 19 consecutive years.
  - Maintained MSCI ESG Rating of "A."
  - Received "A-" rating for climate change and "A" rating for water security from the Carbon Disclosure Project.
- Consistently listed on major Diversity and Inclusion indices: Bloomberg's Gender Equality Index and Forbes Best Employer for Diversity.
- Achieved a score of 90 percent on the 2021 Human Rights Campaign's Corporate Equality Index.
- Recognized as Top Noteworthy Company by DiversityInc.



## Sustainable Development Governance 102-19, 102-20

Sustainable development is overseen by the Board and executive leadership and integrated throughout the company.

**Linde's Board of Directors:** In 2021, the Board approved new climate change goals, including the 2035 absolute GHG reduction target and 2050 climate neutrality ambition. The Board previously approved the SD 2028 targets, and the Board reviews progress on all targets.

In 2021, the Board added a new Sustainability Committee to focus on environmental matters and clean energy initiatives. Additionally, the former Compensation Committee was named the Human Capital Committee, with expanded oversight of social aspects, including community engagement. Charters of certain committees were updated to specify their oversight of ESG factors more clearly. Additional detail on Board Committee charters can be found at: <https://www.linde.com/about-linde/corporate-governance>. In addition, the Board reviews safety matters at each meeting. A compliance presentation is made annually by the Chief Compliance Officer. A presentation is made annually by the Chief Human Resources (HR) Officer on Linde's program in Diversity and Inclusion.

**The Executive Leadership Team** is the highest level of leadership team. They are responsible for economic, environmental and social topics, and oversee and approve sustainable development strategies and programs. In 2021, they reviewed presentations related to ESG that were prepared for the Board.

Members of the Executive Leadership Team report directly to the CEO and are responsible for their respective regional operating segments of the Americas, APAC and EMEA, as well as Engineering, and for Clean Energy and corporate functions, including Legal and Human Resources.

Linde's Business Leadership team is responsible for business operations across the globe. Linde's Functional Leadership manages and has direct responsibility for areas including Safety, Health, Environment and Quality (SHEQ), Technology, Clean Energy, Sustainability, Productivity and Digitalization.

**Linde's Executive Vice President (EVP), Clean Energy**, is the executive officer responsible for sustainability. He is a member of the executive leadership team and reports to the COO. In addition to oversight of sustainable development, he is responsible for digitization, technology and leading hydrogen strategy and partnerships, including green hydrogen and clean fuels programs. Specifically, in relation to sustainability and climate change, the EVP, Clean Energy is the highest management level responsible for coordinating the SD 2028 targets, including Linde's climate change targets.

The EVP, Clean Energy, is responsible for aligning various functions of the organization and the businesses around sustainability goals: development of targets (by sustainability), standardizing methodologies (various global functions such as SHEQ and R&D, as well as HR and Legal), and reporting performance against many of the targets (for example, COE for environmental performance, SHEQ for safety performance, Strategy and Capex for investments in decarbonization, and R&D for innovation and growth related to decarbonization).

In 2020, Linde formed the Linde Clean Hydrogen team to serve as a focal point for green hydrogen and clean fuels.

**The Vice President, Sustainability**, reports to the EVP, Clean Energy, and is the highest-ranking functional leader of sustainability. She is the Chair of the Corporate SD Council and coordinates performance

and action planning to define and achieve all sustainability targets and action plans. She is also responsible for coordinating consultations with internal and external stakeholders relating to ESG issues (see the Engaging Stakeholders section) and staying current with emerging issues. She also leads global internal and external engagement on sustainable development issues, community engagement, Zero Waste and other sustainability initiatives and ensures the fair, reasonable treatment of all perspectives.

**The Corporate Sustainable Development Council (SD Council)** is the corporate committee responsible for the proposal and execution of Linde's sustainable development strategy, targets and programs. It consists of the heads of functions that support the implementation of Linde's SD strategy and targets, and the designated heads of Operating Segments, Engineering, and global businesses who lead SD implementation in their areas. The SD Council is the institutional link between the Management Committee and the Board on Linde's sustainable development.

**Business SD Councils** are established in each Linde Operating Segment and global business. They are comprised of functional leads and coordinated by a business-level Sustainable Development leader, supported by an SD Coordinator, both appointed by that business' president. Business Councils meet quarterly. They lead business- and functional-level internal and external engagement on sustainable development and coordinate the implementation of local sustainable development action plans and Linde's Sustainable Development Management System (SDMS). Business SD Coordinators participate in bi-monthly global meetings coordinated by the office of Sustainable Development. They share sustainable development best practices and challenges between corporate groups and the businesses.

**Linde's 10-year SD (SD 2028) targets** were set in 2019 and are baselined in 2018 to reflect the starting year of the combined company. They were developed at the request of Linde's Board and Management Committee, who approved them in early 2020. These are managed targets; the businesses are accountable for achieving them. Reporting on specific targets is consolidated and coordinated by one or more corporate functional vice presidents and is reviewed internally (in most cases, monthly). Linde's energy and climate change targets are reported each month from the businesses and reviewed at a monthly global meeting of the COE, led by its vice president. The meeting tracks trends against targets and seeks opportunities to replicate best practices. This monthly report is then provided to the Finance office, the Chief Financial Officer (CFO) and the Management Committee.

**Linde's latest climate change goals** are managed and the businesses are accountable for achieving them. The 2035 target is baselined in 2021. Activities and monitoring has already begun, with Sustainability and Finance convening quarterly reviews with Linde's CEO.

**Other operational targets** for water, sustainable productivity, Zero Waste and community engagement also report monthly into the COE meeting.

**Zero Waste, Community Engagement and Workforce Development** programs are led by the Sustainable Development function. Community engagement encourages business programs that engage employees in volunteerism in their communities. "Community" is a core company value; community engagement is considered a leadership activity. Linde sites maintain a strong Community Engagement program. Workforce Development programs have been designed and launched with community partners in a range of areas from welding to additive manufacturing to heavy-duty truck driving.

# Risk Management

Linde's risk management process includes risk reviews by management as well as annual review by the Board. In its [Annual Report \(10-k\)](#), Linde lists risk factors that management assesses may significantly impact the company. Several risk factors have been identified.

Risks include short-term, long-term and emerging risks.

Examples of emerging, long-term risks include:



## Catastrophic Events or Natural Disasters

### Increasing Significance

According to TCFD, natural disasters are increasingly common due to the rise in Earth's temperature. TCFD notes impacts to ecosystems, human health and businesses; see <https://www.fsb-tcfd.org/about/>.

### Potential Impact on Linde

The potential impact of this risk is both short- and long-term. Linde's most recent risk assessment notes that such events could disrupt or delay Linde's ability to produce and distribute its products to customers and could potentially expose Linde to third-party liability claims. In addition, such events could impact Linde's customers and suppliers, resulting in temporary or long-term outages and/or the limitation of supply of energy and other raw materials used in normal business operations.

### Steps Undertaken

Linde evaluates the direct and indirect business risks, consults with vendors, insurance providers and industry experts, makes investments in suitably resilient design and technology, and conducts regular reviews of the business risks with management.

See Linde's 2021 [Annual Report \(10-k\)](#), page 10, and Linde's [2022 CDP Climate Change Response](#).



## IT System Failures and Network Disruptions

### Increasing Significance

According to the U.S. Cybersecurity and Infrastructure Security Agency (CISA), there is increased risk for "wide-scale or high-consequence events." The agency notes that critical infrastructure is increasingly subject to sophisticated cyber intrusions that pose new risks; see <https://www.cisa.gov/cybersecurity>.

### Potential Impact on Linde

Linde's most recent risk assessment notes that the company relies on information technology systems and networks, and stores and processes sensitive business and proprietary information in these systems and networks. Operational failures and breaches of security from increasingly sophisticated cyberthreats could lead to the loss or disclosure of confidential information, result in business interruption, malfunction or regulatory actions, and have a material adverse impact on the company's operations, reputation and financial results.

### Steps Undertaken

Linde has taken steps to address these risks and concerns by implementing advanced security technologies, internal controls, network and data center resiliency and recovery processes.

See also Linde's 2021 [Annual Report \(10-k\)](#), page 11.

# Engaging Stakeholders

102-40, 102-42, 102-43, 102-44

This section describes ongoing engagement on key topics with several relevant stakeholder groups. They are invited to voice their opinions, which in turn provides value to the company. Stakeholder feedback was integrated into Linde's process to determine PFs, KPIs and company goals, including our SD 2028 targets and 2035 target, and 2050 climate neutrality ambition. See Sustainable Development Targets 2028.

## Employees 102-40, 102-42, 102-43, 102-44

Linde is committed to the safety, well-being and professional development of all employees worldwide. The company is committed to providing a safe and inclusive workplace with an emphasis on the highest standards of integrity and professional performance. This allows Linde to maintain a high rate of employee engagement, which helps attract and retain talent.

Group	Frequency	Key Topics	Response to Key Topics
All employees	Continuous	<ul style="list-style-type: none"> <li>Pay</li> <li>Conditions</li> <li>Retention</li> </ul>	<ul style="list-style-type: none"> <li>Linde provides a range of employee benefits that reward performance.</li> <li>Linde has a robust training and development program and annual employee performance appraisals.</li> </ul>
All employees	Continuous	<ul style="list-style-type: none"> <li>Employee retention and engagement</li> </ul>	<ul style="list-style-type: none"> <li>Linde was named a Top Noteworthy Company by DiversityInc, an organization that measures the top global companies for workplace diversity and a culture of inclusion.</li> <li>Linde's worldwide 2021 employee engagement scored favorably relative to established benchmarks, and Linde was named one of Forbes Best Employers for Diversity 2021.</li> </ul>

## Customers 102-40, 102-42, 102-43, 102-44

Customer satisfaction is crucial to Linde's results. A significant portion of Linde's revenue is earned from recurring customers and retained accounts. In addition to an analysis of customer retention, we assess the satisfaction level of a subset of our largest accounts.

Group	Frequency	Key Topics	Response to Key Topics
All customers	Continuous and periodic	<ul style="list-style-type: none"> <li>Productivity</li> <li>Competitive advantage</li> </ul>	<ul style="list-style-type: none"> <li>Linde works continuously to offer customers relevant technologies to improve their resource efficiency and positive environmental impacts, particularly in energy use and the reduction of GHG emissions.</li> </ul>
All customers	Continuous and periodic	<ul style="list-style-type: none"> <li>Safety</li> <li>Product knowledge</li> <li>Quality</li> <li>Reliable supply</li> </ul>	<p>Globally, Linde assures customers of safe, reliable and quality supply of critical products. For example:</p> <ul style="list-style-type: none"> <li>Throughout the COVID-19 pandemic, Lincare has cared for 165,000 COVID-19 patients. Lincare provides in-home services to patients with underlying chronic medical conditions, which helps to increase critical hospital capacity by transitioning respiratory patients and others from in-patient to in-home care.</li> </ul>
Subset concerned about ESG issues	Periodic	<ul style="list-style-type: none"> <li>Climate change</li> <li>Energy efficiency</li> </ul>	<p>Globally, Linde works with customers to improve their energy efficiency and reduce GHG emissions. For example:</p> <ul style="list-style-type: none"> <li>Linde responds to dozens of customers each year from several geographies that seek information as part of the CDP supply chain assessment. Linde's 2021 Supplier Engagement Rating Score was A-, compared to an average rating of B- in our sector.</li> </ul>
Collaboration for innovation	Continuous	<ul style="list-style-type: none"> <li>Competitive advantage and customer satisfaction</li> </ul>	<p>Consistent with our vision and mission, the company is committed to helping customers by delivering innovative and sustainable solutions. In many cases, its innovative technology solves environmental challenges, allowing its customers to be more productive while using fewer natural resources and energy, and producing fewer emissions.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>In 2019, Linde and BASF won the ICIS Innovation Awards for Best Process: Linde's DRYREF™ syngas process in combination with BASF's SYNSPIRE™ catalyst enables steam reforming of methane in dryer conditions and the use of CO<sub>2</sub> as feedstock, contributing to energy savings and an improved CO<sub>2</sub> footprint.</li> </ul>
Subset of customers	Periodic	<ul style="list-style-type: none"> <li>Satisfaction level</li> </ul>	<ul style="list-style-type: none"> <li>Linde has measured customer satisfaction based upon retention for 2018 – 2020; the target of 90% was achieved each year.</li> <li>In 2021, Linde began planning for a pilot customer satisfaction survey using Net Promoter Score (NPS). Linde received a confirmation of satisfaction with a NPS of 35.</li> </ul>

## Shareholders 102-40, 102-42, 102-43, 102-44

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.

Group	Frequency	Key Topics	Response to Key Topics
Regular investors	Continuous	<ul style="list-style-type: none"> <li>Shareholder return</li> </ul>	In 2021, Linde's stock performance outpaced major indices, including the S&P 500. See EC (1).
ESG investors	Continuous	<ul style="list-style-type: none"> <li>ESG and sustainability</li> </ul>	<p>Linde is frequently recognized for outstanding performance in sustainability. We consistently excel in premier sustainability investment indexes and rankings. Linde is listed on major investment indexes such as the S&amp;P Global Corporate Sustainability Assessment, World Dow Jones Sustainability Index (DJSI), FTSE4Good and STOXX.</p> <p>Linde was named to the S&amp;P Global Sustainability Yearbook 2022. Results are based upon the 2021 Corporate Sustainability Assessment, which confirmed Linde as a constituent of DJSI World, scoring at the 99th percentile. The Sustainability Yearbook is the world's most comprehensive publication on corporate sustainability.</p> <p>Linde also scored an A- on its 2021 CDP Climate Change Response. Linde was named to CDP's A-list for its CDP Water Security Response.</p>

## Suppliers 102-40, 102-42, 102-43, 102-44

Linde infuses its core values through supply chain engagement initiatives structured to cultivate supplier capacity. This drives better business performance, sustains higher quality and improves eco-proficiency and product development, including access to innovation. We optimize initiatives locally and across the globe by focusing on select commodities and distinct groups of suppliers.

Group	Frequency	Key Topics	Response to Key Topics
Electric utility and capital equipment suppliers	Continuous	<ul style="list-style-type: none"> <li>Energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Linde works with our electricity and capital equipment suppliers around the globe to identify and implement programs that optimize energy efficiency in our offices and facilities.</li> <li>Energy supply contracts continue to bring carbon-free electricity to Linde's corporate office in Danbury, Connecticut. The site also sources energy from solar panels in the parking lot.</li> </ul>
Contract drivers	Continuous	<ul style="list-style-type: none"> <li>Safety</li> </ul>	<ul style="list-style-type: none"> <li>Contract drivers receive the same or comparable levels of training as Linde drivers.</li> </ul>
Minority suppliers	Continuous	<ul style="list-style-type: none"> <li>Capacity building</li> </ul>	<ul style="list-style-type: none"> <li>Linde seeks to promote engagement and help build capacity among suppliers designated as diverse business enterprises.</li> </ul> <p>For example:</p> <ul style="list-style-type: none"> <li>Over the last few years, Afrox, Linde's subsidiary in South Africa, has been the driving force behind more than 10 small enterprises. This is part of Afrox's commitment to kick-start, support and build small Black-owned businesses capable of meeting the needs of the company's strategy in terms of procurement, transport and penetrating new markets.</li> </ul>

## Communities 102-40, 102-42, 102-43, 102-44

Community is a Linde value. Linde is, at its core, a “local” company. We make long-term investments in communities where we build facilities and source locally for talent, leadership and suppliers. This, in turn, helps strengthen Linde’s reputation and business relationships.

Group	Frequency	Key Topics	Response to Key Topics
Corporate: Sustainability and Global Giving programs	Continuous	<ul style="list-style-type: none"> <li>• Diversity</li> <li>• Education</li> <li>• Healthcare</li> <li>• Environment</li> <li>• Community resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Community engagement is a part of Linde’s culture and is encouraged by leadership. Linde engages with its communities by building close relationships with local providers of emergency services, with employee volunteer projects that help build community resilience and through the Linde Global Giving Program (see GRI 201-1, 203-1, 203-2, 413-1, 413-2).</li> <li>• Linde has a strong community engagement program and activity in all businesses (see GRI 203-1, 203-2, 413-1, 413-2).</li> <li>• For example in 2021, approximately 100,000 children and students benefitted from our efforts in community engagement.</li> </ul>
Unemployed & underemployed Universities Military	Continuous	<ul style="list-style-type: none"> <li>• Capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Linde’s <i>Skills Pipeline</i> program addresses labor shortages by helping to build capacity. For example, the program in commercial truck driving helps soldiers transitioning from the military earn their CDL. Having more drivers available to work in industry can potentially reduce supply chain disruptions.</li> </ul>

## Government Agencies 102-40, 102-42, 102-43, 102-44

Linde has a strong global ethics and compliance program. Linde’s Government Relations department participates in discussions with international, national and sub-national governmental bodies regarding legislation that impacts our business, drives energy efficiency, delivers positive outcomes in electricity regulation and supports our unique technologies to produce clean energy. See GRI 415-1.

Group	Frequency	Key Topics	Response to Key Topics
Government agencies	Continuous	<ul style="list-style-type: none"> <li>• Compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Linde maintains a detailed oversight process to ensure that its activities are conducted in a legal, ethical and transparent manner.</li> <li>• Linde trains employees on issues related to doing business with the government and complying with anti-trust and competition laws and the U.S. Foreign Corrupt Practices Act (FCPA).</li> <li>• Linde meets with international, national, sub-national and local government officials to discuss energy costs, energy efficiency, tax and trade-related issues and the environmental benefits of Linde technologies.</li> </ul>

## Industry Associations and Groups 102-40, 102-42, 102-43, 102-44

Linde is a member of a range of trade associations, business associations and alliances, including national chemical associations and industrial gas associations in the company’s key geographies, and manufacturers associations and chambers of commerce, through which it engages in dialogue with government officials and stakeholders about issues that are important to the company and its business. See GRI 102-13 for a full list of industry associations.

Group	Frequency	Key Topics	Response to Key Topics
Industry groups	Continuous	<ul style="list-style-type: none"> <li>• Policy development</li> </ul>	<ul style="list-style-type: none"> <li>• In many cases, a Linde executive holds a board seat and/or serves on a relevant committee, or Linde participates in projects where it views membership as a strategic partnership. See GRI 102-13.</li> <li>• Linde also participates in additional local and regional organizations.</li> </ul>
Chemical industry	Continuous	<ul style="list-style-type: none"> <li>• Responsible Care®</li> </ul>	<ul style="list-style-type: none"> <li>• Linde is externally audited for conformance to the Responsible Care Management System® (RCMS®) and is a signatory of the Responsible Care® Global Charter.</li> </ul>

## 102-13 Memberships of associations

Memberships of associations (such as industry associations) and national or international advocacy organizations where Linde:

Global	Holds a position on the governance body	Participates in projects or committees	Provides substantive funding beyond routine membership dues	Views membership as strategic
Hydrogen Council	X	X	0	X
International Oxygen Manufacturers (IOMA)	X	X	0	0
<b>Americas</b>				
American Chemistry Council (ACC)	0	X	0	X
American Fuel and Petroleum Manufacturers Association (Associate Member)	0	X	0	X
American Institute of Chemical Engineers (AIChE)	0	X	0	X
Business Council for International Understanding	0	X	0	X
California Manufacturers and Technology Association	X	0	0	X
Compressed Gas Association (CGA) (U.S.)	X	X	0	X
HR Policy Institute	0	X	0	X
Louisiana Chemical Association	0	X	0	X
National Enhanced Oil Recovery Initiative (NEORI)	0	X	0	X
NY Chemistry Council	0	X	0	X
Puerto Rico Manufacturers Association	0	X	0	X
Society of Human Resource Management (SHRM)	0	X	0	X
Texas Association of Manufacturers	0	X	0	X
Texas Chemical Council	0	0	0	X
Texas Taxpayers and Research Association	0	X	0	X
U.S. China Business Council	0	X	X	X
<b>Asia-Pacific</b>				
Asia Industrial Gas Association	X	X	0	X
<b>Europe</b>				
American Chamber of Commerce	0	X	0	0
Atlantik-Brücke e.V.	0	X	0	0
Clean Energy Partnership	0	X	0	0
Deutscher Wasserstoff- und Brennstoffzellenverband	X	X	0	0
Deutsches Aktieninstitut	X	0	0	0
European Industrial Gas Association (EIGA)	X	X	0	X
European Petrochemical Association (EPCA)	0	0	0	0
Förderkreis der Deutschen Industrie e.V.	0	X	0	0
Hydrogen Europe	0	X	0	X
Hydrogen Power Storage & Solutions (HYPOS) - East Germany	0	X	0	0
Industriegaseverband (IGV)	X	X	0	X
Ost-Ausschuss der Deutschen Wirtschaft	X	X	0	X
Stifterverband für die Deutsche Wirtschaft	X	X	X	0
Verband der Chemischen Industrie VCI	0	X	0	0
Verband Deutscher Maschinen- und Anlagenbauer (VDMA)	X	X	0	0
Verein der Bayerischen Chemischen Industrie	X	X	0	0
Wirtschaftsrat der CDU	0	X	0	0
<b>Key</b>				
yes	X			
no	0			

## 102-40 Stakeholder Groups Engaged by the Organization

### Selected Stakeholder Recognition:

#### Global Recognition

##### Recognition by SRI Investors

See full listing in the Sustainable Development/Recognition area on the company's website at: <https://www.linde.com/sustainable-development/awards-and-recognition>.

Linde is listed on major ESG investment indexes, including the following:

- SAM Corporate Sustainability Assessment Dow Jones Sustainability Index (DJSI World)
- FTSE4Good
- STOXX

##### Compliance and Ethics

- One of the 2021 World's Most Ethical Companies by the Ethisphere Institute

##### Diversity & Inclusion

- Bloomberg Gender-Equality Index, 2022

#### Business and Regional Recognition

##### Compliance and Ethics

- Responsible Business Award 2021, Estonian Transportation Administration, AS Linde Gas, Estonia

##### Employees

- 2021 Noteworthy Company for Diversity by DiversityInc for the sixth consecutive year (United States)
- Forbes 2021 Best Employers for Diversity for the second consecutive year (United States)
- Top Employer China 2021 for the seventh consecutive year
- 2021 Inspire Gerda Award Diversity and Inclusion (South Latin America)
- Recognition as a "Super Company" by the business magazine CNN Expansión (Mexico)
- Top Employer Germany 2022, Certified Excellence in Employee Conditions
- Great Place to Work Turkey 2021
- One of Greater Toronto's Top 100 Employers, 2021, by Mediacorp (Canada)

##### Safety

- 2021 Annual Award for Safety and Health at Work (Bulgaria)
- Annual Award for Safety and Health at Work 2021, Linde Gas Italy (Italy)
- Annual Award for Safety and Health at Work 2021, Linde Medicale (Italy)
- American Chemistry Council's 2021 Responsible Care Facility Safety Award
- EIGA Road Safety Award 2021 - Bulk fleet less than 5 million kilometers per year, Linde Gas AS, (Norway)
- CGA Safe Facility Performance Award (United States)
- CGA Fleet Safety Excellence Award (United States)

##### Communities and Community Groups

- Recognition as a socially responsible company by the Mexican Center for Philanthropy and the Alliance for Corporate Social Responsibility for the 12<sup>th</sup> consecutive year (Mexico) and the eighth consecutive year (Costa Rica)
- Danish Municipality Fredericia's CSR Award for community engagement, A/S Linde Gas

**Customer and Customer-Related**

- 2021 – 2023 Strategic Supplier of Wanhua Chemical Group (China)
- Outstanding Safety Award to LLH CSOT T-4 Project Team from CSOT (China Star Optoelectronics Technology)
- Recognition for “Excellent customer services during epidemic situation” to LLH Xianyang CHOT site for continuous product supply (China)
- Recognition to the LLH F2 TGM team for 15 incident-free years and for providing uninterrupted services from 2006 to 2021, by SK Hynix (China)
- Supplier of the Quarter Award from Intel DMTM, Q2 and Q4, 2021, to TMM LLH & Linde/BOC Ireland Team (China and Ireland)
- Consumidor Moderno recognition for call center excellence (South America)

**Industry Associations, Professional Associations and Government Agencies**

- Recognition from National Technical Committee on Semiconductor of Standardization Administration of China for participating in developing national GB/T standards for SiCL<sub>4</sub>, SiH<sub>2</sub>CL<sub>2</sub> and C<sub>4</sub>F<sub>6</sub> electronics gases
- Award for Industry 4.0, ROC Centre Ropice (Czech Republic)

**Environment**

- CGA Environmental Recognition Award
- Recognition for Excellent Environmental Performance by the Ministry of the Environment, Clean Transportation Program (Mexico)
- Blue Flag Ecological Program, Bandera Azul Ecológica, by the National Commission of the Blue Flag (Costa Rica)
- Reforestamos Mexico Award to environmentally conscious companies that support reforestation programs

**Supplier Recognition**

- “Wattsmart Business Partner” from Rocky Mountain Power (LGUS)



# Economic, Environmental, Social Topics

# Living the Mission: The Faces of Linde





# Economic Topics

## EU Taxonomy: Cross-Company Connections to Tackle Emerging Trends in Sustainability

In 2021, the European Commission provided final direction for the Non-Financial Reporting Directive (NFRD), requiring companies falling within the scope to disclose their environmentally sustainable economic activities based upon the new EU taxonomy classification system. In response, a global team rolled up their sleeves to tackle the challenge together. During 2021, experts from Government Relations, Sustainability and Corporate Accounting worked closely with champions in the business, Linde Engineering, SHEQ, and Technology to meet this new legal requirement. Linde's first disclosure appeared in the 2021 International Financial Reporting Standards (IFRS) report.

"The EU taxonomy, like the corresponding legal framework, was still developing while we were working on it—and is still progressing today," said Jan Swoboda, Associate Director, Global Government Affairs, who led much of this project together with Adina Mittmannsgruber from Sustainability. "Teamwork was essential to understand criteria, scope and application."

Sensitizing colleagues at an early stage, informing them about the methodology and new reporting obligations regarding climate change and adaptation, were key. The core team mapped economic activities included in the Climate Delegated Acts of the EU Taxonomy to relevant Linde business areas. The Corporate Accounting team aligned revenue, capital expenses and operational expenses with the company's overall financial reporting. "I am very proud of this joint team effort," said Erin Catapano, Executive Director, Corporate Accounting. "The various experiences and knowledge about business areas, processes and technologies were essential to this first step."

More steps will come as the Taxonomy continues to roll out. As stakeholder expectations evolve, Linde teams look forward to the challenge and to working together.

→ For more information on Linde's EU taxonomy reporting, see [Linde 2021 IFRS Financial Report](#).



From left to right: Mihail Brynzov (Technology), Virginie Metivier (Linde Engineering), Jan Swoboda (Government Relations) and Adina Mittmannsgruber (Sustainability)



From left to right: Shantalee Budwah (Corporate Accounting), Kathy Kuberka (Technology) and Erin Catapano (Corporate Accounting)

## 200 Series: Economic Topics

### **Economic Management approach for material aspects** 103-1, 103-2, 103-3, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7

Financial performance is reported in Linde's financial reports. The economic dimension of sustainability is broader: it concerns the organization's impacts on the economic conditions of its stakeholders and on economic systems at the local, national and global levels. The Economic category illustrates the flow of capital among different stakeholders as well as the main economic impacts of the organization on investors, governments, employees, customers, suppliers and communities where the company operates or has an effect. This section reports on Linde's contribution to the sustainability of a larger economic system: its economic performance, market presence and indirect economic impacts.

#### **Organizational Responsibility, Accountability and Incentives**

Linde's Chief Executive Officer (CEO) and the Board of Directors are accountable for the economic health of the company. Responsibility for performance lies with the businesses. Performance is consolidated and reported to the Board by the responsible executives: Chief Compliance Officer (CCO), Chief Human Resources Officer (CHRO), EVP, Clean Energy, vice presidents of SHEQ, the Center of Excellence (COE), and Procurement leadership.

Integrity is a corporate value, an expectation of behavior and non-negotiable. Linde's Code of Business Integrity (CBI) affirms its commitment to fairness, transparency and trust as the basis for growth and prosperity for employees, customers, suppliers, markets and its communities. The Board of Directors is responsible for monitoring the implementation of the CBI. Its responsibilities include the periodic review of the policy and overseeing management's preventive, reporting, investigation and resolution programs for implementing this policy. The CBI is posted on the company website and is communicated to employees. It provides clear instructions on expected behaviors to conform with the CBI and for reporting of concerns about potential non-conformance. Employees also receive training and certification to the CBI. Subcontractors and other stakeholders are expected to follow this standard. The Board Audit Committee is responsible to review the processes and results for certification of employees' understanding of, and compliance with, the company's Business Integrity and Ethics Policy.

