

2020 Sustainability Report





INTRODUCTION

Message from Seifi Ghasemi 2
Our Purpose and Strategy 4
Commitments and Contributions 5
Sustainable Development Goals 6
GROW
Economic Performance
Customer Sustainability 10
Innovation
Ethics and Integrity 16
Data Privacy and Cyber Security 17
CONSERVE
Protecting the Environment 18
Energy and Climate Change 20
Water Conservation 24
Additional Environmental Concerns . 26
CARE
Safety
Talent and Diversity
Talent and Diversity
Community Support
Community Support

Please note: Photos depicting individuals not wearing the proper COVID-19 Personal Protective Equipment (PPE), or in close proximity to one another, were taken prior to the onset of COVID-19. Air Products implemented strict protocols at all of its locations in line with evolving guidance around the world to combat COVID-19.









Forward-looking statements

This report contains "forward-looking statements" within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forwardlooking statements are based on management's reasonable expectations and assumptions as of the date of this report and are not guarantees of future performance. Actual performance may differ materially from projections and estimates expressed in the forward-looking statements because of many factors, including, without limitation, the risk factors described in the Company's Annual Report on Form 10-K for its fiscal year ended September 30, 2019 and Quarterly Report on Form 10-Q for the period ended March 31, 2020. Except as required by law, the Company disclaims any obligation or undertaking to update or revise any forward-looking statements contained herein to reflect any change in the assumptions, beliefs or expectations or any change in events, conditions, or circumstances upon which any such forward-looking statements are based.







Grow • Conserve • Care SUSTAINABILITY

Grow responsibly through sustainability-driven opportunities that benefit our customers and our world.

We help customers improve their sustainability performance through higher productivity, better quality products, reduced energy use, and lower emissions.

Conserve resources and reduce environmental footprints through cost-effective improvements.

We set aggressive environmental performance goals for greenhouse gases, energy, water, and our fleet, and we measure progress to continually improve our own operations.

Care for our employees, customers and communities — protecting our license to operate and grow.

We are building a culture of safety, simplicity, speed, and self-confidence. Our goal is zero accidents and zero incidents. We are committed to developing our people, supporting our communities, engaging suppliers and upholding our integrity.

CHAIRMAN, PRESIDENT AND CEO MESSAGE



As we publish this report, our nation and our world are facing serious and unprecedented challenges. In the United States and around the world, we must all stand together against racism and hate and stand up for the fundamental right of every person to be treated with dignity and respect. Likewise, we must all join together to resolve the unparalleled global COVID-19 crisis, upholding health and fulfilling our responsibility to run our facilities safely and deliver essential products during this time.

While addressing these challenges, important sustainability issues remain. We must continue to protect people and the environment while providing the products needed for healthy and fulfilling lives. Imperative to that effort is meeting the world's need for clean, sustainable energy. We see Air Products at the heart of that effort. In this Sustainability Report, we share with you the actions we are taking to fulfill those needs and our higher purpose to improve sustainability in our businesses, with our customers and for our employees, communities and the world.

Our sustainability efforts are rooted in our "Grow, Conserve and Care" strategy. We continually strive to improve the sustainability of our businesses, support our customers' sustainability objectives and strengthen our governance systems as part of our "Grow" efforts. We reduce environmental impacts through resource efficiency and lower emissions intensities in line with our "Conserve" initiatives. Our "Care" efforts center on enhancing the health and safety of our people, developing employees, promoting diversity and inclusion and supporting our host communities. You can see our progress, shown by achieving nearly all of our 2020 Sustainability Goals.

Our products are critical for scores of industries that need our gases to advance their own sustainability efforts and to make products that serve their customers and consumers. As we look forward, we see significant opportunities for gasification, carbon capture technologies and hydrogen for mobility and energy transition. These are opportunities to solve today's and tomorrow's energy and environmental challenges, and we are driven by an important ambition — to innovate alongside our customers to help make these opportunities a reality.

We believe a thriving society and healthy planet are inextricably linked and look forward to continuing to work with our employees, customers and other stakeholders to collectively build a better future. Thank you for taking time to learn more about Air Products' sustainability efforts, plans and achievements, and as always, we appreciate your interest in our company.

"

We believe a thriving society and healthy planet are inextricably linked . . .

Seifi Ghasemi

Chairman, President and Chief Executive Officer of Air Products

SUSTAINABILITY HIGHLIGHTS FOR 2019

GROW



69 million

metric tons of CO₂e avoided due to our products



53%

of revenues from sustainable offerings



100% compliance

with annual Code of Conduct certification

CONSERVE



> \$100 million

in cumulative energy and water costs avoided



>1 million

metric tons of CO₂e avoided through efficiency improvements



2.5 times

the ratio of CO₂e avoided by our customers to our emissions

CARE



27 million

worker hours without an LTI during Jazan ASU project



21%

female share of workforce



\$7.6 million

in donations to communities

OUR PURPOSE AND STRATEGY

Industrial gases are essential to modern life. They are used to make materials that go into our homes and businesses, cars and fuels, health care, food and more. And as the world's population grows, so does demand for these products and the gases that make them possible.

Our modern way of life also has impacts on our world that will be intensified by population growth, continued rising middle class demands and increasing urbanization. Growth can strain our natural resources, such as water, and increase environmental impacts including climate change. The challenge for all of us is to sustainably live within what the earth provides while working to improve standards of living for everyone.

As the world's largest supplier of hydrogen, we provide vast quantities of hydrogen to petroleum refiners to lower sulfur content and enable the production of cleaner-burning gasoline and diesel fuels, significantly reducing vehicle emissions. Our oxy-fuel burners improve productivity for glass and metal manufacturers while reducing energy consumption and emissions. We are also a leader in hydrogen fueling infrastructure and are helping to build the hydrogen economy around the world for zero-emission vehicles. Furthermore, we remain a global leader in liquefied natural gas equipment, air separation plants, and hydrocarbon recovery and purification equipment.







Air Products is Proud to Contribute Solutions to these Challenges.

Sustainability is one of our core values and business drivers. We are focused on serving energy, environmental and emerging markets, all of which are central to the sustainability of the world. We have significant opportunities—today, tomorrow, and the day after tomorrow—to help solve the world's urgent environmental issues through our industrial gases and large-scale gasification, carbon capture, and hydrogen businesses.

Our products enable our customers to be more productive and efficient – to make more with less while reducing their impact on the environment. In fact, in 2019 our products enabled our customers and downstream users to avoid the equivalent of 69 million metric tons of carbon dioxide emissions. This figure is 2.5 times our own direct and indirect ${\rm CO_2}$ emissions and shows the immense benefits of our operations.

While our strategy provides opportunities for Air Products' continued success and growth, the Company's economic performance may be affected by various risks, many of which are beyond our control. These risks are routinely reviewed by Company leaders and the Board of Directors, and auditable risks are included in the Company's Internal Audit program. Additional details about business risks are provided in our 2019 Annual Report (Item 1A).

COMMITMENTS AND CONTRIBUTIONS

In 2016, Air Products set sustainability goals across all aspects of our Grow-Conserve-Care sustainability framework. This process was completed based on feedback from key stakeholders and the identification of our sustainability priorities. In 2019, we continued to make good progress against these goals, and as we reach the end of the 2020 framework, we are establishing a new set of sustainability targets. Please see the relevant Grow-Conserve-Care sections of this report for details on our programs and progress.

GROW	2020 Goal	Status	2019 Results
Economic Performance	Lead the Industrial Gas industry in profitability	✓	Adjusted EBITDA margin ^a : 38.9% Adjusted Operating margin ^a : 24.3% Return on Capital Employed ("ROCE") ^a : 13.1%
Customer Sustainability	Enable customers to avoid CO ₂ emissions while contributing >50% of revenues from sustainable offerings	✓	CO ₂ e avoided: 69 MM MT Revenues from sustainable offerings: 53%
Ethics & Integrity	Require 100% of employees to be trained and certified in our Code of Conduct	✓	Training and certification: 100%
Compliance	Continuously improve compliance systems and performance	/	Enhanced governance systems
CONSERVE	2020 Goal	Status	2019 Results
Energy Savings	Save energy by reducing use intensity by 2.5% for ASUs and 1.5% for HyCOs	✓	ASUs: 3.7% reduction HyCOs: 0.9% reduction
GHG Reductions	Reduce GHG emissions intensity by 2%	/	2.3% reduction
Distribution Efficiency	Improve distribution efficiency and reduce CO ₂ emissions intensity by 10%	✓	18% improvement
Water Conservation	Conserve water and lower use intensity by 5%	✓	26% reduction
CARE	2020 Goal	Status	2019 Results
Safety	Lead the industrial gas industry in safety	✓	Recordable rate: 0.45 LTI rate: 0.09
Talent & Diversity	Build the most diverse and inclusive workforce in the industrial gas industry	✓	Female share of workforce: 21%
Community Support	Enhance our ability to measure the positive impacts of our employee and community engagement	✓	\$7.6 million in cash and product donations
Supplier Sustainability	Ensure 100% of new supplier agreements include Human Rights and Conflict Minerals clauses	✓	Clauses added to global terms and conditions

^a Amounts are non-GAAP financial measures. See "Sustainability 2020 Reconciliation of Non-GAAP Financial Measures" for reconciliation to the comparable GAAP measures.

[✓] Goal met

[✓] Goal on track

SUSTAINABLE DEVELOPMENT GOALS

Established by the United Nations in 2015, the Sustainable Development Goals (SDGs) aim to create a world without poverty, inequality, unrest and environmental stress. Businesses can play a critical role in providing solutions to these sustainability concerns that can also generate new opportunities. Air Products is contributing to these goals across nine areas aligned with our Grow-Conserve-Care sustainability framework. Our alignment with the SDGs is shown below and indicated in the relevant sections of this report.

GROW





How we contribute

- Productivity improvements
- Technology developments
- Job creation
- Human rights programs

Related goals

- Most profitable industrial gases company
- Customer avoided emissions
- Job creation
- Sales of Sustainable Offerings

CONSERVE









How we contribute

- Clean energy production and energy efficiencies
- Climate change mitigation
- Water quality improvements and use efficiencies
- Effective waste management

Related goals

- Save energy
- Reduce GHG emissions
- Improve distribution efficiency
- Conserve water and lower use intensity

CARE







How we contribute

- Products that enable health
- Safety improvements
- Zero tolerance for discrimination
- Representation of women in our businesses

Related goals

- Lead our industry in safety performance
- Build the most diverse and inclusive workforce in our industry



Sustainable Offerings for Sustainable Growth

By striving to improve the sustainability of our own businesses, and supporting our customers' sustainability objectives though innovation, we will continue to Grow and make new opportunities a reality.

ECONOMIC PERFORMANCE

Why It's Important

For a business to sustainably operate, grow and contribute to society it must be financially sound. Well-paying jobs and attractive benefits are needed to recruit and retain talented employees, as are investments in employee development and programs that ensure safety, human rights and ethical business practices. Likewise, the health of communities where operations are based can impact business success.





What We're Doing

Air Products is a global company with local businesses. Our Industrial Gases business, representing 96% of our 2019 revenues, is organized and operated regionally. This enables us to be close to our customers, improving service and reducing distribution costs and emissions.

We have more than 17,000 dedicated employees across 750+ operating facilities in 50 countries. As a result, our operations provide substantial economic support to our host communities around the globe.

