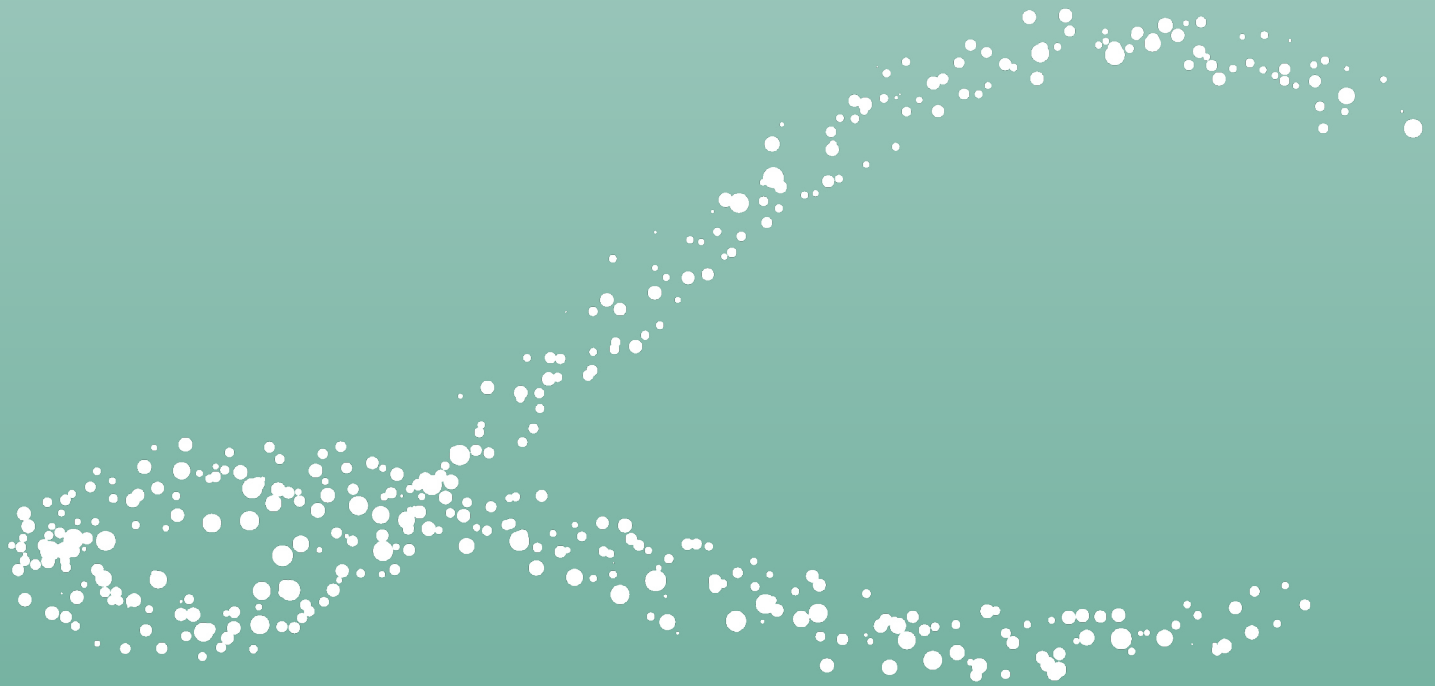


Making our world more productive



# Linde ESG Data Overview (2020 Data Year)

A Summary for Investors  
October 2021

# Table of Contents

Introduction.....	5
Linde’s Business Model.....	5
Creating Economic, Environmental and Social Value .....	7
Linde’s 2028 Targets .....	9
Reports and Reporting Frameworks.....	10
Policies and Position Statements .....	10
Climate Change .....	11
Environment.....	12
Safety and Health .....	13
Our People .....	13
Community .....	14
Governance .....	14