Linde has appointed a CCO within the Legal department. The CCO reports to the General Counsel, who reports to the CEO. Compliance with policies prohibiting corruption or anti-competitive behavior and the maintenance of Linde's reputation for strong ethics and integrity are managed under the CCO, who also oversees compliance with policies related to the CBI, including human rights. Linde's Human Rights Policy is publicly available, and the VP of Sustainability manages the periodic review of this policy.

The Board's Audit Committee reviews the company's key compliance risks and compliance program, including its design, implementation and effectiveness, with the CCO and General Counsel.

Linde follows the law and is governed by all applicable local laws wherever it is located. In the event of a conflict between local law and the CBI or company policy, Linde will follow the stricter standard within the framework of the applicable laws.

The issues of information and cybersecurity fall under the remit of the Board Audit Committee. In addition, the full Board reviews cybersecurity as part of its regular risk reviews. Linde has appointed a Global Chief Information Officer (CIO) reporting to the Chief Financial Officer (CFO). The CIO is the senior functional head of information and cybersecurity. A Chief Cybersecurity Officer reports to the CIO.

Linde's executive annual variable compensation is impacted by performance in non-financial areas considered to be Strategic Business Objectives. These include achieving best-in-class performance in several areas, including global compliance.

#### **Policies, Commitments, Goals and Targets**

Linde's CBI and Supplier Code of Conduct are provided on its website: [www.linde.com](http://www.linde.com).

As described in the Materiality, Priorities and Targets: SD 2028 (102-47) on page 15, Linde's sustainability Priority Factors (PFs) are aligned from both legacy companies and have related KPIs. Linde's economic PF is Integrity and Compliance, which has a related SD 2028 target. In addition, several of the climate change targets are economic and environmental. See Performance Towards Targets on page 24. The 200 series disclosures report against the relevant GRI Standards for these PFs, in addition to GRI disclosures that are not PFs but that may be of interest to various external stakeholders.

[103-1](#), [103-2](#), [103-3](#)

### **Mechanisms for Grievance and Recourse**

Values and policies are actively communicated to employees around the world to outline Linde's expectations of conduct wherever it does business. Linde takes these standards very seriously, and non-compliance can result in severe disciplinary action, up to and including termination of employment. Its employees are actively encouraged to report suspected complaints and concerns, or to anonymously report violations, through a number of channels, including the Integrity Hotline. It also encourages customers, vendors or other observers to use the hotline to submit complaints or allegations about these or other matters. The company provides an annual report of Linde incidences of substantiated hotline reports on its website at: <http://www.linde.com/about-linde/sustainable-development/reporting-center/hotline-reports>.

### **Programs, Projects, Initiatives**

These are described in the Economic disclosures per GRI 200 series.



## 201-1 Direct economic value generated and distributed

### Revenue

2021 revenue: \$30.8 billion

See [2021 Annual Report \(10K\)](#) for consolidated financial statements. A full description of Linde's financial results is provided in the Annual Report (10K). See also EC (1) for earnings per share (EPS) performance.

### Tax Strategy

Linde is a leading industrial gases and engineering company with more than 72,000 employees globally, serving customers in approximately 100 countries worldwide. Linde delivers innovative and sustainable solutions to customers and creates long-term value for all stakeholders. The company is making our world more productive by providing products, technologies and services that help customers improve their economic and environmental performance in a connected world.

The nature of Linde's industrial gases business is substantially local. As a result, Linde generates income and pays taxes in jurisdictions in which it has business operations. In case of cross-border transactions, the respective Linde parties endeavor to comply with the applicable transfer price regimes, including transfer price determination rules.

Linde's business, particularly within the industrial gases segment, is capital-intensive. Linde believes that capital investment provides the basis for economic growth; hence the company supports tax policies that promote capital investment.

Linde is committed to developing new technologies that help its customers increase productivity and achieve environmental benefits in a wide range of industries. Linde also supports tax policies that incent innovation and protect the value of intellectual property. Linde's intellectual property assets are primarily developed and maintained in the U.S. and Germany, both geographies that are not typically regarded as low-tax countries. Transfer of these assets to low-tax jurisdictions is not part of Linde's tax planning.

Linde, as a multinational company, supports the continued expansion of a network of bilateral income tax treaties to reduce barriers to cross-border investment and eliminate double taxation.

For all these reasons, Linde advocates for tax policies that drive economic growth, particularly in areas of increased engineering efficiency and enhanced local production and development.

Linde has adopted a Code of Business Integrity (CBI), as well as its corporate vision, mission and values – safety, integrity, accountability, inclusion and community. The principles in the CBI set out Linde's commitment to integrity, to its employees, to the company, to its customers and partners and to its communities. The CBI provides guidance and insight to navigate compliance and ethical questions and to promote an overall culture of compliance. One key guiding principle is full compliance with applicable laws and regulations.

In line with its CBI, Linde manages its tax affairs in a responsible and transparent manner and in compliance with applicable tax legislation. Linde maintains processes and controls designed to minimize the risk of errors that could impact the amount of tax that it pays. These processes and controls are regularly monitored, reviewed and tested, and underpin the preparation and submission of its tax returns.

Linde has a responsibility to its shareholders to maximize returns and structure its affairs in an efficient manner, including taxes.

Linde's effective tax rate and tax exposures are reviewed annually with the Audit Committee of the Board of Directors. Linde discloses its effective tax rate publicly, together with the associated risks for the company's future tax rate and exposures, in the company's annual 10-K filing on its website at: <https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en>.

### Charitable Spend

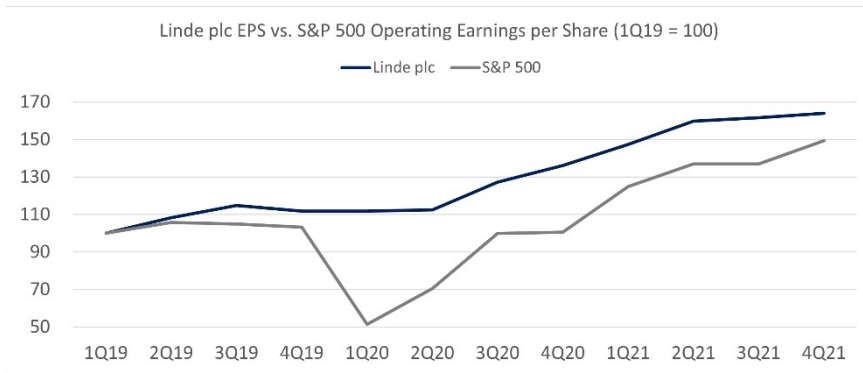
Linde Global Giving Program spend: \$9.7 million. See also 413-1.

201-1

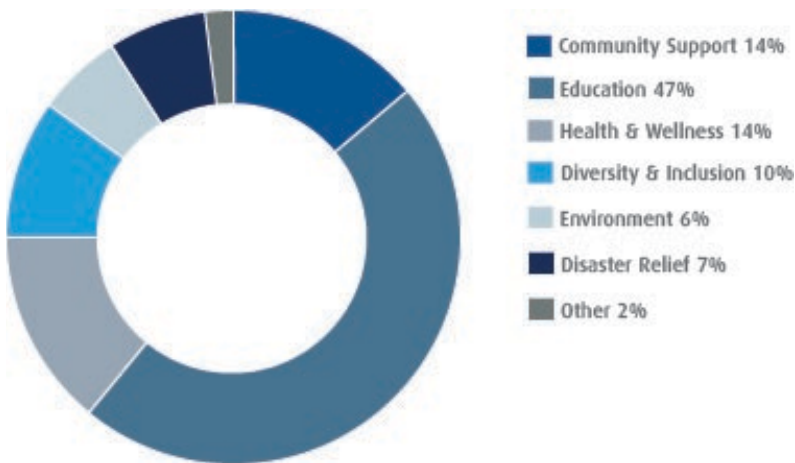
In 2021, the Linde Global Giving Program donated approximately 10 percent of Global Giving funds toward efforts to increase diversity and inclusion. Nearly half of the funding was directed to education and approximately 6 percent was directed to the environment. Each of these three areas directly complements the company's strategic focus for philanthropy. The balance provided impact in communities through targeted community support, healthcare support and other areas; support for disaster relief in 2021 represented about 7 percent of charitable giving. Linde also reports the breakdown of Global Giving support by region.

See also 413-1 for information on community engagement.

See also 203-1 for information on indirect economic impacts.



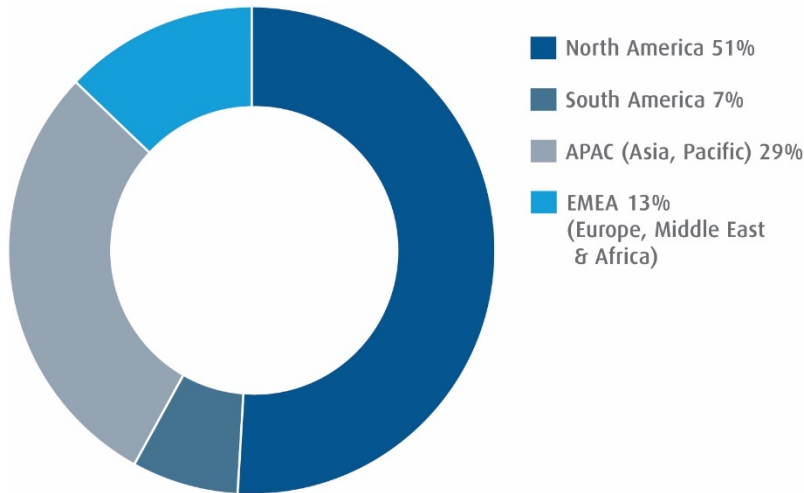
EC (1): Indexed Earnings per Share (EPS), Linde, 2019–2021



EC (2): Global Giving Spending by Area, 2021



201-1



EC (3): Global Giving Spending by Geography, 2021

### 201-2 Financial implications and other risks and opportunities for the organization's activities due to climate change

For information on financial and other risks and opportunities from climate change, see Linde's CDP response. The document is available on its website at the end of July: <https://www.linde.com/-/media/linde/merger/documents/sustainable-development/2022-cdp-response-climate-change.pdf>.

### 201-3 Coverage of the organization's defined benefit plan obligations

A defined benefit and/or a defined contribution plan is available to all U.S. employees, as well as to employees in some other countries. Further detail is provided in Note 16, pages 82 and following, in Linde's 10-K filing.

Dependent upon the business and date of hire, employees may participate in legacy programs, which may include defined benefits and contributions.

Retirement coverage for employees of the company's international subsidiaries is provided by those companies through separate plans that are typical for the country of employment.

### 201-4 Financial assistance received from government

Linde periodically receives grants from government entities (e.g., the Department of Energy in the U.S., Department of Research and Education BMBF/ Department of Economy BMWI in Germany) to sponsor innovation. Linde also periodically receives local, state, country or regional economic development incentives related to capital investments.

### 202-1 Ratios of standard entry-level wage by gender compared to local minimum wage at significant locations of operation

One hundred percent of employees in all business units earn at least the local minimum wage. Linde's CBI reinforces its commitment to "provide equal employment opportunity, and we recruit, hire, promote and compensate people based solely on merit and ability." This is reinforced by Linde's Diversity & Inclusion Guidelines, provided on the website at: [https://www.linde.com/-/media/linde/merger/documents/diversity-and-inclusion/linde\\_global\\_di\\_policy.pdf?la=en](https://www.linde.com/-/media/linde/merger/documents/diversity-and-inclusion/linde_global_di_policy.pdf?la=en). See also Linde's Human Rights Policy: <https://www.linde.com/sustainable-development/policies-and-position-statements/human-rights-policy>.

Linde's compensation policy assigns jobs into pay levels based on job descriptions so that people performing the same type of job functions are in the same pay range, regardless of age, gender or race. To ensure that its compensation policy is being appropriately administered, the company conducts annual pay equity analyses in the U.S. and in other countries where required by law. Specific salary information is confidential.

## 202-2 Proportion of senior management hired from the local community at significant locations of operation

Linde's business model is locally focused: Consistent with its growth goals and goals to grow innovation capacity in emerging economies, Linde has a commitment to source and develop local talent. Many country or regional business leaders are local or regional nationals. In hiring and promoting, the company practices the consideration of local leadership who understands the culture and business practices of the area. This provides ideal role models for the local workforce and offers a more cost-effective option than moving leaders from another country.

The following activities help ensure that local talent receives leadership opportunities:

1. Increase local recruiting efforts.
2. Train and develop current workforce for advancement.
3. Offer opportunities for language learning to promote the ability to operate effectively in a multi-national environment.
4. Create opportunities for high-potential local nationals to have special assignments outside their home countries.
5. Collaborate with educational programs to develop the local workforce.

See 405-1.

## 203-1 Development and impact of infrastructure investments and services supported

A significant portion of the company's applications support the development of social and economic infrastructures. Linde gases help to enable safe drinking water for more than 225 million people each day. Industrial and specialty gases enable cleaner and more efficient economic growth in industries from cement to steel. Linde applications are also integral to the development of future energy infrastructures (e.g., applications for renewable energy and second-generation biofuels).

The company is committed to improving the quality of life in the communities it serves. Through financial contributions and the volunteer efforts of employees, Linde supports programs that address diversity, education, the environment and community resilience — all important aspects of community sustainability. In 2021, the company's Global Giving Program contributed \$9.7 million to a range of programs and charitable organizations around the world. See 201-1 for information on how the Global Giving contribution was distributed by focus area and business region.

Employee and facility/business contributions from community engagement projects were estimated at more than \$2.4 million, and the dollar value of employee and facility in-kind contributions, such as food, clothing and supplies, was estimated at more than \$400,000. Global Giving also tracked more than \$1.7 million in in-kind contributions of Linde products such as gases.

The total Linde contribution, including in-kind contributions, but not volunteer time, is estimated at approximately \$14.2 million. The estimated value of volunteer time is more than \$800,000.

## 203-2 Significant indirect economic impacts

Linde's business helps countries modernize with technologies that enable environmentally responsible economic growth. Linde provides careers and associated benefits to more than 72,000 employees, many of whom are hired locally, as well as benefits to thousands of retirees. Indirect benefits accrue to Linde's vendors (also, often, contracted locally), as well as customers, shareholders and communities in which the company operates. For descriptions of how Linde's business model enables indirect economic, social and environmental benefits, see pages 8 and 9.

The company hires local talent:

- Most emerging economy business leaders are host country or regional nationals.
- It sources local contractors. Substantially all contract drivers, and most contract construction workers, are sourced locally.
- It helps build capacity in local communities. Linde employee volunteers provided a range of benefits to approximately 250,000 people, mostly in communities local to Linde sites.

All Linde community engagement projects are encouraged to help meet specific needs identified by community leaders, but there is no science to measure the impact of community outreach. Linde uses a methodology developed by the London Benchmarking Group (LBG)

## 203-2

to evaluate the indirect economic, environmental and social impacts of its community engagement activity for the company, its employees and beneficiaries (see 413-1 and 413-2).

In 2021, for 91 percent of projects, volunteers reported that community engagement had a direct positive impact on recipients' quality of life. In approximately 71 percent of projects, volunteers reported that community engagement provided the beneficiaries with value that could lead to economic benefits, such as job skills or opportunities for personal growth.

Community engagement is a component of Linde's SD 2028 goals, with the target to deliver 550 projects per year in communities by 2028 through Linde community engagement initiatives. In 2021, despite the ongoing pandemic, Linde employees delivered almost 390 such projects, a substantial portion of the 2021 goal, prioritizing support for the pandemic, remote education opportunities and virtual engagement. Many of the projects directed towards education support Linde's contribution to SDG Target 8 to achieve full and productive employment and decent work for all women and men.

The significance of Linde's economic and governance PFs and targets in the context of external benchmarks and stakeholder priorities is explained in the section Materiality, Priorities and Targets: SD 2028, page 15.



### 204-1 Proportion of spending on local suppliers

Note: This section responds to 204-1 and also responds to 102-9.

#### Policy

Linde's Supplier Code of Conduct (Supplier Code) is made available on its website at: <https://www.linde.com/about-linde/global-procurement>.

Suppliers, contractors and third parties play a critical role in Linde's ability to operate and provide products and services to its customers. Suppliers' actions and practices also reflect on Linde. Therefore, the company chooses suppliers carefully based on merit and a due diligence process. Linde expects suppliers to comply with legal requirements and to act in a manner that is consistent with Linde's values and the principles outlined in its Supplier Code and CBI.

The Supplier Code defines Linde's basic requirements for its suppliers concerning their responsibilities towards Linde and its stakeholders, societies and the environment. As part of the standard documentation for all new and renewing contracts, suppliers must comply with the principles outlined in the Supplier Code and with Linde's CBI or equivalent policies of their own. Specific expectations are laid out for Integrity and Legal Compliance; Human Rights and Labor Standards; Health, Safety and Environment; Accuracy of Books and Records; Intellectual Property; and Supply Chain. A grievance mechanism is provided.

#### Local Sourcing

Linde works with suppliers in many countries in which it does business — approximately 100 countries. Linde has a corporate value of community. This reflects the nature of Linde's industrial gas products: it is generally not economical to transport them distances greater than a few hundred miles from the production facility. As a result, the company invests in building local facilities and hires locally for management, employees and contractors.

The most significant sets of suppliers from the point of view of local talent sourcing are facility construction contractors and contract drivers. Installation of new equipment, as well as ongoing maintenance, is largely performed by local suppliers. Linde uses locally-sourced contract drivers in most of its Asia Pacific countries; in EMEA (except for Germany and the UK); in South America; and in parts of Central America. [102-9](#)

The company invests in supplier capacity-building to raise performance standards and share benefits at the same time. The company also values opportunities to engage suppliers and team members to better understand product offerings and applications. Past examples of supplier collaboration include the Supplier Innovation Fair at the Linde Technology Center, where suppliers discussed technology topics with Linde team members. As part of overall efforts to lower CO<sub>2</sub> emissions, Procurement teams often work with distribution management and other team members on efforts to reduce fleet emissions, such as procuring renewable fuels. See page 19.

#### Promoting Supplier Diversity

Providing innovative and valuable solutions for customers around the globe requires diverse talents, perspectives and experiences. As part of this, Linde supports programs that assist it in fostering relationships with a variety of qualified, diverse businesses for its supply chain around the globe.

[204-1, 102-9](#)

Linde's Supplier Diversity Program in the U.S. encourages and supports the use of a variety of qualified distinct business enterprises. It seeks to provide maximum practical opportunities for diverse businesses to participate in the supply of goods and/or services that support the company's business model.

The program has championed companies classified as small and diverse businesses for nearly two decades. The vice president and controller serves as the small business liaison officer and oversees the Small Business Subcontracting Program. On an annual basis, in collaboration with management and support staff from the company's Procurement team, a detailed small business subcontracting plan is established with practical goals that the company strives to achieve with small businesses in procuring designated commodities. In 2021, the company spent a total of \$546 million with small and diverse business enterprises. Approximately \$429 million was procured from U.S. small businesses, representing products and services that covered approximately 800 different commodities and services. Some companies that identified as small also identified as a veteran-owned or service-disabled-veteran-owned businesses, corresponding to nearly 6 percent of total small business spend, or \$33.3 million. Approximately \$66 million was spent with women-owned businesses, double the spending from 2020. Additionally, \$31 million was spent with minority-owned businesses, including businesses identifying as ethnic minorities or non-ethnic minorities, such as LGBT or persons with disabilities. The company's U.S. Procurement team has collaborated with its global affiliates to understand the supplier diversity landscape and opportunities in each country in which it operates. By leveraging the knowledge and skills of the company's diverse employee population and continuing to provide cultural awareness training around the world, the company strives to achieve an organically inclusive environment where diversity is recognized as a valuable asset and competitive advantage in its supply chain.

Globally, the company continues to identify and enhance supplier diversity initiatives in areas with emerging programs and/or the potential to develop them. In 2021, the company renewed its membership with the Regional Councils of Minority Supplier Development Council (MSDC), Women's Business Enterprise National Council (WBENC), National Gay and Lesbian Chamber of Commerce, NY Chapter (NGLCC-NY) and National Gay and Lesbian Chamber of Commerce (NGLCC). Linde continues to promote internal programs for diverse suppliers seeking sales opportunities, including, but not limited to, service geography, description of business capabilities and acquired certifications. Coupled with the company's existing business matchmaker program, the advanced business information has continued to provide opportunities for the company's procurement team and operations personnel to more efficiently identify experienced candidates for requests for proposals, leading to a higher percentage of diverse suppliers offering proposals and ultimately being awarded contracts.

Outreach and capacity-building with the company's prime supplier population allowed for the sharing of best practices in supplier diversity and yielded a commitment to enhance or establish mutually beneficial diversity metrics from suppliers with whom the company spends \$1 million or more with annually. In 2021, the company continued its Tier 2 diverse spend reporting program with U.S. prime suppliers, demonstrating the company's long-term commitment of sustaining diversity and inclusion in its supply chain. The program's goal is to develop diverse suppliers, beyond the company's direct supplier relationships, by providing additional economic growth opportunities. Over the course of the year, the program identified \$18.2 million in combined direct and indirect diverse spend. Sixteen prime suppliers from various industry sectors, including telecom, logistics, healthcare and MRO, participated in the program. Capturing this information has allowed the team to advance its supplier diversity program for validating and tracking the company's spend with diverse businesses and has helped to identify collaboration opportunities for 2021 with companies that have established supplier diversity programs.

Efforts are also active outside of the U.S. For example, in South Africa, Afrox has achieved Level 1 on the Broad Based Black Economic Empowerment (BBBEE) score card for the third year in a row. The BBBEE program is meant to improve diversity in the workplace, implement skills development, CSR programs and providing business opportunities to the previously disadvantaged black-owned business.

### **Investing in Supplier Relationships: A Win-Win**

Linde works hard to deepen relationships with suppliers and contractors while ensuring that they meet its standards and business values. This brings multiple benefits to the company and to the communities near to its operations. Linde puts a high priority on evaluating risks associated with its supply chain and collaborates with suppliers and other stakeholders where its involvement can make the most impact.

On a regular basis, Linde works with its carriers on safety training, initiatives and sharing best practices to continuously improve upon operational efficiency, reduce environmental hazards and promote security and human rights.

204-1, 102-9

Linde also works cooperatively with selected key suppliers in efforts to better understand and calculate its Scope 3 inventory. See pages 68-70. Linde has improved its efforts to calculate Scope 3 emissions for a broad range of its supplies based on an enhanced methodology that considers geographic origin as well as economic sector. Through direct engagement and capacity building, Linde has been successful in advancing supplier awareness of environmental and climate change topics and continues to improve the data accuracy of its Scope 3 emissions accounting.

Such engagements can unearth win-win approaches to reduce resources and provide social and environmental benefits throughout the supply chain.

### Safety Training

Worldwide contractor safety training: One hundred percent of contract drivers, and most contract construction workers, are hired from local firms. In addition to the jobs provided to locally based construction workers and drivers, in 2021, Linde invested more than 2 million hours in safety training to contractors in several categories. This included training for more than 30,000 contractors. Contractor training averaged more than 50 hours a year, more than a work week. If each contractor hour costs Linde \$20, this investment can be estimated at more than \$40 million. In all cases, this training is directed towards achieving safer construction of Linde facilities and safer, more secure and more fuel-efficient transportation of Linde products. Linde's world-class results for contractor and driver safety are a measurable consequence of this investment. See 403-9. In addition, the safety and other professional driver training results in a transfer of professional skills that increases the employability of the recipient

For information on supplier and contractor training, see 414-2.



### 205-1 Operations assessed for risks related to corruption

Linde administers an annual risk assessment that is circulated to all business managers globally and functional leaders and covers 100 percent of all business units. Potential risks related to corruption are an explicit focus.

A Compliance Review Board (CRB) performs quarterly regulatory risk assessments. Dedicated Foreign Corrupt Practices Act (FCPA) and anti-bribery audits are also conducted. In the last 12 years, 40 audits have been conducted, which is more than three audits per year on average.

Linde operates in certain jurisdictions identified as high risk based on the Corruption Perception Index from Transparency International. The company has not identified significant risks other than regular risks that are dealt with through training and certifications of employees.



### 205-2 Communication and training on anti-corruption policies and procedures

In 2021, Linde's Board of Directors received training on the CBI, which includes anti-corruption policies and procedures. The company also trains all its salaried employees globally on anti-corruption. The company has an established process to conduct thorough due diligence prior to contracting and sends training to 100 percent of all third parties and agents who interact with the government on the company's behalf.

Linde's CBI applies to the company's directors and employees, including its CEO, CFO and the vice president and controller. This CBI, which includes elements of compliance with laws, business integrity and ethics, has been approved by the Linde Board of Directors. To assist employees and directors in complying with this code of ethics, management periodically develops specific standards implementing certain provisions of the code. Linde's CBI is posted on Linde's website.

One hundred percent of salaried Linde management and employees, and some non-exempt employees, are required to annually certify that they have read and understand the company's CBI, which includes a rigorous outline of the FCPA and anti-bribery laws. This is an online training and survey. Training to targeted populations was conducted in 2021; the company achieved 99.1 percent, based upon the figures verifiable through Linde's Learning Management System. The remainder of the targeted population whose training could not be verified will have completed training in 2022.

### **205-3 Confirmed incidents of corruption and actions taken**

Linde takes its commitment to integrity very seriously. Non-compliance with the CBI, depending on the circumstances, can result in serious disciplinary action up to and including termination of employment. Employees are actively encouraged to report suspected complaints and concerns and are expected to report violations through a number of channels, including the Integrity Hotline. Reports through the Integrity Hotline may be made anonymously. It is a violation of company policy for any person to retaliate against any individual who has reported any matter in good faith.

Table SOC (12) provides the aggregate number of hotline reports and a summary of the types of reports received; see 406-1. All hotline reports are promptly handled, and identified issues are addressed. Further details are not provided in Linde's public reporting as they are business confidential. No confirmed incidents of violation of anti-corruption laws occurred in 2021.

### **206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes**

No anti-trust regulatory or enforcement action was initiated in 2021. Also refer to the "Contingent Liabilities" section of Linde's annual 10-K filing.

# Environmental Topics



© Villanova University

## Connecting with External Stakeholders to Expand and Refine Scope 3 Reporting

Linde has reported emissions along its supply chain, or Scope 3 emissions, for several years. This category of GHG is of interest to many stakeholders, as the world seeks to understand the global carbon footprint, and the company discloses this information in annual reporting, including its CDP Climate Change response. Scope 3 emissions derive from suppliers, direct customers, or even end consumers, and developing baselines and sound and repeatable methodologies is an essential step in reporting. Collaboration with suppliers and customers is key to obtaining the information to make this process successful, to increase accuracy, and to establish baselines that can be used to manage and potentially reduce emissions long-term.

Such special projects also offer the company the opportunity to engage with another group of external stakeholders: future sustainability champions. Linde's continued work in Scope 3 seemed a perfect fit for the continuing engagement with Villanova University's Resilient Innovation through Sustainable Engineering (RISE) program. Since 2016, the company has been a member of RISE, completing one or two sustainability projects annually with graduate students who take part in the RISE program.

"The advantages for both sides are apparent," said Kathy Kuberka, Director, Technology Planning, "Linde benefits from the graduate students' fresh ideas and solutions based on the current state of science, driving resilient innovation across our value chain." The university agrees. "Our collaboration with Linde enables graduate student teams the unique opportunity to work alongside professional experts and to complement their academic knowledge with practical experience addressing real-life sustainability challenges," said Dr. Mary McRae, RISE faculty advisor.

RISE team members Adi Pise, Ana Cedillo, Chris Wilson, Jamie Silk and Renee Turner helped to research emissions from cylinder and tank assets in the semester-long effort, which involved outreach with key suppliers who agreed to collaborate in this endeavor. To close the project, the students made a final presentation and gave recommendations on how to streamline the data collection process while continuing to focus on data quality. Interestingly, the team found that calculated emissions from supplier data were lower than the original model suggested, due to a high proportion of aluminum produced from hydropower sources, making clear the value from engagements across the supply chain for such efforts.

The next project is already in planning. The Linde team looks for more opportunities to work creatively with suppliers, customers and academia on complex projects.

→ For more information on Linde's GHG inventory, see Linde's CDP disclosures on the [Sustainable Development Reporting Center](#).

## 300 Series: Environmental Topics

### Environmental Management approach for material aspects 103-1, 103-2, 103-3

The environmental dimension of sustainability concerns an organization's impacts on natural systems, including ecosystems, land, air and water. Linde's business depends on a natural resource (the air), and the company's mission and business model both aim to create more value with fewer resources. Its PFs in sustainable development include a range of environmental aspects aimed at reducing operational environmental impacts and maximizing environmental contributions — the benefits that Linde applications bring to customers and the planet.