Our Commitments and Contributions

We aspire to be the most profitable industrial gas company in the world. We have achieved this goal with the highest adjusted EBITDA margin in our industry. Having a strong financial position allows us to continue to commit a significant amount of capital to grow Air Products into the future, creating value for our shareholders and society. We also:

- Offer rewarding jobs with competitive pay and benefits
- Promote the safety of our employees, customers and communities
- Strive to uphold human rights in our operations, businesses, communities and supply chains
- Invest in technologies, products and facilities
- Contribute in several ways to the well-being of our host communities

The economic value we generated in fiscal year 2019:

• Sales: **\$8,918.9 million**

Cost of sales: \$5,975.5 million

Capital expenditures^a: \$2,128.6 million

• Selling and administrative: \$750.0 million

Income tax provision: \$480.1 million

Research and Development: \$72.9 million

• Donations to communities: \$7.6 million

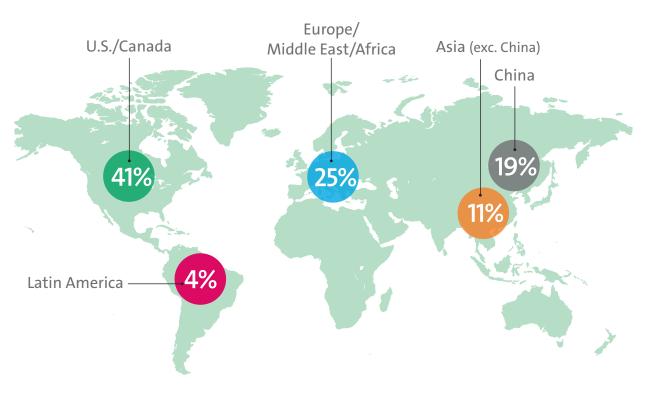
^a Amounts are non-GAAP financial measures. See "Sustainability 2020 Reconciliation of Non-GAAP Financial Measures" for reconciliation to the comparable GAAP measures.

Our Businesses

- Regional Industrial Gases businesses produce and sell atmospheric and process gases, operating through three regional segments (Americas, EMEA and Asia).
- Global Industrial Gases includes our atmospheric sale of equipment businesses.
- Corporate and Other includes three global equipment businesses: liquefied natural gas (LNG) equipment, liquid helium and liquid-hydrogen transport and storage containers, and turboexpanders and other precision rotating equipment.



Global Presence*



^{*}Consolidated sales by region. Europe, Middle East and Africa includes India

CUSTOMER SUSTAINABILITY |

Why It's Important

Business interest in sustainability is increasing as companies recognize the need to address the risks and opportunities associated with global challenges such as population growth, water scarcity and climate change. Progressive companies are looking for ways to continually improve productivity, reduce resource consumption and lower the environmental impacts of operations while maintaining product quality and profitability.

53% of revenues

derived from sustainable offerings, which exceeds our revenue goal of 50%.

Our Products

- Atmospheric gases oxygen, nitrogen, argon, and rare gases
- Process gases hydrogen, helium, carbon dioxide, carbon monoxide, syngas, and specialty gases
- Equipment for the production or processing of gases, such as air separation units (ASU), non-cryogenic generators and LNG heat exchangers

What We're Doing

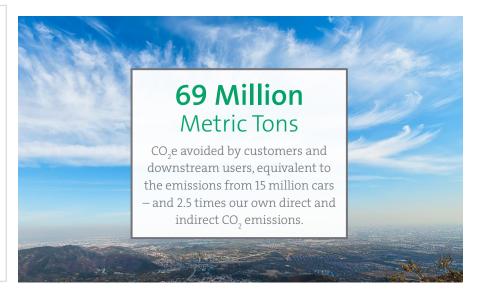
At Air Products, we are driven by an important ambition: to innovate alongside our customers and help them be more sustainable. We produce products that improve energy efficiency, reduce environmental impact and address societal needs such as health, safety and improving quality of life. These products and applications and their benefits are described in the next pages of this report.

We also:

- work closely with customers to develop products and applications that improve productivity, conserve energy and reduce environmental impact;
- construct facilities on customer sites to enable products to be distributed
 efficiently through pipelines and to recycle steam and water for use at multiple
 plants;
- conduct life-cycle assessments of products and processes to determine environmental impacts; and
- dedicate efforts to continually improve our quality performance and customersatisfaction, which ranged from 83% to 96% across our regional businesses in 2019.

Our Commitments and Contributions

We are committed to enabling our customers to enhance their sustainability. We track our progress through avoided carbon dioxide (CO₂) emissions and the revenue contributions of our sustainable offerings, which are products that improve energy efficiency, reduce environmental impact, and/or address a societal need.



Using Process Intelligence to Improve Production

Secondary aluminum production is the process of recycling aluminum scrap into new aluminum that can be used again for a variety of products. While changes in equipment design over time have improved the efficiency of the overall process, the "pour readiness" of the aluminum is still largely based on the relevant operator's best judgment. Unfortunately, this often results in a significantly higher metal pour temperature than is required causing yield loss, lower efficiency, and unnecessary use of additional fuel and industrial gases.

The Air Products Process Intelligence (APPI) Process Advisor system provides a unique way to predict when the charge material is completely molten and at the required tapping temperature. The model uses energy and material balances with historical and real-time operational and process data to create a digital twin of the melting process. The APPI Process Advisor system provides operators a prompt when the melt is completed, letting them know it is the optimum time to turn off the burner and pour the molten charge. As new data continues to feed into the model, machine learning technology improves its predictions over time.

"Air Products' Process Intelligence system has helped us improve our aluminum recycling operation by reducing production losses and energy consumption. This has resulted in a more efficient, consistent and cost-effective process," said Mike Dines, Director at Tandom Metallurgical Group Ltd., which uses the APPI Process Advisor.



over 170,000 customers in 30+ industries, including:

- Refining
- Glass
- Chemicals
- Electronics
- Gasification
- Healthcare
- Natural gas
- Food and Beverage
- liquefaction
- Metals
- Water Treatment



Additional information: Sustainable Offerings → Our products from A to $Z \rightarrow$

PRODUCTS THAT BENEFIT OUR CUSTOMERS AROUND THE WORLD

Air Products' gases, equipment and applications enable our customers and their downstream users to improve sustainability by increasing productivity, producing better quality products, reducing energy use and lowering emissions. We enabled 69 million metric tonnes of CO₂e to be avoided in 2019 through several of the following products.



Oxy-fuel Technology

Air Products' oxy-fuel combustion technologies are used in energy-intensive applications like cement, metals and glass manufacturing to increase production, lower fuel use and costs, reduce emissions and optimize efficiency. Air Products has been a leader in oxy-fuel technology since it was first introduced over 50 years ago and continues to help customers improve operations and efficiency through new burner designs and performance testing at our world-class combustion laboratory facilities.



Gasification

Gasification technologies convert lower-value feedstocks into syngas that can be used to make highervalue products such as substitute natural gas, power, steam, hydrogen, transportation fuels, fertilizers, chemicals, and more. Gasification of coal is the cleanest of all coal-based electric power technologies and produces significantly lower levels of air emissions and solid waste than traditional, combustion-based power generating processes. Gasification also enables countries to use available resources and improve energy security by converting feedstocks into cleaner energy and value-added products. Air Products has acquired gasification technology and is developing a robust technological foundation to serve the growing gasification industry.

Hydrogen

Hydrogen is used to refine heavier, sour crudes, increase refinery yields and reduce emissions through cleaner transportation fuels including ultralow sulfur diesel fuel and hydrogen powered electric fuel cell vehicles. Many other industries such as electronics, food, glass, chemicals, and more also benefit from hydrogen's unique properties to improve quality, optimize performance and reduce costs. Air Products is the world's largest provider of hydrogen. We operate over 100 hydrogen plants, including some with liquefaction capabilities, and which have a combined 1,500 years of operating experience. In many cases, we provide hydrogen from pipeline systems around the globe, including the world's largest hydrogen pipeline network and system located in the U.S. Gulf Coast.



Biogas Membrane Separators

Biogas membrane separators are used to produce methane from farm waste, manure, or municipal waste. The proprietary hollow fiber membranes purify the biomethane by removing unwanted elements from the biogas stream, so it can be used to generate heat and power.





Modified Atmosphere Packaging (MAP) and Freshline® Solutions

Gases for MAP and Freshline® solutions provide high-purity gases and equipment to extend the shelf life of food, improve taste, reduce waste, and help to keep production cost down. The research and development team at Air Products has been at the forefront of food freezing for over 50 years, pioneering cryogenic technology and continuing to push the boundaries of efficiency and versatility while ensuring safety and hygiene.

LNG Process Technology and Equipment

The use of LNG continues to increase with strong energy demands in growing economies. Air Products' LNG technology and equipment enables the efficient and economic production and transport of this critical energy resource, including from stranded energy sources around the globe. More LNG is produced using Air Products' mixed component refrigerant and liquefaction processes than any other processes, with over 100 LNG trains currently in operation. We manufacture this efficient and reliable equipment at our state-of-the-art facility in Florida (U.S.). In the past year, Air Products dedicated an LNG Equipment Test Facility and announced a manufacturing plant expansion at the site.

Halia®

Air Products' Halia® solutions enable healthy aquatic ecosystems and effective treatment of water and wastewater. We supply high-purity oxygen and Halia® aeration systems for use in hatcheries and fish farms, lakes, ponds and other water bodies to promote conditions that allow fish, turtles and other aquatic life to thrive. Since the 1960s, Air Products has provided solutions to increase and improve treatment of wastewater and drinking water for industrial and municipal customers. These innovative, value-added technology solutions improve water quality, reduce costs, lower emissions and increase the environmental sustainability of water treatment processes.



Helium

Helium and our high purity medical gases help sustain life. Magnetic resonance imaging (MRI) is enabled by helium, which is used to keep MRI magnets cold and superconducting. Helium is also valued as a gas for lifting, breathing, leak detection, space exploration, semiconductor manufacturing, scientific applications, and shielding. It has unique properties that optimize performance and productivity, reduce labor costs, and improve safety. As a leading producer and supplier of helium, Air Products has pioneered many of the helium extraction, production, distribution, and storage technologies still in use - including cryogenic equipment for most of the world's helium recovery plants.

Hydrogen for Mobility

Hydrogen can be used in many different types of transportation, either in a fuel cell or an internal combustion engine, to eliminate or significantly reduce emissions. Our SmartFuel® hydrogen fueling station technology provides complete fueling infrastructure from supply to dispensing for fuel cell vehicles and is used in 1.5 million hydrogen fills per year. With more than 50 years of hydrogen experience, Air Products is at the forefront of hydrogen energy technology development. Cars, trucks, vans, buses, scooters, forklifts, locomotives, planes, cell towers, material handling equipment, and even submarines have been fueled with our SmartFuel® technologies.



|INNOVATION|

Why It's important

Addressing sustainability challenges requires ingenuity, innovation and partnership. For example, as population and prosperity increase around the world, including in emerging markets, so will the demand for energy. The higher demand must be met through cleaner energy solutions and improved energy efficiency. The same is needed to address the rising levels of CO₂ in the atmosphere and increased demand for food, water and other valuable resources.



What We're doing

Our research groups are aligned with our businesses and focus on improving our processes and helping our customers. Research and Development (R&D) concentrates on new and improved processes and equipment for the production and delivery of industrial gases and new or improved applications for industrial gas products that help our customers improve sustainability. Air Products also funds and cooperates in R&D programs conducted by major universities and other organizations.