# 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

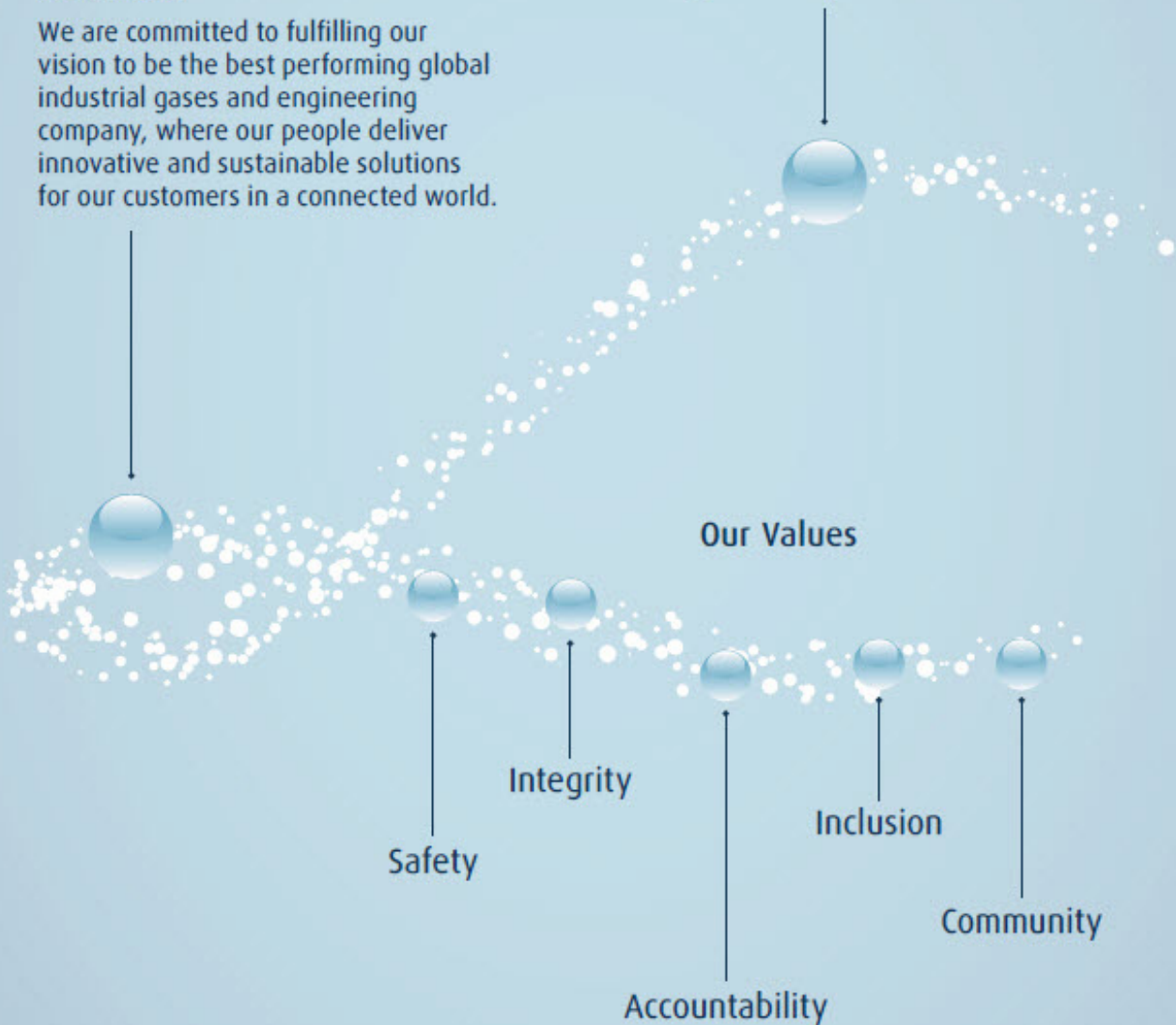
Safety

Integrity

Accountability

Inclusion

Community



## Sustainable Development

### Best-in-class safety performance

4x better than U.S. Occupational Safety and Health Administration industrial average for lost workday case rate

Enabled the **avoidance of >2x more GHG emissions** than were emitted in all of the company's operations

Green H<sub>2</sub> supply to the world's first **H<sub>2</sub>-powered ferry**

A leader in **Diversity & Inclusion**

350,000 people benefited from employee **community engagement** projects

Reduced **300 million gallons** of water in operations

Sourced **more than 1/3** of global electricity from **low-carbon sources**

### Awards and Recognition

- Member of Dow Jones Sustainability™ World Index (DJSI world)
- Member of Bloomberg Gender-Equality Index (GEI)
- One of the World's Most Ethical Companies by Ethisphere Institute

## Introduction

This ESG Data report provides a consolidated overview of Linde plc's non-financial performance. Metrics cover the company's activities during the period January 1 to December 31 for the year indicated.