#### Organizational Responsibility, Accountability and Incentives

Linde's CEO and the Board of Directors are accountable for environmental issues impacting the company. Linde's full Board of Directors has responsibility for reviewing safety and environmental risk at each Board meeting.

Responsibility for performance lies within the businesses. Performance is consolidated and reported to the Executive Leadership Team and to the Board. Linde's EVP and CHRO is the most senior officer responsible for environmental issues globally. Respective members of the executive leadership are responsible for the regional operating segments of the Americas, APAC, and EMEA, as well as Linde Engineering, Lincare, Applications Technology, Clean Energy, Sustainability and Digitalization. Linde's environmental compliance and management are managed under the vice president, SHEQ (Safety, Health, Environment, and Quality), who reports to the CHRO. The SHEQ organization develops and maintains consistent methodologies, procedures and reporting. Safety is one of Linde's values and is, therefore, non-negotiable. We are driven to ensure that no harm comes from our actions to people, the environment or the communities in which we operate.

Linde's water program and water target are led and maintained by the COE, which also leads and maintains its program in Sustainable Productivity. The Zero Waste program is led and maintained by Sustainable Development. Linde's Sustainable Development Management System (SDMS) provides a monthly dashboard to review performance towards environmental targets. It is jointly coordinated by SD, COE and SHEQ. Climate change targets are also reported monthly from the SDMS to the finance organization and CFO.

Linde's executive annual variable compensation is impacted by performance in non-financial areas considered to be Strategic Business Objectives. These include achieving best-in-class performance in several areas, including productivity and environmental responsibility.

#### Policies, Commitments, Goals and Targets

Linde has a CBI and a global HSE Policy, both with commitments to environmental stewardship. Linde has issued a Sustainable Development and Climate Change Position Statement.

As described in Materiality, Priorities and Targets: SD 2028 on page 15, Linde's Environmental PFs are Climate Change and Environment, Safety & Health. Each of these PFs has related SD 2028 targets; see Performance Towards Targets on page 24. The 300 series disclosures report against the relevant GRI Standards for these PFs, in addition to GRI disclosures that are not PFs but that may be of interest to various external stakeholders.

#### Mechanisms for Grievance and Recourse

Linde policies are communicated to employees around the world to outline its expectations of conduct wherever it does business. It takes these standards very seriously, and non-compliance can result in severe disciplinary action, up to and including termination of employment. Linde employees are actively encouraged to report suspected complaints and concerns, or to anonymously report violations, through a number of channels, including the Integrity Hotline. The company also encourages customers, vendors or other observers to use the hotline to submit complaints or allegations about these or other matters. The company provides an annual report of Linde incidences of substantiated hotline reports on its website at: <http://www.linde.com/about-linde/sustainable-development/reporting-center/hotline-reports>.

#### Programs, Projects, Initiatives

In addition to the material below, see the environmental disclosures per the GRI 300 series aspects.

#### Training

Environmental and safety training is conducted for all employees and all contractors, as defined in the SHEQ Management System and Standard Operating Procedures (see 404-1). Onboarding and ongoing training are conducted as part of the SDMS.



103-1, 103-2, 103-3

### Environmental Management System (EMS)

Linde's strong global environmental management system (EMS) ensures that measures are in place to enable pollution prevention and control, the responsible management of direct and indirect atmospheric emissions and waste, the protection of natural resources and biodiversity, and the management of environmental impacts from transportation or from the use and disposal of products and services. Linde is a member of the chemical industry Responsible Care program. It strives to continually improve its health, safety and environmental performance; listen and respond to public concerns; work with customers, carriers, suppliers, distributors and contractors to foster the safe and secure use, transport and disposal of chemicals; achieve optimum environmental performance; and report goals and progress to the public. Linde's global EMS conforms to the American Chemistry Council's (ACC's) Responsible Care® Management System (RCMS) and is aligned with ISO 14001, the international standard for Environmental Management Systems (EMSs).

### External EMS Certification

As a member of ACC, Linde's safety, health, environment and security (SHES) management system is audited by an accredited third party to ensure compliance with the ACC RCMS. Linde is audited by Bureau Veritas per the requirements of the RCMS, most recently in March 2019 (the certification cycle is three years). RCMS audits for ACC include Linde's Danbury, Connecticut, corporate office and a representative sampling of sites in the U.S. and Canada.

The scope of the audit includes sites that "manufacture and distribute industrial gases per the RCMS Technical Specification (TC) RC 101.03." As an outcome of the RCMS audit, Linde's SHES management system in the U.S. and Canada has been recognized as compliant with ACC requirements (see <https://www.linde.com/about-linde/safety-and-environment>).

Linde is signatory to and in compliance with the Responsible Care Global Charter, which includes active participation in Responsible Care programs in all countries where programs exist and where Linde has significant business interests.

Linde businesses around the world conform to Linde's worldwide SHES management system; in the company's major markets, they are certified to the international EMS standard, ISO 14001, to national standards for EMSs or to other related standards. For example:

- All Linde Germany is externally certified to ISO 5001, the international standard for energy management systems, as well as ISO 14001.
- Linde Engineering has obtained external certification to ISO 14001.
- White Martins sites in Brazil and APAC businesses maintain certifications to ISO 14001.
- Mexico sites are certified to their national environmental agency PROFEPA Clean Industry Standard.

By revenue, 87 percent of Linde's worldwide gases production and engineering sites are externally certified to RCMS, ISO 14001 or an equivalent national standard.

### Internal SHEQ Assessment Program

All Linde sites, and other sites where Linde is a majority shareholder, are subject to evaluation for safety, environment and quality (the latter for compliance with local medical regulations, where applicable). Quarterly assessment reports are provided to senior management. The full Board is committed to review safety and environmental risks at each board meeting. Regular assessments are a requirement of Linde's SHEQ standards and help ensure consistently high standards in all areas of safety, environmental protection, security and compliance.

Linde's internal SHEQ assessment program includes type "A" and "B" assessments and facility self-assessments. Type A assessments are led by Global SHEQ staff or their designated agent. Type B assessments are led by a member of one of the global business units. Both type A and B assessments are independent of the facility being audited, and the number of these assessments is tracked by Global SHEQ. Facility self-assessments are also conducted by local or regional personnel to help facilities self-identify areas in need of improvement and are not tracked outside of the local operating unit. In 2021, Linde conducted 70 "A" assessment audits, all at Linde sites, and 328 internal "B" assessment audits as per business safety plans. See GEN (2).

### Internal Assessments

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
"A" Assessment audits conducted	56	60	26	70
"B" Assessment audits	216	300	250	328

GEN (2): Internal Assessments

103-1, 103-2, 103-3

**External Environmental Data Assurance**

Linde's eKPIs are externally assured. See 102-54 for the verification letter and <https://www.linde.com/-/media/linde/merger/documents/sustainable-development/2021-ekpi-assurance-statement.pdf>.

## Introduction

Linde is a resource-intensive company. Linde's environmental performance year-on-year can best be evaluated on an intensity basis versus revenue. In most cases, this shows a positive trend. In addition, Linde's business model is resource efficiency — to make more value than it consumes. The environmental and other benefits of Linde applications are described in the "Business Model" section on page 10, the "Creating Economic, Environmental and Social Value" section on page 11, and the "Linde Applications Enable >2x Carbon Productivity" section on page 20.

For ease of comparison and to follow Linde's performance year-on-year, Linde presents a full-year pro forma value for 2018 for each environmental KPI. These 2018 pro forma values are comparable to the 2019 and 2020 numbers, using the same reporting scope, definition and boundaries. Trend data needs to be understood in the context of the merger in 2018 between Linde AG and Praxair, Inc. to form Linde plc.

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, JVs and other holdings within its organizational boundaries whose revenues and Earnings Before Interests and Taxes (EBIT) are included in Linde's financial results. Linde does not collect eKPI data for minority holdings and other holdings that are not reporting their financials. EKPIs for JVs, which are not fully consolidated into the company financials (at-equity JVs), are collected but are only included in external GHG reporting under Scope 3.



### 301-1 Materials used by weight or volume

Raw materials are procured through a global procurement organization under global procurement standards and expectations that include requirements for material sustainability. Linde has supplier expectations that manage sustainability in its supply chain.

#### Non-Renewable Materials Used

Linde estimates that 1 percent by weight of the raw materials used in 2021 were non-renewable, including natural gas and naphtha, which are used in hydrogen production.

Linde also builds air separation units (ASUs) and steam methane reformers (SMRs). Construction materials for these are generally from non-renewable sources: aluminum, carbon steel, stainless steel, copper and brass alloys, brass and metals. The largest material by spend is steel.

#### Renewable Materials Used

Ninety-nine percent by weight of the raw materials used in 2021 to produce gaseous nitrogen, oxygen, argon, carbon dioxide and hydrogen were renewable raw materials. Renewable raw materials used by Linde include air, water, carbon dioxide and hydrogen. These products represent more than 90 percent of the revenue Linde received for the products it manufactures. Examples of products not included are those manufactured by Surface Technologies and low-volume products, such as acetylene.

Using air as its raw material, Linde produces oxygen, nitrogen, argon and rare gases through several air separation processes, of which cryogenic air separation is the most prevalent. As air is a renewable natural resource, there is no negative environmental consequence to using this raw material.

Process gases, including carbon dioxide, hydrogen, carbon monoxide, helium, specialty gases and acetylene, are produced by methods other than air separation. In many cases, these are sourced as an industrial byproduct or waste. Some of these byproduct sources are renewable, but all offer a means to reuse products that would otherwise have been waste. The volumes of process gases procured are considered business confidential.

- Most carbon dioxide is purchased from byproduct sources, including chemical plants, refineries and industrial processes. These byproduct sources include ethanol manufacturing facilities, where the waste carbon dioxide is considered renewable. A portion is recovered from carbon dioxide wells.
- Hydrogen and carbon monoxide are produced by either steam methane reforming of natural gas or by purifying byproduct sources obtained from the chemical and petrochemical industries. In 2021, Linde procured 19 percent byproduct hydrogen.
- Helium is acquired from several sources. In the U.S., for example, Linde is sourced from helium-rich natural gas streams.
- Acetylene can be produced from calcium carbide and water. A significant percentage is purchased as a chemical byproduct.

### 301-2 Percentage of materials used that are recycled input materials

Also see 301-1 for information on renewable raw materials. As part of its sustainable supply chain program, Linde's Procurement organization works with vendors to reduce consumption of upstream, non-renewable natural resources. For some of its business lines, Linde actively sources recycled input materials by using byproducts from other industrial processes. The total weight of these byproducts as a percentage of total material use is not reported here.

From 2011–2021, most of the acetylene produced by Linde in the U.S. was sourced from byproduct acetylene, avoiding the mining of calcium carbonate and the recycling or disposal of carbide lime. Most Linde carbon dioxide sold in the U.S. was sourced from ethanol fermentation (a biomass source). As a business, Linde is constantly researching innovative ways to expand the use of this application.

Most gases are transported in pipelines or trucks and use little packaging. Cylinder products are typically transported by truck. (See 301-3).

Linde has a large engineering business, which designs and constructs new production plants. When building a new plant, the focus is put on the re-use of parts/components from other disassembled plants (e.g., refurbished parts) as much as possible. At the end-of-life of a production facility, parts and components are checked, refurbished if required, and directly re-used or put in stock for future usage. Thus, most of the materials are recycled and become input materials (e.g., for new plants).

In order to avoid procurement of new materials, the company has established several asset management programs that are actively identifying idle assets (e.g., cylinders) to ensure that they are put back into use rather than purchasing new materials. The programs actively track all assets, are well reported and yielding good results.

### 301-3 Reclaimed products and their packaging materials

Linde produces very little packaging waste. Linde delivers most of its product in pipelines or bulk trucks, or in cylinders. As the products are consumable, there is nothing to reclaim and no packaging material for the majority of products. For the packaged gases product lines, either disposable cylinders or reusable cylinders are utilized. The metal cylinders last about 40 years, are returnable and are typically reused multiple times.

Linde runs several large cylinder refurbishment centers worldwide as well as many smaller test shops and repair centers in many countries. In its cylinder test shop in Wolverhampton, UK, Linde refurbishes about 500,000 cylinders per year in order to avoid unnecessary scrapping.

### 302-1 Energy consumption within the organization

Where MWh were converted to GJ, MWh were multiplied by 3.6.

#### Fuel Consumption

Linde's total non-renewable fuel consumption in 2021 was 75.6 million GJ, or 21 million MWh. This figure represents energy consumption and excludes fuel consumed as a feedstock for production. Linde did not consume any renewable fuel for such purposes in 2021. Fuel types used included natural gas, diesel, oil and "other," which includes naphtha and other refinery fuel gas.

#### Electricity Consumed

Total non-renewable electricity consumed in 2021 was approximately 40 million MWh, or 144 million GJ. Total active renewable electricity purchased in 2021 was 2.8 million MWh, or 10 million GJ.

Linde also tracks low carbon electricity, which includes both active and passive renewable electricity as well as nuclear. Active renewable electricity is classified as electricity procured through Power Purchase Agreements (PPAs), directly connected 100 percent RE supplier contracts, or validated green energy certificates. Passively procured electricity from the grid was calculated using the latest location-based renewable energy grid factors from the IEA and, where available, plant-specific RE factors according to the supplier contract/utility bill. In 2021, active RE was 2.780 million MWh and passive RE was 9.125 million MWh, for a total of 11.905 million MWh. Nuclear was 5.051 million renewable electricity, of which 0.7 million was actively sourced, bringing the total to 17 million MWh of low carbon electricity, which represents 40 percent of Linde's total electricity consumption in 2021.

Electricity values for the 2018 baseline, 2019, and 2020 have been updated due to the Scope 2 recalculation incorporating additional market-based emission factors. See 102-48 on page 13 for information on restatements and the affected KPIs.

## 302-1

See page 24 in Performance Towards Targets for information about Linde's low carbon power sourcing target.

**Steam Consumed**

Linde did not consume any heating or cooling in 2021.

Linde consumed 9.15 million MWh, or 32.9 million GJ, of steam in 2021.

**Electricity, Heating, Cooling and Steam Sold**

Linde sold 9.8 million MWh of steam in 2021.

**Total Energy Consumed**

Linde consumed a total of 72,943,000 MWh, or 262.6 million GJ, of energy in 2021. This is a 5 percent increase from the previous year. While Linde continued to implement energy efficiency projects, energy use increased mainly due to increases in production volumes.

Linde tracks energy consumption through meters and utility bills, collecting information for each plant and location in a global eKPI system. Newly constructed plants less than 2 months old and de-minimis locations consuming less than 1,500 MWh are excluded from reporting.

**Non-renewable Fuel Consumption**

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Non-renewable fuels purchased and consumed	21,034,000	21,246,000	21,298,000	21,012,000

EN (1): Non-renewable Fuel Consumption

Units: MWh

**Electricity**

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Active renewable electricity consumed	2,507,000	2,431,000	2,493,000	2,780,000
Passive renewable electricity consumed	7,868,000	8,161,000	8,534,000	9,125,000
Low carbon (nuclear) electricity consumed	3,617,000	3,687,000	4,264,000	5,051,000
Fossil electricity consumed	27,557,000	27,600,000	26,331,000	25,823,000
<b>Total Electricity Consumed</b>	<b>41,549,000</b>	<b>41,879,000</b>	<b>41,622,000</b>	<b>42,779,000</b>

EN (2): Electricity

Units: MWh

**Steam**

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Steam consumption	5,943,000	6,012,000	6,357,000	9,152,000

EN (3): Steam

Units: MWh

302-1

**Total Energy**

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
a. Non-renewable fuels purchased and consumed	21,034,000	21,246,000	21,298,000	21,012,000
b. Non-renewable electricity consumed <sup>1</sup>	39,042,000	39,448,000	39,129,000	39,999,000
c. Steam consumption	5,943,000	6,012,000	6,357,000	9,152,000
<b>d. Total non-renewable energy consumption (a+b+c)</b>	<b>66,019,000</b>	<b>66,706,000</b>	<b>66,784,000</b>	<b>70,163,000</b>
e. Total renewable electricity purchased or generated <sup>2</sup>	2,507,000	2,432,000	2,493,000	2,780,000
<b>Total Energy Consumed (d+e)</b>	<b>68,526,000</b>	<b>69,138,000</b>	<b>69,277,000</b>	<b>72,943,000</b>

1 Row b (non-renewable electricity consumed) includes both fossil-fuel based electricity and passive renewable electricity. Since passive renewables are consumed from the grid, Linde does not include this in row b since it did not directly purchase or generate this power.

2 Row e includes only active renewable energy consumed.

EN(4): Total Energy

Units: MWh

**302-2 Energy consumption outside of the organization**

Linde did not consume energy outside the organization.

**302-3 Energy intensity**

It is key to Linde's business to manage energy use and energy use in production. The company considers production volumes to be business confidential. Internally, energy intensity is tracked monthly and is a basis for Linde's operational GHG intensity targets, see Performance Towards Targets, page 24.

**302-4 Reduction of energy consumption**

Linde has a 7 percent energy intensity improvement target by 2028 for air separation units, see Performance Towards Targets, page 24.

**303-1 Interactions with water as a shared resource****303-2 Management of water discharge-related impacts**

Note: This section responds to 303-1 and 303-2

Water sourced from municipal utilities, surface waters and ground water are considered fresh water ( $\leq 1,000$  mg/L Total Dissolved Solids); all other sources are considered "other" ( $> 1,000$  mg/L Total Dissolved Solids).

For more information on the company's water impact, interactions with key stakeholders, management approach and commitment to water stewardship, see Linde's Water Position Statement at <https://www.linde.com/sustainable-development/policies-and-position-statements/water-position-statement> and the most recent CDP Water Security response at: <https://www.linde.com/-/media/linde/merger/documents/sustainable-development/2022-cdp-response-water-security.pdf>. The CDP response is available at the end of July.

 **303-3 Water withdrawal** **303-4 Water discharge** **303-5 Water consumption**

Note: This section responds to 303-3, 303-4, and 303-5

**Water Withdrawal**

In 2021, Linde withdrew 971 million m<sup>3</sup> of water. Linde tracks water withdrawals primarily through utility bills. No water sources were significantly affected by Linde's withdrawal of water in 2021.

Of the 971 million m<sup>3</sup> of water that Linde withdrew in 2021, 47 percent was from fresh water sources (municipal, surface water and groundwater), 31 percent from seawater, and 22 percent from third-party (industrial/recycled) sources. Linde estimates that more than 90 percent of the water withdrawn in 2021 at Linde production plants (excluding once-through) was recycled numerous times through cooling towers before discharge.

Overall, water withdrawal increased 16.6 percent compared to 2020, mainly due to increased production, including the impact of one new plant startup that used a significant volume of the category "other/seawater".

**Water Discharge**

Linde did not have any unplanned water discharges in 2021. No water bodies or related habitats were significantly affected by Linde water discharges or runoff in 2021.

Where Linde facilities discharge process water, discharges are governed by discharge permits issued by a regulatory agency. Linde estimated chemical oxygen demand (COD) at these sites to be 1,700 metric tons in 2021, which is a 15 percent decrease from 2020.

Linde discharged 891.2 million m<sup>3</sup> of water in 2021, of which 39.2 million m<sup>3</sup> was wastewater. Linde also discharged once-through cooling water back to the source from which it came. In 2021, 852.0 million m<sup>3</sup> of water was discharged in this manner, of which 42 percent was to fresh water sources, 35 percent was to seawater sources, and 23 percent was to third-party sources.

**Water Consumption**

Linde consumed 80.4 million m<sup>3</sup> of water in 2021. Consumption is defined as total water withdrawn minus wastewater discharged, minus once-through cooling water that is returned to the original source with no impact to quality. Consumption increased by 9 percent compared to 2020.

Consumption of fresh water was 99.5 million m<sup>3</sup> in 2021, which is a 7 percent increase compared to 2020. Overall, consumption increased due to increases in production volumes.

**Water-stressed Areas**

Linde tracks water withdrawal, discharge and consumption from sites in areas of water stress. Areas of water stress are defined by the WRI Aqueduct Water Risk Atlas. Linde determines sites to be in a water-stressed area if the Atlas lists the baseline water stress as "high" or "extremely high."

See page 27 for information on Linde's target to implement water management plans at high-water-use sites in areas of water stress.

303-3, 303-4, 303-5

### Total Water Withdrawal, Discharge & Consumption

	2019 Linde	2020 Linde	2021 Linde
A. Fresh Water Withdrawal	456.0	427.9	457.2
B. Other Water Withdrawal – Seawater	175.7	202.4	298.6
C. Other Water Withdrawal – Third Party (Industrial/Recycled)	170.2	202.9	215.8
<b>D. Total Water Withdrawal (A+B+C)</b>	<b>801.9</b>	<b>833.2</b>	<b>971.6</b>
E. Fresh Water Returned to Original Source (once-through cooling water)	354.8	334.8	357.6
F. Other Water Returned to Original Source (once-through cooling water) – Seawater	175.7	202.4	298.6
G. Other Water Returned to Original Source (once-through cooling water) – Third Party	145.1	179.2	195.7
H. Wastewater Discharge (non-once-through)	43.4	43.1	39.2
<b>I. Total Water Discharge (E+F+G+H)</b>	<b>719.0</b>	<b>759.5</b>	<b>891.2</b>
<b>J. Total Water Consumption (D-I)</b>	<b>82.9</b>	<b>73.7</b>	<b>80.4</b>

EN (5): Total Water Withdrawal, Discharge &amp; Consumption

Units: million m<sup>3</sup>

### Fresh Water Withdrawal, Discharge & Consumption

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
A. Municipal Water Withdrawal	54.1	58.9	56.6	61.7
B. Surface Water Withdrawal	446.1	386.3	361.2	386.3
C. Ground Water Withdrawal	11.9	10.8	10.1	9.2
<b>D. Total Fresh Water Withdrawal (A+B+C)</b>	<b>512.1</b>	<b>456.0</b>	<b>427.9</b>	<b>457.2</b>
E. Discharge: Fresh Once-Through Cooling Water Returned to Surface Water Sources	419.7	354.8	334.8	357.6
<b>F. Net Freshwater Consumption (D-E)</b>	<b>92.5</b>	<b>101.2</b>	<b>93.1</b>	<b>99.5</b>

EN (6): Fresh Water

Units: million m<sup>3</sup>

### Water-Stressed Areas: Withdrawal, Discharge & Consumption

	2020 Linde	2021 Linde
A. Withdrawal	35.9	31.5
B. Discharge	18.9	15.8
C. Consumption (A-B)	17.0	15.7

EN (7): Water-Stressed Areas: Withdrawal, Discharge &amp; Consumption

Units: million m<sup>3</sup>



### 304-1 Operational sites owned, leased, managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas

### 304-2 Significant impacts of activities, products and services on biodiversity

### 304-3 Habitats protected or restored

### 304-4 Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

#### **Biodiversity**

Linde's operations do not have a significant impact on biodiversity.

When planning new sites, processes are in place to ensure that Linde minimizes any potential negative impacts on biodiversity. Linde follows internationally recognized guidelines when performing its evaluations, such as the Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment issued by the United Nations.

Linde's approach is to avoid operations near protected areas. In fact, because most of Linde's sites are located in industrial areas or business parks, 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 3 years.

The last evaluation, covering more than 600 production sites, established that none of these sites are located in the vicinity of a protected area.

For more information on Linde's position on the importance of ecosystems, please see the statement on Linde's website at <https://www.linde.com/sustainable-development/policies-and-position-statements/ecosystems-position-statement>.

## Greenhouse Gas Emissions 305-1, 305-2, 305-3, 305-4, 305-5

### GHG Inventory Methodology

Linde's greenhouse gas (GHG) emissions disclosures have been prepared based on a reporting year of January 1 to December 31, the same as the financial reporting period. All GHG emissions figures are in metric tons of CO<sub>2</sub>e and cover six gases: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, HFCs, NF<sub>3</sub> and SF<sub>6</sub>.

Linde's GHG emissions information was prepared with reference to the World Resources Institute/World Business Council for Sustainable Development's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, revised edition (the GHG Protocol®).

Global warming potentials (GWPs) are sourced from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report.

- **Timelines and Base Year GHG Emissions**

Linde reports on its eKPIs for the last four years in order to reflect the trend and development of KPIs.

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. For performance against GHG targets, see the "Performance Towards Targets" section, page 24.

- **Excluded Sources of GHG Emissions**

Linde has very small office sites and smaller sales outlets (such as retail outlets) with fewer than five people, called "de-minimis" sites. Emissions from these sites are negligible and are therefore not included in the GHG inventory.

- **Prior Year Revisions**

The company has restated 2018-2020 Scope 2 to reflect an update to market-based emission factors. See 102-48 on page 13.

- **External Verification**

Linde's 2021 GHG inventory was verified by a third party. In 2022, a Limited Assurance was performed on Scopes 1 and 2 and a subset of Scope 3 emissions (2021 calendar year data). A copy of Linde's assurance statement is available at the end of this report and may be found separately on the Linde website.

### 305-1 Direct greenhouse gas (GHG) emissions (Scope 1)

Linde's total Scope 1 emissions in 2021 were 16,321,000 MT CO<sub>2</sub>e, which is an increase of 0.5 percent from 2020. This is mainly attributed to increases in production volumes that were largely offset by efficiency improvements. The primary source of Scope 1 emissions for Linde is the combustion of natural gas at hydrogen plants, which represented 11.4 million metric tons of Scope 1 emissions in 2021. Another portion is from ASU plants using natural gas for energy generation, which amounted to 2.2 million metric tons CO<sub>2</sub>e. Smaller sources of Scope 1 emissions are other GHGs (e.g., from methane plants or nitrous oxide plants) or other types of GHG emissions that are converted into CO<sub>2</sub> equivalents. The total of such "other GHG emissions" was 0.9 million metric tons in 2021. Carbon dioxide and other plants caused approximately 1.2 million metric tons. The combustion of diesel and gasoline from transport activities resulted in approximately 0.6 million metric tons CO<sub>2</sub>e in 2021.

#### Scope 1 Emissions Covered by Emissions-limiting Regulations

In 2021, 1,570,000 metric tons of Scope 1 emissions (10 percent) were subject to a form of carbon legislation, over a cap-and-trade scheme, ETS or a form of carbon taxation. Most of this number (more than 86 percent) was covered by the EU ETS or UK ETS schemes; smaller amounts were subject to sub-national regulations such as the California CAT scheme or the Singapore carbon tax. For details on the 2021 carbon regulation schemes applicable to Linde, see Linde's most recent CDP report, which will be available at the end of July at:

<https://www.linde.com/-/media/linde/merger/documents/sustainable-development/2022-cdp-response-climate-change.pdf>.

#### Calculation Methodology

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 methane (CH<sub>4</sub>), sulfur hexafluoride (SF<sub>6</sub>), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and nitrogen trifluoride (NF<sub>3</sub>).

**305-1**

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 CO<sub>2</sub> 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 CO<sub>2</sub> 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, Office of Transportation and Air Quality, personal communication, Apr. 6, 2018.

**Scope 1 GHG Emissions**

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Scope 1	16,872,000	16,461,000	16,247,000	16,321,000

EN (8): Scope 1 GHG Emissions

Units: Metric Tons CO<sub>2</sub>e

**305-2 Energy indirect greenhouse gas (GHG) emissions (Scope 2)**

Linde’s Scope 2 GHG emissions in 2021 were 23.6 million metric tons CO<sub>2</sub>e (market-based), which is a 5.7 percent increase from 2020. The largest electricity user is ASUs, which account for approximately 90 percent of all electricity used.

These emissions were calculated using the market-based approach. Linde continues to move to market-based emissions factors where possible. In some cases, market-based factors are higher than location-based factors. These have resulted in increases in Scope 2 emissions. Compared to 2020, Scope 2 emissions have increased, partly due in increased production.

Restatements are made in accordance with its [GHG Recalculation policy](#). Linde has updated its Scope 2 emissions for 2018, 2019 and 2020.

Linde also calculated Scope 2 emissions for 2021 using the location-based approach, which applies IEA factors and eGRID emission factors in the U.S. Scope 2 emissions calculated with the location-based approach were 21.4 million metric tons CO<sub>2</sub>e in 2021. 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.

**Organizational Boundary**

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.

**Calculation Methodology**

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. See 102-48 on page 13 for information on restating Scope 2 emissions for 2018-2020 due to updates to market-based emissions factors.