R&D is conducted principally at our Technology Centers in the United States (Trexlertown, Pennsylvania), the United Kingdom (Basingstoke, Hersham and Carrington), Spain (Barcelona), China (Shanghai), India (Pune) and Saudi Arabia (Dhahran).

Air Products is developing innovations in three key areas that are also opportunities to enhance the sustainability of our customers:

Gasification

Countries and large companies around the world continue to focus on gasification to utilize abundant natural resources to make synthetic gas or syngas. Gasification enables liquid fuels, high-end chemicals and power to be produced from syngas by countries that have massive resources of coal and want to reduce dependence on imported oil, as well as countries that have significant natural gas reserves and want to create additional value from the fuel. Gasification also provides a solution for refineries all over the world that need to find a use for high sulfur bottom-of-the-barrel liquids that can no longer be used as fuel for ships and for petroleum coke, which also has diminishing outlets for its use because of its high sulfur content. From an environmental perspective, gasification allows for the easier removal of pollutants like sulfur and nitrous oxides, and the transportation fuels produced from syngas have significantly less sulfur dioxide emissions and provide local environmental and health benefits. Gasification will also be a growing energy source across the globe, expected to produce nearly 4 million megawatts of energy by 2026, more than doubling its 2017 output.a

Carbon Capture

Carbon capture is a high-impact opportunity to help tackle climate change and will be essential to meet the Paris climate goals. We see significant opportunities to capture CO_2 from gasifiers and hydrogen plants for use in sequestration, enhanced oil recovery and productive use of CO_2 . We can deploy these carbon capture technologies in new plants or in retrofits of existing facilities.

Hydrogen and the Energy Transition

As the world's largest hydrogen producer, we are an important part of bringinghydrogen to scale on the way to a clean energy future. Hydrogen is almost entirely supplied from natural gas and coal today – this is because the resources are plentiful and producing hydrogen from low-carbon energy is costly at the moment. Our team is working on reducing the emissions created in the production of hydrogen. We are also increasing the volume of blue and green hydrogen we produce – and are investing in new, clean hydrogen solutions for our customers.





Our Commitments and Contributions

We are committed to improving our energy efficiency and reducing emissions intensity while helping our customers do the same. We have advanced our three innovation platforms by:

- Acquiring leading technologies Shell's Coal Gasification Process (SCGP) and GE Energy's gasification technology that give us the ability to process low-value feedstocks more efficiently and to reduce overall emissions.
- Working on our contribution to the Project Porthos, a major development in Rotterdam, which is expected to capture and store 2-2.5 million metric tons of CO₂ each year.^b
- Taking a leadership position in the development of hydrogen supply and fueling infrastructure. Our technology has been used in over 10 million hydrogen fills to date, and Air Products has been involved in over 250 hydrogen fueling projects in over 20 countries.
- Successfully monitoring and maintaining industrial gas facilities in our fleet of operating plants around the world using our proprietary ProcessMDTM platform for predictive monitoring and fault diagnosis.

The Key to Carbon Capture – High Purity CO₂

Around the world, companies are looking to capture, utilize or store CO_2 . However, the CO_2 produced is at low pressure and low concentrations, which makes capture difficult and expensive. At Air Products we can solve this problem by removing CO_2 from process gas.

Our CO₂ Vacuum Swing Adsorption (VSA) technology captures CO₂ from hydrogen in a single step, producing a high-purity CO₂ stream ready for storage. Using this process,

gas is fed into vessels containing high-surface area adsorbents that preferentially remove CO₂ when under pressure. When a vessel has been fully saturated with CO₂, the feed is switched to the next vessel and the pressure is reduced before CO₂ is removed by a vacuum pump. The sequencing of the beds is designed to achieve a high purity CO₂ product. CO₂ VSA systems can also be optimized based on product flow, purity and pressure, energy cost and expected operating life.

Air Products has successfully used this technology to enable capture of nearly 1 million metric tons of ${\rm CO_2}$ per year since 2013.

 $^{{\}tt a}\ https://www.zionmarketresearch.com/report/coal-gasification-market}$

b https://www.rotterdamccus.nl/en/the-project/

ETHICS AND INTEGRITY |

Why It's important

A company's success is built on the trust of its employees, customers and other stakeholders. Unethical behavior, such as bribery and corruption, negatively impact stakeholder perspectives and company performance.



What We're Doing

Integrity — behaving ethically and being true to our word — is a core value at Air Products and one we must never compromise. We do not tolerate ethics violations and have put strong policies and programs in place to prevent, detect, report and address these issues. This includes Air Products' Code of Conduct and Business Ethics (Code of Conduct). Every employee is required to comply with the Code of Conduct, complete mandatory training and certify their understanding of the Code of Conduct annually.

Air Products encourages individuals to report, as allowed by local law, misconduct or ethics violations. Every allegation is reviewed, investigated and closed. The Company has a disciplinary process to address allegations that have been confirmed and pursues actions up to and including termination.

We also conduct risk assessments for the potential of corruption risks across the organization through our compliance function and our internal audit processes, which are applied globally. Significant risks that have been identified include relationships and transactions with governmental authorities and the use of third-party intermediaries, the approval and use of which are controlled through an internal global process.

Our Commitments and Contributions

Our goals are twofold – require 100% of employees to be trained and certified in our Code of Conduct, and continuously improve our compliance systems and performance. To that end, the annual Code of Conduct training and certification (ACOC) are combined into a comprehensive online program that each employee is required to complete. All employees met this requirement in 2019.



IntegrityLine is available 24/7 for reporting allegations



Selected Topics from our Code of Conduct

- Conflicts of Interest
- Fraud
- Bribery and Corruption
- Payments to Government Officials
- Gifts, Travel, and Entertainment Expense
- Financial Accounting and Reporting Accuracy

- Competition Law, and Fair Dealing and Anti-Boycott Laws
- Import/Export Laws
- Insider Information
- Confidential and Proprietary Information
- Company Assets
- Records Management

- Communications and Privacy
- Political Contributions and Lobbying
- Social Media and Public Communication
- Equal Employment Opportunity and Prevention of Harassment
- Environment, Health, Safety, and Security
- Workplace Violence
- Substance Abuse
- Sustainability and Corporate Social Responsibility
- Audits and Investigations
- Anti-Retaliation

100%
Employee
Completion
of code of conduct
training and
certification.

Data Privacy and Cyber Security

We believe it is our responsibility to safeguard, in accordance with applicable laws, the personal information of our employees and all other individuals with whom we work, including customers, partners, suppliers and contractors. This commitment is documented in our Global Data Privacy Policy. We have had no substantiated complaints regarding breaches of privacy, infringement of privacy rights or losses of customer data.

Cyber threats are one of the largest security threats that our world faces today, not only in our business, but in our personal lives as well. Air Products' cybersecurity efforts fall under the responsibility of the Chief Information Officer and are led by our Information Technology Team. Our approach to cyber threats uses a risk-based framework that includes five core functions:

- identifying potential risks to systems, assets, data and capabilities;
- protecting critical infrastructure services;
- detecting cyber events;
- responding to events by taking appropriate actions; and
- recovering and restoring capabilities that may have been impaired.

All employees are trained on information security and expected to follow procedures, stay up to date on cyber threats, report suspicious activity and maintain current and compliant computing systems.

Additional information:

Commitment to Ethical Business →

Code of Conduct →

IntegrityLine →



CONSERVE

Protecting the Environment through Responsible Consumption and Production

We have a shared responsibility to protect our air, water and land. This is reflected in our fundamental ambition to help solve today's and tomorrow's energy and environmental challenges.

We are committed to improving our own performance by operating efficiently, incorporating environmental considerations into the design of our facilities and products, effectively managing environmental risks and transparently communicating our environmental performance. While our resource consumption and emissions may increase due to growing societal and customer demands for our products, our efficiency and environmental improvements enable us to make our customers' processes and products better without proportionally expanding the environmental footprint of our ASU and HyCO businesses.

We also encourage suppliers to incorporate environmental sustainability into their operations and supply chains as described in our Supplier Sustainability Expectations. Additional supplier requirements are provided in the Care section of this report.

Efficient Use of Resources

The principal raw materials for making atmospheric gases and hydrogen are air, energy as electricity or steam and natural gas. Air, which is considered by many to be a renewable resource, represents more than 90% of the raw materials we use on a weight basis. Similarly, 80% of the raw material used for our carbon dioxide business is from renewable sources.

Industrial gas manufacturing is energy intensive. ASUs require electricity or steam to compress air so it can be cryogenically distilled into oxygen, nitrogen and argon. Likewise, the production of hydrogen consumes natural gas, and in some cases refinery off-gas, as a feedstock and/or fuel in the production process. The products produced enable our customers to be more energy efficient, which reduces their fuel consumption and emissions.

Packaging is not a significant issue for Air Products because we supply most of our products in two-way bulk containers, semi-bulk containers or via pipelines. For small-scale supply in certain regions of the world, we use cylinders that are long life, returnable, and reusable transportable pressure vessels with typical life spans of 20+ years.



Environmental Management at Air Products

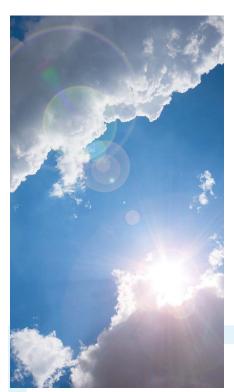
- Our Environmental, Health and Safety (EHS) Policy
- Goals for energy efficiency, CO, reductions and water conservation
- Our global EHS Management System, applicable to all operations, which contains environmental standards and procedures and which is aligned with ISO 14001
- Employee training requirements based on job function
- Risk assessment processes for products, processes and regulatory requirements
- Compliance audits conducted by our EHS Assurance Team
- Review of performance by our Board of Directors, Sustainability Leadership Council, Businesses and Operations, and members of our Environmental Centers of Excellence
- Internal reporting of results on a monthly basis
- External reporting on environmental performance through our annual Sustainability Report, public website, and responses to various stakeholders

ENERGY AND CLIMATE

Why It's important

Energy consumption and CO₂ emissions are inextricably linked. The world needs clean, sustainable energy – energy that protects our environment and moves us all toward a better future. World CO₂ emissions were expected to reach 36.8 billion metric tons in 2019 and are expected to grow for at least another decade.^a

a https://news.stanford.edu/2019/12/03/globalcarbon-emission-increase/



What We're doing

We believe a diverse mix of solutions is needed to meet clean energy needs while reducing greenhouse gases (GHG), as noted in our GHG strategy. For example, we supply vast quantities of hydrogen to petroleum refiners to lower sulfur content and produce cleaner-burning gasoline and diesel fuels. Likewise, our oxy-fuel burners improve productivity for glass and metal manufacturers while reducing energy consumption and emissions. We have leading technologies for gasification, carbon capture and hydrogen for mobility and the broader energy transition.

From an operational perspective, industrial gas manufacturing is energy intensive. Energy consumption is the most significant variable in the cost of our production processes. We carefully track and manage energy purchases, and our conservation programs are focused on continually improving energy efficiency across our plants, particularly larger facilities. Efficiency improvements are realized through higher plant utilization, increased production at new, larger and more efficient facilities and hundreds of facility improvement projects. Several of our facilities have been certified to the ISO 50001 Energy Standard.

Our Commitments and Contributions

In 2019, we continued to make progress on our 2020 environmental sustainability goals (2015 baseline year):

- Save energy by reducing use intensity by 2.5% for ASUs and 1.5% for HyCOs
- Reduce GHG emissions intensity by 2%
- Improve efficiency and reduce CO₂ emissions related to distribution by 10%
- Conserve water and lower use intensity by 5%

As we reach the end of our 2020 sustainability goal framework, we are establishing a new set of sustainability targets.