Linde plc was formed in 2017 in accordance with the requirements of the business combination agreement, dated June 1, 2017, as amended, among Linde plc; Praxair, Inc. (Praxair); and Linde Aktiengesellschaft (Linde GmbH). Effective October 31, 2018, the business combination was completed and Linde plc is comprised of the businesses of Praxair and Linde GmbH. For 2018, pro forma data was calculated for numerous non-financial metrics to reflect what performance would have looked like had the merger been effective for all of 2018. In the tables on the following pages, if a 2018 cell is greyed out, a pro forma value was not calculated for that metric.

Consistent with Linde's financial reporting, all financial figures are reported in US Dollars.

Each year, Linde has various metrics externally audited. The most recent audit covers the 2020 data year. The audit assurance letters can be found in Linde's [Reporting Center](#).

## Linde's Business Model

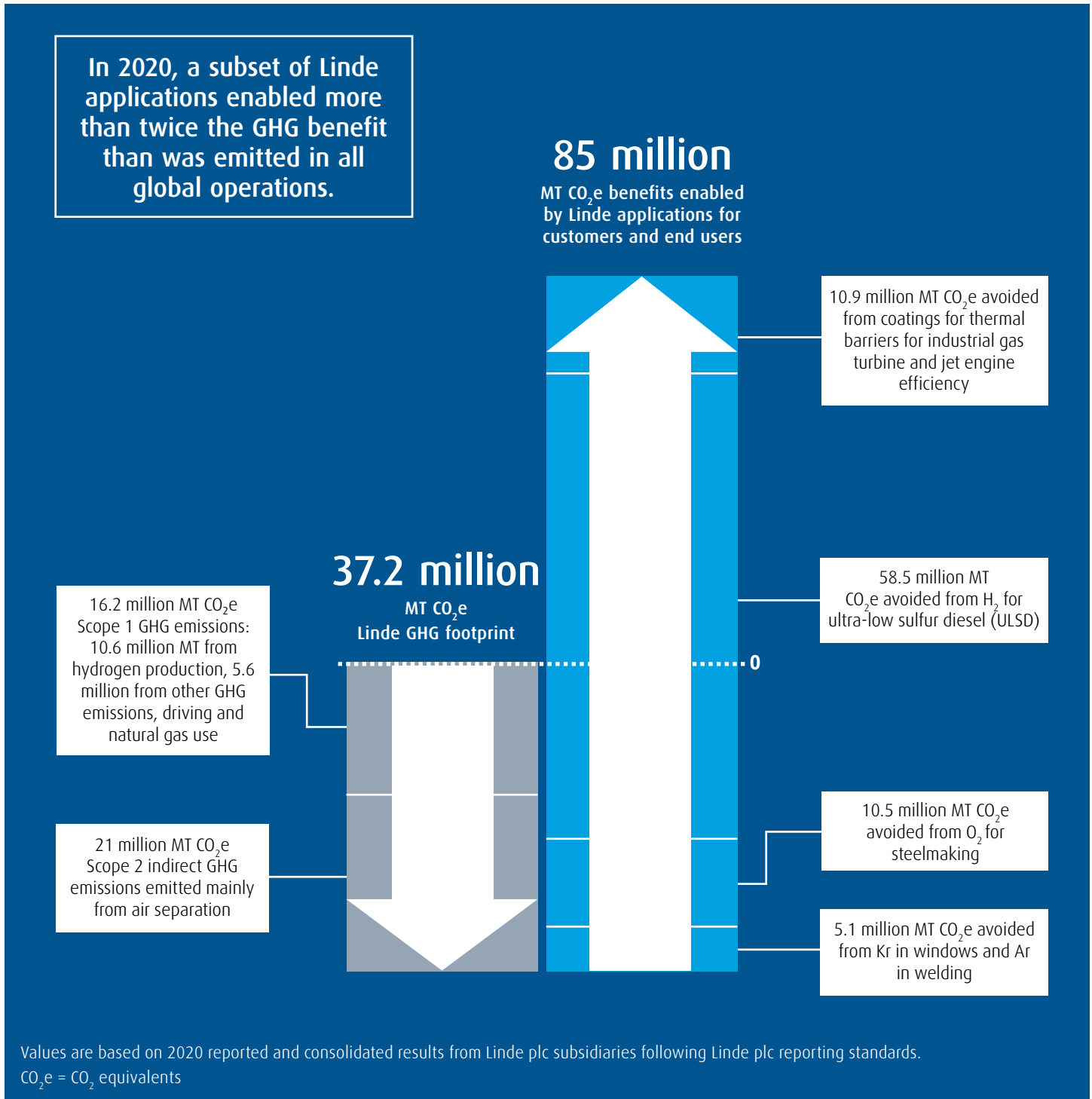
Linde's business model is to transform air and other process gases into applications that, in many cases, help customers become more energy- and resource-efficient or provide social benefits.

Linde's industrial gas processes transform natural resources into environmental and social value and impact. Principal business operations are to make atmospheric gases from raw materials in the air and electricity, and process gases, principally hydrogen, from natural gas or industry by-products, together with steam. The outputs of these processes, or our product applications, serve multiple end-markets. More than 65 percent of sales are underpinned by fixed fees or resilient end-markets (e.g., healthcare, food and beverage, and electronics as well as portions of sales to chemical and refining, metals, and manufacturing), which provide protection from market swings.

Many of Linde's applications bring environmental, economic and social benefits to our customers, communities and the planet. For example, Linde's oxygen helps steelmakers save energy, allows sustainable aquaculture to thrive and serves hundreds of thousands of patients needing respiratory 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.

# Linde Applications Enable 2.3x Carbon Productivity

Linde is a company in the business of resource transformation in a world that is dealing with climate change. Below are our 2020 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 greenhouse gas (GHG) emissions of all Linde operations. In 2020, total GHG emissions were 37.2 million MT CO<sub>2</sub>e, versus 85 million MT CO<sub>2</sub>e avoided by our customers or end users, from several applications shown below – 2.3x the GHG benefit created than depleted.



## 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 table on the facing page shows a range of Linde's inputs and activities, and the output and outcomes of these. For example, Linde values the safety of its employees and contractors and invests more than 5 million hours on safety training each year. 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 of our 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, put additional pressure on wastewater treatment plants across the globe to treat increasing volumes of wastewater – adding pure oxygen effectively increases plant capacity. As access to drinking water becomes scarcer, the market for desalination has expanded, particularly in drought-susceptible areas. Carbon dioxide can be used in the re-mineralization step, as a safer alternative to mineral acids. In Australia, for example, Linde CO<sub>2</sub> helps desalinate water to meet the needs of 15 percent of the population of Sydney. In 2020, Linde gases enabled over 200 million people to have access to safe drinking water, including 137 million people in APAC.

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 UN 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 the next page shows the six SDGs most relevant to Linde, which are referenced in Linde's 2028 Sustainable Development Targets.

An example of how Linde's activity contributes towards the SDGs is for SDG 12: Responsible Production and Consumption. Target 12.2 is "By 2030, achieve the sustainable management and efficient use of natural resources." Linde's broad range of resource intensity targets addresses this issue. Linde also takes direct action on Target 12.6: "Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle."

Another example is for SDG Goal 7, Target 7.2: "Increase the share of renewable energy by 2030." Linde will actively contribute to this target by doubling the purchase of low carbon electricity by 2028.

INPUT AND ACTIVITIES 	OUTPUT AND OUTCOMES 	IMPACT
<b>Employees</b> A global corporation with a presence in approximately 100 countries	<ul style="list-style-type: none"> <li>Supported 74,207 employees globally, with personnel expenses totaling \$5.6 billion in 2020, including salaries, benefits, Social Security contributions and pensions, and share-based compensation</li> </ul>	UN SDG*  <b>3 GOOD HEALTH AND WELL-BEING</b> 
Committed to Diversity and Inclusion	<ul style="list-style-type: none"> <li>27% female employees worldwide</li> <li>Trained approximately 1,200 leaders on unconscious bias</li> <li>Consistently listed on major Diversity and Inclusion indices</li> </ul>	
Commitment to Safety: >5 million hours of safety training delivered per year to employees and contractors	<ul style="list-style-type: none"> <li>Achieved lost workday case rate 4X better than the U.S. Occupational Health and Safety Administration all industries industrial average</li> </ul>	<b>8 DECENT WORK AND ECONOMIC GROWTH</b> 
<b>Customers and Investors</b>		
Shareholder focus	<ul style="list-style-type: none"> <li>Delivered 28 consecutive years of dividend growth</li> </ul>	<b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b> 
Customer-centric, capital-intensive operations	<ul style="list-style-type: none"> <li>Adjusted after-tax return on capital**: 13.4%</li> <li>Industry-leading project backlog of \$8 billion</li> </ul>	
Local business model	<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>	<b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b> 
<b>Innovation</b>		<b>7 AFFORDABLE AND CLEAN ENERGY</b> 
Technology Innovation	<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 54% 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>	<b>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</b> 
<b>Natural Resources</b>		<b>8 DECENT WORK AND ECONOMIC GROWTH</b> 
Resource productivity	<ul style="list-style-type: none"> <li>Delivered productivity in line with business strategic objectives (total productivity savings &gt;\$750 million)</li> <li>Realized \$133 million savings from sustainable productivity, including avoiding 300 million gallons of water usage and 576,000 MT CO<sub>2</sub>e***</li> </ul>	
37.2 million MT CO <sub>2</sub> e direct and indirect GHG**** emissions	<ul style="list-style-type: none"> <li>16.4 TWh low-carbon energy sourced (39% of all energy)</li> <li>Enabled 85 million MT CO<sub>2</sub>e to be avoided by customers from five of Linde's key technologies</li> </ul>	
74 million m <sup>3</sup> water consumed	<ul style="list-style-type: none"> <li>Enabled more than 200 million people to have access to safe drinking water through gases used for water treatment and desalination</li> </ul>	
<b>Society</b>		
Commitment to Ethics and Integrity	<ul style="list-style-type: none"> <li>Maintained strong compliance culture through Code of Business Integrity, which has been implemented globally</li> </ul>	
\$9.4 million in funding for social projects and initiatives	<ul style="list-style-type: none"> <li>Supported more than 1,000 organizations globally</li> </ul>	
61,000 employee volunteer hours contributed	<ul style="list-style-type: none"> <li>Impacted 150,000 children and students through employee community engagement projects</li> </ul>	
Healthcare business	<ul style="list-style-type: none"> <li>Provided crucial support to hospitals and healthcare facilities during the COVID-19 pandemic</li> <li>Cared for 40,000 COVID-19 patients in the U.S. through Lincare's respiratory care services</li> </ul>	

\* 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 2020.  
 \*\*\* CO<sub>2</sub>e: CO<sub>2</sub> equivalents  
 \*\*\*\* GHG: Greenhouse gas



## Linde's 2028 Targets

Linde's ambitious Sustainable Development 2028 (SD2028) Targets are our roadmap and plan for the coming 10 years. The targets are organized in four categories that we consider relevant to the company and its internal and external stakeholders. The targets are consistent with Linde's business model, mission and values, and the strategic business objectives named by the Board of Directors as a basis for variable compensation. Linde's businesses and functions are accountable for achieving these targets – they are embedded into our businesses and operations. Each target is a business KPI and managed as part of the business.

Priority Factors	Linde SD 2028 Targets	2018	2019	2020	Target	Status
Climate Change	Invest in decarbonization initiatives, cumulative \$ million	14	66	128	1,000	↗
	Direct >33% of R&D budget to decarbonization, cumulative %	23	25	26	>33	↗
	Contribute >50% revenue from sustainability portfolio, annual %	n/a	53	54	50	↑
	Enable >2x GHG benefits, annual	2.5x	2.7x	2.3x	>2.0x	↑
	35% Improvement in GHG intensity vs. EBITDA, cumulative %, (intensity MMT CO <sub>2</sub> e/\$ billion)	(5.2)	-8.2% (4.7)	-16.5% (4.3)	-35% (3.2)	↗
	4% HyCO GHG intensity improvement, cumulative %	0	-3.4	-7.1	-4.0	↗
	7% ASU energy intensity improvement, cumulative %	0	-0.6	-0.5	-7.0	↘
	10% Fleet GHG intensity improvement, cumulative %	0	-0.9	-7.2	-10.0	↗
	10% Absolute reduction in other GHG emissions, cumulative %	0	0	-9.3	-10.0	↗
	>2x Low-carbon power sourcing, primarily from active renewable electricity, cumulative TWh	15.2	15.5	16.4	>30.0	↗
Safety, Health & the Environment	\$1.3 billion in sustainable productivity, cumulative \$ million	92	176.5	310	1,300	↗
	Water Management Plans (WMPs) at high-water-use sites in areas of high-water stress (# sites, % WMPs implemented)	n/a	22 (73%)	67 (20%)	100%	↗
	Achieve Zero Waste to Landfill at 450 Sites	217	210	286	450	↗
	Annually achieve operational safety better than industry levels for Lost Workday Case Rate (LWCR)	0.32	0.23	0.21	1.00	↑
	Annually achieve annual operational safety better than industry levels for Total Recordable Case Rate (TRCR)	0.74	0.57	0.51	3.10	↑
	Annually achieve Commercial Vehicle Incident Rate (CVIR) of <2.5 per million kilometers driven	2.05	2.17	1.7	<2.50	↑
	Zero global sales of coating slurries that contain hexavalent chrome by 2029 (Surface Coatings)	On track, see reporting section following				↗
Ethics & Integrity	100% employee certification to Linde Code of Business Integrity (CBI), annual % employees certifying	100	100	100	100	↑
People & Community	Achieve 30% representation of women globally by 2030 (% all employees)	n/a	27	27	30	↗
	550 employee community engagement projects completed	410	367	317	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	100	n/a
	Increase environmental/climate-related philanthropic spend by 50% (annual \$ '000, % total)	\$555k	\$654k (18%)	\$684k (23%)	\$832k (50%)	↗
Legend	↑ achieved; ↗ on track; ↘ behind target					

For detailed information on Linde's target performance, visit the "Performance Towards Targets" section of Linde's [2020 Sustainable Development Report](#).

# Reports and Reporting Frameworks

## List of Reports

Copies of Linde's current and past sustainable development reports can be found in Linde's Reporting Center. The most recent sustainability reports are:

[2020 Sustainable Development Report](#)

[2021 CDP Climate Change Response](#)

[2021 CDP Water Response](#)

## Reporting Frameworks

Linde uses a number of frameworks to guide the company's sustainability reporting, including:

[Linde SASB Index \(2020 Data Year\)](#)

[Linde TCFD Index \(2020 Data Year\)](#)

# Policies and Position Statements

[Human Rights Policy](#)

[Sustainable Development and Climate Change Position Statement](#)

[Water Position Statement](#)

[Code of Business Integrity](#)

[Corporate Governance Guidelines](#)

[Global Health, Safety & Environmental Policy](#)

[Political Involvement Policy \(US\)](#)

[Supplier Code of Conduct](#)

[Conflict Minerals Policy](#)

[Modern Slavery Policy Statement \(UK\)](#)

[Linde's Global Diversity & Inclusion Guidelines](#)

[Responsible Care Policy](#)

## Climate Change

Metric	Unit	2018	2019	2020
<b>Innovation</b>				
Investment in decarbonization activities	\$ million	14	66	<b>128</b>
R&D budget for decarbonization	% of total R&D budget	23	25	<b>26</b>
Revenue from Sustainability Portfolio	\$ billion		13.5	<b>13</b>
% Revenue from Sustainability Portfolio	% of total revenue		53	<b>54</b>
GHG benefits enabled by select Linde applications	Million MT CO2e	94	100	<b>85</b>
<b>GHG Emissions</b>				
GHG Intensity (over EBITDA)	Million MT CO2e/\$ billion	5.2	4.7 (-8.2%)	<b>4.3 (-16.5%)</b>
GHG Intensity (over revenue)	MT CO2e/thousand \$ million	1.40	1.37	<b>1.37</b>
Total Scope 1 + Scope 2 emissions <sup>1</sup>	Million MT CO2e	39.205	38.711	<b>37.216</b>
Scope 1 (direct) GHG emissions	Million MT CO2e	16.872	16.461	<b>16.247</b>
Scope 1 emissions covered by emissions-limiting regulations	Million MT CO2e		1.5	<b>1.5</b>
Scope 2 (indirect) GHG emissions (market-based)	Million MT CO2e	22.333	22.250	<b>20.969</b>
Scope 3 GHG emissions <sup>2</sup>	Million MT CO2e	14.849	15.412	<b>14.403</b>
Fuel- and energy-related activities	Million MT CO2e	5.066	5.590	<b>5.290</b>
Purchased goods and services	Million MT CO2e	1.540	1.540	<b>1.640</b>
Capital goods	Million MT CO2e	0.965	0.965	<b>0.931</b>
Investments	Million MT CO2e	4.460	4.460	<b>3.930</b>
Downstream leased assets	Million MT CO2e	2.163	2.280	<b>2.050</b>
Downstream distribution (contractor driving)	Million MT CO2e	0.661	0.577	<b>0.562</b>
<b>Energy Use</b>				
Energy consumption	Million MWh	68.526	69.137	<b>69.277</b>
Fuel consumption <sup>3</sup>	Million MWh	21.034	21.246	<b>21.298</b>
Steam consumption	Million MWh	5.943	6.012	<b>6.357</b>
Electricity consumption	Million MWh	41.549	41.879	<b>41.622</b>
Actively sourced renewable energy	Million MWh	2.507	2.431	<b>2.493</b>
Low carbon <sup>4</sup> electricity	Million MWh	15.193	15.510	
Portion of electricity originating from the grid	%	>99	>99	<b>&gt;99</b>
Renewable energy portion of electricity (active only)	%	6	6	<b>6</b>
Low carbon portion of electricity (active + grid)	%	35	35	<b>39</b>

<sup>1</sup> Calculated using the financial control approach.

<sup>2</sup> Linde reports Scope 3 emissions from its 6 most relevant categories. See the SDR for more information on our Scope 3 reporting.

<sup>3</sup> This figure includes non-renewable fuels only. Linde did not consume any renewable fuel.

<sup>4</sup> Low carbon includes both active (generated or purchased through a PPA) and passive (grid supplied) sourcing. Low carbon includes all forms of renewable electricity as well as nuclear.

## Environment

Metric	Unit	2018	2019	2020
<b>Water</b>				
Water <sup>5</sup> withdrawn	Million m3		801.9	833.2
Portion withdrawn in regions with high or extremely high baseline water stress	%			4
Fresh water withdrawn	Million m3	512.1	456.0	427.9
Water consumed	Million m3		82.9	73.7
Portion consumed in regions with high or extremely high baseline water stress	%			23
Fresh water consumed	Million m3	92.5	101.2	93.1
Fresh water consumption intensity (over revenue)	Million m3/\$ billion	0.0033	0.0036	0.0034
Sites in regions with high or extremely high water stress that have implemented Water Management Plans (WMPs)	% of applicable sites		22 (73%)	67 (20%)
Water incidents of non-compliance	# of incidents	0	0	0
<b>Waste</b>				
Non-hazardous waste generated	MT	77,400	63,700	65,700
Non-hazardous waste disposed	MT	32,100	28,700	30,800
Non-hazardous waste disposal intensity (over revenue)	MT/\$ million	1.14	1.01	1.13
Non-hazardous waste recycled	MT	45,300	35,000	34,900
Hazardous waste <sup>6</sup> generated	MT	30,000	34,100	29,800
Hazardous waste disposed	MT	27,800	27,300	24,900
Hazardous waste disposal intensity (over revenue)	MT/\$ million	0.99	0.97	0.91
Hazardous waste recycled (marketable only)	MT	2,200	6,800	4,900
Zero waste sites	#	217	210	286
<b>Air Emissions (non-GHG)</b>				
NOx emissions	MT	10,003	10,596	12,030
NOx emissions intensity (over revenue)	MT/\$ million	0.356	0.375	0.442
SOx emissions	MT	591	730	790
SOx emissions intensity (over revenue)	MT/\$ million	0.021	0.026	0.029
VOC emissions	MT	1,312	1,297	1,053
VOC emissions intensity (over revenue)	MT/\$ million	0.047	0.046	0.039
<b>Other</b>				
Sustainable productivity savings	\$ million	92.0	84.5	133.0
Environmental expenditures <sup>7</sup>	\$ million	40.0	47.0	54.1
Environmental fines <sup>8</sup>	\$ million	0	0.02	0
Sites externally verified to be in conformance with ISO 14001	% sites by revenue		87	87
Conformance to Linde global health, safety, environment and security requirements and management system, in alignment with Responsible Care® and international standards ISO 14001, OHSAS 18001/ ISO 45000, FSSC 22000 and ISO 9001	% sites	100	100	100

<sup>5</sup>Includes fresh water + industrial/recycled water. Does not include brackish water.

<sup>6</sup>Hazardous waste values include waste defined as hazardous by regulatory authorities in each country we operate.

<sup>7</sup>Environmental expenditures = capital investment + operational expenditures

<sup>8</sup>Linde reports significant fines (those costing more than \$10,000) in the year the violation occurred (not the year the fine was paid).

## Safety and Health

Metric	Unit	2018	2019	2020
<b>Operational Safety</b>				
Lost workday case rate (LWCR), employees and contractors	# of incidents per 200,000 hours worked	0.32	0.23	<b>0.21</b>
Total recordable case rate (TRCR), employees and contractors	# of incidents per 200,000 hours worked	0.74	0.57	<b>0.51</b>
Fatalities, employees and contractors	#	7	4	<b>1</b>
<b>Vehicle Safety</b>				
Commercial vehicle incident rate (CVIR), employees and contractors	# of incidents per million km driven	2.05	2.17	<b>1.7</b>
<b>Process Safety</b>				
Tier 1 process safety events	# of events per 200,000 hours worked	0.03	0.037	<b>0.035</b>
<b>Product Safety</b>				
Products that undergo a hazard assessment	%	100	100	<b>100</b>

## Our People

Metric	Unit	2018	2019	2020
<b>Employment</b>				
Total employees	#	80,820	79,886	<b>74,207</b>
Voluntary turnover	%		6.3	<b>5.4</b>
<b>Diversity and Inclusion</b>				
Women at executive levels	%		16	<b>17</b>
Women at management level and above	%		19	<b>20</b>
Women in workforce (salaried employees)	%		27	<b>27</b>

## Community

Metric	Unit	2018	2019	2020
Corporate Foundation and other giving	\$ million	6.2	8.0	9.4
Environmental- and climate-related philanthropic spend	\$ million	0.55	0.65	0.68
Diversity- related philanthropic spend	\$ million	0.65	0.76	0.94
Business involvement in community engagement	% of major sites		100	100
Community engagement projects completed	#	410	367	317

## Governance

Metric	Unit	2018	2019	2020
<b>Board of Directors</b>				
Women on the board	# (%)	3 (25)	3 (25)	3 (25)
Number of meetings	#		5	5
Board attendance	% of all meetings		100	97
Related party transactions	% of revenue	0.019	0.065	0
Members of Audit Committee that are independent	%	100	100	100
<b>Political Involvement</b>				
Direct Political Contributions	\$	0	0	0
Total contribution and other spending <sup>9</sup>	\$ million	1.6	1.5	3.8
<b>Compensation</b>				
Incentives for non-financial performance (payout factor)	%		160	160
Performance period covered by executive compensation plan	# years	5	3	
Time vesting period for CEO	# years	3	3	3
<b>Taxation</b>				
Effective tax rate <sup>10</sup>	%	28.5	26.3	25.0
<b>Audit</b>				
Audit and audit-related fees paid to auditor	\$	16,217,000	18,750,000	24,378,000
Non-audit fees paid to auditor	\$	4,867,000	1,440,000	832,000

<sup>9</sup>Including contributions to from Linde to trade associations, tax-exempt organizations and to lobbying firms; and from the U.S. employee political action committee (PAC)

<sup>10</sup>The tax rate for 2018 is pro forma and includes both Linde GmbH and Praxair.