**Scope 2 GHG Emissions  
(Market-based)**

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Scope 2	23,518,000	23,448,000	22,299,000	23,573,000

EN (9): Scope 2 GHG Emissions

Units: Metric Tons CO<sub>2</sub>e

### 305-3 Other indirect greenhouse gas (GHG) emissions (Scope 3)

Linde reports on the following seven categories of Scope 3 emissions:

- Fuel- and energy-related activities not included in Scopes 1 and 2
- Emissions due to investments
- Emissions due to down-stream leased assets
- Emissions from purchased goods and services
- Emissions from capital goods purchases
- Upstream transportation and distribution (contractor driving)
- Emissions from business travel

Criteria for selecting Scope 3 reporting categories were:

- Relevance and transparency: This includes activity over which Linde has a level of operational control but where the GHG emissions are reported by another party.
- Relevance or materiality to Linde's footprint: This includes activity that may have a potentially significant GHG consequence.

#### Upstream Scope 3 Emissions

Linde's methodologies for upstream Scope 3 emissions are described below.

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

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, as 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) losses and DEFRA factors for Well-to-Tank (WTT) 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 DEFRA is applied. For Scope 3 emissions from transport fuels as well as other fuels consumed (excluding feedstocks), DEFRA factors for fuel- and energy-related emissions are used per relevant category.

In 2021 DEFRA adjusted its methodology and underlying assumptions to calculate its Scope 3 emissions factors for fuel and energy. This led to a significant increase of the Scope 3 factors relevant for Linde, resulting in an increase in Linde's Scope 3 emissions in this category by more than 2 million tons CO<sub>2</sub>e. A small portion of the increase in 2021 is also based on higher fuel and electricity consumption due to increased production/output.

##### Purchased Goods and Services (category 1)

In 2021, Linde defined a new company-wide methodology to calculate its Scope 3 category 1 emissions, as well as expanded its boundaries, leading to a substantial increase of its reported emissions in this category (by 2.6 million tons CO<sub>2</sub>e).

Linde's Scope 3 category 1 now considers Scope 3 emissions from Linde's purchased raw materials representing >95 percent of Linde's procurement spend in this category. This includes raw materials and traded items like healthcare components or hardgoods sold in Linde's shops, construction components used by Linde engineering to build customer plants, as well as purchased feedstock – natural gas for hydrogen plants and compressed air for air separation plants.

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. CO<sub>2</sub>e 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, which have increased considerably in 2021 and have impacted Linde's Scope 3 category 1 value.

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-plant-specific electricity Scope 2 emission factors.

#### Capital Goods (category 2)

In 2021, Linde applied a new company-wide methodology to calculate its Scope 3 category 2 emissions, which considers capital goods procured by Linde allocated to a procurement category, such as cylinders, tanks, healthcare, automotive or plant components capitalized, as well as production plants operated by Linde.

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).

Moreover, in 2021 Linde began collecting product-specific GHG emissions data from several suppliers of cylinder assets procured in 2021. The product carbon footprint included the suppliers' own emissions (based on a product-specific calculation) as well as related upstream emissions. The emissions data obtained directly from suppliers were integrated into the overall category 2 value.

The Scope 3 category 2 value decreased in 2021 compared to the previous year. This is due to a reclassification of some procurement categories that were previously considered as capital goods that are now correctly disclosed under raw materials.

#### Upstream Transportation and Distribution, including Contractor Driving (category 4)

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. Environmental Protection Agency, Office of Transportation and Air Quality, personal communication, Apr. 6, 2018.

In addition, in 2021 Linde implemented a new tool to calculate emissions from products and services procured, which uses a spend-based method (see category 1). This also considers transport services procured. The calculation result showed that emissions from transport of construction components delivered to Linde Engineering construction sites (mostly over sea and air) are relevant and therefore are to be included in the overall Scope 3 category 4 value, leading to an overall increase of emissions in category 4.

Emissions from contractor driving were previously classified as downstream emissions (category 9) and have been reclassified, per guidance in the Greenhouse Gas Protocol. See the Restatements section, 102-48.

#### Business Travel (category 6)

Linde also estimates a small amount of emissions from business travel, estimated at 0.021 million MT. This has not previously been reported as a part of this disclosure, as it is negligible. As we have determined an estimate, we now include within our Scope 3 disclosures. Estimates are based on the company's historical air travel records, including countries of destination, and uses emissions data provided by airlines.

### **Downstream Scope 3 Emissions**

Linde's methodologies for downstream Scope 3 emissions are described below.

#### Downstream Leased Assets (category 13)

This category includes emissions for assets such as smaller on-site facilities where the customer is paying for the power and, in many cases, operating the plant. This also includes several major plants where customers are paying for the power and where Linde is charging 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.

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.

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 emission factors from the IEA to calculate indirect emissions for those sites.

#### Emissions due to Investments (category 15)

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 are reporting their electricity and other fuel consumption into Linde's environmental reporting system. Linde is then calculating 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.

Emissions in this category increased, in part, in 2021 due to the change in ownership of the company's business in Taiwan. As of 2021, the entity is now held as a joint venture, and emissions from that entity are now accounted as Scope 3 emissions.

#### **Scope 3 Sources Not Reported**

As demonstrated in this year's reporting, Linde continues to assess ways to expand and refine Scope 3 reporting, in ways that lend transparency and repeatability.

Linde does not report emissions in the following categories: employee commuting, upstream leased assets, downstream transportation and distribution, franchises and waste generated in operations. These emissions have been calculated or estimated and were determined to be not relevant due to their very small contribution to Linde's Scope 3 footprint.

Linde currently does not report emissions from processing of sold products, use of sold products and end-of-life treatment of sold products. 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. Linde does not estimate the downstream emissions associated with the various end uses of all its product but is currently evaluating methodologies that will provide feasible estimates. The company expects to continue to expand its reporting in the future.

### Scope 3 GHG Emissions

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
<b>Upstream</b>				
Fuel-and Energy-related activities	5,060,000	5,590,000	5,290,000	7,430,000
Purchased Goods and Services	1,540,000	1,540,000	1,640,000	4,250,000
Capital Goods	965,000	965,000	931,000	810,000
Upstream Transportation (including Contractor Driving)	661,000	577,000	562,000	780,000
Business Travel				21,000
<b>Downstream</b>				
Investments	4,460,000	4,460,000	3,930,000	5,450,000
Downstream Leased Assets	2,163,000	2,280,000	2,050,000	2,520,000
<b>Total</b>	<b>14,849,000</b>	<b>15,412,000</b>	<b>14,403,000</b>	<b>21,261,000</b>

EN (10): Scope 3 GHG Emissions

Units: Metric Tons CO<sub>2</sub>e

### 305-4 Greenhouse gas (GHG) emissions intensity

Scope 1 and 2 emissions are as reported in 305-1 and 305-2 and include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF<sub>3</sub>) and sulfur hexafluoride (SF<sub>6</sub>). Sales revenue reported to calculate revenue intensity is reported in Linde plc's financial filings. See EN (11).

Linde is tracking emissions intensity versus EBITDA and has defined a 10-year target for this intensity figure (reduction of 35 percent). See details on GHG versus EBITDA intensity in the "Performance Towards Targets" section, page 24, and EN (12). Total Scope 1+2 emissions for 2018-2020 are restated due to restated Scope 2 values; see 102-48 on page 13.

#### GHG Intensity by Revenue

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Total Scope 1+2 (thousands) in Metric Tons CO <sub>2</sub> e	40,390	39,909	38,546	39,894
Revenue (million USD)	\$28,084	\$28,228	\$27,243	\$30,793
<b>GHG Intensity</b>	<b>1.44</b>	<b>1.41</b>	<b>1.41</b>	<b>1.30</b>

EN (11): GHG Intensity by Revenue

Units: Metric Tons CO<sub>2</sub>e/ Thousand USD Revenue

#### GHG Intensity by EBITDA

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Total Scope 1+2 (thousands) in Metric Tons CO <sub>2</sub> e	40,390	39,909	38,546	39,894
EBITDA (million USD)	\$7,603	\$8,178	\$8,645	\$10,179
<b>GHG Intensity</b>	<b>5.31</b>	<b>4.88</b>	<b>4.46</b>	<b>3.92</b>

EN (12): GHG Intensity by EBITDA

Units: Metric Tons CO<sub>2</sub>e/Thousand USD EBITDA

### 305-5 Reduction of greenhouse gas (GHG) emissions

#### Scopes 1+2 GHG Emissions Reductions

Linde's total sustainable productivity in 2021 yielded savings equivalent to 696,000 metric tons CO<sub>2</sub>e. It counts projects where benefits are fully realized as well as projects that were implemented in 2021 and are still accruing benefits. These projects provided GHG savings from enhancing the energy efficiency of buildings, processes and the transportation fleet. Information on the projects, including investment made and cost savings, can be found in Linde's CDP response, which is available at the end of July at: <https://www.linde.com/-/media/linde/merger/documents/sustainable-development/2022-cdp-response-climate-change.pdf>.

#### Customer GHG Benefits

A subset of Linde applications enabled customers and end users to avoid 88 million metric tons of CO<sub>2</sub>e in 2021; see page 20.

Such emissions represent avoided emissions, which are sometimes referred to as Scope 4.

## 305-7 NOx, SOx, and other significant air emissions

### NOx Emissions

NOx emissions were 12,236 metric tons in 2021. This is an increase of 1.7 percent from 2020 and is attributed to normal variability in sampling.

### SOx Emissions

SOx emissions were 714 metric tons in 2021, a 9.6 percent decrease from 2020, mainly due to improvements in stack flow data used in calculations as well as the increasing implementation of national standards for fuels with lower sulfur content.

### VOC Emissions

VOC emissions were 948 metric tons in 2021, a 16.9 percent decrease from 2020, mainly due to updates in standard emissions factors.

### Calculation Methodology

NOx, SOx and VOC emissions from plants are taken from emissions monitoring systems or are estimated based on operations data where emissions monitoring is not required by local regulations. SOx emissions from transport are estimated based on sulfur concentration in local fuel using local transport knowledge and legislative limits. NOx and VOC emissions from transport are calculated based on estimated diesel consumption rates and local regulatory limits. Emissions factors are sourced from the U.S. Environmental Protection Agency Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005.

See 102-48 on page 13 for information on restated VOC emissions.

### NOx, SOx and VOC Emissions

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
NOx Emissions	10,003	10,596	12,030	12,236
SOx Emissions	591	730	790	714
VOC Emissions	1,185	1,158	1,141	948

EN (13): NOx, SOx and VOC Emissions

Units: Metric Tons

## 306-1 Waste generation and significant waste-related impacts

## 306-2 Management of significant waste-related impacts

## 306-3 Waste generated

## 306-4 Waste diverted from disposal

## 306-5 Waste directed to disposal

Linde manages and reports waste metrics as part of environmental management. The company makes efforts to reduce waste generation and to reduce waste to landfill through initiatives in operations and programs such as the Zero Waste program.

### Hazardous Waste

Linde uses local country regulations to define and report hazardous waste.

Linde tracks the amount of hazardous waste recycled but does not track the portion of this that is sold. Linde estimates that about half of recycled hazardous waste is marketable. In 2021, Linde recycled 8,000 metric tons of hazardous waste, including 4,000 metric tons of marketable and 4,000 metric tons of non-marketable hazardous waste. Linde reports the half that is not marketable in the table below as part of “hazardous waste generated.”



306-1, 306-2, 306-3, 306-4, 306-5,

In 2021, total hazardous waste generated (this does not include hazardous waste that is sold for recycling, as this is considered a product) was 21,500 metric tons, which is a 13.7 percent decrease from 2020, largely due to a reduction in waste process material from one large site. This accounts for more than half of the global waste in this category.

### Non-hazardous Waste

Total non-hazardous waste disposed in 2021 was 15,900 metric tons, which is a 36 percent decrease from 2020. The main reasons for the significant decrease are construction, turnaround and cylinder scrapping activities in 2020 that were not required in 2021. Note that non-hazardous waste was restated for 2020. This was due to a reporting update at two sites.

### Zero Waste Program

Linde is committed to reducing hazardous and non-hazardous waste. Linde's Zero Waste program is an effort that has existed for more than a decade. Sites work to divert at least 90 percent of the normal waste from going to landfill. The program encourages a practice, prioritizing reduction of waste generation at the source. Therefore, in addition to recycling and other reclamation efforts, many sites have incorporated initiatives that not only reduce waste but also extend conservation principles in the community and help foster economic opportunity. By the end 2021, more than 700 sites participated in the program, collectively diverting more than 260 million pounds from landfills.

See page 28 of this report for information on the Zero Waste Program and performance against the SD 2028 Zero Waste target.

### Significant Spills

There were no significant spills in 2021.

### Transport of Hazardous Waste

Linde did not transport, import or export hazardous waste across international borders in 2021.

### Hazardous Waste

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Hazardous waste disposed	25,600	20,500	20,000	17,500
Hazardous waste recycled that is not marketable	2,200	6,800	4,900	4,000
<b>Total hazardous waste generated</b>	<b>27,800</b>	<b>27,300</b>	<b>24,900</b>	<b>21,500</b>
Hazardous waste recycled that is sold/ marketable	2,200	6,800	4,900	4,000

EN (15): Non-Hazardous Waste

Units: Metric Tons

### Non-Hazardous Waste

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Non-hazardous waste disposed	32,100	28,700	24,698	15,939
Non-hazardous waste used/recycled/sold	45,300	35,000	34,929	31,830
<b>Total non-hazardous waste generated</b>	<b>77,400</b>	<b>63,700</b>	<b>59,628</b>	<b>47,769</b>

EN (16): Non-Hazardous Waste

Units: Metric Tons

### 307-1 Non-compliance with environmental laws and regulations

The company reports significant fines in the year the violation occurred (not the year the fine was paid). Significant fines are those costing more than \$10,000. See EN(16). There were two significant fines assessed to Linde for non-compliance with environmental laws or regulations that occurred in 2021.

Linde is not aware of any non-monetary sanctions for environmental non-compliance or any actions brought through dispute resolution mechanisms involving an independent third-party review.

#### Environmental Violations and Fines

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Number of Violations	0	2	0	2
Value of Fines Related to Above	0	\$142,000	0	\$52,000

EN (17): Environmental Violations and Fines

Units: USD

### 308-1 New suppliers that were screened using environmental criteria

One-hundred percent of suppliers that present environmental risk are screened using environmental criteria.

### 308-2 Significant actual and potential negative environmental impacts in the supply chain and actions taken

Linde values its supplier relationships and works to develop supplier capacity. Linde uses a risk-based approach to supplier management. Those suppliers at risk of negative environmental impacts are principally suppliers of chemicals, or process and specialty gas suppliers, and all are subject to additional pre-qualification requirements. These qualifications are revisited in periodic audits and in any contract re-qualification.

Those that show an unwillingness or inability to conform are subject to disciplinary action up to and including contract termination.

# Social Topics



The new Navapura Primary School near Linde Engineering will house more than 300 students

## Connecting with Our Communities to Support the Next Generation

Community is one of Linde's corporate values, and employees around the globe are proud of the company's tradition of creating resilience in the communities where we live and work. One of the priority areas of Linde's corporate philanthropy strategy is education: The company's Global Giving program provided more than \$4 million in funding to educational programs. As well, nearly one-third of Linde's Community Engagement projects' primary or secondary focus area involve opportunities to better prepare students, from providing underserved children with resources to efforts in environmental literacy. Strong educational systems can promote stronger communities, and strong ties to community and education stakeholders can help to focus efforts on unique solutions. Two exemplars from India and the United States are among the many global efforts buoyed by both the talents of Linde volunteers and the company's philanthropic giving.

Linde Engineering (LE)'s expertise is building, so it is no surprise that helping to improve the infrastructure of schools is a community need the business embraces. For LE India, helping to support such projects has become a tradition: The team has helped to fund schools in Kural and Bhayali, and in 2021, supported the construction of the Primary School in Navapura, the rural center of the Vadodara district where LE is located. "We noticed that the existing school building was in a very poor condition, and that many children in Navapura had limited access to the educational infrastructure," explained Chitra Parmar, Communications Manager at Linde Engineering India. "We decided to connect with the community and see how we can help, as we didn't want the children to suffer from the lack of education." The team saw their efforts as a way to foster long-term outcomes, such as increasing skills, employment potential and higher quality of life, which are among the outcomes tracked in the assessment of Linde's CE projects. The new school is scheduled to open in 2022.

Students are not the only beneficiaries of such projects. In Linde's collaboration with CELF, the Children's Environmental Literacy Foundation, Linde has collaborated for many years on programs that not only engage children, but their teachers as well. Environmental sustainability is the focus of these programs, which in 2021 occurred in Linde communities in Danbury, Connecticut, Houston, Texas and Tonawanda, New York. "What I like most about CELF is that they maximize the benefit that they provide to the communities by training teachers, who then train their students about which actions to take to make a difference in life," explained Bradley Damstedt, Senior Technology Expert in Combustion R&D, who leads the collaboration with CELF. "The programs use real-world problem-solving to prepare students with critical thinking skills and motivation to become agents of change for a healthier, more stable, and sustainable future." CELF interventions include consulting for schools, professional development for teachers, and innovative programs for students. The projects in 2021 focused on air quality and pollution, and the outcomes are expected to be impactful for teachers and students alike: "Linde's long-term support of CELF has been pivotal to our work equipping teachers with pedagogical skills and resources to cultivate students' understanding of the interconnections between social, economic and ecological systems, and their sense of agency to take action toward solutions. Linde's commitment has helped enable our small but mighty team to reach over 15,000 teachers and 1.5 million students," said Tara Stafford Ocansey, Executive Director of CELF.

These community connections demonstrate a simple educational concept: multiplication. By seeding these efforts with Linde time and resources, children are given more opportunities to reach even higher heights in their future.

→ For more information on how Linde demonstrates the corporate value of Community and how Linde assesses the impact of Community Engagement activities, see [Community](#) on the Linde website.

## 400 Series: Social Topics

### Social Management approach for material aspects [103-1](#), [103-2](#), [103-3](#), [403-1](#), [403-2](#), [403-3](#), [403-4](#), [403-5](#), [403-6](#), [403-7](#)

The social dimension of sustainability concerns an organization's impacts on people and social systems — employees, contractors, suppliers, customers, other business partners and local communities — and discloses how the risks that may arise from interactions with other social institutions are managed and mediated.

#### Organizational Responsibility, Accountability and Incentives

Linde's strong worldwide social policies and procedures include aspects such as compliance and integrity, human resources, diversity and inclusion, safety, community engagement and the Global Giving Program. These are managed as part of daily operations. In many cases, suppliers are expected to adhere to equivalent standards.

Linde's CEO and the Board of Directors are accountable for social issues impacting the company. Linde's full Board of Directors has responsibility for reviewing safety and environmental risk at each Board meeting. The Human Capital Committee assists the Board in its oversight of Linde's compensation and incentive policies and programs, and management development and succession, particularly in regard to reviewing executive compensation for Linde's executive officers. The Committee also periodically reviews the company's diversity policies and objectives, and the programs to achieve those objectives. Charitable contributions are mainly made through the Global Giving Program. Employee community engagement in all businesses and functions is promoted from the Sustainability department.

Responsibility for performance lies with the businesses. Several executives are responsible for social aspects:

- The CHRO is responsible for talent sourcing, management and retention, and diversity and inclusion. He reports to the CEO. The global leader of Diversity and Inclusion is the senior functional lead in this area and reports to the CHRO.
- The General Counsel is responsible for ethics, integrity and compliance and reports to the CEO. The CCO reports to the General Counsel and is the senior functional lead in this area and reports to the General Counsel.
- The CHRO is responsible for SHEQ and reports to the CEO. The vice president of SHEQ is the senior functional lead in this area.
- The CHRO is also responsible for the operation of the Global Giving Program.
- The EVP, Clean Energy reports to the CEO and oversees sustainable development. The VP, Sustainability is the senior functional lead in this area and also leads community engagement activities.
- Procurement leadership exists within each business segment and region, and the vice presidents serve as the senior functional leads in this area. Working with other leaders, they coordinate activity to ensure adherence to Linde's supplier sustainability and human rights commitments, among others.

Safety, inclusion and community are Linde values, and, therefore, are non-negotiable. Linde's executive annual variable compensation is impacted by performance in non-financial areas considered to be Strategic Business Objectives. These include achieving best-in-class performance in several areas, including safety and talent management.

#### Policies, Commitments, Goals and Targets

Corporate policies are posted on the company website at [www.linde.com](http://www.linde.com). Linde's CBI, corporate HSE Policy, Human Rights Policy, Global Diversity & Inclusion Guidelines, Supplier Code of Conduct and other corporate and country-level policies make clear the company's commitment to management processes for addressing relevant areas of potential human rights concern. These include:

- Safety and health protection; a safe work environment
- The prevention of discrimination and harassment of employees
- Equal opportunity and equal treatment
- Merit-based decisions on recruitment, hiring, promotion and compensation
- Compliance with regulations, including regulations on working hours
- The right to privacy
- Freedom of association and freedom of peaceful assembly, including freedom to choose whether to engage in collective bargaining and employees' participation in works agreements in various countries

103-1, 103-2, 103-3

Specifically, the Linde CBI makes clear Linde's commitment to human rights. Linde recognizes every person's innate humanity and treats everyone with dignity and respect. In supporting the protection and promotion of human rights worldwide, Linde abides by the principles of the International Bill of Human Rights enacted by the United Nations and does not condone or engage in discrimination; harassment; violations of privacy, slavery or servitude; restrictions on free assembly; or unfair employment practices. Linde commits to adhering to these human rights principles and expects similar standards to be observed by all with whom it conducts business. As described in Materiality, Priorities and Targets: SD 2028 on page 15, Linde's social PFs and related SD 2028 targets include Safety, Health & the Environment, Integrity & Compliance, and People & Community, and they have related KPIs and SD 2028 targets; see the Performance Towards Targets. This section reports against the relevant GRI Standards for these PFs, in addition to GRI disclosures that are not PFs but that may be of interest to various external stakeholders.

#### **Safety Management, Programming and Training** 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7

Aspects of safety, including occupational health, are led by SHEQ. The function is also responsible for safety management, including hazard identification, risk assessment, and incident investigation, and management reviews are in place. SHEQ leads the identification and mitigation of potential health and safety impacts.

SHEQ also leads consultations and communications with employees on health and safety programs and initiatives. Safety training is conducted for all employees and all contractors, as defined in the SHEQ Management System and Standard Operating Procedures. See 404-1. Safety performance is reviewed by management and the board and reported. Benefits, including management of medical care coverage and associated communications, are managed by the Human Resources function. See also 401-2, 402-1, 403-9, 404-1 and 416-1.

#### **Mechanisms for Grievance and Recourse**

Policies are actively communicated to employees around the world to outline Linde's expectations of conduct wherever it does business. It takes these standards very seriously, and non-compliance can result in severe disciplinary action, up to and including termination of employment. Several channels are provided to encourage employees to report suspected complaints and concerns, or to anonymously report violations, including the Integrity Hotline. The company also encourages customers, vendors or other observers to use the hotline to submit complaints or allegations about these or other matters. The company provides an annual report of Linde incidences of substantiated hotline reports on its website at: <http://www.linde.com/about-linde/sustainable-development/reporting-center/hotline-reports>.

#### **Programs, Projects, Initiatives**

These are described in the 400 series disclosures.



## 401-1 New employee hires and employee turnover

Note: This section responds to 401-1 and also responds to 102-8.

### Total Employment

The number of employees as of December 31, 2021, was 72,327, reflecting a decrease of 1,880 employees from December 31, 2020. See SOC (1).

The company's workforce includes professional/managerial-level employees, technical employees (including drivers), technologists and administrative staff. Many of the company's truck drivers and administrative assistants in the U.S. are non-exempt employees. The company has implemented a centralized tracking system for workforce statistics and continues to phase this system globally.

U.S. employees who work more than a pre-defined number of hours per week are entitled to benefits. The distribution of employees by region is provided in SOC (2).

Overall, 73 percent of Linde employees are men and 27 percent are women. The percentage of female senior executives in the global organization is 18 percent. The company's workforce does not include a substantial portion of work performed by self-employed workers or by individuals other than employees. Regional HR is responsible for managing each respective region, and the company consolidates key metrics at the global level; these are reported here. This indicator is partially reported. The company does not typically employ seasonal labor. 102-8

### Turnover

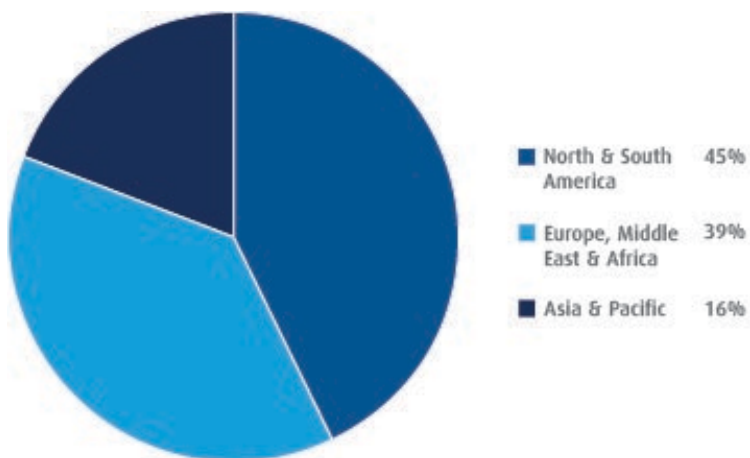
Linde's global voluntary turnover rate was 6.7 percent.

Globally, Linde does not provide additional details about the number and rate of new hires, as it considers this information to be confidential.

### Number of Employees

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Total	80,820	79,886	74,207	72,327

SOC (1): Number of Employees



SOC (2): Employees by Region

## 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation

The company offers a high-performance culture, values ambitious and creative employees, and incentivizes and rewards good performance. Employees can expect to receive a competitive pay package that recognizes the experience, skills and abilities they bring to the company.

Training and development are offered, as well as a full range of benefit programs ranging from wellness to work-life balance. Benefits are available to all full-time employees—in the U.S., those working more than 20 hours per week—and vary according to business unit. Paid vacations and holidays, life and accident insurance, healthcare, disability/invalidity coverage, primary caregiver leave (maternity/paternity leave, including for adoption), flextime, education reimbursement, wellness allowances and a range of personal and family insurance policies, options for professional services (legal, counseling, medical care, childcare, eldercare), purchasing subsidies (personal office equipment and supplies, gym membership/equipment) and retirement provisions are some of the types of benefits provided to employees of the organization. Many specific program descriptions here apply to U.S. programs, but equivalent programs may be offered in each country and referenced on that country's careers website. These benefits are generally not provided to temporary or part-time employees by major operations. [403-3](#)

- **Flexible Work:** The company understands that everyone has commitments outside of work. Recognizing this, the company has global policies that provide work arrangements that help employees meet enduring or shorter-term personal needs through formal and informal means. For example, in the U.S., Linde offers paid personal days and a Flexible Work Policy that allows flexible scheduling.
- **Work/Life:** The company offers a confidential resource and referral service for practical advice and referrals related to parenting and childcare, eldercare, financial and college planning, retirement planning, survivor support programs and more. Facilities offer accommodations to employees. Employee assistance programs are offered in many locations, including in the U.S. and in the U.K.
- **Health and Wellness:** A range of activities are offered to all employees to support employee health and wellness. They include seminars on such diverse topics as financial health/retirement; stress management information and stress management/reduction techniques and training; sleep management; managing work-life issues such as a family member with Alzheimer's disease; community engagement; office picnics/parties; and "bring your child to work day." Some activities are managed by an Employee Activity Council or similar and vary by site. For those participating in the company medical plan in the U.S., benefits include a Healthy Living Plan, nutritional/health support and a 24-hour nursing consultation. Some sites also have on-site fitness programs. In the U.K. for example, cycle to work programs are also offered. Some sites have onsite health or wellness personnel for occupational health. [403-3](#), [403-6](#)
- **Volunteerism:** Linde is committed to supporting the communities around the world where its employees live and work. Employees are encouraged to participate in volunteerism and community engagement activities. Its Global Giving Program provides substantial matches to a range of employee giving. Community engagement is part of the company culture, and employees at all levels of the company contribute their time and skills to help build resilient communities. Corporate policies allow employees to volunteer during work hours with the support of their managers. Options for employees include employee-driven projects, giving campaigns such as the annual United Way campaign held at various locations, and the year-round matching gift program. The matching gifts program provides a 100-percent match for all eligible donations, up to \$15,000. It was previously available to employees in the U.S.; a similar program has also been extended to other regions.

## 401-3 Return to work and retention rates after parental leave, by gender

Subject to country or region's laws, Linde employees of either gender are entitled to parental leave or benefit entitlement that may be used for parental leave purposes.