Climate Scenario Analysis

Scenario analysis is a tool that evaluates the potential effects of future events on an organization, such as climate change. Air Products is examining several climate scenarios, which are in line with the

recommendations of the Intergovernmental Panel on Climate Change (IPCC) and Task Force for Climate-related Financial Disclosures (TCFD), to examine the potential implications of climate-related risks and opportunities on our businesses.

Carbon Productivity

Carbon productivity is a measure of how much value is generated from the consumption of energy. We are working to improve our carbon productivity through several mechanisms, including: improving the energy efficiency of our production processes and product distribution; increasing our use of renewable energy; pursuing opportunities to further deploy our carbon capture technology and expertise; and enabling our customers and their downstream users to avoid CO_2 emissions. Below are carbon productivity improvements for 2019 (compared to 2015 baseline).

3.7%

reduction in energy intensity realized by our ASUs

23%

of the electricity we purchased was from renewable sources

18%

improvement in distribution efficiency

0.9%

improvement in energy efficiency for our HyCO units

>\$100 Million

in cumulative energy and water costs avoided

>80,000

metric tons of CO₂ avoided through distribution improvements^b 2.3%

decrease in GHG emissions intensity^a

>1Million

metric tons of CO₂e avoided through efficiency improvements^a

2.5 Times

the ratio of CO₂e avoided by our customers to our emissions^a

Our total energy consumption in 2019 was 52.5 TWh, representing a 5% increase from 2018. The increase was a result of our growth that was driven by rising societal and customer demands, particularly in Asia. At the same time, we continued to reduce energy use intensity for our operations, using proportionally less energy to make the products our customers need. Our ASUs surpassed their energy efficiency goal for 2020, achieving a 3.7% improvement in energy efficiency intensity, and our HyCO operations have improved by 0.9% since 2015. These successes were realized through higher plant utilization, increased production at new, larger and more efficient facilities, and hundreds of facility improvement projects involving changes to equipment and manufacturing processes.

Our direct (Scope 1) and indirect (Scope 2) $\rm CO_2$ emissions are related to the energy we consume. In 2019, our Scope 1 GHG emissions, which are primarily from our HyCO operations were 16.6 million MT, representing a 1% increase from the prior year. Our Scope 2 emissions, which are due in large part to the electricity and steam we consume in our ASUs, were 10.6 million MT in 2019, which was a 4% increase from 2018. On an intensity basis, our Scope 1 and 2 emissions improved by 2.3% due to energy efficiency improvements and we met our GHG emissions intensity goal for 2020. Our Scope 3 emissions were 6.6 million MT.

As in prior years, CO₂ emissions data was externally verified by WSP, a management and consultancy service provider.



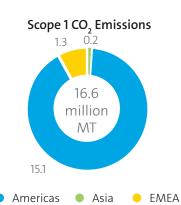
cIntensity goals are configured as the ratio of reporting year (2019) value (i.e., energy, emissions, or water) to reporting year production divided by the value to production ratio in our base year (2015). Using a ratio allows the reported results to be dimensionless and protects confidential production data.

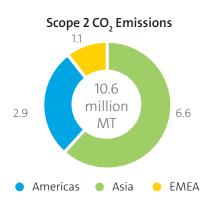
^a Includes Scope 1 and 2 emissions ^b Includes Scope 1 emissions

Energy Consumption 7.5 52.5 TWh

Steam

ElectricityFuels





We have made several investments over the past several years to improve fleet efficiency, reducing fuel consumption and $\mathrm{CO_2}$ emissions. This included replacing 30% of our North American tractors, 65% of our fleet in the UK with fuel efficient Euro 6 compliant tractors and replacing additional tractors in Belgium, France and the Netherlands. Upgrades also included higher payloads on some vehicles that increased tons of product shipped per distance driven and fuel efficiency. We have met our distribution efficiency goal.

Capturing CO, in Texas

In Port Arthur, Texas, Air Products operates the largest CO_2 purification and capture project for enhanced oil recovery (EOR) by an industrial gas company. Air Products designed, constructed and operates the state-of-the-art system to capture CO_2 from two steam methane reformers located at the Valero Port Arthur Refinery. The CO_2 removal technology was retrofitted to the SMRs, which produce hydrogen to assist in the making of cleaner burning transportation fuels by refinery customers on Air Products' Gulf Coast hydrogen pipeline network.

 ${\rm CO_2}$ captured from Air Products' SMRs finds a second use by enabling our partners in Port Arthur to realize greater yields in their oil extraction process due to injection of ${\rm CO_2}$ into sedimentary rock, which has the duel benefit of enhanced oil recovery (EOR) and the sequestration of ${\rm CO_2}$ beneath the earth's surface. Since 2013, when it initiated onstream capture operations, Air Products has captured nearly one million tons per year of ${\rm CO_2}$ at Port Arthur that has been put to beneficial use.

Carbon capture is essential to meeting the Paris climate goals. Significant opportunities are available to capture CO₂ from gasifiers and hydrogen plants, and we can deploy our carbon capture technologies and other technologies developed by

Air Products in new plants or by retrofitting existing ones.



Building a Sustainable Future

In 2019, Air Products and Saudi Aramco announced a joint agreement to build the first hydrogen fueling station in Saudi Arabia. The pilot program represented a first step in demonstrating oil-based hydrogen-powered systems with the Kingdom and combined Air Products' technological know-how and experience in hydrogen with Saudi Aramco's industrial experience, facilities and R&D capabilities.

Together the companies have established a fleet of hydrogen fuel cell electric vehicles. The vehicles are being fueled with high-purity compressed hydrogen that is dispensed at the hydrogen fueling station located at Air Products' technology center in the Dhahran Techno Valley Science Park. Air Products' proprietary hydrogen fueling technology is incorporated into the station.

The fleet of vehicles have a driving range of 500 kilometers and emit only water. Vehicle refueling is quick, averaging five minutes as opposed to an hour for traditional battery electric vehicles. This project, together with Air Products' fueling stations around the world, demonstrate the potential of hydrogen fuel cell electric vehicles to make a significant contribution to a clean, secure and affordable energy future.



Supporting the Energy Transition

The world faces a huge challenge in shifting toward clean, sustainable energy sources. Air Products supports its customers as they execute their energy strategies alongside economic growth and social development. We recognize that carbon-based fuels will continue to be instrumental for the equitable development of the global economy, and that substitution of coal-based energy with less carbon-intensive energy may not be economically feasible in some circumstances. As the world transitions to lower carbon energy sources, our technologies and products enable our customers to reduce emissions from legacy energy sources while they pursue new sources of energy for their operations and manufacturing processes.

Air Products is the world's largest supplier of hydrogen, and we are scaling hydrogen production and fueling infrastructure to ensure its successful adaptation as a sustainable fuel. When used in a fuel cell, hydrogen is nearly two times more efficient than gasoline and diesel on a "well-to-wheel" basis and produces no emissions. Today, in California, individual customers can buy a hydrogen-powered fuel cell car and fill it at Air Products' and other hydrogen filling stations that feature our leading fueling technology. From Japan to Korea to Europe – across the world we are working to build access to these cleaner passenger vehicle opportunities. We see even greater opportunity for long-haul transportation – buses, trucks, trains and ships.

Our commitment to hydrogen will set the stage for the future of the fuel as a sustainable option for mobility and the broader energy transition.

Hydrogen has significant potential as a household and industrial fuel. Even with current natural gas infrastructure, hydrogen can be blended at levels up to 20% without major infrastructure or appliance modifications. Hydrogen can be made from renewable resources and can simultaneously reduce a country's dependence on imported energy and significantly reduce GHGs.



Renewable Energy

Air Products increased its use of renewable energy in 2019, continuing our journey to identify green energy sources that can reduce our energy costs and environmental footprint. In some countries we purchase renewable electricity, including the United Kingdom, while in France we purchase guarantees of origin. We have installed solar arrays at several of our production and office facilities, generating electricity for internal consumption. Overall, 23% of our electricity purchases were from renewable sources in 2019.

Facilities with solar arrays

- Keumiée, Belgium
- Araraquara, Brazil
- · Tainan, Taiwan
- · Kuan Yin, Taiwan
- Halfweg, The Netherlands
- · Allentown, Pennsylvania

Additional information:

CDP response →
Climate Change Policy Statement →

Third-party verification of CO₂ data →

|WATER CONSERVATION|

Why It's Important

Water conservation is critical to the health and sustainability of our planet. Experts project a 40% shortfall between water demand and fresh water supply by 2030, and by 2050 nearly three billion people will live in water-stressed areas.

What We're Doing

Air Products cannot operate its facilities without adequate water supplies. This reality drives us to be good stewards of water. We use water primarily for cooling, to make hydrogen using the steam methane reforming (SMR) process and to provide steam and water to our customers. The steam is a co-product of our SMRs and has a significant energy efficiency advantage and related environmental benefit when compared to steam generated from boilers. Because of these uses, our water consumption is tied closely to energy use; therefore, improvements in energy efficiency can also conserve water. We also use water for safety systems (i.e., fire suppression) and cleaning.

We have significantly improved our water efficiency by identifying facilities that are consuming more water per unit production than similar facilities, conducting assessments at these facilities to identify conservation opportunities and making appropriate changes at the plants. Much of our water conservation has been through improved cooling tower operations and converting to recycled gray water in our plants. We have also used air-cooling to reduce water consumption.

We continue to use recycled water, particularly in Southern California, to reduce our consumption of freshwater. Collaboration with industrial neighbors and joint venture partners has enabled this recycling. Across all our plants, we estimate that 9% of our water was from recycled sources in 2019.



Our Commitments and Contributions

In 2016, Air Products established a goal to reduce water consumption by 5% on an indexed basis by 2020 from a 2015 baseline. We achieved this goal in 2017 and continued to improve water efficiency through subsequent years, reducing our water intensity by 7% in 2019 for a total reduction of 26% since the baseline year.

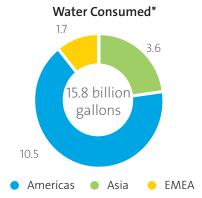
Our consumption of water, on an absolute basis, decreased to 15.8 billion gallons in 2019 due to increased water recycling. Additional data on water withdrawals, consumption and discharges is provided in the GRI Content Index to this report.

Business Opportunities for Water Treatment

Customers rely on our technologies to improve water quality and treat wastewater. Our offerings include: pure oxygen aeration systems for wastewater treatment and aquaculture; oxygen for ozone generation; carbon dioxide for pH adjustment and drinking water remineralization; and ozone and advanced oxidation systems for wastewater treatment.







* Includes water discharged but not returned to source

Water Stress

We have identified operations in water stressed areas, particularly areas where the baseline water stress is high or extremely high according to the World Resources Institute Aqueduct Water Risk Atlas. In 2019, 22% of our facilities were located in water stressed areas.

ADDITIONAL ENVIRONMENTAL MEASURES

Waste

Industrial gas production does not generate significant waste. Hazardous waste generation from acetylene manufacturing results in a by-product lime slurry. This slurry is often beneficially reused in other processes, such as water neutralization, brick production and in hardening materials in landfills.

Other sources of hazardous waste include spent catalysts, waste oils and solvents, waste paint and materials used to cleanup small spills. All waste is managed and treated in accordance with the regulatory requirements of the jurisdiction in which the waste is generated. Waste that cannot be recycled is disposed of in an environmentally sound and regulatory compliant manner.

In 2019, the amount of hazardous waste we generated globally was 6 million pounds, an increase of 1% compared to 2018. The increase was primarily due to plant decommissioning. Our non-hazardous waste in North America totaled 11 million pounds, which was substantially higher than the prior year due to large, one-time disposal activities for projects at several sites.



Air Emissions

The manufacture of atmospheric gases produces negligible Scope 1 and other air emissions. Most of our air emissions are from hydrogen manufacturing and utility operations that support our facilities. We monitor and report air emissions in accordance with applicable regulations.

- NO_x and SO_x are products of combustion and are primarily from fuel used in our boilers and SMRs.
- Other air pollutants result from the minor loss of materials used in our processes or solvents used in the maintenance of equipment that include toxics under the U.S. EPA Toxic Release Inventory (TRI) program, other criteria pollutants, hazardous air pollutants (HAPs) and volatile organic chemicals (VOCs).

Additional data on air emissions is provided in the GRI Content Index to this report.

Environmental Compliance

Regulatory fines decreased in 2019 to \$4,400 and notices of violation were 24% lower compared to prior year (13 vs. 17). There were no reportable spills..



Ozone Depleting Substances and Fluorinated Gases

Air Products does not manufacture ozone depleting substances (ODS) such as hydrochlorofluorocarbons (HCFCs) or chlorofluorocarbons (CFCs). We do sell different gas mixtures that contain very small quantities of HCFCs and CFCs in cylinders for calibration of detection instruments as allowed under the Montreal Protocol.

Fluorinated or "F gases" are often used as a replacement for ODS. We do not make F gases but do supply them in Europe for use as refrigerants and in mixtures for special applications, such as calibration. We also recover, recycle and reclaim F gases for destruction.



Texas Wetlands

In Texas, Air Products purchased over 200 acres of wetlands for perpetual preservation to enhance the existing Tony Houseman Wildlife Management Area. In Louisiana, we converted 150 acres of privately-owned uplands into forested wetlands, restoring natural hydrologic flows, planting cypress-tupelo and bottomland hardwoods and providing long-term monitoring and financial assurances.

Biodiversity

Early in the planning stages of any new capital investment, from new plants or expansions to pipelines, we assess safety, human health, socioeconomic, cultural and environmental impacts. These assessments can influence decisions to modify a project or develop mitigation strategies to ensure the ecological health of the location and region is maintained or enhanced. Likewise, our construction practices focus on preserving the local environment by reducing the likelihood of spills or negative effects from runoff.

Air Products discharges water into eight Conservation International Biodiversity Hotspots including: the Atlantic Forest, California Floristic Province, Chilean Winter Rainfall and Valdivian Forests, Indo-Burma, Mediterranean Basin, Sundaland, Tropical Andes and Tumbes-Choco-Magdalena. The water discharged into these locations in 2019 was insignificant, averaging <0.01% of the total volume of water contained in the associated water body.



Caring for Our Employees, Customers and Communities

As noted by our Chairman, a thriving society and healthy planet are inextricably linked.

CARING FOR OUR EMPLOYEES, CUSTOMERS AND COMMUNITIES

Our gas products enable economic opportunities and foster healthy communities. We develop, execute, own and operate complex process facilities that become game-changers for local economies. Likewise, we take the materials that are plentiful in emerging markets and help transform them into high-value products that enable these countries to grow and improve standards of living.





We innovate alongside our customers to help make their energy projects more sustainable, create efficiencies, improve standards of living and support the social development of communities around the globe. Our megaprojects are job creators and provide direct economic benefits to local communities and indirect economic benefits through supply chains. The high-value products produced through these projects often become the backbone for economies. For example, in India, an important ingredient in fertilizers, urea, can be made from syngas. These fertilizers support the agricultural industry, which employs about half of the country's workforce. Syngas can also be used to make dimethyl ether, a substance that — in emerging markets — helps families replace wood for cleaner cooking. The time saved from gathering wood and reduced cooking times, tasks done predominantly by women in India, enables women to spend more time developing skills that can be used to generate income for themselves and their families.

We recognize that we cannot do this alone. We need engagement with key stakeholders. We walk with our customers along their sustainability journey. We work with governments to understand their development and energy goals, and we build projects that help governments around the world achieve those goals. We partner with civil society organizations to understand how we can work with them to amplify the social benefits of our projects and be better stewards of the environment.

Along this journey we strive to promote health, safety, our people and our communities:

- We have a passion for safety safety is fundamental to who we are as a company. Safety is a shared value, and one can feel our employees' commitment and see it demonstrated in many ways every day. Safety is a critical component of everything we do, everywhere in the world.
- We are focused on enabling our employees to thrive and excel at Air Products.
 We have a tradition of excellence that has been built by passionate, talented people who are driven to succeed.
- We continue to invest in the long-term health and vibrancy of the communities in which we live and work.

SAFETY

Why It's important

Ensuring that employees return home after work in good health is the most important reason to have a safe and healthy work environment. Excellent safety performance can also lower business costs related to missed work, productivity impacts and workers' compensation premiums. It has also been shown that safe workplaces build employee trust, reduce absenteeism and result in higher quality products that enhance business.

Safety Performance in 2019 vs. Prior Year

	2019	2018
Fatalities	2	0
Employee Recordable Rate	0.45	0.29
Employee LTI Rate	0.09	0.07
Contractor Recordable Rate	0.50	0.31
Contractor LTI Rate	0.02	0.07

What We're Doing

Safety is central to our Company goal of being the safest, most diverse and most profitable industrial gas company in the world. We also believe it's a moral obligation. We want our employees to return home to their families as safe and in the same condition as when they arrived for work.

Our beliefs about safety have been instituted for decades through our Total Safety Values, which stress that nothing is more important than safety and that adherence to safety is a condition of employment. Our current leadership has built on this strong foundation, making us an even safer company.

Year-on-year we strive to improve safety for our colleagues, customers and host communities.

Our Commitments and Contributions

Our goal is to be the safest industrial gas company in the world. Although we have improved our lost-time injury rate by 63 percent and our recordable injury rate by 22 percent since 2014, our safety performance in fiscal 2019 was not acceptable by Air Products' standards. Regrettably, we had two contractor fatalities in 2019, one in Spain and one in Brazil. Steps were taken to ensure the risks associated with these incidents were identified and communicated.

Safety and Health Management at Air Products

- Our Environmental, Health and Safety (EHS) Policy
- · Goals for employee, contractor and transportation safety
- Our global EHS Management System, applicable to all operations, which contains safety and health standards and procedures and which is aligned with ISO 45001
- Employee training based on job function
- Risk assessment processes for workers, processes, products, transportation and regulatory requirements
- Compliance audits conducted by our EHS Assurance Team
- Review of performance by our Board of Directors, Sustainability Leadership Council, Businesses and Operations and members of our Safety Centers of Excellence
- · Internal reporting of results on a monthly basis
- External reporting on safety performance through our annual Sustainability Report, public website, and responses to various stakeholders



Worker Safety

Our Basic Safety Process (BSP), in use for over 15 years, provides the framework for employee engagement in upholding and continually strengthening our safety performance. BSP is focused on preventative activities, such as planned inspections, observations and behavior-based activities. Employees at all levels of the Company, including those under collective bargaining agreements, engage in coordinated BSP activities, such as sequential safety meetings that are held on a monthly basis for supervisors and their employees.

Our "Master the Basics" mindset takes BSP one step further by giving employees a mental checklist to use before undertaking any task. That checklist includes being aware of surroundings, knowing physical limitations, following procedures, using the proper personal protective equipment and thinking before acting. This mindset makes safety personal and actionable.

Process Safety

Staying on top of potential process safety hazards is one of the most important aspects of managing safety. To promote process safety, we apply sound engineering principles to design, construct, operate and maintain our plants and equipment while minimizing process related hazards. Our program considers regulatory requirements, such as U.S. OSHA's Process Safety Management and the European Union's Seveso Directive, and includes procedures, training, hazard assessments and quantified risk analysis.

Emergency Preparedness and Crisis Management

A critical part of BSP and our risk management effort is preparing for emergencies and crisis events. Every facility is required to have a site emergency plan on which employees train and practice. If a crisis involving one of our facilities or products occurs, our Crisis Management System is activated through the Air Products Global Security Operations Center (GSOC) that is manned 24/7/365. The GSOC is the critical communication hub for Air Products' global emergency and crisis response and utilizes communication tools to activate management resources. The Air Products Crisis Management System involves employees at all levels of the Company and marshals the resources and management skills necessary to effectively lead and respond in a crisis.

Security

We have and will continue to prioritize the security and safety of our employees, customers, and the communities in which we operate. The GSOC is designed to assist our global business in all areas of emergency response, crisis management, security planning and proactive monitoring of world events. Our formal security policies and standards address employee and facility security, product security, pipeline and land transportation security, Security Vulnerability Assessments (SVAs), workplace violence and contracted security services, among other areas.



Response to the COVID-19 Pandemic

As this report was being finalized, the novel coronavirus (COVID-19) became a significant threat to people and their livelihoods.

Air Products has responded to COVID-19 with speed and safety. Due to skyrocketing demand for medical oxygen, teams around the world mobilized to install oxygen tanks at hospitals and temporary facilities, converted trucks to oxygen service to enable more product to be delivered, and developed procedures to enhance safety during product delivery. We are proud to be designated as a critical industry and have kept our plants operating around the world so they could provide products, services and equipment essential to basic human needs.



Many of our employees are on the front lines during the pandemic, keeping our plants running and delivering to our customers the products they need. When possible, employees have been working from home to help maintain their health and safety as well as business continuity. During this crisis, we have not laid off any of our employees or reduced their salaries. Our strong financial position enables us to carry our people and their families through these unusual times.

Product Safety

Essential to product safety is ensuring customers and others handling our products have complete safety information. To prepare this information, we have conducted product safety reviews for our commercial products. These reviews include characterizing the intrinsic environmental and health hazards of the products, examining product uses and creating management actions to address potential concerns. Likewise, our phased process for new technology development has been used to identify and address potential risks of new products and applications.

Our high volume liquid/bulk industrial gas products are not toxic and can be handled safely with the appropriate procedures, equipment and training. Less than 2% of Company revenues are from sales of toxic substances.

Safety information from our product safety reviews is used in safety data sheets (SDS), which are a primary vehicle for communicating hazards information. We also share product hazards through labels that are compliant with the Globally Harmonized System (GHS), as well as internally-developed Safetygrams and customer training. We received a \$300 administrative fine in fiscal 2019 related to product safety.

Transportation Safety

Air Products drivers are the "face of the Company" to our customers and the public, every day. Their safety is supported through the safety features of our delivery vehicles, driver training and our Data Enabled Coaching Program (DECP).

The DECP relies on safety performance and vehicle efficiency data that are collected, recorded and transmitted by event recording cameras in our trucks. DECP coaches use the data, including the videos, to give feedback to our drivers that helps them improve their driving and become safer and more efficient. The videos can also be used for incident investigation, providing an advanced level of understanding of the contributing factors of an accident and highlighting preventative coaching and training opportunities.