Additional employee benefits and entitlements in the U.S. fall under the Family and Medical Leave Act (FMLA) and Short-Term Disability (STD). To be eligible for FMLA leave benefits of 12 weeks in a year, an employee must meet some eligibility requirements, for example, time worked for the company (12 months). The FMLA covers birth, adoption or foster care of an employee's child within 12 months after the birth or placement of the child ("Bonding Leave"); care for an immediate family member (spouse, child or parent) with a serious health condition ("Family Care Leave"); and an employee's inability to work because of a serious health condition ("Serious Health Condition Leave"). Other countries have equivalent programs. In the U.S., full-time employees, having one year or more of service, who are parents of newly birthed or adopted children are eligible for a Primary Caregiver Leave, which allows parents of newly birthed or adopted children up to 10 weeks of leave. This includes four weeks of paid leave in addition to any disability benefits that may be available. In addition, subject to management discretion, all new parents may request flexibility or accommodations in the six months after birth or adoption.

At this time, the company does not report on the number of employees who took parental leave or their return to work retention rates.

## 402-1 Minimum notice periods regarding operational changes, including whether these are specified in collective agreements

Note: This section responds to 402-1 and also responds to 102-41 and 403-4.

Linde considers relations with its employees to be excellent.

Linde's CBI and Human Rights policy makes clear the company's commitment and management processes to address relevant areas of human rights concern, including freedom of association, freedom of peaceful assembly and the freedom to choose whether to engage in collective bargaining or to participate in works agreements in various countries. An estimated 32 percent of Linde employees worldwide belong to an independent trade union, are covered by collective bargaining agreements or are members of a works council.

The company has collective bargaining agreements with unions at numerous locations throughout the world, which expire at various dates. Most of the company's labor agreements have language that defines severance arrangements. In countries or companies where employees have third-party representation via a works council or collective bargaining, the company respects these relationships and works with these third parties in a mutually respectful manner. In the case of work councils, the company meets any predetermined notice periods mutually agreed to by the parties. [102-41](#)

As a matter of business practice, the company keeps employees well informed of operational changes through normal internal communication channels, most notably its corporate intranet, through which global/corporate information and business unit information (in home country language) is provided directly to employees. Business leaders also communicate through regular channels that include periodic business teleconferences, newsletters and issue communications.

The company makes every effort to be proactive and to provide reasonable notice to all employees if a significant change occurs, and it has a good record of employee relations in countries where it does business.

## 403-9 Work-related injuries

Note: This section also responds to 403-6.

Key performance indicators (KPIs) for Linde's safety performance include days away from work (lost workday case rate), and the tracking of illnesses and injuries, including fatalities and occupational diseases. These and other safety key figures are reported monthly to the Executive Leadership Team. In addition, Linde's full Board of Directors has responsibility to review safety and environmental risk at each Board meeting.

The Board has established a strategic business objective to maintain best-in-class performance in safety. Accidents and near misses are closely monitored, reported and investigated. Evaluations of these events are performed, and the lessons learned are communicated in safety training and special safety alerts for the relevant work groups. The benefit of these continuous efforts is that Linde's employee and contractor safety performance continues to be better than general industry benchmarks and among the best within the industrial gases and chemical industry.

To promote continuous improvement and recognize efforts contributing to a safe working environment, Linde recognizes its businesses through safety awards for reduction in recordable injuries, lost workday cases and/or product vehicle accidents. In addition, Linde annually holds a global "Safety Commitment Day," which provides information about different safety issues and various workshops around safety. External contractors are also invited to join in safety programming. In 2020, Linde also translated safety principles to reflect the COVID-19 pandemic and introduced safety protocols and measures due to the worldwide pandemic. These principles remain as the pandemic continues. [403-6](#)

Linde also promotes a healthy work environment by providing employees with information on ergonomics and lighting considerations. Linde controls workplace environmental factors, including noise, lighting, indoor air quality, humidity and temperature. [403-6](#)

Linde reports safety rates as follows: pro forma for 2018 and Linde consolidated for **2019, 2020 and 2021**. See tables SOC (3) and SOC (5). Contractor lost workday case rates are reported for construction contractors. See SOC (4). For ease to stakeholders, the company also reports lost time injury frequency rate (LTIFR) for employees and contractors and rates for Tier 1 process safety events in units of per million work hours. See SOC(6a), SOC(6b), and SOC(6c).

Vehicle safety rates are reported for commercial vehicles. See SOC (7a) and SOC (7b).



403-9

Pro forma rates for 2018 are estimates.

See also pages 27 and 28 for information related to 2021 performance and the SD 2028 targets.

## Global Safety Performance

	Worldwide	Worldwide	Worldwide	Worldwide	Americas	Asia Pacific	Europe Middle East & Africa	Other Areas
	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde	2021 Linde	2021 Linde	2021 Linde	2021 Linde
Rates of occupational diseases (Total: 1 worldwide)	0.010	0.011	0.001	0.004	0	0	0	0.010
Lost Workday Case Rate overall (Total: 204 worldwide)	0.28	0.210	0.245	0.249	0.051	0.214	0.233	0.420
Rates of injury (Total: 500 worldwide)	0.72	0.602	0.600	0.630	0.492	0.488	0.350	0.937
Rates of injury and illness (Total: 501 worldwide)	0.733	0.613	0.601	0.634	0.492	0.488	0.350	0.947
Global Work-Related fatalities, Employees	2	2	0	2	1	0	0	1
Global Work-Related fatalities, Contractors	5	2	1	2	1	1	0	0

SOC (3): Global Safety Performance by Region

Units: Rate per 100 employees, number of fatalities

## Construction Contractor Lost Workday Case Rate

	2018 Praxair	2019 Linde	2020 Linde	2021 Linde
Lost Workday Case Rate	0	0.09	0.086	0.047

SOC (4): Construction Contractor Lost Workday Case Rate

Units: Rate per 100 contractors

## Tier 1 Process Safety Event Rate

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Tier 1 Process Safety Event Rate	0.03	0.037	0.035	0.039

SOC (5): Tier 1 Process Safety Event Rate

Units: Rate per 100 contractors

403-9

**Employee LTIFR per Million Work Hours**

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
LTIFR Employees	1.4	1.05	1.22	1.25

SOC (6a): Employee LTIFR per Million Work Hours

Units: Rate per 1,000,000 work hours

**Contractor LTIFR per Million Work Hours**

	2018 Praxair	2019 Linde	2020 Linde	2021 Linde
LTIFR Contractors	0	0.45	0.43	0.24

SOC (6b): Contractor LTIFR per Million Work Hours

Units: Rate per 1,000,000 work hours

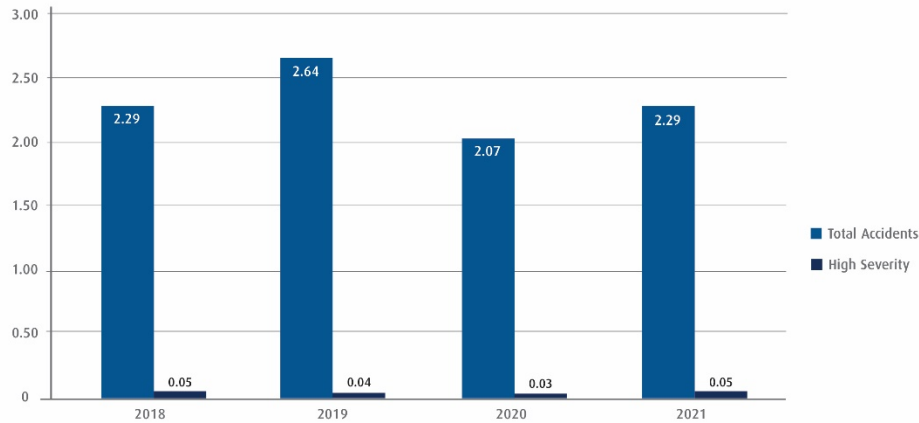
**Tier 1 Process Safety Events per Million Work Hours**

	2018 Linde Pro Forma	2019 Linde	2020 Linde	2021 Linde
Tier 1 Process Safety Event Rate	0.15	0.186	0.175	0.195

SOC (6c): Tier 1 Process Safety Event Rate per Million Work Hours

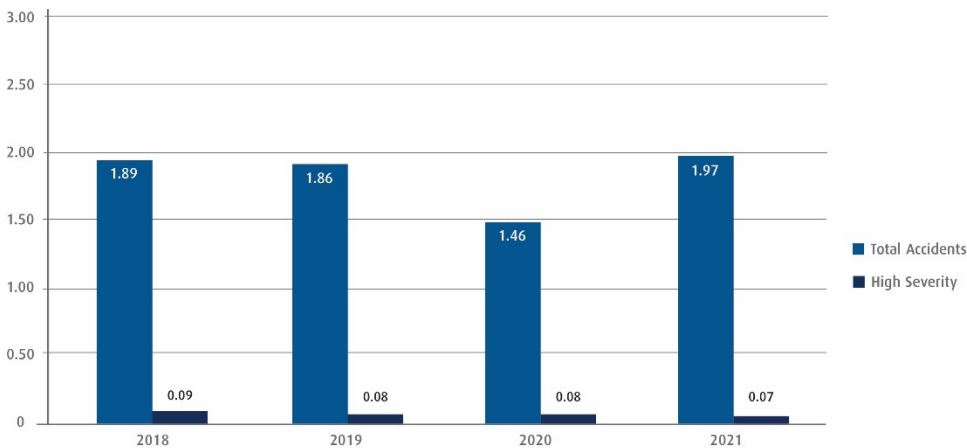
Units: Rate per 1,000,000 work hours

403-9



SOC (7a): Worldwide Product Vehicle Safety: Linde Drivers

Units: Rate per million km



SOC (7b): Worldwide Product Vehicle Safety: Contract Drivers

Units: Rate per million km

## 404-1 Average hours of training per year per employee by gender, and by employee category

### Business Benefits from Training and Education

Like many companies, Linde must attract, hire and retain qualified personnel to develop, market or sell its products and successfully manage its business. Linde is dependent upon its highly skilled, experienced and efficient workforce to be successful. Much of Linde's competitive advantage is based on the expertise and experience of its key personnel in marketing, technology, manufacturing, distribution infrastructure, systems and products. The inability to attract and hire qualified individuals, or the loss of key employees in very skilled areas, could have a negative effect on the company's financial results. Investments in employee training and development bring value, but this is often hard to measure, or of indirect business benefit. The challenge in this area is to create training interventions that bring direct learning and measurable business benefits.

Development training is an important investment. Such training brings value in many ways to employees and to the company. The Talent Development team has conducted needs assessments to ensure that potential programs met the needs of the company. One key goal was to increase the engagement and efficiency of the company's people managers. Some key e-learning initiatives resulted, and these programs are now increasingly employing technology in training and development. Two examples of continued deployment of e-learning include the use of Skillsoft and the diversity and inclusion programs, such as "Inclusion Boost." Due to the global pandemic, the use of e-learning and virtual platforms has become the dominant mode of training, with widespread utilization in areas including compliance, safety and inclusion training. Examples below depict typical programs offered, although all may not have been offered in 2021 due to constraints because of the pandemic.

Many e-learning programs exist throughout the globe, with both formal training events and opportunities for webinars: For example, the Strengthening the Pipeline program, which is part of the strategy to support Linde's "30 by 30" diversity goal, provides a hybrid-training opportunity comprised of webinars, self-paced learning, coaching and self-assessment.

### Employee Learning and Development

The careers and career paths of Linde employees are strategically managed. Employees and management use a range of competence-based and goal-setting tools. Employees store and maintain resumes, experience, completed training, certifications achieved, performance appraisals and career goals and aspirations. Career paths are planned in conversations with their managers against competency ladders. These plans are used for talent development, succession planning and internal recruitment.

Linde has invested in Elevate My Learning, a learning management system (LMS) platform that facilitates global reporting of formal training. The data reported below is a subset of all the company-sponsored formal training provided. The LMS system enables all businesses and functions to house, track and offer training and training-related information on a single enterprise platform. Linde continues to explore new ways to expand the use of the system.

Linde reports an average of 20 hours of training globally (regional average); however, these hours vary depending on training needs and budgets. See SOC (8).

In 2021, the company continued to expand the use of technology to offer significant training with increased efficiency of time and cost:

- The company's e-learning offerings have reached more than 4,000 employees. Nearly 26,000 courses, videos and other resources were taken, representing more than 66,000 training hours.
- The company continued the use of e-learning for business integrity and other training. Globally, this is typically approximately 20,000 employees.

When added to standard compliance training and safety training, employees received an average of 70 hours of training in 2021. See SOC (9). This training consists of:

1. Ethics and compliance training: This is mandatory at all levels. The average employee receives 2 hours of training each year.
2. Employee development training: Linde employees received an average of 20 hours of formal training in 2021.
3. Professional skills training: Employees in specific businesses and functions receive additional training as needed or requested.
4. Management and development training: The company also provided additional management and development training as needed or requested.

### Safety Training [403-5](#)

Linde is committed to providing its employees with a safe operating environment by investing in state-of-the-art technology and driving a culture in which safety is the top priority. Accordingly, the company rigorously focuses on training to prevent work-related risks and/or occupational health hazards for employees, their families, contractors and, in many cases, for community members. Its industry-leading safety performance is the result of a program of continuous training and communication using a wide range of media.

In 2021, Linde invested approximately 5 million hours in safety training for its employees and contractors. On average Linde employees at facilities and offices received approximately 48 hours of formal safety training in 2021. (See 204-1 for information on safety training for contractors.) [403-5](#)

Sites in all regions and business units have periodic safety meetings and an annual Safety Commitment Program, which is held at every facility globally and represents Linde's commitment to safety (operations are shut down for Safety Commitment Programs). There are periodic "stand-down" meetings when operations are stopped for a safety program, continuous short "toolbox" reviews, and additional annual training for specific job functions and for compliance purposes. In addition, Linde conducts general safety training and communication through a range of global, regional and site-based channels on a needs basis, for example, in relation to safety changes in different seasons, a worldwide health threat or to communicate learnings after a safety incident. Safety training is conducted for all employees, in all functions.

### Cultural Awareness, Diversity and Inclusion, and Unconscious Bias Training

Training is one of the four key tenets of Linde's diversity and inclusion strategy. Accordingly, training is offered globally through multiple platforms, with various contents and to various levels across the organization. Diversity and inclusion training goals are to enhance managerial and leadership capabilities in understanding the business case for diversity and building inclusive leadership skillsets, and also equipping employees to effectively manage talent in a multicultural, increasingly diverse environment.

Classroom training and e-learning are used to enhance personal and managerial skills and are offered on a mandatory and voluntary basis. Since 2015, more than 1,200 global managers have received unconscious bias training and associated tools for managers. "Inclusion Boost," which was introduced in 2018, uses videos to reinforce inclusion initiatives and prior unconscious bias training. In a series of short videos, employees can learn, reflect and share. More than 2,000 employees have participated in this self-directed training.

Informal diversity training is also offered at all global locations, embedded within celebrations of Global Diversity Day and International Women's Day events, during which time the company offers learning webinars and inclusion activities.

Inclusion is also supported through engagement activities. The company celebrates heritage days around the world to recognize the global diversity of its employees. As well, employee resource groups (ERGs) provide support and reinforce the culture within the company. For example, in North Latin America, employees participated in #ChooseToChallenge, an initiative during International Women's Day, in which employees share positive messages to support equity for women in the workplace.

### Leadership and Skills Development

Classroom training is only part of the education that employees receive. Mentoring, networking, skills training and work experience are all designed to enhance employee career opportunities. Some employees receive formal mentoring, and there are various networks for employees to join based on interest (e.g., Toastmasters clubs or "Success Network" events). Eligible employees receive tuition reimbursement for approved studies, including university degrees. Following are highlights of additional initiatives that promote the career development of employees:

- Widespread e-learning opportunities to increase technical and managerial skills and for personal development.
- The Personal Development Center, for example, provides online coaching and tools for developing competencies used in annual performance evaluations, and other valued skills.
- An enterprise-wide LMS system enables all businesses and functions to house, track and offer training and training-related information on a single enterprise platform.

### Business Programs

The company's commercial and corporate programs offer challenging projects that help prepare dynamic sales and corporate talent within the business. Examples include the following rotational programs:

- Commercial Development Programs
  - Lincare's Sales Representative Training Program: This 10-day program prepares sales team members with customer relationship management tools, as well as clinical knowledge.
  - Commercial Leadership Program (CLP): The CLP is designed to expose employees to key areas within the company's sales arena and cylinder gas business.
  - Leadership and Technical Orientation Program (LTOP): LTOP is a one-year program designed to introduce employees to the operations and commercial aspects of the America's gases business in the U.S., such as plant startups or shutdowns, maintenance, project planning and execution, project management, sales and planning.
  - International Leadership Development Program (ILDLP): ILDLP is a two-year international program designed to expose attendees to key business areas and help them to build their skills. Rotations can be across several functions, including the financial, business development and marketing areas.
- Corporate Development Programs
  - Leading in Linde (LIL): This three-day supervisory skills program is offered in all geographies. To date, more than 2,300 managers have benefitted from this training, helping them to expand their managerial skills. This program allows the company to standardize managerial practices around the world.
  - Career Development Program (CDP): This program was developed for early-career employees. "Train the Trainer" sessions for regional groups provide the capability to deliver the CDP to more employees, as millennials continue to enter the workforce.
  - General Managers Program (GMP): This program teaches employees how to create value using experiential techniques. The program enhances employees' ability to operate in a competitive business environment.
  - For executive leadership, development programs help prepare future executives to develop the business management and leadership skills required to achieve both short- and long-term business objectives. Participants work to understand their leadership strengths and weaknesses and to develop the potential of their own direct reports.

In 2021, the company finalized the development of Leadership Pathways, a collection of curated pathways on key leadership topics that support learning and development along the career journey. The program is targeted to develop the skills necessary for first level managers, mid-level managers, and leaders of leaders and the series is open to all employees and easily accessible. This new development experience begins in 2022.

### Digitalization: Developing Skills for the Future

Linde also makes investments in employees so that they are prepared for the increasingly fast-moving and data-intensive world and better grasp opportunities from digitalization. Over the last three years, Linde has introduced “digital transformation” programs. The cornerstone program involves a three-month session, which includes coaching, immediately followed by opportunities to put the concepts into practice. The program includes digital boot camps, introduction to AGILE frameworks, demystification of digital technologies and use cases. The team’s focus is on solving real business challenges utilizing new methodologies, tools and digital technologies. They also explore alternative and more efficient modes of technology platforms. A key goal of the sessions is to simplify processes and to build digital solutions, products and tools that move decision-making from descriptive to predictive. This program continued in 2021, and to date, more than 1,300 cross-functional employees from all areas of the business have participated in these programs and increased their digital capabilities. Projects implemented have resulted in productivity improvements and new ways to solve business challenges. Linde’s digital exchange and digital practitioner platform “dX” was also established. In “dX”, employees who have completed the digital transformation programs meet and share best practices, help to mentor peers and grow the community of digital practitioners.

This indicator is partially reported. Linde businesses are responsible for HR management at their respective regional level. Key metrics are consolidated at the global level and reported here.

### Global Employee Development Training

	2018 Praxair	2019 Linde	2020 Linde	2021 Linde
Employee development training, not including safety	12	9	9	20

SOC (8): Global Employee Development Training, not Including Safety Training, Average

Units: hours per employee

### Global Employee Training 404-1

	2018 Praxair	2019 Linde	2020 Linde	2021 Linde
All employee compliance training (ethics, integrity)	2	2	2	2
Employee development training, not including safety	12	9	9	20
Safety training – all employee average	37	50	48	48
<b>Total average recorded formal training hours</b>	<b>51</b>	<b>61</b>	<b>59</b>	<b>70</b>

SOC (9): Global Employee Training, Average

Units: hours per employee



### 404-2 Programs for upgrading employee skills and transition assistance programs

Linde offers a wide variety of training programs to different groups of employees to support their professional development and help them advance in their respective functions. Examples include:

- Linde-provided training programs and university courses with a work experience element for young people, as well as training opportunities in various technical and commercial areas. In Germany, the company has offered vocational training in dozens of different professions. Many of the apprentices and student trainees have been offered job opportunities.
- The Emerging Leader Program is targeted at managers in transition (from first-line managers to middle managers).
- Eligible employees receive tuition reimbursement for eligible studies such as an MBA.

## 404-2

- Linde Engineering's Project Execution Academy (PEA) provides an opportunity for project managers to gain industry-recognized Project Management Professional (PMP) credentials. This fosters a better understanding of the project execution process and leads to better preparation to lead company construction projects.

Several learning and development tools are made available to employees allowing them to develop professional and interpersonal skills. Employees participate in industry conferences and seminars that facilitate best-practice sharing and professional networking. The company's financial services vendor routinely offers on-line and in-office seminars on financial planning, including financial planning for employees approaching retirement, in some areas. In the U.S., under the company's generally applicable severance plan, if employment terminates for certain reasons, U.S. employees are generally eligible for severance benefits of up to a maximum of 26 weeks of base pay, depending on their completed years of service. In addition to retirement savings plan benefits, the company offers access to financial planning tools and resources to aid in transition to retirement.



### 404-3 Percentage of employees receiving regular performance and career development reviews

#### Talent Management

At least annually, all eligible Linde employees meet formally with their supervisors to review their performance and development opportunities. Employees receive a performance appraisal through the systematic use of agreed-upon measurable targets and a multi-dimensional performance appraisal. Performance reviews and development plans are a part of a global talent management system, which is designed to effectively utilize and advance employees across all regions.

#### Performance

Every year, Linde ensures that managers and employees measure the results of individual objectives, creating a transparent link between performance and rewards. All employees around the world are expected to obtain results and demonstrate a series of competencies and behaviors that support the local business strategy.

The company's performance management process is designed to:

- Ensure alignment between employee and business unit/function goals.
- Enhance communication between employees and managers.
- Promote meaningful assessment and evaluation of individual performance.
- Promote alignment between individual performance and pay.

The focus on continuous improvement allows employees to update goals based upon business needs. This fosters collaboration between managers and employees. Goals are the driving force behind achievement and provide an opportunity to challenge employees and improve their skills. Goals serve the needs of the company and aid in the development of employees.



### 405-1 Diversity of governance bodies and employees

Global Diversity and Inclusion is a formal support function operating under Corporate HR and develops strategies and initiatives within four pillars: Talent Management, Inclusive Culture, Managerial Training and Marketplace Branding.

Linde's Board of Directors, CEO and Executive Leadership Team monitors results by business group in diverse representation at all levels of the talent pipeline, including senior leadership, talent acquisition, talent development and advancement, managerial training and workplace culture and engagement. This oversight, which includes quarterly reviews, provides accountability for business leaders and ensures that diversity and inclusion is sustained as a top priority for the organization's long-term growth and viability. Subsidiaries and businesses are held accountable through the development and implementation of an annual Diversity Action Plan that includes both qualitative and quantitative aspirational goals.

Among other things, Linde (1) sponsors talent pipeline initiatives, including employee resource groups, for diverse talent segments; (2) celebrates heritage days and cultural awareness events; (3) offers Inclusive Leadership and Unconscious Bias training to employees; and (4) brands itself through social media and other forms of external communications. See also 404-1.

SOC (10) provides current and historical information on diversity to the Board, global senior leadership team and CEO senior management team.

## 405-1

The Linde Board of Directors consists of ten members, including its CEO. In 2021, all were over 50 years old. Of the ten Board members, two (20 percent) are female, and one board member is African American.

In 2021, three-quarters of executive officers were over the age of 50, and one-quarter was 50 or below. Globally, the percentage of women employees is 27 percent.

Linde is committed to sourcing and retaining local talent, particularly in its emerging economy countries. The company does not currently report global diversity breakdowns in all the ways requested in the GRI Standards.

In addition, Linde reports on the age distribution of its global workforce in the following categories: silent generation (those born in 1945 or before); baby boomers (those born from 1946 to 1964); generation X (those born from 1965 to 1980); millennials (those born from 1981 to 1996); and generation Z (those born in 1997 or later). See SOC (11).

### Diversity in Global Leadership and Management

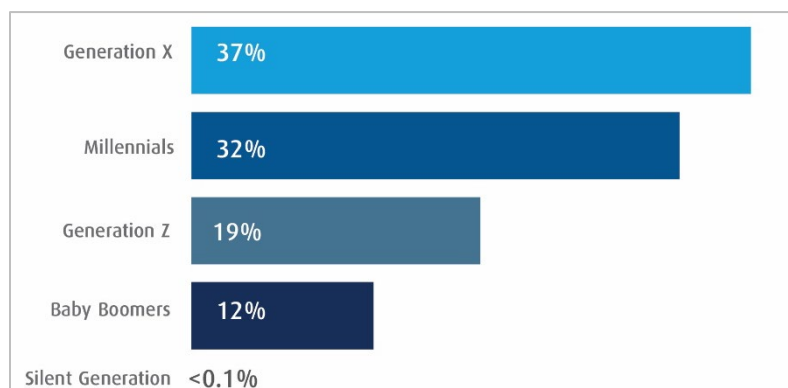
	2018* Linde	2019 Linde	2020 Linde	2021 Linde
<b>Board Diversity</b>				
% Women	25	25	25	20
% U.S. minority	8	8	8	10
% Total board diversity	33	33	33	30
<b>Executive Leadership*</b>				
% Women	19	16	17	18
% U.S. minority**	39	18	19	19
% Total executive diversity	51	21	22	22
<b>Global Diversity (Male/Female)*</b>				
% Overall	81/19	73/27	73/27	73/27
% Management level and up	83/17	81/19	80/20	77/23

\* For 2018, data provided for Executive Leadership and Global Diversity is for legacy Praxair.

\*\*For 2018, Executive Leadership, U.S. minority includes U.S. minority and non-US and is not directly comparable to 2019 to 2021.

SOC (10): Diversity in Global Leadership and Management

Units: percentage



SOC (11): Age Distribution, Linde Employees

Units: percentage



## 405-2 Ratio of basic salary and remuneration of women to men

Linde's compensation policy assigns jobs into pay grades based on job descriptions so that employees with comparable functions and responsibilities are compensated appropriately, regardless of age, sex, race or other prohibited characteristics. As part of its compensation program, Linde conducts annual pay equity analyses in the U.S. and in other countries where required by law.

Linde disclosed compensation information for named executive officers, both men and women, as well as the ratio of CEO pay to the median employee. See Linde's 2021 Proxy statement, pages 63 and 80. Other specific salary information is confidential.

## 406-1 Incidents of discrimination and corrective actions taken

Discrimination is prohibited by company policies. The Board of Directors has approved the CBI and related program(s) to provide additional, specific business conduct guidance to employees.

Linde is committed to recruiting, hiring, compensating and promoting people based solely on their abilities, performance and qualifications for their jobs, and to maintaining a professional work environment in which employees are treated with respect and dignity. As part of its commitment to equal employment opportunity, the company prohibits discrimination or harassment based on race, color, religion, sex, national origin, age, disability, veteran status, pregnancy or gender identity or expression. This prohibition is applicable to all employees worldwide whether such behavior is prohibited by the laws in the regions where it operates. The company is also committed to complying fully with applicable labor and employment laws wherever it operates.

The company takes these standards very seriously, and any non-compliance, depending on the circumstances, can result in serious disciplinary action, up to and including termination of employment. Information was distributed to employees worldwide to outline management's expectation of ethical conduct and integrity wherever Linde does business. Employees are required to annually certify that they have read and understood the material. This was conducted in 2021.

Employees are expected to report suspected complaints, concerns and violations through a number of channels, including the Linde Integrity Hotline. Reports may be made anonymously. All reports to the hotline are appropriately investigated and satisfactorily closed. It is a violation of company policy for any person to retaliate against any individual who has reported such a matter in good faith.

Reports to the company's Integrity Hotline include, but are not limited to, potential human rights violations and potential incidents of alleged discrimination involving internal and/or external stakeholders across operations in the reporting period. See 412-1, 412-2, 414-1 and 414-2. The year 2019 was the first year Linde reported for the consolidated company, and 2021 data is on the same basis. Prior years reports are for legacy Praxair and are not a basis of comparison with Linde in 2019. In 2019, Linde expanded categorizations; therefore, the data from 2019 forward is not comparable with prior years.

In 2021, 523 reports were made to the Linde Integrity Hotline. Of these reports, 355 were substantiated. The range of issues were appropriately investigated and addressed. Internal Audits is responsible for maintaining and retaining complete records about the receipt of all targeted complaints and their reporting, investigation and final resolution. Internal Audits develops and maintains a control and follow-up system for targeted complaints, including to the extent he/she deems appropriate, a written tracking system to ensure that each complaint is promptly followed up and resolved, accountabilities are assigned and communicated, and each step in the handling of the complaint is described in detail.