Employee Health and Wellness

We are committed to creating environments and driving behaviors that sustain the health, safety and wellness of our people. Our Global Health and Wellness Team, consisting of medical professionals globally, works closely with our Human Resources and EHS organizations to ensure our global standards comply with governmental regulations, including on topics such as blood-borne pathogens, medical records management, emergency response, fire brigade and confined space entry rescue. They also provide a travel medicine program to help employees and family members traveling abroad and collaborate with Global Security to have the most current and relevant information available for travelers. Our Global Health and Wellness team is actively working with our Crisis Management Teams to protect and support our employees and facilities during the COVID-19 pandemic.

Safe and Sustainable Construction

Air Products assembled an international workforce of 6,000 people who achieved 27 million worker-hours on our ASU project in Jazan, Saudi Arabia without a single lost-time injury. The ASU facility, part of the largest industrial gas facility in the world, will supply 75,000 metric tons per day of oxygen and nitrogen to Saudi Aramco's refinery and the gasification and power operations on the site.

A multi-national team of people from over 30 countries filled the varied roles necessary for the construction project. Having such a diverse workforce, with different cultural and regional norms

with respect to safety culture and attitude to risk, made education a key and necessary component to drive Air Products' high standards of safety and well-being.

The safety achievement was accomplished through regular safety practices and initiatives and clear, consistent safety priority and performance expectations, with frequent senior management visits onsite during the peak construction period. The safety focus of the team enabled the construction of this large-scale energy infrastructure project in a safe and environmentally sound manner.

Employee Health and Wellness is Promoted through a Variety of Initiatives:

- Dedicated onsite clinics
- Health assessments and campaigns
- Ergonomic programs
- Fitness facilities and programs
- Health and nutrition
- Mental health services

Our Products Promote Health and Well-being

For nearly 80 years we've supplied medical grade gases, equipment, turnkey services as well as cryogenic services for magnetic resonance imaging (MRI) to hospitals and institutions globally. Our medical gases are used in secondary care centers, surgical centers, extended care facilities, research laboratories, at home and in stand alone MRI imaging centers.



TALENT AND DIVERSITY

Why It's important

People make organizations successful and their combined talents, commitment and motivation enable companies to meet their goals. Diversity gives companies access to a broader range of talent that provides insights into diverse customers and their needs. Plus, diversity enables companies to be more effective and profitable.

What We're Doing

Air Products brings together talented people to develop innovative solutions for the challenges that face us, our customers, and our world. This is part of our higher purpose, as is creating a first-class company where people belong and matter, and enjoy coming to work and are proud of what they do.

Our past and future success rely on promoting collaboration among people of different cultures and backgrounds. We are expanding the Air Products family globally by growing in new geographies. As we grow in new regions of the world, we bring with us our diversity and inclusion values to some areas where the societal roles of minorities and women are still evolving.

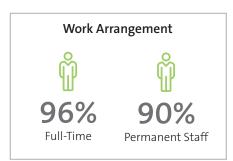
Our Commitments and Contributions

Our goal is to be the safest, most diverse and most profitable industrial gas company in the world, providing excellent service to our customers.

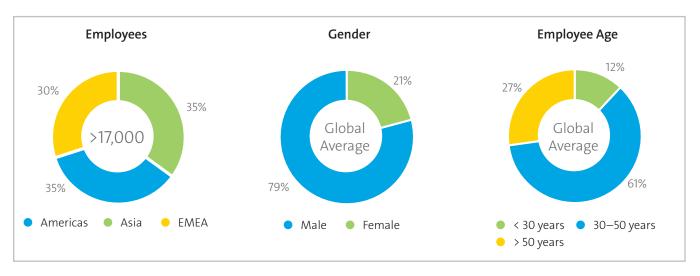
Our talent-related initiatives, including employee recruitment and development, diversity and inclusion and compensation and benefit programs, are focused on building and retaining the world-class and talented staff that is needed to meet our Company goals.

Members of Collective
Bargaining Units

33%



7.7%
Voluntary and Involuntary
Combined



Talent Management

We intentionally invest in attracting, hiring, developing and rewarding a winning global team. Our "Everyone. Everyday." approach to Talent Management originates from our belief that every job is important to our success and that we must support every employee to do his or her best work every day.

We employ a contemporary approach to Talent Management through an established framework focusing on three elements:

- **Performance Management** to ensure employees receive regular, ongoing and in-the-moment feedback and coaching;
- Individual Career Planning enabling employees and managers to work together to develop skills needed today and tomorrow; and
- Annual Talent Review and Succession Planning process where we identify and invest in future leaders and create a leadership pipeline for critical roles across the organization.

Diversity in the Workforce

21%

Females in the Workforce

21%

Females in Management

17%

Females in Senior Leadership

20%

Females in Executive Roles

20%

U.S. Minorities in the Workforce

17%

U.S. Minorities in Management

14%

U.S. Minorities in Senior Leadership

30%

U.S. Minorities in Executive Roles

U.S. Minorities are defined as U.S. employees who self-identify as Black, Hispanic, American Indian or Alaskan Native, Asian or Pacific Islander per U.S. Equal Employment Opportunity Commission guidelines.



Diversity and Inclusion

As we work to be the most diverse industrial gas company in the world, we are building a workforce that reflects the places we do business, fully utilizing the diversity of the talent pool and fostering a respective and inclusive culture so that employees seek out diverse perspectives and feel empowered to confidently express their viewpoints and mobilize actions to create meaningful change.

Air Products uses innovative recruiting strategies and has long standing partnerships with diversity recruiting organizations that help strengthen the pipeline of diverse talent. In 2019, 55% of our college hires were diverse. We continue to invest in the unique needs of diverse talent by providing our "Leadership Development Program for Diverse Talent," featuring inclusive leadership modules in our development programs for new and experienced managers and through unconscious bias training for leaders and hiring managers. These programs explore why diversity and inclusion matters, the role of leaders in achieving our D&I goals, the five key elements of inclusive leadership and how to take intentional action to counteract unconscious bias. We explore, through coaching and video demonstrations, how unconscious bias may influence hiring, coaching and development and who we listen to and praise.

These efforts contribute to increasing the representation of women and diverse talent at Air Products as we strive to be the most diverse industrial gas company.

Air Products sponsors Employee Resource Groups (ERGs) throughout the world. The ERGs form an Inclusion Network that partners with Company leadership to create supportive communities that help attract and retain talent, raise cultural awareness and competence, develop critical skills and competencies and contribute to the Company's diversity and inclusion objectives. Throughout the year the Inclusion Network and ERGs sponsor activities and programs for all employees, including workshops, panel discussions, awareness training and professional development sessions. Recently our LGBT+, Black and Women's ERGs joined forces to celebrate Black History Month with activities throughout the month and we celebrated International Women's Day with gatherings around the world.

Examples of Our External Diversity Partners:

- Catalyst
- National Action Council on Minorities in Engineering (NACME)
- National Black MBA Association (NBMBAA)
- National Society of Black Engineers (NSBE)
- Society of Hispanic Professional Engineers (SHPE)
- Society of Women Engineers (SWE)
- Women in Science and Engineering (WISE)

Our FRGs Include:

- AERO (Asian Employee Resource Organization)
- BERG (Black Employee Resource Group)
- EDGE (Ethnically Diverse Gulf Employees)
- Enable (Valuing employees of ALL abilities)
- HOLA (Hispanic Organization of Latinos and Amigos)
- ISERO (Indian Subcontinent Employee Resource Organization)
- Spectrum (LGBT+ Resource Group)
- WSN (Women's Success Network)

This year Air Products was recognized by several organizations for our strong performance in Diversity and Inclusion, including:

- earning a 100% score on HRC's Corporate Equality Index for the 4th consecutive year; and
- being named one of the Best Employers for Diversity in 2020 by FORBES® Magazine.

We Stand Together

Message from Seifi Ghasemi:

We stand together against the disease of racism.

We stand together against the malady of hate.

We stand together in our shared humanity and equality.

We stand together on the fundamental right of every person to be treated with dignity and respect.

We stand together.

Well-being Month Increases Personal Awareness, Connects Colleagues in New Ways

In November, employees throughout Asia celebrated Organizational Well-being Month. Colleagues took part in a series of activities hosted by local Diversity and Inclusion Councils designed to improve safety, health and wellness, better understand and appreciate diversity and create a more inclusive work environment.



The activities took place across China, India, Malaysia, Singapore, South Korea and Taiwan. External experts were invited to speak on promoting physical and mental well-being. Employees shared their own experiences, including a cancer survivor in Malaysia who hosted "Early Detection Saves Lives" and reinforced the importance of regular medical check-ups and maintaining a heathy lifestyle. Other topics included effective communication across generations, unconscious bias, resolving conflict, listening skills, and giving and receiving feedback. Employees also planted flowers, fruits and vegetables and organized exercise activities, including a Car-Free Family Fun Walk where employees and their families took part in a 5K walk and played games along the way.

Through all the activities, employees increased awareness of diversity and the importance of their personal well-being and helped their colleagues do the same.

Learning and Capability Development

Air Products offers many opportunities for employees to develop their skills, talents and careers. We set training and learning requirements for employees based on their roles and responsibilities and to support current and future business needs.

Our development competencies are aligned with our "4S" culture of Safety, Speed, Simplicity and Self-Confidence. Every colleague focuses on mastering nine competencies, and people leaders are accountable for excellence in an additional three leadership competencies.



9 Core Competencies:

All Employees

- Integrity
- Deliver Safety
- Passion to be the Best in the Industry
- Positive Attitude
- External Focus
- Drive Results
- Innovation
- Demonstrate Courage
- Develop Self & Others

Safety

Safety is a moral responsibility. The only acceptable goal is zero accidents.

Simplicity

We will simplify our organization, work processes and decisionmaking.

Speed

We will act with urgency and respond quickly to our customers' needs.

Self-confidence

We are a team working together to win. We will be the best in the industry.

3 Leadership Competencies:

Additional for Managers

- Lead and Inspire
- Manage Execution
- Strategic Mindset

Compensation

A work environment where employees know they belong and matter includes fair and equitable pay. Our pay practices apply equally to all employees, irrespective of gender, race, religion, disability, age or any other form of personal difference.

We strive to pay competitively in local markets where we do business and compete for talent. We benchmark our compensation to ensure that we are keeping pace with the market to provide competitive pay and benefits. Director and executive officer compensation, and CEO pay ratio, are available in our most recent proxy statement.

Benefits

While our benefits vary around the globe and across positions, some of the base benefits for full-time employees include:

- Accident insurance
- Education assistance
- Employee Assistance Programs, including guidance on legal, financial, family, work matters and well-being
- Employee Recognition Programs
- · Employee Referral Program
- Health plans
- Leaves of absence for personal, family, military and educational purpose
- Life insurance
- Paid vacation and holidays
- Retirement savings plans
- Training and development

Promoting Human Rights

Air Products is committed to safe-guarding human rights of our employees and in our business interactions. Our Human Rights Policy reflects this commitment and our expectations for equal opportunity, respectful work environments, prohibition of discrimination, freedom of association, prohibition of forced and child labor, compensation and working time, EHS and security and anti-corruption. A 24/7 Integrity Line is available to anyone who would like to report a potential issue, including human rights concerns.

We complete annual human rights assessments for our operations and supply chains. In 2019, we reviewed the potential for human rights issues in the highest risk countries in which we operate, and we did not identify any significant risks.

Additional information:

Careers website →
Human Rights Policy →
Human Trafficking and Slavery Policy →

| COMMUNITY SUPPORT |

Why It's important

Companies and communities, working together, can more effectively identify and address social issues and help create a more vibrant and sustainable community where employees and neighbors live and work. Collaboration also builds trust, a critical value required for companies to continue to operate and grow.

What We're Doing

For nearly 80 years, Air Products has been building relationships and contributing to the well-being of our host communities around the world. We do this in a variety of ways: through financial contributions from the Air Products Foundation, in-kind donations, employee directed giving and employee volunteerism with not-for-profit organizations. Our support priorities include education and workforce development, health and human services, community and economic development, arts and culture and environment and safety. We work closely with community partners, including not-for-profit organizations, emergency responders, elected officials, and education, business and community leaders, to identify the highest impact opportunities.

The Air Products Foundation

The mission of the Air Products Foundation is to build meaningful relationships with charitable organizations that share the values inherent in our higher purpose and enhance positive relationships with Air Products' employees, communities, customers and shareholders.

Using its mission as a guide, the Air Products Foundation supports programs in our host communities throughout the U.S., in global locations where we have employees and operations, at colleges and universities where we are strategically engaged, in national organizations committed to diversity and inclusion and through employee- and retiree-directed matching gifts programs.

Many of our employees directly support Science, Technology, Engineering and Math (STEM) related activities in collaboration with educational facilities, schools, colleges, universities and community groups. By attracting people to STEM careers, we help build future career paths and develop strong talent pools. Our STEM efforts target diverse groups, including students at different education levels, workers and community members. In 2019, we delivered over 100 STEM programs globally that touched the lives of more than 100,000 people.



LGBTQ Community

In 2019 Air Products worked closely with the Bradbury-Sullivan LGBT Community Center which is near the Company's headquarters and nationally known for its work to understand and support the LGBTQ community. The Air Products Foundation issued a successful challenge grant to help Bradbury-Sullivan pay off its mortgage with \$25,000 as a donation by the Foundation and \$27,000 raised by the community with Air Products' help. The mortgage on the building was paid off, and in its place, a new staff member was hired to work with youth, which is a vulnerable LGBT population.



Our Commitments and Contributions

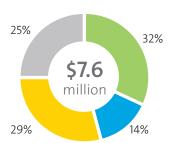
In 2019 the Air Products Foundation made nearly \$8 million in cash contributions. Nearly half of the donations were to organizations in our host communities, including our headquarters in Allentown, Pennsylvania as well as facilities in the U.S. and around the world. Talent grants, which make up about one-third of the donations, were provided to eligible institutions and organizations that help us attract, develop and retain diverse talent. Matching gifts are made by the Air Products Foundation to eligible not-for-profit organizations to which employees have made contributions, such as the United Way, and are matched dollar-for-dollar. In 2019 Air Products employees and retirees raised \$3 million for the United Way.

Working, Living, and Giving Around the World

We develop stakeholder outreach plans aimed at addressing high-priority needs and maintaining positive relationships with the communities near our largest operations globally. These plans include meetings with local leaders, facility tours, emergency response training and support for education and philanthropy.

Our employees are also very engaged in their local communities. In 2019, Air Products employees and retirees engaged in hundreds of community programs. For details about community projects, please see our Corporate Citizenship website.

FY19 Contributions



- Headquarters
- U.S Field/International
- Talent Grants
- Matching Gifts/United Way

Additional information:

Corporate Citizenship website → Political Contributions Policy →

A Sampling of Community Projects Around the World



North America:

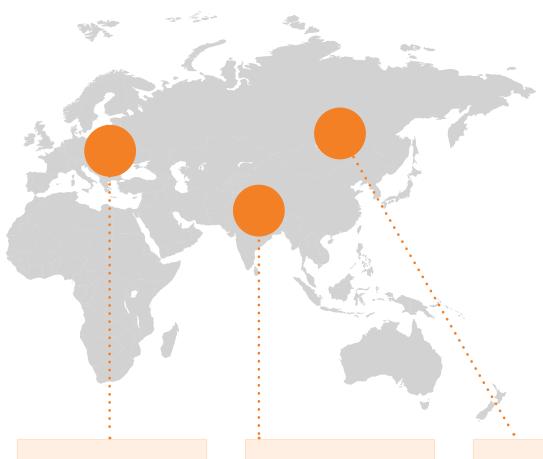
- California: Contributed to the Boys and Girls Club of the Diablo Valley for youth leadership and self-esteem programs
- Canada: Supported the "Everyone Plays" program sponsored by the City of Fort Saskatchewan in Alberta
- Pennsylvania: Further supported Miller-Keystone Blood Center via a grant for a new community bloodmobile
- Louisiana: Sorted and boxed roughly 11,000 pounds of non-perishable food to help feed Baton Rouge's senior community
- Texas: Supported the La Porte Education foundation and their robotics program for high school students



South America:

• Chile: Helping women create environmentally friendly products

A Sampling of Community Projects Around the World (continued)



Europe:

- United Kingdom: Challenged students to combine STEM, sustainability and business acumen through the National Enterprise Challenge, the UK's largest school enterprise programme
- Spain: Brightening the pediatric ward in Hospital de Logroño with inspirational paintings through "Nos Mueve La Ilusión"
- France: Contributed to Make a Wish in France as part of the company's 100th year anniversary in the country

India:

- Pune: Helped the artisan community at the Pune Haat Local
 Fair to revive traditional artforms
 and financially empowered local
 artists
- Kerala: Presented at the Kerala Management Association's National Conclave on "Managing Work and Life: The Global Aspirations of Young India"

Asia:

- China: Brought gas knowledge and technologies to local communities through the South China LIN ambassador program
- Singapore: Employees celebrated the Mid-Autumn Festival with a group of seniors from REACH Community Services Society
- South Korea: Initiated the Korea Pyeongtaek City Library Development Fund



PARTNERSHIPS

Why It's important

Solving today's and tomorrow's energy and environmental challenges requires ambition, ingenuity and partnership. Partnerships, between businesses, governments and civil society, are needed to address the key sustainability issues facing our people and planet and to deliver on the Sustainable Development Goals.



What We're Doing

Air Products engages with companies and organizations around the world on key sustainability concerns. These collaborations are aligned with the SDGs where we can have the most impact. As we expand our businesses in the developing world, we share our technologies, engineering expertise and safety, environmental and diversity standards and approaches with our new partners.

Our Commitments and Contributions

Examples of our contributions to the SDGs are highlighted throughout this report. Partnerships include:

- Engaging with Chambers of Commerce throughout the world to promote business growth
- Partnering with institutes of higher education on technology research, such as Purdue University in the United States, the Technical University of Denmark, and the King Abdullah University of Science and Technology in Saudi Arabia
- Teaming up with companies to enable the use of recycled water in waterstressed regions, such as Southern California in the U.S.
- Supporting the use of hydrogen to transition to cleaner energy through organizations such as the Hydrogen Council
- Partnering with a customer to extract helium from a naturally occurring carbon dioxide gas source being processed by the customer
- Working with customers and governments in several regions to develop carbon capture, use and storage projects
- Collaborating with local emergency responders, providing access, training and preparedness drills and activities
- Supporting gender equality through engagement in organizations and initiatives, such as the CEO Action for Diversity & Inclusion™

Ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth—all while tackling climate change and working to preserve our oceans and forests.

-United Nations on the Sustainable Development Goals (SDGs)

SUPPLY CHAIN SUSTAINABILITY |

Thousands of suppliers are essential to our success. We strive to work with quality suppliers who can help Air Products deliver value and excellent service to our customers and who share in our commitment to ethical business practices. All suppliers are expected to abide by and conform to our Code of Conduct in their business dealings with us and to support sustainability through the principles outlined in our Sustainability Expectations of Suppliers, which include environmental, human rights and community considerations.

In total, Air Products' spent almost \$7 billion in power, equipment, materials and services with over 15,000 suppliers and service providers in 2019. Energy is the primary raw material purchased to manufacture industrial gases, particularly electricity and steam for our ASUs, and natural gas for our HyCO plants. Steel, aluminum and capital equipment subcomponents are the primary materials procured for our equipment business. There were no significant changes in our supply chain year-over-year.

Because Air Products operates regionally, our procurement teams are primarily local to our businesses and work with regional and local suppliers. We also have a corporate team that supports procurement of capital equipment.

Our procurement teams have supplier qualification processes in place to ensure we receive the quality supplies and services we need. In 2019, we conducted onsite evaluations of new suppliers as part of the qualification process. If noncompliance is identified through our ongoing monitoring, we work with the supplier to address the issue.

Promoting Supplier Diversity

It is our policy and practice to provide maximum practical opportunities to diverse suppliers. In 2019, approximately 20% of our procurement in the U.S. was from diverse suppliers. These include small, socially and economically disadvantaged, and other minority-owned and women-owned U.S. businesses that can provide competitive sources of materials and services. We offer advice and guidance to assist minority business firms in building relationships and becoming successful suppliers to us.

Human Rights in Our Supply Chain

We complete annual human rights assessments for our operations and supply chains. From a supply chain perspective, we examined human rights risks relative to procurement spend and supplier location using country-specific risk information from third parties. Most of our suppliers are in heavy industries that are not as susceptible to human rights violations as other industries. However, to promote human rights in our supply chains, we have added human rights clauses to our standard terms and conditions for procurement. No significant risks were identified through our assessment, and we are not aware of any allegations of violations of human rights in our supply chain in 2019.

Conflict Minerals

A significant program in the U.S. to address human rights atrocities in the Democratic Republic of the Congo (DRC) is the Conflict Minerals Rule under the U.S. Dodd-Frank Act. The four covered minerals – tungsten, tantalum, tin and gold – are used in a variety of applications, from hearing aids and pacemakers to laptop computers and GPS devices.

Each year we report our progress in identifying Conflict Minerals in our supply chain to the U.S. Securities and Exchange Commission and post our Conflict Minerals report on our website.



Additional information:

Code of Conduct →

Conflict Minerals Policy →

Sustainability Expectations of Suppliers →

| APPENDIX |

Stakeholder Engagement

We work closely with our key stakeholders – customers, employees, investors, communities, suppliers and government regulators – to understand and respond to their needs and collaborate for shared benefit. Meetings, presentations and ongoing dialogue with stakeholders throughout the year provide ample opportunities for collaboration on sustainability.

Stakeholder Assessment

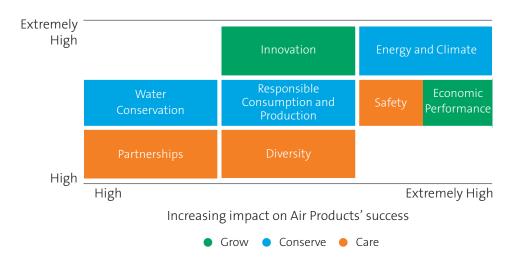
Air Products has been conducting stakeholder assessments since it began reporting in accordance with GRI guidelines. For this report, the assessment process included:

- Evaluating sustainability issues identified in various frameworks, standards, questionnaires, customer and other company reports and stakeholder questions
- · Interviewing and/or surveying key stakeholders to understand their sustainability concerns and priorities
- Reviewing the results with our Sustainability Leadership Council to confirm the priorities and further shape our sustainability efforts

The assessment for this report was initiated with dozens of sustainability concerns from multiple sources, such as SASB, TCFD and CDP. Stakeholders reflected on these concerns, providing their feedback on the importance and potential impacts of the issues. While the issues varied to some extent across the stakeholder groups, all groups shared a growing concern for the impact of climate change. Stakeholder support of Air Products' sustainability programs was consistently positive.

The concerns rated by the stakeholders with the highest level of importance and impact are included in our Sustainability Priorities and have been used to develop this report.