See SOC (12). See also public reporting on Linde's website.

### Hotline Reports

	2018 Praxair	2019 Linde	2020 Linde	2021 Linde
Number Reported	340	776	573	523

SOC (12): Hotline Reports

Units: Number of Reports

### **407-1 Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be at risk**

Note: This section responds to 407-1 and 409-1.

Linde's CBI, Human Rights Policy, Corporate HSE Policy and Supplier Code, as well as other corporate and country-level policies, make clear the company's commitment and management processes to address relevant areas of potential human rights concern. These include: freedom of peaceful assembly, including freedom to choose whether to engage in collective bargaining, and employees' participation in works agreements in various countries. Linde's Supplier Code of Conduct makes clear that suppliers are expected to recognize, as far as legally permitted, the right of free association and collective bargaining of employees. For actions taken, see 412-2.

### **408-1 Operations and suppliers identified as having significant risk for incidents of child labor**

Linde's CBI, Human Rights Policy and Corporate HSE Policy, as well as other corporate and country-level policies, make clear the company's commitment and management processes to address relevant areas of potential human rights concern. These include prohibition of any form of child labor. Linde's Supplier Code of Conduct makes clear that suppliers are expected to prohibit child labor and comply with minimum working age requirements prescribed by national laws and international conventions.

### **409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor**

Linde's CBI, Human Rights Policy and Corporate HSE Policy, as well as other corporate and country-level policies, make clear the company's commitment and management processes to address relevant areas of potential human rights concern. These include prohibition of any form of forced labor, including human trafficking. Linde's Supplier Code of Conduct makes clear that suppliers are expected to prohibit any form of forced labor, including forced prison labor, indentured labor, bonded labor, slave labor or any form of human trafficking.

### **410-1 Security personnel trained in the organization's human rights policies or procedures**

One hundred percent of Linde's security personnel were trained in Linde's CBI, which contains a section on human rights. See 412-2.

### **411-1 Incidents of violations involving rights of indigenous peoples**

In 2021, there were no determinations of Linde's operations precluding employees from their rights to freedom of association, there was no likelihood of incidences of child labor or forced labor, and Linde was not involved in any incidents of violation of the rights of indigenous people, so action was not required.

### **412-1 Operations that have been subject to human rights reviews or impact assessments**

An "adverse human rights impact" occurs when an action removes or reduces the ability of an individual to enjoy his or her human rights. Both because it is consistent with the company's values and because of potential risk, Linde actively seeks to avoid causing or contributing to adverse human rights impacts through its own activities with its employees, contractors and suppliers, and also with JVs, including those over which the company does not have management control. Linde may be required to address human rights impacts when required by national regulation and may choose to take voluntary action to support its values and reputation, even if the company has not contributed to those impacts.

Operational human rights issues include those related to employee and contractor work conditions (e.g., safety, training, personal protective and other safety equipment, the prohibition of forced or child labor, and if appropriate, access to housing and to clean and sanitary facilities) and worker wellness (inclusion, development opportunities, diversity, access to healthcare and appropriate facilities). These are assured as part of the company's normal management processes in 100 percent of its sites and offices globally, as well as in JVs where it has management control. One hundred percent of operations were reviewed. This exceeds 1,000 sites. 412-1

Human rights issues also may arise in Linde's value chain — among Linde's suppliers, customers or communities. For these and general human rights issues management, see 414-1 and 414-2.

### 412-2 Employee training on human rights policies or procedures

All targeted employees receive training annually in Linde's CBI, which deals specifically with human rights. In 2021, the recorded percentage of those completing the training was 99.1 percent. Assuming a minimum of a half hour per person, this amounts to a minimum of 20,000 hours. In addition, 100 percent of employees are trained in relevant issues pertaining to safety and diversity and inclusion.

#### Training in Human Rights Relevant to Linde's Value Chain

One hundred percent of construction contractors and 100 percent of contract truck drivers are trained in Linde's operational safety requirements.

Linde has identified a salient human rights risk that it has an opportunity to help mitigate — the crime of sex trafficking along long-haul truck routes. Linde has worked with leading non-governmental organizations (NGOs) in the Americas to bring awareness of this crime to its drivers, contract drivers, management and employees. The program is active in Canada as well as in the U.S. where Linde Gases renewed its training plans in 2021. Since 2012, more than 5,000 employees and contractors have been trained across Linde Americas. Details have been reported in prior reporting.

### 412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening

One hundred percent of significant investment decisions incorporated human rights screening in keeping with Linde's CBI. Potential investment agreements that would violate this policy are not pursued. This includes capital investments and acquisitions.

### 413-1 Percentage of operations with implemented local community engagement, impact assessments and development programs

Community is a core value at Linde:

*We are committed to improving the communities where we live and work. Our charitable contributions, along with employee volunteerism, support initiatives that make important and sustainable contributions to our world.*

The company's commitment to community is executed through two philanthropic program arms:

- Community engagement represents employee- and corporate-led programmatic efforts in communities where the company has a presence.
- Charitable contributions through Linde's Global Giving Program, which provides financial, philanthropic support in the form of scholarships, contributions and support for employee volunteerism and matching gifts.

Both of these strategic arms are aligned and work together to provide a significant, lasting value to local communities, to positively impact the company's reputation, and to develop and engage employees. Strategically, the programs work to deepen impact, engage employees and drive business goals, complementing the corporate mission of making our world more productive.

In Linde, many community engagement projects are also supported by the Global Giving Program. This financial support helps volunteer projects to potentially have more far-reaching, long-term impact.

One hundred percent of Linde businesses participated in employee volunteer community engagement activities in 2021. [413-1](#)

Businesses also provide charitable development through the company's Global Giving Program. Impact assessments are performed on all reported community engagement efforts and on significant and long-term projects supported by the Global Giving Program. [413-1](#)

## Community Engagement Overview and Strategic Focus

Since being formally launched in 2009, community engagement remains strong. In 2021, all Linde businesses participated in employee volunteer community engagement activities, and Linde employees spearheaded 389 projects across the globe. These projects represent the efforts of approximately 457 sites. Frequently, sites collaborate on projects. In 2021, 24 percent of Linde community engagement projects were sponsored by more than one site. The incidence of volunteerism — a measure of the number of times individual employees engaged with the community — reached nearly 10,000.

The company has a healthy mix of established projects and a growing pipeline of new efforts launched to address changing needs. Approximately 5 percent of projects have continued for more than 10 years, and more than half—approximately 56 percent of projects in 2021—were new initiatives, reflecting the start of new projects, often virtual, as the world deals with the continuing pandemic. Community engagement projects are classified by focus areas: environment, health, education, diversity and general community support. These focus areas parallel the focus areas of the Global Giving Program.

See SOC (13a), SOC (13b) and EC (2).

Nearly half (47 percent) of community engagement projects are in the priority focus areas of education, diversity and environment. These support the strategic priorities aligned with the business: Education—especially STEM education—and diversity are critical to a robust, talented pipeline. As well, environmental responsibility is a key priority for the company. In addition to several climate change targets, the SD 2028 targets include targets for diversity and increased philanthropic spend in the area of environment.

Examples of company projects include:

- **Education:**  
Support to enable students' access to learning resources is a focus of many community projects. The Surface Technologies business in Indianapolis has donated educational supplies to students and teachers at the nearby school. As well, HyCO team members in Clear Lake, Texas, sponsored a STEM camp for students in the Houston area.
- **Diversity**  
MLK Literacy Kits: Linde employees in the U.S. donate books annually to support literacy in honor of the Rev. Dr. Martin Luther King, Jr. holiday. Many members of the REACH employee resource group, which represents employees of African and African American heritage, participate in this project.
- **Environment**  
Teams are actively working to protect ecosystems in our communities. For example, employees from the Linde Technology Center in Tonawanda, New York, participate in the local annual Shoreline Sweep. This event mobilizes volunteers to collect litter and debris near the shoreline to protect ecosystems in Western New York. In the Bangna office in Thailand, employee teams helped to build dams in Thailand's second largest national park, Thap Lan National Park. These dams help retain water for use later during dry periods and preserve humidity in the forests. These efforts also are beneficial to local organisms.

## Sustainable Development Goals (SDGs), Linde's SD 2028 Goals and Community Engagement

Community engagement efforts seek to make a lasting impact on communities and to address enduring problems. Linde has tracked projects against the Sustainable Development Goals (SDGs) for the past several years.

Linde's Community Engagement Program supports the SDGs. Approximately 87 percent of the community engagement projects addressed specific SDGs. These foci also reflect congruence with Linde's priority areas, focusing on development in the areas of environment, diversity/inclusion and education.

Several programs contribute to SDG 8: Decent work and economic growth (to achieve decent work and employment for men and women by 2030) and its subsets. The company's SKILLS PIPELINE™ workforce development program is directly tied to the SDG for decent work and economic growth (to achieve decent work and employment for men and women by 2030). In 2016, the program was expanded from the Louisiana inaugural effort to China. In 2017, the program was expanded to Indiana in the area of advanced manufacturing. In 2018, the program was further expanded to other geographies in welding. In 2019, the program expanded to professional truck driving, in a program focused on transitioning soldiers. The program saw the graduation of the one hundredth soldier at the end of 2021.

In addition to the driving program, with the help of collaborating colleges, two other programs continued during the pandemic in 2021: First, the program's offering for dual-credit students in East Chicago, IN, which provides an early start to college and preparation for careers in production maintenance technology, continued into 2021, graduating the first class. In addition, the advanced manufacturing program in Danbury, CT, welcomed a second cohort. In 2022, Linde looks forward to further geographic and skills area expansion for this program, including programs in Western New York and California.

### Recognition and Incentives to Grow Impact

Enthusiasm for community engagement is complemented by Linde's global award for Community Engagement. Introduced in 2009, this recognition from Linde's CEO honors successful efforts that demonstrate a high level of commitment and impact. In 2021, exemplary projects from each business or region were recognized, along with five global winners. Award-winning project teams are honored and receive a significant charitable donation. Projects are recognized for outcomes as well as strategic alignment with company goals.

Charitable awards, when possible, are designated to the original beneficiary organization to enable the project teams to deepen their efforts, and, ultimately, to increase the impact on communities.

### Strategy

Three strategic elements for community engagement are deepen, engage and drive.

- Deepen  
Community need is a primary driver of community engagement.

Projects are dictated by the needs of local communities combined with the desire and ability of local project teams to help address these needs. Linde community engagement is a proactive outreach to help build community resilience. In order to facilitate needs assessments, the company has conducted training on incorporating community needs assessments when determining projects, and guidance for needs assessments is included in the community engagement reporting tool.

Sites are encouraged to build strong relationships with local communities. In order to identify and meet local needs, community engagement is frequently conducted with partners, including local government agencies, suppliers, customers and community groups. These partnerships help deepen and extend the ability to help build resilient communities.

- Engage  
Community engagement is considered a leadership activity and is initiated by volunteers. It is also a way to increase awareness of community needs.

Linde often incorporates community engagement at company-sponsored meetings and conferences, and the company uses these events to develop employee skills and company networks; the company has done so formally since 2012. With the support and participation of business leaders, these events continue to spur additional community engagement participation in locations around the globe.

A hallmark of engagement at Linde has been the annual Earth Week celebration. In place formally since 2012, Earth Week is an opportunity for employees and teams around the world to engage in personal and corporate acts of environmental responsibility, mirroring the culture at Linde every day.

Projects often involve community activities, including tree planting, roadside clean-ups and school educational events. Employees also share individual environmentally friendly acts. Linde's Global Giving Program then "matches" each act with a donation.

The 2021 Earth Week celebration at Linde reflected the Earth Day Network theme: Restore Our Earth. Due to the continuing COVID-19 health crisis, the focus of participation shifted from local activities and projects to online support and virtual activities related to education and the environment, as well as other community support. Thousands of employees worldwide participated in Linde's Earth Week celebration. These voluntary actions resulted in donations to Seed Programs International, supporting up to 75,000 pounds of vegetables in areas where hunger is a pressing concern.

Linde's Earth Week past donations have supported irrigation and gardening projects with the AMDAE organization in Colombia (Asociación Mutual para el Desarrollo integral de la Afrocolombianidad y el Empresarismo). The goal of the project is to help integrate displaced members

of the Afro-Colombian community into their new homes in other parts of Colombia. The goal of the farm is to house, feed and economically support 40 people. They integrate knowledge and customs from their past into modern farming techniques. The farm is a cultural learning center available to all Colombians. The model farm shares all aspects of Afro-Colombian culture with the general community.

Such programs not only have social impact, but also environmental impact. They also support Linde's strategic goal to engage employees.

In addition to the camaraderie, community engagement also helps to develop leadership and other beneficial skills for all employees. Employees participate in design contests for museum exhibits and help to build skills by organizing activities in local communities. Employees continue to affirm the value of time spent in these activities, and community engagement has been cited as a factor that contributes to choosing to join Linde for employment.

Employees also direct much of the spending from Linde's Global Giving Program. Through matching gifts and employee volunteer grants, the Global Giving Program helps employees benefit charities in their communities. About 12 percent of the Global Giving Program is employee-directed. The matching gifts program also includes countries outside of the U.S.

- Drive

Driving impact through community engagement is the third main strategic objective.

Along with employee-led efforts, Linde's corporate-led community engagement efforts work to confirm its mission and align with business drivers through strategic initiatives, especially in the STEM fields. These programs directly help to increase the number of skilled men and women in the workforce. In addition, both illustrate that the Linde community engagement program and Linde's Global Giving Program work hand-in-hand.

The skills gap comprises problems for many stakeholders:

- Workers: Lack of preparedness for the underemployed and unemployed
- Colleges: Disconnects between training and industry expectations
- Industry: Increased cost or project delays due to training or retraining

In certain programs, students also earn college credit, allowing students to stack credits transferable to degree programs, in addition to gaining industry-relevant credentials and exposure to potential employment opportunities.

The SKILLS PIPELINE program offers a multi-faceted approach to workforce development, including community awareness campaigns, scholarships to provide training for skilled workers, professional development opportunities, support to increase the skills of incumbent workers and instructorships for teachers.

In 2021, Linde also saw the graduations from workforce development efforts, including transitioning soldiers in the company's SKILLS PIPELINE workforce development program in driving. Some of these graduates have found a place in industry post-transition, and some are working for Linde businesses, demonstrating the ability of programs such as those in the SKILLS PIPELINE family to address the skilled-crafts gap that exists in industry.

In 2022, the company is considering expansion to other skill areas critical for Linde, and to more geographical locations outside of the U.S.

Linde has supported schools and training centers for welding technology outside of the U.S., especially in regions with low levels of average income, by providing the necessary equipment and expertise. Such programs contribute to improving local living conditions and enhancing equal opportunities.

## Community Input

With a presence in approximately 100 countries, Linde is, at its core, a "local" company. As the company is a member of numerous individual local neighborhoods, communities are one of its relevant stakeholders. For the process for determining Linde stakeholders and engaging those stakeholder groups see the section commencing on page 35. Linde integrates their feedback into its process to determine priority factors, key performance indicators and the company's SD 2028 targets.

Community relations begin with the initial entry into a new area, and the company continues to be part of the neighborhoods where its facilities have a presence and where its team members live and work. Being a good neighbor includes not only understanding community needs to set up or volunteer in suitable community engagement activities but also to communicate crucial information, and to listen to and consider opinions, questions and concerns.

In its Responsible Care Global Policy, the company defines general guiding principles regarding communications with external stakeholders like communities and procedures to periodically assess their questions and concerns, implement suitable communication processes and measure performance. The policy also provides the responsibilities for business heads and operations heads, accordingly. Linde communicates information about product hazards and safe handling, safety, health and environmental programs and performance, as appropriate. This also includes sharing emergency preparedness plans with community representatives. The effectiveness of the company's stakeholder communications programs is evaluated regularly. As for all other stakeholders, the company's standard of responsible behavior towards communities is confirmed by Linde's Code of Business Integrity. Formal ways to contact Linde can be found on the website, for both email and phone inquiries.

Linde employees and teams pay close attention to local needs through activities, such as joining community committees, attending local town meetings, providing public safety awareness, hosting educational community events and engaging with relevant nonprofit and/or community organizations. Linde hosts community informational events in neighborhoods near operations and builds close relationships with local providers of emergency services.

Community events are often a part of workforce development programming as well as engagement between businesses and neighborhoods. In addition, the company's pipeline business has frequent events to educate the community about the business and the importance of safety.

As part of the continuing focus on community relations and as part of its SD 2028 goals, Linde has committed to including community needs considerations in 100 percent of its large engineering projects. Activity begins in 2022. The Community Impact Assessment is made by the business and project execution teams during the planning of new and/or significant expansions of Linde sites. It includes a discussion with key stakeholders in the community, which may include representatives from municipalities and community organizations; understanding community needs; and a proposal of potential ways to address these community needs and bring positive impact, especially through social, educational or environmental initiatives.

#### **Assessment of Impact: Starting with Need... Ending with Impact**

Linde assesses the short- and long-term impacts generated by its philanthropic activity. By understanding community needs and how the company can best help address them, impacts are anticipated at the beginning and then measured at appropriate times during projects. The company assesses the impact of its Community Engagement and Global Giving Programs and performs environmental impact assessments.

## Community Engagement Impact Assessment

# IMPACTS OF COMMUNITY ENGAGEMENT PROJECTS ON

## EMPLOYEE VOLUNTEERS



**90%**

helped increase employees' interpersonal development

**86%**

increased employees' awareness of community needs

**84%**

positively impacted employees' outlook on Linde

**82%**

contributed to employees' personal growth

**78%**

increased employees' management effectiveness

**51%**

helped employees develop workplace-transferable skills

## COMMUNITY



**91%**

positively impacted beneficiaries' quality of life

**87%**

helped beneficiaries develop positive attitudes

**71%**

developed beneficiaries' skills or personal growth

## LINDE



**85%**

promoted positive employee engagement

**86%**

positively impacted Linde's reputation

**35%**

actively engaged Linde's customers

Impactful projects are the goal of all community engagement efforts. Linde's most recent Sustainable Development Materiality Assessment (SDMA) identified community engagement as a priority for Linde and its stakeholders. Goals and targets are developed and maintained based on the SDMA, managed and reported in the SDMS and published in this report, the 2020 Sustainable Development Report and in the annual Community Engagement Brochure. Linde's strong culture of execution complements its efforts to measure the impact of community engagement. As in prior years, Linde measures and reports the social and environmental impact and outcomes, as well as the employee and company benefits, of community engagement based upon a methodology developed by the United Kingdom-based LBG report, *Making a Difference*.

Before the start of community engagement efforts, project teams focus on desired outcomes from the projects. At the conclusion of each project, the teams measure benefits, as reported by volunteers and/or beneficiaries. Increasingly, third parties help to validate project benefits.

- Inputs

Inputs are measured by the number of hours, number of sites participating and incidence of volunteerism. Results in 2021 reflect the decreased activity in light of the pandemic compared to recent years, but increasing from 2020. Participation grew from 2020, as well as incidence of volunteerism. See SOC (14).

- Outputs

Outputs are measured by the number of beneficiaries, money raised and goods donated. Linde volunteers brought direct benefits to approximately 250,000 people, including approximately 100,000 students. Results in 2021 reflect the decreased project size in light of the pandemic. See SOC (15).

Additionally, projects reported funds that employees and facilities raised or donated in support of community engagement. In addition to funding from the Linde Global Giving Program, employees and facilities raised or donated more than \$2.8 million in cash and in-kind donations, including food, clothing, trees/seedlings and other forms of in-kind support. This contribution included approximately \$2.4 million in cash contributions from employees and facilities. As a part of efforts to continually validate the program, the cash component of this reported contribution was independently verified by an external party for 2021.

- Impacts



Key impacts are reported as benefits to project recipients, employee volunteers and to the company. Linde has compared the performance of these metrics over time and continues to see a positive impact overall. Trends seen in 2021 are due to the change in the type of volunteerism projects as well as reporting challenges due to the global pandemic. Projects are increasingly virtual, with smaller teams as employees continue to find creative ways to address community needs. See SOC (16).

- **Beneficiary Benefits**

In 87 percent of projects, volunteers reported that community engagement created a positive impact on the attitudes of recipients. In 71 percent of projects, volunteers reported that community engagement provided recipients with job skills or opportunities for personal growth. In 91 percent of projects, volunteers reported that community engagement had a direct impact on the recipients' quality of life.

- **Employee Benefits**

In 82 percent of projects, volunteers reported that community engagement helped to increase their own personal growth and effectiveness. In 90 percent of projects, employees reported that volunteering helped increase their interpersonal development. In 78 percent of projects, volunteers reported that community engagement helped to increase their management effectiveness. Further, in 51 percent of projects, employees reported learning and/or developing skills that were transferable to the workplace.

Community engagement affects how employees view both Linde and their communities. In 84 percent of projects, volunteers reported that community engagement positively impacted their outlook on Linde and/or their job. In 86 percent of projects, volunteers reported that community engagement gave them a better awareness of the community.

- **Company Benefits**

Benefits to Linde are measured in terms of increased engagement with customers and employees and impact on reputation. In 35 percent of projects, volunteers reported that the community engagement projects gave the opportunity to engage with customers. In 85 percent of projects, volunteers reported that community engagement helped to build employee engagement.

The impact on reputation is also assessed separately: In approximately 69 percent of projects, volunteers reported that community engagement projects were likely to increase awareness of Linde. In more than half of these instances, teams reported that third parties have provided validation of their efforts or the positive impact of their project(s).

Longer term, Linde assesses the impact on multiple stakeholders from signature efforts. Considered impacts are both qualitative and quantitative. For example, students who have participated in the company's SKILLS PIPELINE program have reported high levels of preparation and increased quality of life and self-sufficiency.

Linde has seen increased engagement with customers and suppliers, and, ultimately, available skilled talent to meet current demands for workers. It is truly a win-win.

### **Building Communities... Building Leaders**

Community engagement programs often give employees opportunities to build leadership and other skills such as project management. Prior voluntary offerings at Linde included training where employees can learn more about voluntary board service and the multiple skills offered through such experiences. Several employees have expressed interest or have joined non-profit boards after attending such training, increasing engagement with the community.

### **Community Impact... Business Impact**

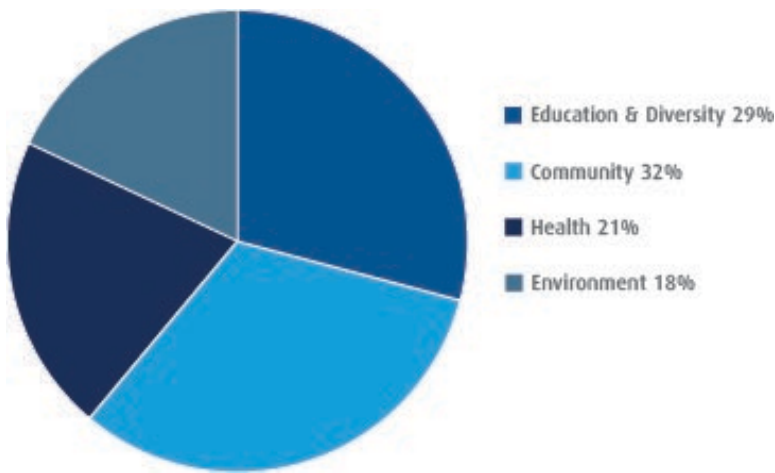
Linde has seen increased engagement with customers and suppliers, and, ultimately, available skilled talent to meet current demands for workers. Graduates from the company's SKILLS PIPELINE program have been hired by Linde, its customers and other members of industry. Graduates leave the program with industry-recognized credentials. The program also introduces skills to diverse populations, including women and veterans. The program is marketed broadly across the community at large, increasing awareness of opportunities to those who may be historically represented in career fields. For example, the graduating classes for the welding programs in Louisiana included a significant number of women graduates: The first graduating class in Louisiana was comprised of approximately 21 percent women. The second class, which graduated in 2017, was comprised of approximately 17 percent women. The East Chicago cohort, which graduated in 2021, was comprised of a majority of first-generation college students.

**Global Giving Impact Assessment**

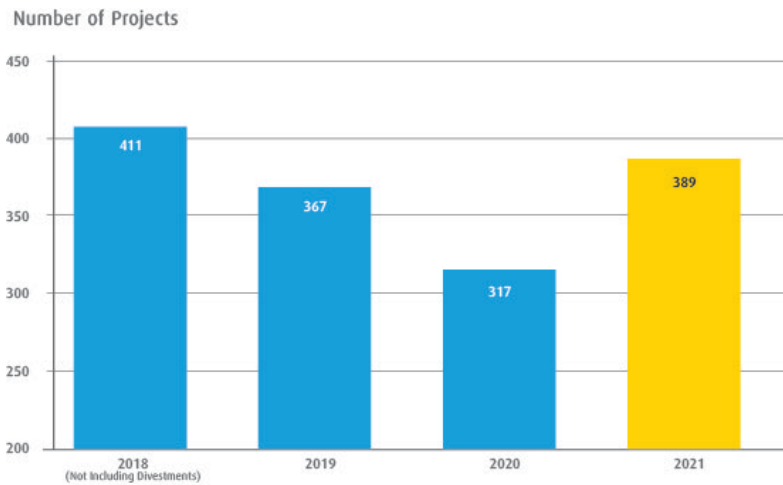
Since 2014, the company's Global Giving Program has strategically performed impact assessments, also based upon the LBG methodology. Large contributions above a predetermined threshold and long-term contributions are assessed to ensure that outcomes have been achieved. The result of such assessments is annually reviewed by the Global Giving advisory board.

**Environmental Impact Assessment**

Community impact is a broad consideration at Linde and extends beyond employee philanthropy. Environmental impact assessments are performed in advance of all Linde capital investments. Plant leadership often participates in town meetings to provide information and answer questions. Ongoing monitoring is provided through Linde's cycle of safety and environmental internal assessments. Linde continues to consider ways to further reach and align with local communities.

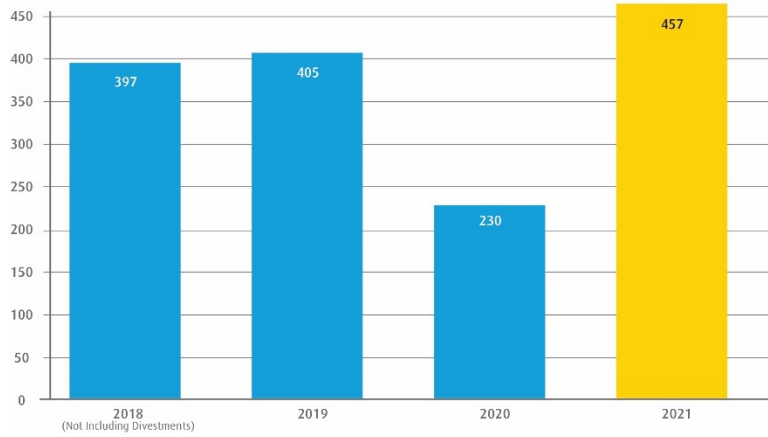


SOC (13a): Community Engagement Projects by Focus Area

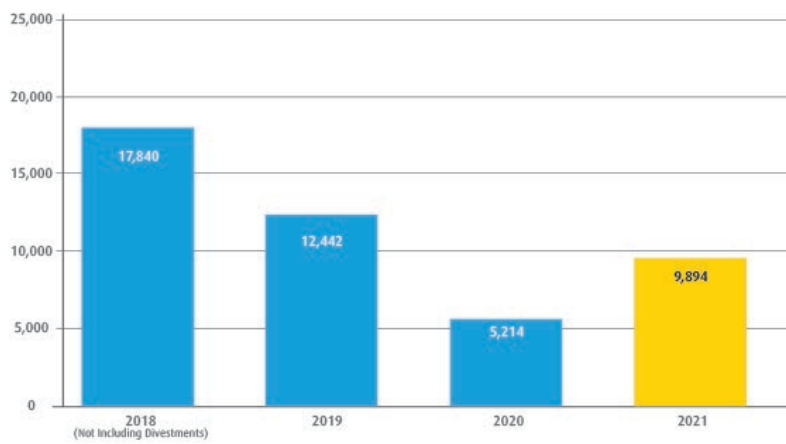


SOC (13b): Number of Community Engagement Projects

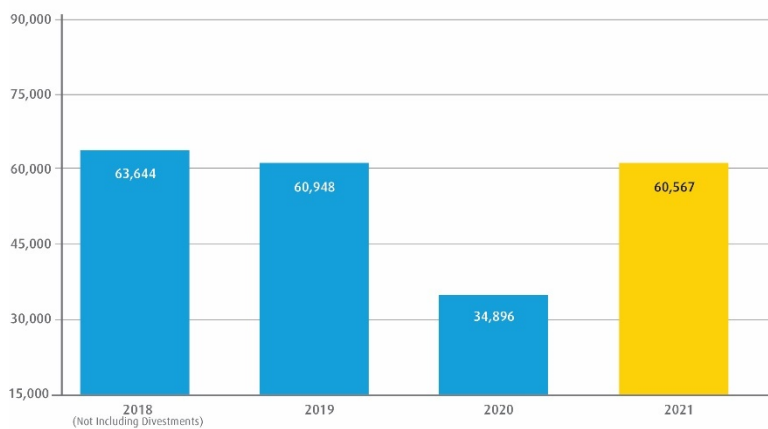
## Number of Sites Participating



## Incidences of Volunteerism

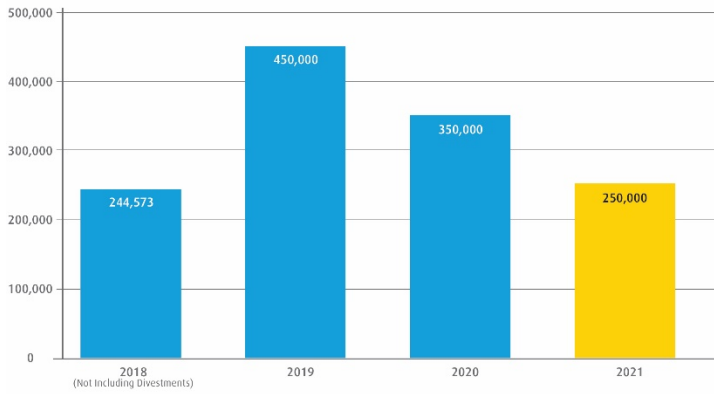


## Hours of Volunteerism by Employees

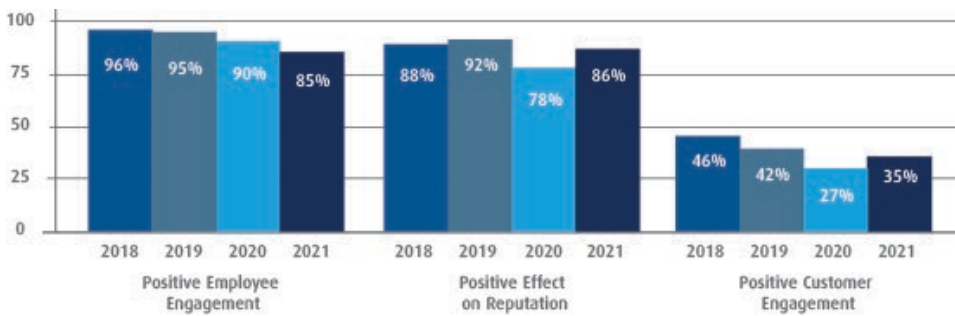
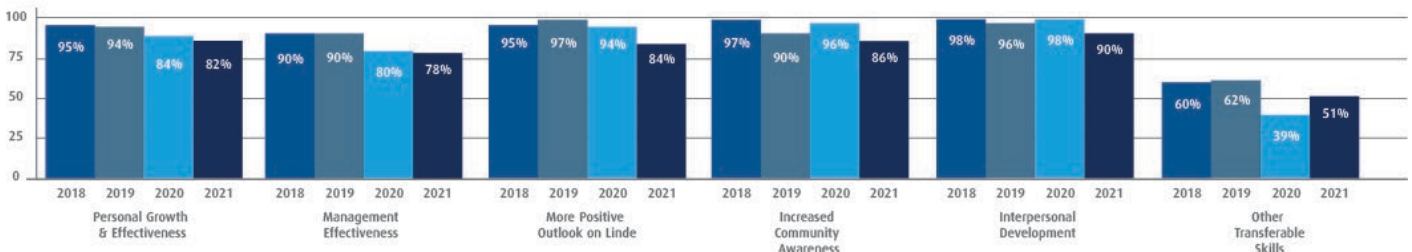
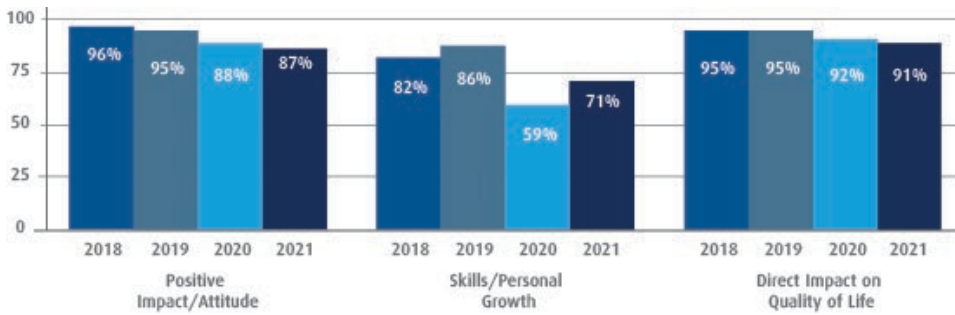


SOC (14): Community Engagement Projects Inputs

Number of Beneficiaries



SOC (15): Community Engagement Project Outputs



SOC (16): Community Engagement Project Outcomes



### 413-2 Operations with significant actual and potential negative impacts on local communities

Linde is unaware of situations where it has had a negative impact on local communities. The company exercises great care to ensure that its investments in local communities are positive and that local communities perceive the company as a safe place to work and as a good employer. Linde has had no reports of significant potential or actual negative impacts on local communities. Rather, community engagement efforts have demonstrated tangible positive outcomes. See 413-1.

Tree planting projects around the globe, such as those conducted by Linde teams in Seoul, not only help to beautify areas but also combat erosion. In 2021, Linde teams planted more than 30,000 trees through community engagement efforts.

Linde's pipeline community education events, STEM programs and workforce development programs are examples of the ways that Linde aims to make positive, relevant impact in communities. Programs also provide opportunities to develop skills and increase quality of life. Notably, Linde's SKILLS PIPELINE workforce development program presented new opportunities to community members traditionally underrepresented in some career fields, for example women in welding. Through the workforce development program in commercial truck driving, soldiers exiting from the military gain skills and credentials before they transition to civilian life.

Linde conducts community events in many neighborhoods, including those near its pipelines. Linde's pipeline safety team typically joins industry peers, traditionally co-hosting approximately 30 such events each year. These help to introduce communities to the importance of safety and to increase familiarity with the industry, facilities and products.

The company's SKILLS PIPELINE workforce development program is indicative of this collaboration with local communities as well as other members of industry, academia and/or government. These programs are intended to have positive economic impact for communities and for individuals and have been well regarded by legislators, industry groups and academic leadership as offering a creative solution to address a recognized need.

These programs build communities by providing resources that potentially impact long-term quality of life. Many projects also help to address basic needs in the community, such as food insecurity. In Tonawanda, New York, for example, team members volunteer over their own lunch breaks to deliver food to elderly, homebound members of the community.

The company's teams also work with local communities as they enter new geographies. As part of its SD 2028 goals, Linde has a target to include community needs assessments in 100 percent of new, large execution projects, with pilots starting in the Americas.

Plant leadership often participates in town meetings to provide information and answer questions, and new projects are often an opportunity to learn about and help address community needs. Linde Engineering has increased engagement for several years, working cooperatively with communities to establish new schools. These types of needs assessments and conversations continue to formalize.

Additionally, charitable funds, in-kind donations and resources contribute to the overall positive impact on local communities. In 2021, these included:

- Cash contributions from the Global Giving Program: \$9.7 million
- In-kind donations raised and donated, including food, clothing, seedlings, product donations and other, but not including cash raised or donated: \$2.1 million (including approximately \$400,000 through the Community Engagement Program and an additional \$1.7 million through the Global Giving Program representing product donations such as Linde gases.)
- Approximate value of service by Linde volunteers: \$800,000
- Approximate value of management support/overheads: \$500,000, including fees paid to external organizations for vetting and processing organizations, included in cash contributions above, as well as an approximation of the staff time to manage the Global Giving and Community Engagement Programs. (Note: Programs are internally managed; Linde does not charge overhead to these programs.)



### 414-1 New suppliers that were screened using social rights criteria

Suppliers are key to Linde's ability to meet its customer needs. One hundred percent of new suppliers are screened at the prequalification stage for social issues, including compliance with labor and employment laws, ethics and integrity, safety, human rights, environmental aspects and financial stability.

For qualification, suppliers and contractors must agree to ensure compliance with their contractual commitments and Linde's CBI and Supplier Code of Conduct, including its Human Rights commitments therein, or demonstrate a comparable commitment to business integrity and human rights via their own policies.

The company's supplier agreements routinely include language that require its suppliers to obey international conventions and national and regional statutory requirements in the countries in which they operate, including any applicable national laws regarding human trafficking, forced labor and other forms of modern slavery. It is currently developing standard language for terms and conditions, which will be included, where applicable, in future contracts. The Procurement organization regularly discusses these expectations with suppliers upon qualification contracting and during any audits conducted, including for 100 percent of critical Tier 1 suppliers.

The executive management team communicates with the company's top-tier suppliers annually to reinforce its commitment to its policies and to remind suppliers of their obligations in contracting with the company. In particular, the executives reaffirm that the company expects business dealings with suppliers to be based on fairness, honesty, lawfulness, safety, environmental stewardship and social consciousness. It continues to assess the effectiveness of its strategy and, where appropriate, adopt policies and practices that improve its program.



### 414-2 Negative social impacts in the supply chain and actions taken

Suppliers are assessed for social impacts broadly defined, including safety and compliance, which are included within Linde's basic operational policies and procedures. In the areas that are integral to these operational policies and procedures, such as safety, integrity and compliance, labor standards and anti-discrimination, issues such as non-compliance and remediation are dealt with on an ongoing basis, and no additional action is required. For steps taken regarding potential suppliers of materials from conflict zones; see below.

#### Due Diligence

Linde's Human Rights Due Diligence Process is summarized in Table SOC (17). [414-2](#)

This process is informed by the UN Guiding Principles Reporting Framework. For policies and commitments, see 103 (social), 406-1, 207-1, 408-1 and 409-1.

A set of human rights risks relating to contractors relate to Linde's CBI and SHE Policy (safety, non-discrimination, ethics and integrity). As with employees, well-established processes assess and address these contractor risks, and mitigation action, if and where required, is taken. One hundred percent are assessed on a planned schedule through Linde Procurement and through SHEQ internal audits.

Process to identify and assess salient human rights risks

Linde uses four tools to identify, review and assess potential human rights risks across the company's own operations, its contractor operations and the operations of its JVs, including those over which it has no management control:

1. Internal global Business Risk Assessment process

Country management and functional leaders participate in quarterly enterprise-wide global risk assessments. In 2021, human rights as a specific topic was not identified as a top risk, directly or indirectly, nor was it so identified in the last several years.

2. Continuous review of emerging regulatory issues in human rights

The CCO, together with the businesses and the VP, Sustainability, have the responsibility to stay current with emerging regulations in the area of human rights. In 2021, Linde reported, as required by regulation, to comply with the disclosure requirements of the U.S. SEC Conflict Minerals and the EU CSR Directive/Irish Regulation, which includes a request for information about human rights. The latter was provided in Linde's 2021 Director's Report and Financial Statement.

### 3. Linde's Compliance Review Board (CRB)

The CCO oversees compliance with the CBI and related policies, including human rights. The CCO coordinates activity with business CRBs and with senior management to oversee emerging regulatory issues, review hotline reports and take appropriate action. If these reviews indicate an emerging potential risk, proactive measures are put in place.

Linde's CRB reviews information supplied to the Integrity Hotline monthly at the business level and each quarter at the corporate level (including the CEO, General Counsel, CHRO and other members of the Executive Leadership Team and the CCO, the head of Internal Audits and the vice president and controller).

In 2021, there were 523 reports to the Linde hotline, of which none related to potential human rights issues (which would be listed within concerns about "Other Policy Violations"). See Linde's Integrity Hotline Reports at: <http://www.linde.com/about-linde/sustainable-development/reporting-center/hotline-reports>. No reports were made about potential human rights concerns to the hotline from internal or external parties, and Linde has no knowledge of systematic discrimination by Linde employees against Linde colleagues or third parties (e.g., potential recruits, suppliers, customers) or potentially vulnerable groups (e.g., children, indigenous people, migrant labor or local communities) on the basis of race, color, religion, gender identity or expression, political opinion, national origin, age, disability, veteran status, pregnancy or sexual orientation, and it has no knowledge or reports of unfair compensation or hours of work, lack of access to a safe and sanitary work environment, restrictions on the right to choose or not choose employee organizations, or the use of child, compulsory or forced labor. All of these areas are protected under Linde's CBI.

The CBI prohibits any form of retaliation against any individual for good faith reporting what he/she believes to be non-compliance with this policy to his/her management, to the appropriate staff group or to the confidential Linde Integrity Hotline. Individual cases of misconduct are promptly investigated. Linde does not tolerate verified misconduct: appropriate measures are taken, up to and including dismissal. Reports to the hotline are reviewed locally by the business CRBs and by the corporate CRB.

The Linde CRB identifies human rights as a potential issue in its hotline classifications, among "Other Policy Violations." In 2021, Linde reported 44 substantiated incidents of "Other Policy Violation;" none was a human rights issue. If any issue was to arise and be substantiated, it would be managed in the company's standard process. Substantiated violations of the CBI are escalated to the Executive Leadership Team and are subject to a root cause analysis. In such cases, a corrective action plan is implemented.

### 4. Linde annual review of emerging country-level human rights risk

As part of an annual process, the VP, Sustainability, reviews trends in human rights risk on a country basis in countries where Linde operates. Groups that are specifically assessed include Linde employees, suppliers, third-party contracted labor and children/adolescents, women, migrant and minority populations. The VP, Sustainability, reviews material in the media and annual human rights reports issued by the U.S. Department of State (DOS). In 2019, this review was expanded to include all Linde countries. For 2021, it was determined that these reports did not indicate new human rights risks, and no new action was taken.

## Human Rights Risk — Assessment

There is concern that a small portion of suppliers, or their suppliers, including Linde's Surface Technologies business and the company's engineering business, could be sourcing materials from "conflict zones" where there is a risk of human rights violations.

- **Conflict Minerals in Electronic Materials:** Based on Linde's commitment to governance, compliance and human rights, the most salient human rights issue associated with Linde activities and business relationships is the issue of potential "conflict minerals" in its supply chain. Certain minerals (including tin, tantalum, tungsten and gold) have been linked with funding killings, violence, rape and other human rights abuses in the Democratic Republic of Congo and other conflict zones. These affect all citizens in these regions, particularly women, children and adolescents.

Linde has determined that approximately 13 percent of its 2021 consolidated sales relate to products that Linde manufactures or contracts to manufacture that may contain necessary conflict minerals. To mitigate potential human rights violations in the "conflict minerals" supply chain, Linde's due diligence process conforms, in all material respects, with the framework set forth in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Guidance) and the related supplements for gold, tin, tantalum and tungsten.

Linde has adopted a Conflict Materials Supply Policy. This policy is available on Linde's website at <https://www.linde.com/-/media/linde/merger/documents/global-procurement/linde-conflict-free-materials-supply-policy.pdf?la=en>. Linde's due diligence process

includes monitoring the performance and continual improvement of its suppliers, and, where relevant, with their suppliers, and reporting to the U.S. Securities and Exchange Commission (SEC), on Linde's website at: <https://irpages2.eqs.com/websites/lindeplc/English/3210/us-sec-filing.html?shortDesc=Specialized%20Disclosure%20Report&format=html&secFilingId=c95d0563-d23d-4065-97b1-fbcbe8460328>.

Linde continues to work with these suppliers to ensure conformance with its policy and standards and with applicable law.

- **Slavery in Supply Chain:** Linde has policies in conformance with country regulation. For example, in the UK, Linde has published a policy in conformance with The U.K. Modern Anti-Slavery Act of 2015 that reiterates its "opposition to the use of all forms of child, compulsory or forced labor at our operations and establishes the expectation that our business partners, suppliers and contractors will demonstrate similar intolerance for such practices."
- **Sex Trafficking on Truck Driving Routes:** Linde works with major NGOs active in this area to train its network of employee and contractor truck drivers to help mitigate this crime. Voluntary action is ongoing in Brazil, U.S. and Canada, and in 2019, was extended to Mexico.

### **Monitoring, Communication and Training**

Regular reviews are conducted across all regions to confirm that processes are set up to ensure compliance with corporate policies, including human rights, compliance, safety and employment, and labor standards. Many of these themes fall under regular Linde management and are managed through those functions. Current procedures in place would allow for up to termination (for employees) or discontinuation of contracts (for suppliers), if any confirmed human rights violations were found. See 404-1 for a description of training and other programs to reinforce compliance, safety and fair labor practices.

### **Human Rights Grievances**

To Linde's knowledge, in 2021, there were no grievances related to human rights filed through formal organizational grievance mechanisms by individuals or groups, internal or external, to the organization and none through the Integrity Hotline.



Coverage	Policy & Due Diligence Process Action Plans	Remediation Activity
Employees - compliance and safety in offices and operations	<ul style="list-style-type: none"> <li>CBI (2): Adherence is required by employees; employees are trained annually and certify acknowledgment.</li> <li>Health, Safety and Environmental Policy (1): Through ongoing training of employees and contractors and regular auditing of health and safety management, the company ensures that the requirements for health protection and safety precautions are systematically and sustainably implemented in its processes.</li> <li>Compliance, HR, SHEQ and business management ensure compliance with uniformly high safety standards and initiate necessary guidelines, strategies and programs.</li> </ul>	<ul style="list-style-type: none"> <li>No actions required as no issues occurred that would require measures beyond the already established mitigation plans.</li> <li>Remediation actions are integral to the Compliance and SHEQ programs.</li> <li>Linde businesses record worldwide incidents that occur. A root cause evaluation is performed, and a report provided to executive leadership and best practices shared. Multiple actions are taken to prevent repetition.</li> </ul>
Employees - labor at operations and offices	<ul style="list-style-type: none"> <li>Flexible working-time models (where possible)</li> <li>Market-rate compensation</li> <li>Wide-ranging measures to promote health and wellbeing at company sites (e.g., medical check-ups, training on stress management/ lifestyle options, availability of fitness centers).</li> </ul>	<ul style="list-style-type: none"> <li>No actions required as no issues occurred that would require measures beyond the already established mitigation plans.</li> </ul>
Employees - non-discrimination at operations and offices	<ul style="list-style-type: none"> <li>Diversity &amp; Inclusion (D&amp;I) initiatives to enhance respect and diversity, including worldwide training in the CBI, D&amp;I principles and policies, unconscious bias.</li> <li>Corporate goal established to increase the proportion of women overall and in management; monthly review with business and functional leaders and corporate management; Integrity Line (3).</li> <li>A range of avenues provided to report potential discrimination issues, including anonymously through the Integrity Line. All employees receive training in this.</li> </ul>	<ul style="list-style-type: none"> <li>No actions required as the company received no indications of human rights violations which would require measures beyond the already established mitigation plans as the company has no reports or knowledge of any systematic discrimination.</li> <li>Verified misconduct is not tolerated and will result in appropriate disciplinary measures up to and including termination of employment.</li> </ul>
Contractors & Suppliers (5)	<ul style="list-style-type: none"> <li>Where applicable, general procurement Terms &amp; Conditions (Ts&amp;Cs) (4) include Linde's Supplier Code of Conduct (SCOC). By accepting applicable Ts&amp;Cs, the supplier acknowledges Linde's SCOC and is required to comply with the SCOC (e.g., through self-assessments).</li> <li>As part of the standard documentation for all new and renewing contractors, suppliers under applicable Ts&amp;Cs must confirm conformance with the SCOC and with Linde's CBI or equivalent policies of their own.</li> <li>Contractors working at Linde plants are required to receive safety induction training.</li> <li>Linde is committed to maintaining long-term relationships with its suppliers where they contribute continued business value. Certain suppliers are audited on a planned schedule and on a broad scope. If deviations are discovered, Linde is committed to working with suppliers on remedies through capacity-building, education and training. Continued, material and/or willful non-conformance are grounds for contract termination.</li> <li>Linde may inspect or appoint a third-party inspector if it believes a supplier may be in material breach of the SCOC. Material breaches of Linde's applicable Ts&amp;Cs include, but are not limited to, incidents of forced or child labor, corruption and bribery and failure to comply with the SCOC's environmental protection requirements.</li> <li>Integrity Line (3) provides various ways of reporting potential issues for employees or third parties.</li> </ul>	<ul style="list-style-type: none"> <li>No remediation actions as the company received no indications of human rights violations that would require measures beyond the already established mitigation plans.</li> <li>In case of material breach of the SCOC, Linde's Ts&amp;Cs note that may terminate the business relationship, subject to contract conditions or other rights or legal grounds</li> </ul>
Applicable Customers	<ul style="list-style-type: none"> <li>Product safety management steers product stewardship.</li> <li>Worldwide tracking of relevant products and their application with respect to potential health and environmental impacts.</li> <li>Safety Data Sheets provided in &gt;40 languages to inform customers about relevant safety measures.</li> <li>Integrity Line (3) provides various ways of reporting potential issues for employees or third parties.</li> </ul>	<ul style="list-style-type: none"> <li>No actions required beyond the already established mitigation plans.</li> </ul>
Communities where Linde invests and operates	<ul style="list-style-type: none"> <li>Linde connects with community members by fostering activities that support community life and development, principally through Linde's employee Community Engagement activity.</li> <li>A new SD 2028 target is that the U.S. engineering organization conducts community relations outreach as part of pre-project planning.</li> <li>Integrity Line (3) provides various ways of reporting potential issues for employees or third parties.</li> </ul>	<ul style="list-style-type: none"> <li>No actions required beyond the already established mitigation plans.</li> </ul>

1) Health, Safety and Environmental (HSE) Policy: <https://www.linde.com/about-linde/safety-and-environment>  
 2) CBI: <https://www.linde.com/-/media/linde/merger/documents/corporate-governance/code-of-business-integrity.pdf?la=en&rev=404a1922cef8448ea3c9342d28d94d02>  
 3) Linde Integrity Line information is provided at: <https://www.linde.com/about-linde/sustainable-development/reporting-center>.  
 4) Linde's Procurement Terms & Conditions are available at: [https://www.linde.com/-/media/linde/merger/documents/global-procurement/linde\\_general\\_terms\\_and\\_conditions\\_of\\_purchase\\_global-master.pdf?la=en](https://www.linde.com/-/media/linde/merger/documents/global-procurement/linde_general_terms_and_conditions_of_purchase_global-master.pdf?la=en).  
 5) Additional activity and reporting are provided for potential suppliers of materials from conflict zones. This is reported annually in Linde's Form SD and in its Sustainable Development Report, both posted on Linde's website at: [www.linde.com](http://www.linde.com).



## 415-1 Total value of political contributions by country and recipient/beneficiary

Linde does not make any political contributions as a company, neither to political parties nor candidates.

In the U.S., employees have formed a political action committee (PAC). Under the umbrella of this independent registered committee, employees collect donations to politicians, political parties and associations and make their own decisions as to how the funds will be used. The PAC Executive Committee has broad employee representation and approves all political contributions made on behalf of the PAC. The Linde PAC is governed by a series of internal policies and adheres to a strict set of by-laws. Following the merger, the PAC for Linde GmbH (previously Linde AG) North America was terminated in 2019, and all activities were conducted through the Praxair PAC, which is now the Linde PAC. In 2021 to the beginning of 2022, total PAC contributions totaled \$19,000 to local, state and federal candidates for elected office representing both political parties. (Scope: U.S., not including Lincare, which has a separate PAC with disbursements of approximately \$15,000 in 2021.)

Policy-related data reported below includes: contributions to political campaigns (from the Linde PAC), as well as Linde's contributions to trade associations, tax-exempt organizations and lobbying firms. In 2021, the total contribution was approximately \$3.3 million, of which more than half was for trade associations and tax-exempt organizations. See SOC (18) and SOC (19).

There was no spending on ballot measures or referendums. Political contributions receipts and disbursements are reported in detail and disclosed publicly. This detail can be found on the U.S. Federal Elections Commission website at: <https://www.fec.gov/data/committee/C00283440/?cycle=2022>.

Linde's political contributions policy is provided at: <https://www.linde.com/-/media/linde/merger/documents/compliance-policies/political-contributions-lobbying-policy.pdf?la=en>.

### Public Advocacy Issues

The two largest public policy advocacy issues for 2021 were medical oxygen access in response to the COVID-19 pandemic and the promotion of hydrogen as a substitute for fossil fuels.

#### Priority: Medical oxygen access in response to COVID-19

Healthcare system and patient access to medical oxygen is a key priority, and healthcare represents a significant portion of Linde's business, approximately 19 percent of revenue in 2021.

Linde's products contribute positively to the health and wellbeing of our customers. Homecare and hospital patients worldwide benefit from our medical gases, devices, services and therapies, especially in respiratory care. For example, during the COVID-19 pandemic, Linde medical oxygen was crucial to healthcare responders and their patients in many of our countries. For example, in the U.S., Lincare is a leading provider of home respiratory-therapy products and services, serving approximately 165,000 patients at home during the pandemic. As COVID-19 overwhelmed healthcare facilities around the world, our local teams took extraordinary measures to deliver essential medical oxygen under challenging conditions, and the company's efforts to provide supply have been recognized by external parties.

#### Priority: Hydrogen as a Substitute for Fossil Fuels

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.

Linde is a global leader in the production, processing, storage and distribution of hydrogen. It has the largest liquid hydrogen capacity and distribution system in the world. The company also operates the world's first high-purity hydrogen storage cavern, coupled with a pipeline network of approximately 1,000 kilometers to reliably supply its customers. Linde is at the forefront in the transition to clean hydrogen and has installed more than 200 hydrogen fueling stations and 80 hydrogen electrolysis plants worldwide and includes decarbonization investments within its SD 2028 targets.

Decarbonization is a priority for Linde, with the goal of investing more than \$1 billion investment 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.

See Leading the Transition to Low Carbon Energy and the Performance Against Targets chapter for more details.

415-1

**Trade Associations**

In addition to reporting political contributions, Linde also reports on trade associations in which the company is a member. See 102-13.

Two of the largest trade associations in which the company is a member include the American Chemistry Council and Compressed Gas Association.

**Political Contributions**

	2018 Praxair	2019 Linde	2020 Linde	2021 Linde
Political Contributions (USD)	0	0	0	0

SOC (18): Political Contributions

Units: USD

**Policy-Related Spending**

	2018 Praxair	2019 Linde	2020 Linde	2021 Linde
Employee Contributions from PAC	\$72	\$13	\$19	\$10
Expenses for Memberships in Trade Associations and Tax-exempt Organizations* and Lobbying Firms	\$1,528	\$1,487	\$3,809	\$3,329
<b>Total</b>	<b>\$1,600</b>	<b>\$1,500</b>	<b>\$3,828</b>	<b>\$3,339</b>

SOC (19): Policy-Related Spending

Units: USD, thousands

\* Includes policy-related portion of membership only

**416-1 Assessment of the health and safety impacts of product and service categories****Minimizing Product Risk**

Linde has a team of business, engineering, operations and safety professionals that examine the potential environmental, health and safety risks of every new product. The entire life cycle of the product — from raw material procurement through manufacturing, distribution, use and disposal — is reviewed. 403-7

Significant product or service categories are covered by and assessed for compliance with these procedures.

- Risk Review: Identify the potential risks in each phase of the product's lifecycle and the design features and management systems that minimize those risks.
- Product Design Safety: Consider how a product may be used or misused and identify design features that could mitigate potential hazards.
- Procurement Specification and Control: Verify compliance with purchased material requirements and specifications.
- Manufacturing Control: Establish procedures and train personnel to ensure consistent product quality within product specifications.
- Distribution and Installation Control: Establish procedures and train personnel to ensure safe product deliveries, storage and customer application.
- Hazard Communication: Communicate information on the safe use and handling of each product in a timely manner through appropriate use of Safety Data Sheets (SDSs), product labelling, product use instructions, customer training and support.
- Product Disposal: Establish procedures to identify products that are no longer suitable for customer use and refurbish, replace or dispose of them in an environmentally safe manner.
- Incident Reporting and Investigation: Report, investigate and analyze incidents involving product misuse and disposal to learn more about product risks and to take corrective action.

## Product Responsibility

Stage	Health and safety impacts of products and services are assessed for improvement at all product life cycle stages
Development of product concept	<p>Product Design Safety: Design reviews consider the ways that the product may be used or misused and include design features that mitigate associated hazards and help protect customer safety.</p> <p>Risk Review: During Linde's product risk review process, new products are evaluated to identify potential health, safety and environmental risks associated with each phase of the product's life, and to identify product design features and management systems that will adequately control those.</p>
R&D	R&D evaluates commercialization projects, from ideation to launch, for environmental and health and safety impacts.
Certification	Linde's product stewardship conforms to the RCMS and is certified to applicable sections in the standard.
Manufacturing and production	Manufacturing control procedures are established, and personnel involved in the manufacturing process are trained to help ensure consistent product quality within product specifications.
Marketing and promotion	<p>Procurement Specification and Control: The specifications for materials purchased from others are communicated to suppliers, and compliance with those requirements is adequately verified.</p> <p>Linde's program on Safety Leadership: Training, Resources, and Personal Commitment provides additional details.</p>
Storage distribution and supply	Distribution and Installation Control: Procedures are established, and personnel involved in product distribution and customer site equipment installation are trained to help ensure safe product deliveries, storage and customer application.
Use and service	<p>Incident Reporting and Investigation: Incidents involving misuse and disposal of products are reported, investigated and analyzed to learn more about product risks and, if necessary, provide a basis for corrective action.</p> <p>Hazard Communication: Information on the safe use and handling of each product, together with relevant health, safety and environmental protection information, is communicated to the customer in a timely manner through appropriate use of SDSs, product labeling, product use instructions, customer training and support upon request.</p> <p>Product Recall: Procedures are established to help ensure that products already in the marketplace can be recalled or upgraded, if necessary, when previously unidentified risks associated with those products are discovered.</p>
Disposal, re-use or recycling	Product Disposal: When applicable, procedures are established to identify products or product components in inventory that are no longer suitable for customer use and, as appropriate, to refurbish, replace or dispose of them in an environmentally safe manner.

SOC (20): Product Responsibility



#### 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services

For 2021, the company is not aware of any reported substantial incidents of non-compliance with regulations or voluntary codes concerning the health and safety impacts of products and services during their life cycle.

#### 417-1 Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements

Linde's Responsible Care Policy commits the company's organizations to "work with customers, carriers, suppliers, distributors, employees and contractors to foster the safe and secure use, transport and disposal of chemicals and provide hazard and risk information that can be accessed and applied in their operations and products."

One hundred percent of Linde's significant product and service categories have processes in place with requirements for product and service information and labelling.

- SDSs are prepared in accordance with either U.S. or European directives and are region- or country-specific. Activities required for compliance with the Global Harmonized System (GHS) for Classification and Labeling are being implemented.
- REACH and Chemicals of Concern: REACH and CLP regulations promulgated by the European Union require complete information on the chemical properties, hazard profile and uses of all products manufactured or imported into Europe. The company tracks the status of all substances that must be registered through the European Chemicals Industry Association's REACH website.

TSCA and Prioritized Chemicals: Linde is subject to and in compliance with the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which requires risk-based chemical assessments and increased public transparency for chemical information.

#### 417-2 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes

The company is not aware of a significant, incidence of non-compliance with regulations or voluntary codes concerning Linde product and service information and labeling in 2021 that would have a material adverse effect.

#### 418-1 Substantiated complaints received concerning breaches of customer privacy

Linde's CBI has a section on data protection that defines how important it is for employees to follow the law and comply with company procedures, protocols and guidelines. This issue has been strongly prioritized in recent years because of new complexities being created by the proliferation of electronic communication. Due to the high priority, policies and training are provided. Linde's 2021 10-K, pages 11 and 12, is publicly available and identifies the risk regarding information related to technology systems, network failures and breaches.

Dedicated cybersecurity teams conduct surveillance for potential threats and implement both procedural and technological controls to protect data and to ensure safe, uninterrupted operations. As well, there are training programs for employees and cybersecurity awareness programs. As far as the company can determine, there have not been substantiated complaints regarding breaches of customer privacy and losses of data for 2021.



#### 419-1 Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services

The company is unaware of any significant penalties imposed in 2021 resulting from the use of its gas products.

## Assurance 102-56

The Letter from the auditor follows on pages 111–113.



1178 Broadway, 3rd Floor  
 New York, NY 10001  
 646-499-0083  
[www.CarbonVerificationService.com](http://www.CarbonVerificationService.com)

July 5, 2022  
 (Amended July 26, 2022)

**To the Management of Linde, Inc.:**

Carbon Verification Service, LLC was engaged by Linde, Inc. to provide assurance of its global 2021 Key Performance Indicators (KPI) and other social metrics. 2021 was the twelfth consecutive year that Carbon Verification Service was retained by the company to verify its KPIs. (Carbon Verification Service was retained eight years by Praxair prior to the merger). Upon being retained, Carbon Verification Service conducted a conflict of interest review to ensure that its review would be free of bias and would be done on an independent basis. Carbon Verification Service provides only verification and auditing services to its clients, including Linde, Inc., to avoid conflict of interest concerns. Carbon Verification Service is not owned or operated by any other entity.

The objective of the verification was to provide limited assurance of the reported KPI values and to assess the accuracy, completeness, relevance, consistency and transparency of Linde, Inc.'s information and assertions. Carbon Verification Service assessed conformance of Linde, Inc.'s GHG emission inventory with The Greenhouse Gas Protocol.

The verification protocol employed for verification of Linde, Inc.'s 2021 GHG emissions was **ISO 14064-3 (2006): Specification with guidance for the validation and verification of greenhouse gas assertions**, and is consistent with the requirements for ISAE 3000. Consensus protocols for the verification of the KPI metrics, other than GHG emissions, do not currently exist. Carbon Verification Service utilized the same verification principles prescribed by ISAE 3000 to guide the verification of this data.

Carbon Verification Service, LLC reviewed selected quantitative KPIs. The verification was based on desk audits of data from 40 sites that were, as in past years, selected so as to be representative of Linde, Inc.'s global geographies and businesses. In addition, two virtual site visits were conducted at a Hydrogen plant in Leuna, Germany and an air separation unit in Bremen, Germany. (The site visits were by necessity virtual in nature due to coronavirus pandemic safety precautions). We did not review all information and supporting documentation associated with the KPIs for all of Linde, Inc.'s global locations and facilities.

Carbon Verification Service, LLC also re-verified Linde, Inc.'s 2018, 2019 and 2020 Scope 2 GHG emissions.

Linde, Inc. management is responsible for the reported KPIs and for the process of assembling the data upon which the reported KPI values are based.

Based upon the verification work performed from March through June 2022, there is no evidence that Linde, Inc.'s KPI data assertions, which appear in the table below, are not materially correct and are not a fair representation of data and information and have not been prepared in accordance with accepted standards and practice.

For Carbon Verification Service, LLC

A handwritten signature in black ink that reads "James J. Groome".

James J. Groome  
 President



1178 Broadway, 3rd Floor  
New York, NY 10001  
646-499-0083

[www.CarbonVerificationService.com](http://www.CarbonVerificationService.com)

### LINDE, INC. 'S ASSERTIONS

Linde, Inc. reported the following eKPI values:

Metric	Restated Values 2018	Restated Values 2019	Restated Values 2020	2021 Value ROUNDED	Units of Measure
GHG Emissions Scope 1				16,321,000	Metric Tons CO2e
GHG Emissions Scope 2 (market-based)	23,517,835.5	23,447,639.8	22,298,976.9	23,573,000	Metric Tons CO2e
Proportion of reported Scope 1 and 2 emissions verified				100	%
Year-over-Year Change - Scope 2 Emissions (market-based, versus previous year)				5.7	%
GHG Emissions Scope 3 - Contractor Driving				606,000	Metric Tons CO2e
Total Electricity Consumption				42,779,000	MWh
Active Renewable Electricity Consumption*	2,506,874	2,431,518	2,493,411	2,780,000	MWh
Passive Renewable Electricity Consumption*	7,868,210	8,160,665	8,533,623	9,125,000	MWh
Other Low Carbon Electricity Consumption (nuclear)*	3,617,499	3,687,152	4,263,593	5,051,000	MWh
Fossil fuel-based Electricity Consumption*	27,556,625	27,599,543	26,331,172	25,823,000	MWh
Steam Consumption				9,152,000	MWh
Non-renewable Fuel Consumption				21,012,000	MWh
Non-renewable Energy Consumption				70,163,000	MWh
NOx Emissions				12,236	Metric Tons
SOx Emissions				714	Metric Tons
VOC Emissions	1,185.44	1,157.92	1,141.23	948	Metric tons
Total Non-hazardous Waste Generated			59,627.8	47,800	Metric tons
Non-hazardous Waste Used/ Recycled/Sold			34,929	31,800	Metric tons
Non-hazardous Waste Disposed			24,698	15,900	Metric tons
Total Hazardous Waste Generated				21,500	Metric tons
Hazardous waste recycled/reused not including that which is marketable / sold				4,000	Metric tons
Hazardous waste disposed				17,500	Metric tons
Total (Solid + Hazardous) Waste Not Landfilled from Zero Waste Program				260,000,000	Pounds
Municipal fresh water withdrawal				61,700,000	Cubic meters
Fresh surface water withdrawal				386,300,000	Cubic meters
Fresh ground water withdrawal				9,150,000	Cubic meters
Fresh once-through cooling water returned to surface water sources				358,000,000	Cubic meters
Total net fresh water consumption				99,500,000	Cubic meters
Chemical Oxygen Demand				1,700	Metric Tons
Fatalities, Employees				2	
Fatalities, Contractors				2	
Employee Lost Time Injury Frequency Rate				0.25	Lost time injuries per 200,000 hours worked
Employee Lost Time Injury Frequency Rate				1.25	Lost time injuries per 1,000,000 hours worked
Occupational Illness Frequency Rate				0.003	Occupational Illness Cases per 200,000 hours worked
Occupational Illness Frequency Rate				0.013	Occupational Illness Cases per 1,000,000 hours worked
Contractor Lost Time Injury Frequency Rate				0.16	Lost time injuries per 200,000 hours worked





1178 Broadway, 3rd Floor  
 New York, NY 10001  
 646-499-0083  
[www.CarbonVerificationService.com](http://www.CarbonVerificationService.com)

Metric	Restated Values 2018	Restated Values 2019	Restated Values 2020	2021 Value ROUNDED	Units of Measure
Contractor Lost Time Injury Frequency Rate				0.78	Lost time injuries per 1,000,000 hours worked
Tier 1 Process Safety Events				0.04	Number of Events per 200,000 hours worked
Tier 1 Process Safety Events				0.2	Number of Events per 1,000,000 hours worked
Community Engagement: cash raised or donated by employees and facilities.				More than \$2.4 million	USD
Community Engagement: cash raised or donated by employees and facilities, and including in kind donations.				More than \$2.8 million	USD
Construction Contractor Lost Time Injury Frequency Rate				0.05	Lost time injuries per 200,000 hours worked
Construction Contractor Lost Time Injury Frequency Rate				0.23	Lost time injuries per 1,000,000 hours worked

\*These eKPI metrics were not fully verified; they are calculated from the verified total electricity consumption value.

## GRI Content Index 102-54, 102-55



This report has been prepared in Accordance with the GRI Standards: Core option.

For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures are included and align with the appropriate sections in the body of the report.

GRI Standard	Disclosure	Direct Answer OR Page number(s) and/or URL(s)	Omission Part Omitted /Reason / Explanation
--------------	------------	---	--

## GRI 101: Foundation 2016

### General Disclosures

GRI 102: General Disclosures 2016	Organizational profile		
102-1 Name of the organization	Linde plc		
102-2 Activities, brands, products and services	See pages 4–5 of the <a href="#">2021 Linde plc 10-K</a> at: <a href="https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en">https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en</a> . See also Sustainable Development Report, pages 8–9.		
102-3 Location of headquarters	United Kingdom (location of principal offices)		
102-4 Location of operations	See page 5 of the <a href="#">2021 Linde plc 10-K</a> at: <a href="https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en">https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en</a> .		
102-5 Ownership and legal form	Publicly traded		
102-6 Markets served	See Sustainable Development Report, pages 8 and 10.		
102-7 Scale of the organization	See pages 21 and 27 of the <a href="#">2021 Linde plc 10-K</a> at: <a href="https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en">https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en</a> .		
102-8 Information on employees and other workers	See Sustainable Development Report, Section 401-1, page 78; see also page 6 and 7 of the <a href="#">2021 Linde plc 10-K</a> at: <a href="https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en">https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en</a> .		
102-9 Supply chain	See Sustainable Development Report, page 8, as well as Section 204-1, pages 51–53.		
102-10 Significant changes to the organization and its supply chain	See pages 22–26 of the <a href="#">2021 Linde plc 10-K</a> at:		

<https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en>.

102-11 Precautionary principle or approach See Sustainable Development Report, page 12.

102-12 External initiatives See Sustainable Development Report, page 12.

102-13 Memberships of associations See Sustainable Development Report, page 38.

### Strategy

102-14 Statement from senior decision-maker See Sustainable Development Report, page 4.

### Ethics and integrity

102-16 Values, principles, standards and norms of behavior See Sustainable Development Report, page 8. See also <https://www.linde.com/about-linde/vision-mission-values>. See also pages 8 and 9 of the Code of Business Integrity at <https://www.linde.com/-/media/linde/merger/documents/compliance-policies/code-of-business-integrity.pdf?la=en>.

### Governance

102-18 Governance structure See Sustainable Development Report, page 31. See also <https://www.linde.com/about-linde/board-of-directors>.

### Stakeholder engagement

102-40 List of stakeholder groups See Sustainable Development Report, pages 35–37 and 39–40.

102-41 Collective bargaining agreements See Sustainable Development Report, Section 402-1, page 80.

102-42 Identifying and selecting stakeholders See Sustainable Development Report, pages 35–37.

102-43 Approach to stakeholder engagement See Sustainable Development Report, pages 35–37.

102-44 Key topics and concerns raised See Sustainable Development Report, pages 35–37.

### Reporting practice

102-45 Entities included in the consolidated financial statements	See Sustainable Development Report, page 12. See also pages 21 and 27, as well as exhibit 21.01, of the 2021 Linde plc 10-K at: <a href="https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en">https://investors.linde.com/-/media/linde/investors/documents/full-year-financial-reports/2021-annual-report-to-shareholders.pdf?la=en</a> .
102-46 Defining report content and topic boundaries	See Sustainable Development Report, pages 12–13.
102-47 List of material topics	See Sustainable Development Report, page 15.
102-48 Restatements of information	See Sustainable Development Report, page 13.
102-49 Changes in reporting	See Sustainable Development Report, page 13.
102-50 Reporting period	January 1, 2021 to December 31, 2021
102-51 Date of most recent report	2021 (2020 data year)
102-52 Reporting cycle	annual
102-53 Contact point for questions regarding the report	Tamara E. Brown, Vice President, Sustainability, Linde Email: <a href="mailto:tamara.brown@linde.com">tamara.brown@linde.com</a> or <a href="mailto:sustainable.development@linde.com">sustainable.development@linde.com</a> Telephone: 203-837-2201
102-54 Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option. Please see GRI Content Index on page 114 of the Sustainable Development Report.
102-55 GRI content index	Please see GRI content index, starting at page 114, of the Sustainable Development Report.
102-56 External assurance	See Sustainable Development Report, page 110.

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission Part Omitted /Reason / Explanation
<b>Material Topics</b>			
<b>GRI 200 Economic Standard Series</b>			
<b>Economic Performance</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Value, Report, pages 45–46.	
	103-2 The management approach and its components	See Sustainable Value, Report, pages 45–46.	
	103-3 Evaluation of the management approach	See Sustainable Value, Report, pages 45–46.	
<b>GRI 201: Economic Performance 2016</b>	201-1 Direct economic value generated and distributed	See Sustainable Development Report, pages 47–49.	
	201-2 Financial implications and other risks and opportunities due to climate change	See Sustainable Development Report, page 49.	
	201-3 Defined benefit plan obligations and other retirement plans	See Sustainable Development Report, page 49.	
	201-4 Financial assistance received from government	See Sustainable Development Report, page 49.	
<b>Market Presence</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Value, Report, pages 45–46.	
	103-2 The management approach and its components	See Sustainable Value, Report, pages 45–46.	
	103-3 Evaluation of the management approach	See Sustainable Value, Report, pages 45–46.	
<b>GRI 202: Market Presence 2016</b>	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	See Sustainable Development Report, pages 49.	
	202-2 Proportion of senior management hired from the local community	See Sustainable Development Report, pages 50.	
<b>Indirect Economic Impacts</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Value, Report, pages 45–46.	
	103-2 The management approach and its components	See Sustainable Value, Report, pages 45–46.	
	103-3 Evaluation of the management approach	See Sustainable Value, Report, pages 45–46.	

<b>GRI 203: Indirect Economic Impacts 2016</b>	203-1 Infrastructure investments and services supported	See Sustainable Development Report, page 50.
	203-2 Significant indirect economic impacts	See Sustainable Development Report, pages 50–51.
<b>Procurement Practices</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Value, Report, pages 45–46.
	103-2 The management approach and its components	See Sustainable Value, Report, pages 45–46.
	103-3 Evaluation of the management approach	See Sustainable Value, Report, pages 45–46.
<b>GRI 204: Procurement Practices 2016</b>	204-1 Proportion of spending on local suppliers	See Sustainable Development Report, pages 51–53.
<b>Anti-corruption</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Value, Report, pages 45–46.
	103-2 The management approach and its components	See Sustainable Value, Report, pages 45–46.
	103-3 Evaluation of the management approach	See Sustainable Value, Report, pages 45–46.
<b>GRI 205: Anti-corruption 2016</b>	205-1 Operations assessed for risks related to corruption	See Sustainable Development Report, page 53.
	205-2 Communication and training about anti-corruption policies and procedures	See Sustainable Development Report, page 53.
	205-3 Confirmed incidents of corruption and actions taken	See Sustainable Development Report, page 54.
<b>Anti-competitive Behavior</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its Boundary	See Sustainable Value, Report, pages 45–46.
	103-2 The management approach and its components	See Sustainable Value, Report, pages 45–46.
	103-3 Evaluation of the management approach	See Sustainable Value, Report, pages 45–46.
<b>GRI 206: Anti-competitive Behavior 2016</b>	206-1 Legal actions for anti-competitive behavior, anti-trust and monopoly practices	See Sustainable Development Report, page 54.

---

**GRI 300 Environmental Standards Series**


---

**Materials**

<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 56–58.
	103-2 The management approach and its components	See Sustainable Development Report, pages 56–58.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 56–58.
<b>GRI 301: Materials 2016</b>	301-1 Materials used by weight or volume	See Sustainable Development Report, page 59.
	301-2 Recycled input materials used	See Sustainable Development Report, page 60.
	301-3 Reclaimed products and their packaging materials	See Sustainable Development Report, page 60.

**Energy**

<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 56–58.
	103-2 The management approach and its components	See Sustainable Development Report, pages 56–58.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 56–58.
<b>GRI 302: Energy 2016</b>	302-1 Energy consumption within the organization	See Sustainable Development Report, pages 60–62.
	302-2 Energy consumption outside of the organization	See Sustainable Development Report, page 62.
	302-3 Energy intensity	See Sustainable Development Report, page 62.
	302-4 Reduction of energy consumption	See Sustainable Development Report, page 62.

**Water**

<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 56–58.
	103-2 The management approach and its components	See Sustainable Development Report, pages 56–58.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 56–58.
<b>GRI 303: Water and Effluents 2018</b>	303-1 Interactions with water as a shared resource	See Sustainable Development Report, page 62.

---



	303-2 Management of water discharge-related impacts	See Sustainable Development Report, page 62.
	303-3 Water withdrawal	See Sustainable Development Report, pages 63–64.
	303-4 Water discharge	See Sustainable Development Report, pages 63–64.
	303-5 Water consumption	See Sustainable Development Report, pages 63–64.
<b>Biodiversity</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 56–58.
	103-2 The management approach and its components	See Sustainable Development Report, pages 56–58.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 56–58.
<b>GRI 304: Biodiversity 2016</b>	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	See Sustainable Development Report, page 66.
	304-2 Significant impacts of activities, products and services on biodiversity	See Sustainable Development Report, page 65.
	304-3 Habitats protected or restored	See Sustainable Development Report, page 65.
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	See Sustainable Development Report, page 65.
<b>Emissions</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 56–58.
	103-2 The management approach and its components	See Sustainable Development Report, pages 56–58.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 56–58.
<b>GRI 305: Emissions 2016</b>	305-1 Direct (Scope 1) GHG emissions	See Sustainable Development Report, pages 66–67.
	305-2 Energy indirect (Scope 2) GHG emissions	See Sustainable Development Report, pages 66 and 67.

	305-3 Other indirect (Scope 3) GHG emissions	See Sustainable Development Report, pages 66 and 68–70.
	305-4 Greenhouse gas (GHG) emissions intensity	See Sustainable Development Report, pages 66 and 71.
	305-5 Reduction of greenhouse gas (GHG) emissions	See Sustainable Development Report, pages 66 and 71.
	305-7 NOX, SOX, and other significant air emissions	See Sustainable Development Report, page 72.

#### Effluents and Waste

<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 56–58.
	103-2 The management approach and its components	See Sustainable Development Report, pages 56–58.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 56–58.
<b>GRI 306: Waste 2020</b>	306-1 Waste generation and significant waste-related impacts	See Sustainable Development Report, pages 72–73.
	306-2 Management of significant waste-related impacts	See Sustainable Development Report, pages 72–73.
	306-3 Waste generated	See Sustainable Development Report, pages 72–73.
	306-4 Waste diverted from disposal	See Sustainable Development Report, pages 72–73.
	306-5 Waste directed to disposal	See Sustainable Development Report, pages 72–73.

#### Environmental Compliance

<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 56–58.
	103-2 The management approach and its components	See Sustainable Development Report, pages 56–58.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 56–58.
<b>GRI 307: Environmental Compliance 2016</b>	307-1 Non-compliance with environmental laws and regulations	See Sustainable Development Report, page 74.

#### Supplier Environmental Assessment

<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 56–58.
	103-2 The management approach and its components	See Sustainable Development Report, pages 56–58.

	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 56–58.	
<b>GRI 308: Supplier Environmental Assessment 2016</b>	308-1 New suppliers that were screened using environmental criteria	See Sustainable Development Report, page 74.	
	308-2 Negative environmental impacts in the supply chain and actions taken	See Sustainable Development Report, page 74.	
<b>GRI 400 Social Standards Series</b>			
<b>Employment</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.	
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.	
<b>GRI 401: Employment 2016</b>	401-1 New employee hires and employee turnover	See Sustainable Development Report, page 73.	Partial omission. Rates of new hires are not disclosed. Also, voluntary turnover is disclosed, but not reported otherwise or by age group or by minority group.  Reason: Confidentiality constraints. Linde considers additional information regarding human resources data as business confidential and does not disclose this publicly.
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	See Sustainable Development Report, page 79.	
	401-3 Parental leave	See Sustainable Development Report, page 79.	
<b>Labor/Management Relations</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.	
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.	
<b>GRI 402: Labor/Management Relations 2016</b>	402-1 Minimum notice periods regarding operational changes	See Sustainable Development Report, page 80.	
<b>Occupational Health and Safety</b>			
	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	

<b>GRI 103: Management Approach 2016</b>	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 403: Occupational Health and Safety 2018</b>	403-1 Occupational health and safety management system	See Sustainable Development Report, pages 76–77.
	403-2 Hazard identification, risk assessment, and incident investigation	See Sustainable Development Report, pages 76–77.
	403-3 Occupational health services	See Sustainable Development Report, pages 76, 77 and 79.
	403-4 Worker participation, consultation, and communication on occupational health and safety	See Sustainable Development Report, pages 76–77 and 80.
	403-5 Worker training on occupational health and safety	See Sustainable Development Report, pages 76, 77 and 84.
	403-6 Promotion of worker health	See Sustainable Development Report, pages 76, 77, 79 and 80.
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	See Sustainable Development Report, pages 76–77 and 107.
	403-9 Work-related injuries	See Sustainable Development Report, pages 80–83.
<b>Training and Education</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 404: Training and Education 2016</b>	404-1 Average hours of training per year per employee	See Sustainable Development Report, pages 83 and 86.
	404-2 Programs for upgrading employee skills and transition assistance programs	See Sustainable Development Report, pages 86–87.
	404-3 Percentage of employees receiving regular performance and career development reviews	See Sustainable Development Report, page 87.
<b>Diversity and Equal Opportunity</b>		

<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.	
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.	
<b>GRI 405: Diversity and Equal Opportunity 2016</b>	405-1 Diversity of governance bodies and employees	See Sustainable Development Report, pages 87–88.	Partial omission. The following is not disclosed: Percentage of employees by minority group. Reason: Confidentiality constraints. Linde considers additional information regarding human resources data as business confidential and does not disclose this publicly.
	405-2 Ratio of basic salary and remuneration of women to men	See Sustainable Development Report, page 89.	
<b>Non-discrimination</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.	
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.	
<b>GRI 406: Non-discrimination 2016</b>	406-1 Incidents of discrimination and corrective actions taken	See Sustainable Development Report, page 89.	Partial omission. The following are not disclosed: The percentage of discrimination incidents and their corrective actions is not completely reported, separately within the total number of hotline reports. Reason: Confidentiality constraints. Linde considers additional information regarding human resources data as business confidential and does not disclose this publicly.
<b>Freedom of Association and Collective Bargaining</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.	
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.	
<b>GRI 407: Freedom of Association and Collective Bargaining 2016</b>	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	See Sustainable Development Report, page 90.	
<b>Child Labor</b>			
	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	

<b>GRI 103: Management Approach 2016</b>	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 408: Child Labor 2016</b>	408-1 Operations and suppliers at significant risk for incidents of child labor	See Sustainable Development Report, page 90.
<b>Forced or Compulsory Labor</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 409: Forced or Compulsory Labor 2016</b>	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	See Sustainable Development Report, page 90.
<b>Security Practices</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 410: Security Practices 2016</b>	410-1 Security personnel trained in the organization's human rights policies or procedures	See Sustainable Development Report, page 90.
<b>Rights of Indigenous Peoples</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 411: Rights of Indigenous Peoples 2016</b>	411-1 Incidents of violations involving rights of indigenous peoples	See Sustainable Development Report, page 90.
<b>Human Rights Assessment</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.

	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.	
<b>GRI 412: Human Rights Assessment 2016</b>	412-1 Operations that have been subject to human rights reviews or impact assessments	See Sustainable Development Report, page 90.	
	412-2 Employee training on human rights policies or procedures	See Sustainable Development Report, page 91.	
	412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	See Sustainable Development Report, page 91.	Partial omission. The following is not disclosed: total number of contracts. Reason: Confidentiality constraints. Linde considers additional information regarding number of contracts as business confidential and does not disclose this publicly.
<b>Local Communities</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.	
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.	
<b>GRI 413: Local Communities 2016</b>	413-1 Operations with local community engagement, impact assessments, and development programs	See Sustainable Development Report, pages 91.	
	413-2 Operations with significant actual and potential negative impacts on local communities	See Sustainable Development Report, page 101.	
<b>Supplier Social Assessment</b>			
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.	
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.	
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.	
<b>GRI 414: Supplier Social Assessment 2016</b>	414-1 New suppliers that were screened using social criteria	See Sustainable Development Report, page 102.	
	414-2 Negative social impacts in the supply chain and actions taken	See Sustainable Development Report, pages 102 and 105.	
<b>Public Policy</b>			

<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 415: Public Policy 2016</b>	415-1 Political Contributions	See Sustainable Development Report, pages 106–107.
<b>Customer Health and Safety</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 416: Customer Health and Safety 2016</b>	416-1 Assessment of the health and safety impacts of product and service categories	See Sustainable Development Report, page 107.
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	See Sustainable Development Report, page 109.
<b>Marketing and Labeling</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 417: Marketing and Labeling 2016</b>	417-1 Requirements for product and service information and labeling	See Sustainable Development Report, page 109.
	417-2 Incidents of non-compliance concerning product and service information and labeling	See Sustainable Development Report, page 109.
<b>Customer Privacy</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.



	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 418: Customer Privacy 2016</b>	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	See Sustainable Development Report, page 109.
<b>Socioeconomic Compliance</b>		
<b>GRI 103: Management Approach 2016</b>	103-1 Explanation of the material topic and its boundary	See Sustainable Development Report, pages 76–77.
	103-2 The management approach and its components	See Sustainable Development Report, pages 76–77.
	103-3 Evaluation of the management approach	See Sustainable Development Report, pages 76–77.
<b>GRI 419: Socioeconomic Compliance 2016</b>	419-1 Non-compliance with laws and regulations in the social and economic area	See Sustainable Development Report, page 109.