Our Sustainability Priorities



Sources for Air Products' 2019 Stakeholder Assessment

- CDP (formerly the Carbon Disclosure Project)
- Dow Jones Sustainability Index (DJSI)
- EcoVadis
- Ethibel
- FTSE4Good

- GRI
- Institutional Shareholder Services (ISS)
- JUST Capital
- Key stakeholders
- MSCI
- Sustainability Accounting Standards Board (SASB)

- Sustainalytics
- Task Force for Climate-related Financial Disclosures (TCFD)
- UN Global Compact
- UN Sustainable Development Goals

About Our Report

Air Products has reported on its sustainability performance annually for the past 17 years, building on previous decades of environmental, health and safety disclosures and reporting. This is our 11th consecutive year reporting in accordance with GRI.

This report has been prepared in accordance with the GRI standards "Core option." The Core option is aimed at providing stakeholders with data and perspectives to understand and evaluate our performance, impacts and opportunities. The report also contains supplemental information not specified by GRI that illustrates additional aspects of our sustainability efforts and impacts.

Air Products used GRI's Principles for Defining Report Content to develop our Sustainability Report. These principles included: stakeholder inclusiveness, sustainability context, and coverage of aspects that reflect our significant economic, environmental and social impacts. Our Sustainability Priorities, aspect boundaries, and related content within this report are provided below:

	Aspect Boundaries							
	Product Development	Sourcing	Production	Sales & Marketing	Distribution	Use/End of Life	Communities	Report pages
Grow								
Economic Performance	•	•	•	•	•		•	8-9
Innovation	•		•	•		•		14-15
Conserve								
Responsible Consumption and production	•	•	•	•	•	•	•	19
Energy and Climate	•	•	•	•	•	•	•	20-23
Water Conservation	•	•	•			•	•	24-25
Care								
Safety	•	•	•	•	•	•	•	30-33
Talent & Diversity	•	•	•	•	•		•	34-38
Partnerships	•	•				•	•	43

Our 2020 report covers the period of January 1, 2019 to December 31, 2019, except where noted that fiscal year (October 1, 2018 to September 30, 2019) data is provided. Our prior year report was issued in May 2019 and reported on the 2018 calendar year. The GRI Content Index for the report is available online.

The scope of this report is global for continuing operations including assets over which financial control is exercised and as reported in our consolidated audited financial statement. We exclude less than controlling interests in joint ventures or equity affiliates. Additional information about affiliates and subsidiaries is available in our 2019 Annual Report.

Resources have been cited throughout the report to provide additional information on our policies, programs and performance related to sustainability, such as:

- Annual Report
- Code of Conduct and Business Ethics
- EHS Policy
- Human Rights Policy
- Sustainability Expectations for Suppliers
- Sustainable Offerings and our products from A to Z

For this report, Air Products has restated energy consumption, greenhouse gas emissions, water withdrawals and use and waste generated for prior years to reflect acquisitions, divestitures and improved methodologies. There were no significant changes to operational boundaries, scope or measurement methods.

Our Sustainability Director was accountable for overseeing the preparation of this report, with significant data contributions provided by business, functional and sustainability related teams throughout the company. No GRI sector standard exists for our industry, however, we have attempted to provide best possible disclosures based on the nature of our business and the related risks and opportunities. Questions about this report can be directed to Julie O'Brien, Air Products' Sustainability Director, at obrienjk@airproducts.com.







Key Performance Data

Provided below is data on key performance indicators (KPIs) for 2019 and 2018. Three years of data for these KPIs is available in the GRI Content Index for this report and listed under the relevant GRI indicator.

Grow	2019	2018
Economic Value		
Sales (\$ millions)	\$8,919	\$8,930
Adjusted EBITDA margin ^a	38.9%	34.9%
Adjusted operating margin ^a	24.3%	21.7%
Return on capital employed ("ROCE") ^a	13.1%	12.4%
Adjusted diluted earnings per share ("EPS") ^a	\$8.21	\$7.45
Dividends declared per common share	\$4.58	\$4.25
Customer Sustainability		
Customer CO ₂ avoided (million MT CO ₂ e)	69	55
Percent of revenues from Sustainable Offerings	53%	54%
Innovation		
R&D Spending (\$ million)	\$73	\$65
Patents owned	3,733	3,423
Ethics and Integrity		
Annual Code of Conduct training and certification	100%	100%
Allegations of Code of Conduct violations	412	394
Conserve	2019	2018
Energy consumption (TWh)		
Total ^b	52.5	49.9
Fuels ^b	28.9	28.2
Electricity ^b	16.1	16.0
Percent of electricity that is renewable	23%	23%
Steam ^b	7.5	5.5
Energy intensity improvement		
ASUs	3.7%	2%
НуСО	0.9%	0.9%
Greenhouse Gas Emissions (million MT)		
Scope 1 ^b	16.6	16.5
Scope 2 ^b	10.6	10.3
Scope 3 ^b	6.6	7.7
GHG intensity improvement	2.3%	1.5%
Distribution efficiency intensity improvement	18%	16%
Waste (million pounds)		
Hazardous waste generated ^b	6.1	6.1
Hazardous waste disposal ^b	2.6	2.1
Non-hazardous waste disposal	11.3	7.1
Water (billion gallons)		
Water withdrawals ^b	19.4	19.1
Gross water consumption ^b	15.8	16.3
Water conservation intensity improvement ^b	26%	20%
- 1		

^a Amounts are non-GAAP financial measures. See "Sustainability 2020 Reconciliation of Non-GAAP Financial Measures" for reconciliation to the comparable GAAP measures.

^b Restated for 2018

Conserve	2019	2018
Other air emissions (metric tons)		
Nitrogen oxides (NOx)	1,495	1,474
Sulfur oxides (SOx)	71	71
Environmental fines	\$4,400	\$17,600
Care	2019	2018
Safety		
Employee recordables (number) and injury rate	82 / 0.45	49 / 0.29
Employee lost-time injuries (number) and rate	16 / 0.09	12 / 0.071
Employee fatalities	0	0
Contractor recordables (number) and injury rate	58 / 0.50	45 / 0.31
Contractor lost-time injuries (number) and rate	2 / 0.02	10 / 0.07
Contractor fatalities	2	0
Vehicle accident frequency rate (preventable accidents per one million kilometers)	1.06	1.01
Preventable road accident rate (preventable road accidents per one million kilometers)	0.27	0.25
Talent and Diversity		
Total employees at year end	>17,000	16,000
Female share of workforce	21%	22%
Global employee turnover rate	7.7%	10.9%
Average formal training hours per employee	20	20
Percent of employees in collective bargaining units	33%	31%
Community Support		
Cash and product donations (\$ million)	\$7.6	\$6.9
United Way contributions (\$ million)	\$3	\$3

Recognition for Our Sustainability Efforts

Air Products is proud to have our sustainability efforts and progress acknowledged by leading ratings and rankings agencies, including the following for 2019:















Index (GEI)



| GLOSSARY AND ACRONYMS |

Term	Definition	
ACOC	Annual Code of Conduct training and certification	
ASU	Air Separation Unit, the technology used to make atmospheric gases including nitrogen, oxygen and argon.	
Blue Hydrogen	Has a 60% lower carbon footprint than hydrogen from natural gas reforming. Sources include natural gas reforming with carbon capture, use or sequestration; electrolysis using non-renewable energy; hydrogen recovery from waste gas; biogas separation or reforming; and biomass gasification.	
BSP	Basic Safety Process	
CCS	Carbon Capture and Storage	
CDP	A not-for-profit charity that runs a global disclosure system for carbon and other information (formerly Carbon Disclosure Project)	
CFC	Chlorofluorocarbon	
CO ₂	Carbon dioxide	
CO ₂ e	Carbon dioxide equivalent is a standard unit for measuring carbon footprints that takes into account the different global warming potentials of GHGs	
DECP	Data Enabled Coaching Program	
EBITDA	Earnings before interest, taxes, depreciation and amortization	
EHS	Environment, Health and Safety	
EMEA	Europe, Middle East and Africa	
EOR	Enhanced oil recovery	
EPA	Environmental Protection Agency (U.S.)	
GHG	Greenhouse gases, including the six Kyoto-regulated gases (${\rm CO_2}$, ${\rm N_2O}$, ${\rm SF_6}$, ${\rm CH_{4^{\prime}}}$ PFCs, HFCs) and ${\rm NF_3}$	
Green Hydrogen	Made using water electrolysis and renewable electricity or by reforming biogas; has the lowest carbon footprint of hydrogen produced	
GRI	Global Reporting Initiative	
HAPs	Hazardous air pollutants	
HCFC	Hydrochlorofluorocarbon	
НуСО	Hydrogen-carbon monoxide	
LNG	Liquefied natural gas	
LTI	Injuries or illnesses resulting in missed or restricted work. LTI rates are per 200,000 hours worked.	
NOV	Notice of Violation - A deviation from a regulation or permit requirement that is formally cited by a government agency	
NOx	Oxides of nitrogen including nitric oxide (NO) and nitrogen dioxide (NO ₂)	
ODS	Ozone depleting substances	
OSHA	Occupational Safety and Health Administration (U.S.)	
Recordable Rate	A work-related injury that requires medical care beyond basic first aid treatment. Recordable rates are per 200,000 hours worked.	

Term	Definition	
ROCE	Return on capital employed	
Scope 1 emissions	Direct GHG emissions that occur from sources owned or controlled by a company, for example, emissions from combustion or chemical production	
Scope 2 emissions	Electricity indirect GHG emissions from the generation of purchased electricity consumed by the company	
Scope 3 emissions	Other indirect GHG emissions that are a consequence of the activities of the company, but occur from sources not owned or controlled by the company	
SDGs	Sustainable Development Goals	
SDS	Safety data sheets	
SOx	Oxides of sulfur including sulfur oxide, sulfur dioxide and others	
SMR	Steam methane reforming, the most economical way to produce large volumes of hydrogen	
STEM	Science, Technology, Engineering and Math	
Sustainable Offerings	Products that improve energy efficiency, reduce environmental impact, and/or address a societal need	
TRI	U.S. EPA Toxic Release Inventory	
VOCs	Volatile organic chemicals	
VSA	Vacuum swing adsorption	

For more information, please contact us at:

Corporate Headquarters

Air Products and Chemicals, Inc. 7201 Hamilton Boulevard
Allentown, PA 18195-1501
T 610-481-4911
(Outside the U.S. and Canada +1-610-481-6799)
F 610-481-5900

Regional Head Offices

Air Products PLC
Hersham Place Technology Park
Molesey Road
Walton-on-Thames
Surrey KT12 4RZ
UK
T +44-1932-249200
F +44-1932-249565

Air Products Asia, Inc. 2503-5, 25/F 148 Electric Road, North Point Hong Kong T +852-2527-1922 F +852-2527-1827

Air Products Singapore Industrial Gases Pte Ltd. 2 International Business Park #03-20 The Strategy Singapore 609930 T +65-6494 2240 F +65-6334 1005 Air Products and Chemicals (China) Investment Co. Ltd. East Wing, Floor 1 Building #88, Lane 887 Zu Chongzhi Road Zhangjiang Hi-Tech Park Shanghai, 201203 P.R. China T +86-21-38962000 F +86-21-50805555

Indura S.A. Av. Las Americas 585 Cerrilos Santiago, Chile ZC-9230117





The information contained herein is offered without charge for use by technically qualified personnel at their discretion and risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto.