

Sustainable Value Report



2013

PRAXAIR
Making our planet more productive

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Pictured on cover: (Top) Riva Krut, VP, Sustainable Development, with Yves Pais and Guillermo Velasco of The Nature Conservancy, and villager Fidel Velazquez Hernández from La Bonanza in Chiapas, Mexico, discussing the social and environmental benefits of planting trees and agricultural crops. Praxair is collaborating with The Nature Conservancy and other groups in Mexico and around the world, to plant or preserve a million trees by 2016. (Bottom right) Sue and Eric Freiburger with their tandem bike at the 2014 MS Ride in Westport, Connecticut. Eric is Praxair's director, process safety. Rich Jarret, team leader for the event and director, business development, stands to the left.

Pictured above: A Praxair argon storage tank in Deer Park, Texas.

Forward Looking Statement

This document contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on management's reasonable expectations and assumptions as of the date the statements are made but involve risks and uncertainties. These risks and uncertainties include, without limitation, the performance of stock markets generally; developments in worldwide and national economies and other international events and circumstances; changes in foreign currencies and in interest rates; the cost and availability of electric power, natural gas and other raw materials; the ability to achieve price increases to offset cost increases; catastrophic events including natural disasters, epidemics and acts of war and terrorism; the ability to attract, hire, and retain qualified personnel; the impact of changes in financial accounting standards; the impact of changes in pension plan liabilities; the impact of tax, environmental, healthcare and other legislation and government regulation in jurisdictions in which the company operates; the cost and outcomes of investigations, litigation and regulatory proceedings; continued timely development and market acceptance of new products and applications; the impact of competitive products and pricing; future financial and operating performance of major customers and industries served; the impact of information technology system failures, network disruptions and breaches in data security; and the effectiveness and speed of integrating new acquisitions into the business. These risks and uncertainties may cause actual future results or circumstances to differ materially from the projections or estimates contained in the forward-looking statements. Additionally, financial projections or estimates exclude the impact of special items that the company believes are not indicative of ongoing business performance. The company assumes no obligation to update or provide revisions to any forward-looking statement in response to changing circumstances. The above listed risks and uncertainties are further described in Item 1A (Risk Factors) in the company's Form 10-K and 10-Q reports filed with the SEC, which should be reviewed carefully. Please consider the company's forward-looking statements in light of those risks.

Message from Our Chief Executive Officer



Dear Stakeholder,

In 2013, Praxair achieved record results in a global economy that has shown only a modest recovery. Our sustainable development efforts continued to mature and are making an impact around the world. This year's report illustrates some of our most important achievements and demonstrates Praxair's commitment to making our planet more productive.

We are committed to minimizing our own environmental resource intensity and maximizing our social and community contributions. One highlight in this area is our Zero Waste program in which over 8,000 employees around the world and more than 200 sites have prevented approximately 98 million pounds of waste from going to landfills.

As a result of such programs, Praxair has been selected as a component of the prestigious Dow Jones Sustainability World Index for 11 consecutive years — the only U.S. chemical company with this distinction. Newsweek also ranked Praxair #30 in the U.S. 500 and #52 in the Global 500 Newsweek Green Rankings. This was the fifth time Praxair was cited by Newsweek as a Top Green Company. And, our commitment to community engagement continues to grow stronger. In 2013, our employees invested nearly 63,000 hours of volunteer time in projects that benefitted more than 326,000 people.

Going forward, we remain committed to improving our customers' economic and environmental performance through applications that improve water quality, reduce emissions and lower overall energy consumption, to name just a few. This report illustrates that GHG emissions avoided by use of Praxair's applications are more than twice the GHG emissions of all Praxair operations; and that our water treatment solutions enable more than 50 million people to have access to safe drinking water.

We will continue to drive sustainability efforts throughout the company. It is part of our DNA. We are grateful for your support and will continue to strive to make our planet more productive — this year and for many years to come.

Respectfully,

A handwritten signature in black ink that reads "Steve Angel". The signature is written in a cursive, flowing style.

Steve Angel, Chairman, President and CEO

Key Figures 2013

		2013	2012	2011
ECONOMIC				
Sales	\$ million	\$11,925	\$11,224	\$11,252
Capital expenditures	\$ million	\$2,020	\$2,180	\$1,797
Adjusted operating profit (Note 1)	\$ million	\$2,657	\$2,502	\$2,469
Adjusted net income — Praxair, Inc. (Note 1)	\$ million	\$1,772	\$1,681	\$1,666
Adjusted diluted earnings per share (Note 1)	actual dollars	\$5.93	\$5.57	\$5.43
Sustainable productivity savings*	\$ million	\$122	\$112	\$64
After-tax return on capital (Note 2)	percentage	12.8%	13.9%	14.8%
Return on equity (Note 2)	percentage	28.6%	28.9%	28.1%
Vendor expenditures	\$ million	\$5,900	\$5,604	\$5,600
Donations from Praxair Global Giving program	\$ million	\$6.3	\$5.6	\$5.0
ENVIRONMENT (Note 3)				
ASU design energy intensity improvement/product vs. 2009 base (100)*	MWh per unit	93.5	95.1	96.2
ASU energy emissions intensity/product vs. 2009 (100)*	MM MWh per unit	96	96.6	97.7
Direct GHG intensity/H2 product vs. 2009 (100)*	MT CO2 per unit	98	98.8	97.1
Truck distribution GHG intensity/product delivered in 2009 (100)*	MT CO2 per unit	92.3	93.4	96.4
NOx emissions from driving (Praxair drivers)*	actual MT	754	902	975
Environmental fines	actual dollars	\$1,400	\$48,085	\$35,562
R&D: “eco-portfolio”*	percent revenue	27.1%	26.8%	26.0%
SOCIAL (Note 3)				
Total employees	actual	27,560	26,539	26,184
Employee engagement*	results of global survey	83%	-	-
Global employee diversity: gender at professional levels	percent male/female	78/22	79/21	82/18
Board diversity: of women, U.S. minority or non-U.S.	percent	55%	45%	50%
Executive leadership diversity: women, U.S. minority or non-U.S.	percent	50%	53%	51%
Emerging country leadership diversity: local or regional national*	percent	91%	100%	92%
Lost workday case rate, Praxair per hours worked*	per 200,000 hours	0.04	0.05	0.05
Lost workday case rate, contractors per hours worked	per 200,000 hours	0.04	0.05	0.08
Recordable injury rate, Praxair per hours worked	per 200,000 hours	0.45	0.42	0.40
Recordable injury rate, contractors per hours worked	per 200,000 hours	0.04	0.24	0.16
Fatalities employees	number	0	2	0
Fatalities contractors	number	1	1	1
Worldwide vehicle accident rate, Praxair drivers	per million miles	3.27	2.80	2.76
Worldwide vehicle accident rate, contractors	per million miles	2.24	2.10	2.88
Community engagement: number of beneficiaries*	number	326,300	304,149	275,000
Community engagement: number of sites participating*	number	221	165	136
Community engagement, employee \$ contributed*	actual dollars	\$925,000	\$473,684	N/A
Supplier sustainability management: cumulative savings from greening the supply chain*	\$ million	\$8.9	\$4.3	N/A

Note 1: Adjusted amounts are non-GAAP measures. Adjusted amounts are reconciled to reported amounts in the “Non-GAAP Financial Measures” section in Item 7 of the 2013 Annual Report.

Note 2: After-tax return on capital and return on equity are non-GAAP measures defined in the “Non-GAAP Financial Measures” section in Item 7 of the 2013 Annual Report.

Note 3: With the exception of “Total Employees”, this data excludes 2013 acquisitions of NuCO2 and Dominion Technology Gases, both acquired during 2013.

*Denotes a Key Performance Indicator (KPI) reporting against a priority area identified in Praxair’s sustainable development materiality assessment, see p. 10.

Introduction

About This Report

Praxair has provided a voluntary sustainable development report annually since 2002. During this period, its global sustainable development program has grown and strengthened, as has its reporting. Today, Praxair is a leader in sustainable development.

This 2013 *Sustainable Value Report (SVR)* applies principles from the new Integrated Reporting Framework <IR>. <IR> provides a framework for investors and other stakeholders to gain greater insight into the medium- and long-term sustainability of a firm. <IR> proposes that a company should report how it manages all its capital flows: financial capital as well as human, intellectual, manufactured, natural, and social and relationship (sometimes referred to simply as “social”) capitals, and the connectivity between them. In this report, Praxair describes how its business model enables value creation across all the <IR> capitals; and describes the flow from inputs (raw materials and other resources); to the manufacture of Praxair solutions or outputs; to the medium- or long-term value that these create or enable.

Praxair’s sustainability reporting has followed the Global Reporting Initiative (GRI) framework since 2010. This year a *SVR GRI 3.1 Annex* is provided. This includes 2013 source data and material and year-on-year data. Praxair expects to migrate to GRI 4.0 for its 2014 report.

The report is organized into the following sections:

Business Overview: Introduction to the company

Strategy: Praxair’s integrated sustainable development strategy and selection of material issues or key priorities

Performance: Performance dashboard: Results over time and vs. targets

Feature Stories: How medium- and long term business value is being created in areas of the <IR> capitals

Responsible Governance: Praxair’s Board’s role in governance, risk management and defining non-financial elements is considered most important to long term sustainable success

Outlook: Medium and Long-term business outlook

Report of Independent Auditor on Review of Nonfinancial Information

This report was prepared with input from various Praxair businesses and functions. It is our view that this report is prepared in alignment with the <IR> framework.

We look forward to your comments and suggestions.



Riva Krut, VP and Chief Sustainability Officer



Business Overview

Introduction to Praxair

Praxair is the largest industrial gas supplier in North and South America, is rapidly growing in Asia and has strong, well-established businesses in Europe. Praxair's primary products in its industrial gases business are atmospheric gases (oxygen, nitrogen, argon, rare gases) and process gases (carbon dioxide, helium, hydrogen, electronic gases, specialty gases, acetylene). Praxair provides a competitive advantage to its customers by continuously developing new products and applications, which allow them to improve their productivity, energy efficiency and environmental performance. Its surface technologies segment supplies wear-resistant, corrosion-resistant metallic and ceramic coatings and powders.

Praxair's 27,560 employees serve over a million customers in approximately 25 industries as diverse as healthcare, petroleum refining, computer-chip manufacturing, beverage carbonation, fiber-optics, steelmaking, aerospace, chemicals

and water treatment. Praxair provides a competitive advantage to its customers by continuously developing new products and applications, which allow them to improve their resource productivity, energy efficiency and environmental performance. Praxair's applications frequently deliver substantial net environmental benefits. These are shown below as a "Net Sustainable Development Value Created Per Employee."

Praxair has consistently outperformed its peer industrial gas companies in terms of shareholder value creation — Return on Capital (ROC), operating cash flow, operating margin, and shareholder returns. Over the past 10 years, Praxair has delivered cumulative total shareholder return of 310 percent — three times higher than the S&P 500 and more than two times higher than the S&P Materials Index. The five-year average operating cash flow as a percentage of sales is 25 percent — 7 percent better than industry average. Praxair dividends have increased each year for 21 consecutive years.

These world-class results are based in Praxair's core values of safety first, high integrity, results driven, customer satisfaction, attracting and developing the right people, and environmental and social responsibility. Praxair's worldwide safety record is five times better than the U.S. industry average. A commitment to diversity is considered integral to the Praxair leadership model. In 2013, the company achieved productivity savings equivalent to a 7 percent gross reduction of its cost stack — exceeding the 5 percent reduction target for a fifth year in a row. Praxair is a sustainability leader: it has been selected for the prestigious World Dow Jones Sustainability Index for 11 consecutive years — the only U.S. chemical company with this distinction, and was ranked #52 in the world in the 2014 Newsweek Green Rankings.

Net Sustainable Development Value Created Per Employee

On a per employee basis, in 2013 each employee enabled:*

1.5 MM LBS

net CO₂e to be avoided

80,000 LBS

net sulfur dioxide (SO₂)
to be avoided

3,500 LBS

waste avoided through
zero waste programs

>1,800 PEOPLE

to have access to
safe drinking water



*Calculation method: Net CO₂e avoided was calculated by taking Praxair's net benefits from GHG (38MM MT CO₂e) and subtracting its total GHG emissions (18MM MT), divided by the number of employees. Net SO₂ avoided took the total SO₂ avoided by the use of Praxair hydrogen to make Ultra-Low Sulfur Diesel (1MM MT SO₂) and divided by the number of employees (Praxair total SO₂ emissions in 2013 were 25 MT). Waste avoided per employee was calculated by taking total waste avoided from Praxair Zero Waste to Landfill program (98MM lbs) and dividing by the number of employees. Praxair water applications bring safe drinking water to more than 50MM people, this was also divided by the number of Praxair employees.

Investing in People and Place

Praxair is a global enterprise with approximately 60 percent of 2013 sales outside of the United States. Business is conducted through consolidated companies in more than 50 countries managed through four regions (North America, South America, Europe and Asia) and globally through Praxair Surface Technologies. Praxair's primary products in its industrial gases business are atmospheric gases (oxygen, nitrogen, argon, rare gases) and process gases (carbon dioxide, helium, hydrogen, electronic gases, specialty gases, acetylene). Many of these products are co-products of the same manufacturing process.

Due to the nature of Praxair's industrial gas products, it is generally uneconomical to transport them distances greater than a few hundred miles from the production facility. As a result, Praxair operates a significant number of production facilities spread globally throughout a number of geographic regions.

Nearly all of its products are produced, and customer relationships managed, on a regional basis. Distribution economics are specific to the local geographies in which the company operates and are consistent with how management assesses performance. Praxair's business is structured to build density and integrated supply between on-site, merchant and packaged gases, and drive performance regionally. Praxair is at root a "local" company: We aim to grow density in target geographies. We invest locally and for the long term in large-scale capital projects. We increase density, and we supply our customers with a reliable, integrated service.

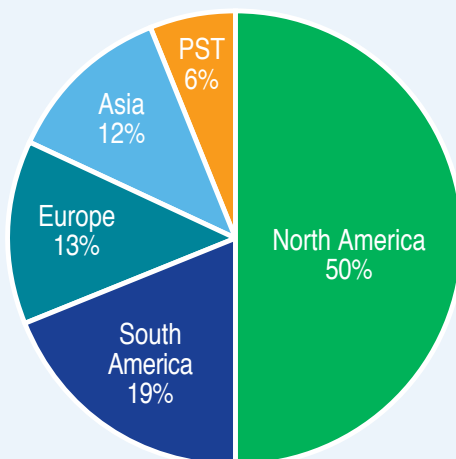
In many ways, sustainable development — and Praxair — are about the value of place. People who remain in their home communities tend to have stronger ties to family and community, economy, culture and society. For Praxair, business success depends on its ability to hire, retain and develop human and social capital in the

geographies where we invest capital and do business. Revenue is closely correlated with employee headcount (see Chart below). The company hires local talent: more than 90 percent of emerging economy business leaders are host country or regional nationals; it sources local contractors: 100 percent of contract drivers, and most contract construction workers, are sourced locally; and it helps build capacity in local communities: Praxair employee volunteers provided a range of benefits to more than 325,000 people, mostly in communities local to Praxair sites.

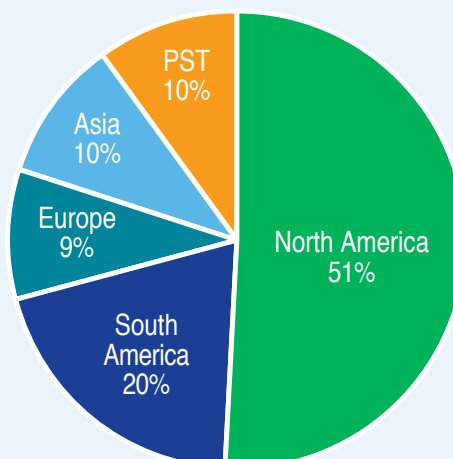
Investing in People Where We Do Business

Praxair three-year average revenue and headcount shows the alignment between business and human capital investments

SALES BY REGION
(2011–2013 AVG)



HEADCOUNT BY REGION
(2011–2013 AVG)



Business Model

PRODUCTS	O ₂	N ₂	Ar	H ₂	CO ₂	He	Specialty & Materials
END MARKET (% revenue 2013)	OUTPUTS: EXAMPLES OF SIGNIFICANT PRODUCT APPLICATIONS						
Manufacturing & Metals (41%)	Steel making, glass, non-ferrous metal processing	Inerting, metals processing	Welding, stainless steel production, window insulation			Welding	
Energy (13%)	Refinery processing			Diesel & gasoline reformulation	Energized fracturing		Coatings extend component life
Chemicals (10%)	Water treatment, oxidation	Inerting, blanketing, purging		Manufacture of ammonia, methanol	Synthesis & separation	Detect leaks	Calibration gases
Electronics (8%)		Inerting			Cleaning & inerting		Electronics processing
Aerospace (3%)	Fuel savings		Welding	Fuel			Coatings
Healthcare (8%)	Respiration					Medical gas, MRIs	Medical gases
Food & Beverage (8%)		Freezing, chilling			Cryogenic freezing, beverages		
Other (9%)	Water treatment, purification				Water treatment	Laboratories	Coatings extend component life
INPUTS:	PRINCIPAL RAW MATERIALS/FEEDSTOCKS						
	Air & electricity			Natural gas or industry byproducts	Industry byproduct, natural wells	Byproduct from natural gas processing	N/A
INPUTS:	MANAGING POTENTIAL ENVIRONMENTAL AND SAFETY ASPECTS						
Raw Materials Use	Reduce through energy and resource efficiency, asset management & byproduct synergy						
Distribution	Continuous improvement in training, oversight & control of product, process and distribution safety						
Productivity	Reduce emissions and waste through energy and resource efficiency in design, operations						
Product & Personnel Safety	Continuous improvement in training, oversight & control in product and process safety						
Suppliers	Engage in supplier partnerships to reduce risk, improve safety, manage costs						
Customers	Product safety: Review design and specifications of components and raw materials to ensure product quality and safety						
OUTCOMES:	SUSTAINABLE DEVELOPMENT VALUE CREATED						
Environmental	Emissions reduction (e.g., NOx, SO ₂ , VOCs)				Substitute for hazardous chemicals		Product durability
	Energy savings		Product durability	Meet regulatory standards			
Economic	Productivity						
	Product quality						
Social	Human health	Human health & safety	Human health			Human health & safety	

Strategy

Risks and Opportunities

Praxair's business model and operations, size and geographic reach create a range of risks that could materially affect the company's future operations and financial performance. These same factors often also create opportunity.

Praxair's Annual Report outlines its approach to risk management and identifies a number of financial and nonfinancial risk factors. These risks could materially affect the company's future operations and financial performance. Praxair considers all of these risks when developing its short-, medium- and long-term strategies. The following nonfinancial risk factors influence Praxair's sustainable development priorities:

- **Cost and availability of raw materials and energy*:** Increases in the cost of energy and raw materials and/or disruption in the supply of these materials could result in lost sales or reduced profitability.
- **Government regulations** in areas such as environmental protection, safety, antitrust matters and global anti-bribery laws, etc.: The company is subject to a variety of U.S. and international government regulations. Changes in these regulations could have an adverse impact on the business, financial position and results of operations.
- **Catastrophic events** could disrupt the operations of the company and/or its customers and suppliers and may have a significant adverse impact on the results of operations.
- **Retaining qualified personnel:** The inability to attract and retain qualified personnel may adversely impact the company's business.
- **Technological advances:** If the company fails to keep pace with technological advances in the industry or if new technology initiatives do not become commercially accepted, customers may not continue to buy the company's products and results of operations could be adversely affected.
- **Operational risks**, including production, distribution and storage, carry inherent risks to human safety, property and the

environment, and may adversely impact the company's business or results of operation.

Praxair sees opportunity as well as risk from a number of the risk factors listed above. For example:

Governmental regulation of greenhouse gases and other emissions and renewable fuel standards in the EU and U.S. provide Praxair with market opportunities in applications such as water technologies, new technologies to extract natural gas and the development of renewable energy alternatives. Praxair hydrogen is a crucial product that enables oil refiners to meet regulatory standards for the reduction of SO₂ emissions in ultra-low sulfur diesel (ULSD). In 2013, Praxair hydrogen sales enabled the reduction of 1 million MT SO₂, and 25 million MT CO₂e. Praxair atmospheric gases such as oxygen in steelmaking, Argon in welding and Krypton in window insulation allow customers to meet various air emissions reduction levels and improve energy efficiency — and in 2013 enabled the reduction of 12.5 million MT CO₂e. The renewable energy market is a growth area for Praxair. Praxair atmospheric

and specialty gases support the photovoltaic market. For example, Praxair produces argon, a critical gas used in solar wafer production, and distributes silane, a key raw material for the thin film deposition of amorphous and polysilicon films in the solar industry.

Retaining and hiring qualified personnel, particularly in emerging economies, is central to Praxair's growth and competitiveness. Praxair has a target that 45 percent of its technology organization staff should be based in emerging economy markets by 2015. For international companies, emerging economy R&D hubs are essential for accessing local markets, getting closer to customer needs and providing access to international talent. Praxair's local business model, of investing in people and place, provides competitive advantage and business opportunity.

Praxair considers these and other opportunities when considering its sustainable development priorities. The analysis of risks and opportunities is a foundation for our overall sustainable development strategy.



Sustainable Development Priorities, Indicators and Targets

Praxair's sustainable development program and nonfinancial priorities are underpinned by Praxair's values, strategy and growth drivers as well as relevant risks, opportunities and stakeholder views — all of which affect business prospects in the short, medium and long term. Priorities are determined through a structured sustainable development materiality assessment (SDMA), and revisited each year as part of

the Sustainable Development Management System review. Annually, priorities, programs and goals and targets are confirmed or updated to ensure efforts remain focused on driving value throughout the organization. The SDMA process is described in Praxair's 2013 GRI 3.1 Report Section 1.2. It identified 14 priority areas; see below.

Performance in the 14 priority areas is managed with 19 Key Performance

Indicators (KPIs), with targets set for 2015, in most cases vs. a 2009 baseline; see below. These are reported monthly to management and executives reported via Praxair's Sustainable Development Performance Dashboard. Results are reported externally each year in Praxair's sustainable development reporting. A summary is provided in the pages following.



Priorities, Performance Indicators and Targets 2009–2015

PRIORITY AREAS	SELECT SUSTAINABLE DEVELOPMENT KPIS	TARGETS 2009-2015
Compliance	Required employees annually certify that they have read and understood Praxair's Statement of Business Integrity (SBI)	100%
Sustainable productivity	Cumulative \$ savings from sustainable productivity	\$500MM
Environmental innovation	Customer eco-portfolio (% revenue)	30%
	Enable delivery of safe drinking water to millions of people a day, incl. in China	>50MM
Emerging market growth	% technology organization based in emerging economies	45%
Energy & GHG efficiency	Cumulative energy savings (target year: 2020)	\$600MM
	Design: % improvement in product energy intensity	8.5%
	ASU GHG emissions intensity: % improvement	6%
	Hydrogen GHG emissions intensity: % improvement	2.4%
Sustainable transportation	Transport GHG emissions intensity: % improvement (merchant driving)	9%
Non-GHG air emissions	Reduce vehicle NOX emissions (%), (2010–2015)	50%
Product stewardship	Enable more GHG to be avoided per year than is emitted in all Praxair operations	2X net benefit
Occupational health & safety	Continuously improve Lost Time Injury Frequency Rate (LTIFR), also called Lost Workday Case Rate (LWCR)	<0.05
Diversity	% local or regional leadership in emerging economy businesses	>90%
Employee engagement	Continuous improvement in employee satisfaction	>83%
	Sites achieving Praxair Zero Waste to Landfill status	150 sites
Community responsibility	Cumulative beneficiaries through community engagement	1.5MM
Supplier sustainability management	Cumulative benefit from greening the supply chain, 2012–2015	\$10MM
Stakeholder engagement	Develop strategic partnerships with external groups that help deliver long-term value	1MM trees

OUR CORE VALUES

■ Safety First

A passionate commitment to safety underpins all of our activities. The safety of our products and services, safety at work, safety on the road and safety at home are the highest priorities for our employees, contractors, families and customers.

■ High Integrity

We continually reinforce the high global standards upon which our reputation has been built, including honesty, ethical conduct and full compliance with the law.

■ Results Driven

With personal accountability, collaboration and innovation, we focus on consistently delivering value to our shareholders and other stakeholders through flawless execution, operational discipline and continuous improvement.

■ Customer Satisfaction

We provide products, applications technology and services that represent the highest standards of quality and reliability. We work closely with our customers to overcome their challenges and achieve their goals.

■ The Right People

We place a high value on attracting and developing talented people from diverse backgrounds who use their talent to make an impact in the world and make our company successful.

■ Environmental and Social Responsibility

We help customers worldwide improve their environmental performance and carbon footprint, while minimizing our own environmental resource intensity and maximizing our social and community contributions.

OUR STRATEGY

■ Core Business

Our core business is industrial gases and a sale of gas business model.

■ Increase Density

We concentrate our assets to optimize our presence, maximize cost efficiencies and drive economies of scale.

■ Target Geographies

We invest in areas of the world where we have secured or will establish significant market presence.

■ Integrated Supply

We build out integrated supply systems to serve the full array of customers.

OUR GROWTH DRIVERS

■ Energy

We are the go-to provider of reliable, cost-effective supply to the energy sector.

■ Emerging Economics

We play a leading role in modernizing industrial infrastructures in high-growth countries.

■ Environment

We help customers reduce their environmental footprint while improving energy efficiency and product quality.

Sustainable Value Creation: The Six Capitals

Praxair's business model and brand promote sustainable value creation in the short, medium and long term. Praxair's values, strategy and growth drivers were mapped to the six capitals presented in the Integrated Reporting <IR> Framework. They were also mapped to each of the 14 priority themes identified in Praxair's Sustainable Development Materiality Assessment, see below. Feature stories are presented from page 17 that show how Praxair creates sustainable value in all the capitals.



FINANCIAL

- **Results Driven**
Sustainable productivity (eco-efficiency)
- **High Integrity**
Compliance



MANUFACTURED

- **Core Business**
Energy & GHG efficiency
- **Increase Density**
Sustainable Transportation



SOCIAL & RELATIONSHIP

- **Integrated Supply**
Supplier sustainability management
- **Target Geographies**
Community responsibility
- **Social Responsibility**
Stakeholder engagement



HUMAN

- **Safety First**
Occupational health and safety
- **The Right People**
Employee engagement
Diversity



NATURAL

- **Customer Satisfaction**
Product stewardship
- **Environment**
Non-GHG air emissions



INTELLECTUAL

- **Emerging Economics**
Emerging market growth
- **Energy**
Environmental innovation

Performance Dashboard: Environment

Energy & GHG Efficiency

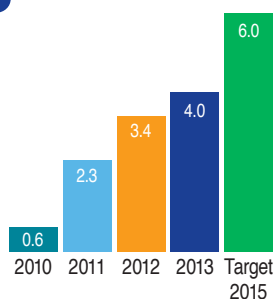
Air Emissions Reductions

Product Stewardship

Enable net environmental benefit from applications

ASU Energy Emissions Intensity (7)

% improvement per unit of product



Cumulative Energy Savings (8)

2009–2013

\$140
MILLION

Air Emissions (13)

2010–2015

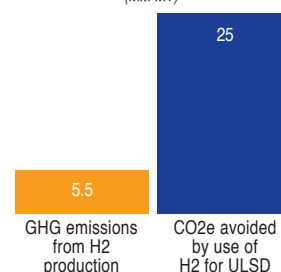
Reduce vehicle NOX emissions %



Carbon Productivity: H2 for ULSD (14)

Enabled more GHG to be avoided than was emitted in all Praxair operations

(MM MT)



H2 GHG Emissions Intensity (9)

% improvement per unit of product



Design (10)

% improvement in product energy intensity for new ASUs



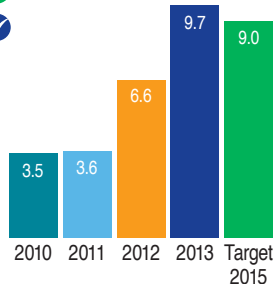
SO₂ Productivity from H2 for ULSD (15)

Praxair H2 enabled the reduction of **1 MM MT SO₂** in 2013, equivalent to 9.3% of the total U.S. SO₂ emissions in 2008



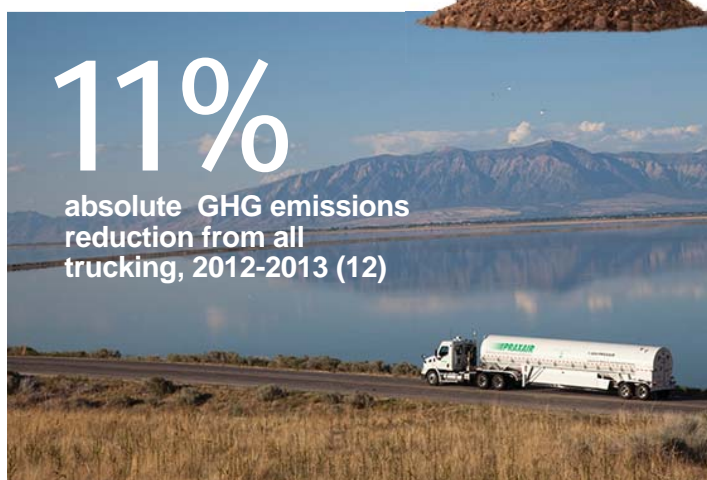
Sustainable Transportation (11)

Transport GHG emissions intensity: % improvement per unit of product



11%

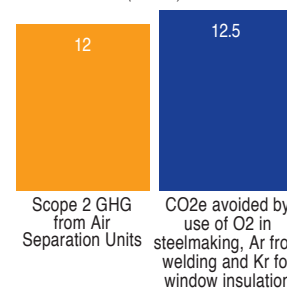
absolute GHG emissions reduction from all trucking, 2012-2013 (12)



Carbon Productivity: O₂, Ar & Kr (16)

Enabled more CO₂e to be avoided than was emitted by all ASU CO₂e emissions

(MM MT)



Performance Dashboard: Social

Employees

Occupational Health & Safety (17)

**PRAXAIR'S SAFETY
RECORD IS**

5x

**BETTER THAN THE U.S.
INDUSTRY AVERAGE**
for recordable injuries

Employee Engagement (20)

83%

**EMPLOYEE
ENGAGEMENT RATE**
In Global Survey

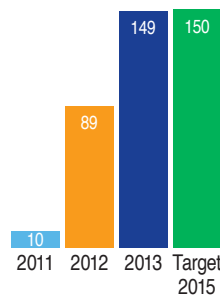
Occupational Health & Safety (18)
Continuously improve Lost Time Injury
Frequency Rate (LTIFR)



0.04

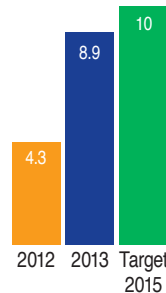
**LOST WORKDAY
Cases (LWCs) per
200,000
HOURS WORKED**

Employee Engagement (21)
Number of sites achieving
Zero Waste to Landfill



Suppliers

Supplier Sustainability
Management (23)
Cumulative savings from
greening the
supply chain (\$MM)



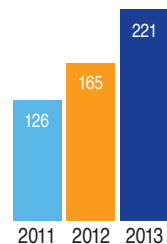
Communities

Stakeholder Engagement (24)



**Partnerships
TO PLANT
1 MILLION
TREES**

Community Engagement (25)
Number of sites
participating



Diversity (19)

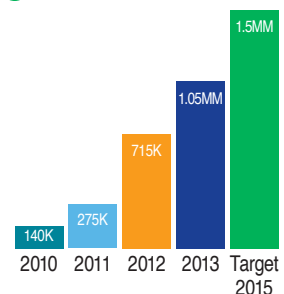
>90%
**leadership in
emerging
economies are
local nationals**

Community Engagement (22)



\$1.5 MILLION
cash and in-kind contributions
**FROM EMPLOYEES
AND FACILITIES**
(not including support from Praxair Global Giving)

Community Responsibility (26)
Cumulative beneficiaries from
community engagement



Performance Dashboard: Notes



1. **Environmental innovation, revenue:** Reports revenue value from eco-portfolio in reporting year. It measures the percent revenue contributed by applications that bring environmental advantage. Praxair R&D has developed a methodology to determine and update which applications are covered. Major applications include: O₂ in steel production and non-ferrous metals, Ar in welding and solar production, all PST components that extend product life, H₂ for Ultra-Low Sulfur Diesel, all water treatment.
2. **Environmental innovation, percentage:** Considers eco-portfolio as a percentage of total annual revenue.
3. **Emerging Market Innovation:** Covers headcount in the technology organization (i.e., R&D and engineering). Measures percent headcount based in emerging economies (i.e., all Praxair operations in Asia and in Central and South America) vs. developed economies.
4. **Environmental Innovation:** Measures people living in cities where Praxair gases disinfect water to help make it potable. Previous target of 25MM was exceeded largely because of the growth of water treatment in cities in China and additional sales in that region.
5. **Sustainable Productivity:** Covers all Praxair operations. Measures productivity projects that bring financial and environmental savings, such as savings in energy (natural gas, electricity, diesel or gasoline), water, waste, NO_x emissions, ODSs, CO₂ and metric tonnes of Carbon Dioxide equivalents (MT CO₂e).
6. **Compliance:** 100% of Praxair management and required employees annually certify that they have read and understood Praxair's Compliance with Laws and Business Integrity and Ethics policies.
7. **ASU energy intensity:** Covers all Praxair worldwide Air Separation Units. Measures energy intensity per molecule of gas produced vs. baseline, normalized to gaseous oxygen equivalent (GO₂e).
8. **Cumulative energy savings (2009–2020):** Covers all Praxair operations. Counts annual savings each year from the baseline year. Cumulative savings of \$140 MM were realized for 2009–2013. Measures performance against Praxair's long-term target: From 2009 to 2020, achieve a minimum annual energy savings (vs. base) of 1.8 million MWh of electricity and 2.5 million MMBtu of natural gas, delivering anticipated cumulative savings in excess of \$600 million and 6 million MT CO₂e by the end of the goal period. Reports cumulative \$, MMBTU and MWh savings from baseline.
9. **Hydrogen GHG emissions intensity:** Measures GHG intensity per molecule of gas produced vs. baseline. The hydrogen target was set in 2009 for major Steam Methane Reformers then operating. It does not include plants that started operating subsequently.
10. **Design product energy intensity improvement:** Covers energy intensity improvements made in the design of new ASUs each year. Measures projected energy cost per molecule of gas produced vs baseline year. Previous target was 6 percent. The target was exceeded and a new target established.
11. **Transport GHG emissions intensity:** Covers all Praxair driving operations where the driver is a Praxair employee. Measures the GHG intensity per product delivered vs. baseline. Measures annual updated fuel efficiency. This is calculated by the number of miles driven in each geography X local GHG emissions factor X product volume delivered. From 2014, this target will also be applied to all contract drivers. Although Praxair exceeded the 2015 target, a new target has not yet been set as these results depend on a range of variables like business growth.
12. **Transport GHG emissions intensity:** Covers all Praxair driving operations (Praxair and contractor drivers). Measures net GHG per product delivered vs. prior year. Measures annual net GHG from truck driving each year. Uses updated Praxair MPG results from previous year X number of miles driven globally X a standard GHG

emissions factor.

13. **Air Emissions:** Covers all NOX emissions from Praxair truck driving, 2009–2015. Praxair emissions have decreased with the use of cleaner burning diesel fuels in the Praxair fleet. Previous target was 20 percent reduction.
14. **H2 for ULSD:** Result reflects conclusions of a Praxair White Paper showing that H2 used for the manufacture of Ultra-Low Sulfur Diesel fuel, when the tailpipe is fitted with a diesel particulate filter, avoids the emission of black carbon, which has a global warming potential and can be converted to CO₂e. See [Green Technologies and Climate Change](#) at: www.praxair.com.
15. **SO₂ for ULSD:** Result reflects conclusions of a Praxair White Paper showing that H₂ used for the manufacture of ultra-low sulfur diesel fuel avoids the emission of SO₂. See [Green Technologies and Climate Change](#) at: www.praxair.com.
16. **O₂, Ar, Kr:** Results reflect conclusions of Praxair White Papers. See [Green Technologies and Climate Change](#) at: www.praxair.com
17. **Occupational Health & Safety:** Recordable injury rate is measured globally as per U.S. OSHA, per 200,000 hours. Praxair's performance is > five

times better than the U.S. (OSHA) industrial average (2012: 4 recordable injuries per 200,000 hours).

18. **Occupational Health & Safety:** Covers all Praxair operations. Lost Time Injury Frequency Rate (LTIFR) was 0.04 per 200,000 hours worked. LTIFR is also called Lost Workday Case (LWC) rate. Results met Praxair's target for continuous improvement (2012: 0.05).
19. **Diversity:** Covers all Praxair operations in South and Central America and Asia. It counts all country leaders or, if there is no country leader, the next level above. "Local" leader is defined as a citizen of the country or of that Praxair business region.
20. **Continuous improvement in employee satisfaction:** Praxair conducts a biennial employee survey. The 2013 survey was distributed to all Praxair worldwide employees and hourly workers. It substantially expanded the number of questions and the number of employee invitees compared to the previous survey, and for this reason its results are not comparable to prior years. Praxair's target was to outperform its industry peers. Survey responses were received from 18,883 employees, 73% of respondent pool. Overall Engagement Index "score" was 83 percent: 8 percent higher than benchmark industry peers.
21. **Sites achieving Zero Waste to**

Landfill: Covers all Praxair operations. Participating sites aim to achieve >90 percent process waste avoided from landfill, which can include incineration for energy. A separate program exists for Office Greening.

22. **Community engagement, employee \$ contributed:** Covers all reported Praxair Community Engagement (CE) activity. Measures annual cash and in-kind contributions from employees and facilities (not including support from Praxair Global Giving). Audit was of a subset, \$925,000 of employee \$ contributions; it did not audit in-kind contributions.
23. **Cumulative savings from greening the supply chain:** Covers all Praxair Global Procurement Materials Management. Measures financial savings in sustainable productivity from procurement. Environmental savings are also measured but not reported for this target.
24. **Stakeholder engagement, Establish strategic partnerships that deliver long-term value:** Plant a million trees (2012–2015). Praxair is collaborating with several environmental conservation organizations to plant or preserve a million trees by 2015, to multiply the environmental value created by its employee Zero Waste program. This is a new target.
25. **Community engagement, site participation:** Covers all reported Praxair CE activity. Metric counts # of sites reporting participation.
26. **Community responsibility:** Covers all reported Praxair CE activity. Metric counts reported direct beneficiaries from these activities and reports a cumulative result from baseline. Previous target was 1MM cumulative beneficiaries.



Creating Sustainable Value

The <IR> Framework sets out reporting guidelines designed to help organizations communicate how they create value over time by interacting with the external environment and the capitals. The capitals are stocks of value that are increased, decreased or transformed through the activities and outputs of the organization. This concept was used on page 6 to describe Praxair's business model.

Feature stories in the following section describe key performance areas for sustainable development value creation at Praxair.

1. **Driving Revenue, Safety and Environmental Stewardship**
2. **Ensuring Sustainable Productivity Over the Long Term**
3. **Investing in Emerging Market Growth and Innovation**
4. **Delivering a Net GHG Benefit Through Praxair Applications**

Each Feature Story shows how multiple <IR> capitals connect to deliver long-term value or outcomes. The capitals are denoted with their relevant icon symbol.



Driving Revenue, Safety and Environmental Stewardship



Global Challenge

Sixty-four percent of Praxair revenue is from its merchant and packaged gases business where products are primarily delivered by truck. Praxair drivers, as well as its contract drivers, cover more than 275 million miles per year, the equivalent of 30 times around the earth at the equator each day. Praxair drivers are the face of Praxair to its customers: their service quality is key to retaining and growing business. Each mile driven represents potential safety and environmental risks to our drivers and the customers and communities they serve, as well as business and environmental costs from fuel and other materials use. Praxair's business — and brand — depends on the safe and efficient delivery of each molecule of product.

Input

Every year, investments are made for continuous improvements in financial, safety and environmental performance in logistics and distribution. These include dynamic tour scheduling, tank optimization, fuel efficiency and on-board computers, network optimization and asset tracking.

In 2013, Praxair provided 1.7 million hours of safety training to its employees and contractors — a week each on average. If each hour of training were valued at \$20, this would amount to a contribution of >\$30 MM. To manage environmental performance, Praxair has a target of 1.5 percent per year GHG intensity improvement from products delivered in trucks.

Output

In 2013, Praxair's recordable injury and lost workday case rates were more than five times better than the industry average. Overall, Praxair distribution achieved an 11 percent net GHG emissions reduction in 2013 compared to 2012. Distribution productivity savings were \$80 million, including:

- 3.75 MM gallons diesel fuel
- 350,000 gallons gasoline
- >\$8 MM incremental sales revenue — for example, from additional delivery capacity created

Outcomes

The successful delivery of each molecule of product trucked to a customer — and a large portion of Praxair's business success — is the result of multiple operational tasks and functions that work together seamlessly to reduce human, environmental and business risk. These allow Praxair to target medium-term additional productivity of more than \$150 million from distribution.

Driving Sustainability and Revenue

Challenge: 64 percent of Praxair revenue is derived from its merchant and packaged gas business, primarily delivered in trucks. Praxair trucks drive around the world the equivalent of 30 times a day at the equator. Business success depends on reliable customer service and an unrelenting focus on safety and environmental responsibility.

INPUT

- >275 million miles driven
- Investments in safety, logistics optimization, environment

2013 OUTPUTS

- 11% reduction in net GHG emissions from trucking vs. 2012
- \$80MM productivity savings from driving

LONG-TERM OUTCOME

- Additional savings of more than \$150 million identified for the medium term

Ensuring Sustainable Productivity Over the Long Term



Global Challenge

Continuous efficiency improvement is a foundation of Praxair's industry-leading operating margin and return on capital (ROC). In this context, it is crucial to increase operating profit margin by continuous efficiency improvement. Praxair has a mature productivity organization integrated throughout the business, charged with finding more than 5 percent savings off Praxair's cost stack. Its challenges are to continue to eliminate costs, find sources of incremental sales and ensure that the culture of productivity is engrained in Praxair's systems rather than individual champions.

Input

Praxair uses the tools of eco-efficiency — measuring environmental savings in addition to financial savings. "Sustainable Productivity," initiated within the productivity organization, measures productivity savings that also conserve resources such as energy, water, waste and GHG emissions.

Output

In 2013, Praxair achieved more than 7% savings of its cost stack through productivity initiatives — exceeding the 5 percent target for a seventh year in a row which contributed to Praxair's 13 percent return on capital. By 2013, sustainable productivity savings were more than \$120 million — sustainable productivity is a significant and increasing component of total productivity. Sustainable productivity savings in 2013 included 1,854 projects and savings of:

- 225 million gallons of water
- 800 million kilowatt-hours of electricity
- 475,000 MT CO₂e.

More than 10 percent of sustainable productivity produced incremental revenue from additional production capacity that generated additional sales revenue.

Outcomes

Sustainable productivity is showing additional value, as sustainable productivity projects are achieving a 50 percent replication rate. A higher replication rate means that sustainable productivity projects are feeding in new ideas at lower cost, adding sustainable value to Praxair's productivity program and to the business.

Sustainable productivity is generating more ideas from more people. Greater levels of employee engagement mean that workers pay more attention, measurably lowering operational risk. A values-driven culture and employee engagement may also aid with retention. Sustainable productivity has become part of Praxair's culture and intellectual property. It is one of the reasons Praxair remains confident that it can maintain and improve its margin and ROC results over the long term.

Ensuring Long-term Productivity

Challenge: Praxair's productivity organization has delivered more than 5 percent savings off its gross cost stack, year after year. These savings have been important contributors to its industry-leading return on capital. Praxair remains focused on utilizing daily business changes to drive continuous improvement in productivity savings.

INPUT

- Mature productivity organization
- Launch of sustainable productivity

2013 OUTPUTS

- > 6% savings against its cost stack
- >\$120 MM sustainable productivity savings
- Employee environmental engagement: more people, more ideas

LONG-TERM OUTCOME

- Sustaining productivity directly impacts Praxair's industry-leading results

Investing in Emerging Market Growth and Innovation



Global Challenge

Emerging markets are a secular growth driver for Praxair: in developed economies such as the United States, industrial gases have a 100 percent per capita consumption rate. In contrast, per capita consumption of industrial gases is 20 percent in China, 12 percent in Mexico and 10 percent in Brazil.* Emerging economies, currently contributing around 35 percent of global Praxair revenue, therefore also represent decades of organic growth opportunity.

Innovation investment is growing in emerging markets: from 2007 and 2012, China and India doubled their R&D spending and now account for almost 20 percent of global R&D spending. For international companies, emerging economy R&D hubs are essential to access local markets, get closer to customer needs and provide access to international talent. This also means that emerging economy sourcing and innovation are crucial to Praxair's growth plans and competitiveness.

*Source: Spiritus Consulting and internal analysis

Input

Praxair has a target that 45 percent of its technology organization staff — engineering and R&D employees — should be based in our emerging economy markets by 2015. Overall, the percentage of Praxair employees in a region corresponds to revenue earned in that region (see p. 7). This investment in human capital for technology development in emerging economies is an investment in future growth. Praxair opened its latest global technology center in 2013 in Shanghai, which will enable the company to work closely with its customers to develop and implement applications both in China and across the globe.

Output

- Praxair achieved its 2015 target in 2013: 45 percent of its global technology organization is based in emerging economies
- Selected as a member of the *Forbes Top 50 Most Innovative Companies*
- Selected as a “Best Innovator” in Brazil by AT Kearney

Outcomes

Technology human capital investment supports Praxair future growth strategy in emerging economies. External recognition for innovation promotes Praxair's reputation and brand among potential technology hires.

Innovating in Emerging Markets

Challenge: Modernizing economies offer opportunities to migrate and customize Praxair applications and are a key area for organic sales growth. At the same time, as global innovation investment is growing in emerging markets, so is competition for technology talent. Praxair must invest in human and intellectual capital to achieve its strategy of emerging economy growth.

INPUT

- Invest in human capital for emerging market innovation

2013 OUTPUTS

- 45% of Praxair's global technology organization based in emerging economies

LONG-TERM OUTCOME

- Technology human capital investment is directed toward future growth in emerging economies

Delivering a 2X Net GHG Benefit Through Praxair Applications



Global Challenge

A central economic question today is how to meet the rising demand for energy and natural resources, within the limits of our planet. In terms of sustainable development, one of the key challenges is to multiply resource productivity while reducing resource use.

Input

Praxair’s products and applications frequently help our customers improve their energy efficiency and reduce their environmental impact. Since 2009, Praxair has had a target to demonstrate the “carbon productivity” of our product portfolio. Calculated carbon productivity for four signature Praxair products that together accounted for 11 percent of 2013 sales:

- Hydrogen sold to make ultra-low sulfur diesel fuel (ULSD) used in trucks fitted with diesel particulate filters
- Oxygen sold to optimize combustion in steelmaking and reduce emissions
- Argon sold for welding
- Krypton sold to insulate thermal windows.

Output

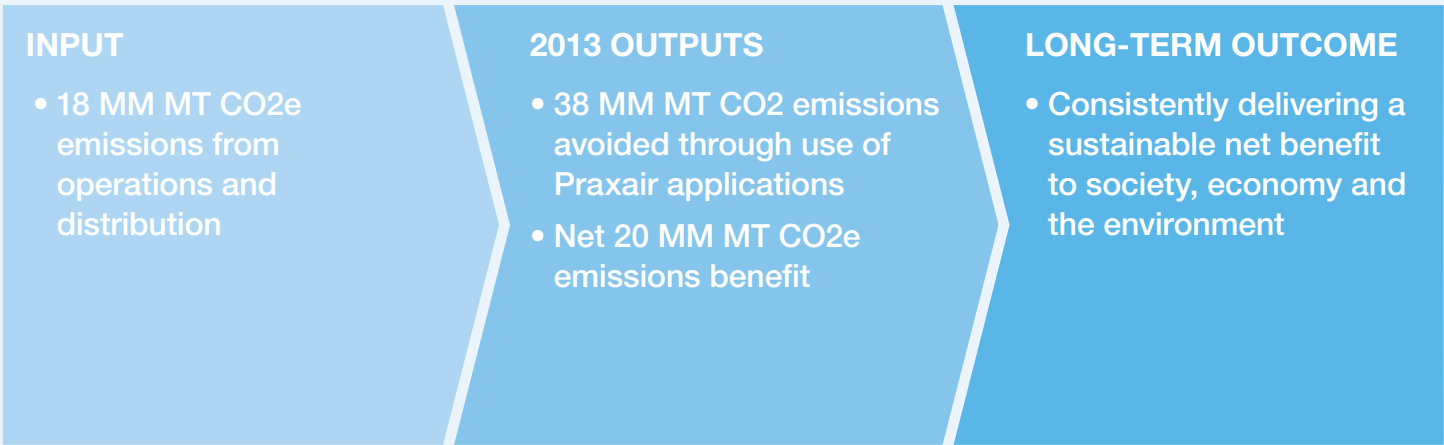
In 2013, Praxair applications enabled 38 MM metric tons (MT) of greenhouse gas (GHG) emissions to be avoided — 20 million MT more than were emitted in all its operations. More information on our methodology and the external audit of results can be found on our website at [Less carbon more green](#).

Outcomes

Making our planet more productive is not only about doing less harm; it is also about doing more good.

Net GHG Benefit

Challenge: In a world with increasing demands for energy, finite natural resources and increasing environmental concern, Praxair must not only do more with less; it must also show that it can do more for its customers.



Governance

Responsible Governance

Praxair Board of Directors

Praxair's Board of Directors consists of 11 Board members, one executive director (Chairman and CEO) and 10 independent directors. The independent directors elected Robert Wood as Executive Session Presiding Director effective January 1, 2013. Mr. Wood presides as an independent lead director over private meetings of the non-management directors and performs other duties, including conducting a performance review of the Chief Executive Officer.

The Board has adopted *independence standards* for service on Praxair's Board of Directors. The Board has applied these standards to all of the nonmanagement directors (all directors are nonmanagement except the company's chairman and CEO), and has determined that each qualifies as independent.

Praxair has a unitary board structure with one executive member; the rest are independent. *Independence standards* are defined on the Praxair website. The Board is diverse. Of 11 members, three (27 percent) are female; two (18 percent) are U.S. minority and one (9 percent) is a non-U.S. citizen. In all, 55 percent of the Board is representative of diverse populations.

Praxair's formal corporate governance policy includes a formal corporate governance statement, documented in *Praxair's 2013 Proxy Statement (March 2014)*, p. 10. Praxair's [Corporate Governance Guidelines](#) are posted at Praxair's public website. These include a statement of compliance of the formal policy with current legislation. The Proxy Statement provides the remuneration framework and performance evaluation of the members of Board of Directors, CEO

and senior executives, and an independence statement of Board of Directors.

Praxair's Board ensures its effectiveness and its alignment with the (long-term) interests of its shareholders. During 2013, the nominees for reelection to the Board collectively attended 100 percent of all Board meetings and meetings of committees of which they are members. Biographies and resumes of the Board of Directors are provided in the *2013 Proxy Statement (March 2014)*, p 24, as well as other mandates of members of the Board of Directors. Praxair's Board members are restricted from having more than five other mandates. Ten of the directors have four or fewer other mandates. The Board assesses its effectiveness annually under a process determined by the Governance & Nominating Committee. Further detail is provided in the *2013 Proxy*



STEPHEN F. ANGEL

Chairman and Chief Executive Officer, Praxair, Inc.



EDUARDO MENEZES

Executive Vice President



ANNE K. ROBY

Senior Vice President



MATTHEW J. WHITE

Chief Financial Officer



ELIZABETH T. HIRSCH

Vice President and Controller



SCOTT E. TELESZ

Executive Vice President



KAREN KEEGANS

Vice President and Chief Human Resources Officer



JAMES T. BREEDLOVE

Senior Vice President, General Counsel and Corporate Secretary

PRAXAIR EXECUTIVE OFFICERS

Praxair's Executive Officers are elected by the Board of Directors and serve at the pleasure of the Board.

The Board elects Praxair's officers annually following each annual meeting of shareholders.

Statement (March 2014), p. 10-11.

Praxair complies with U.S. SEC regulation in regard to transparency of senior management remuneration and provides compensation amounts on an individual level for each Board member, for its CEO and for Praxair's highest-paid senior executives, in its *2013 Proxy (Mar 2014)*: executive compensation is provided on p. 48; directors p. 64. Employee salaries are benchmarked against those of peers and competitor companies.

Praxair's Board also plays a role in risk oversight, and this is outlined in its *Proxy Statement*. At least annually, the full Board reviews the Company's risk identification, assessment and management processes and the guidelines and policies by which key risks are managed. As part of that review, the Board discusses (1) the key enterprise risks that management has identified, (2) management accountability for managing or mitigating each risk, (3) the steps being taken to manage each risk, and (4) which Board Committees will oversee each risk area on an ongoing basis.

The risk factors disclosed in Item 1A of the Company's Form 10-K and Annual Report illustrate the range of the risks faced by a global industrial company and help explain the need for strong Board Committee oversight of the management of risks in specific subject areas. Each Committee's calendar of recurring meeting agenda topics addresses risk areas pertinent to the Committee's subject-matter responsibilities. These areas include financing and currency exchange risks (Finance & Pension Committee), compensation risks, and executive development and retention (Compensation Committee), regular review of the Board's governance practices and the Company's sustainability program (Governance & Nominating Committee), and internal controls, investigations, and integrity standards compliance (Audit Committee). Other risk areas are regularly reviewed by the full Board. These include safety and environmental risk (covered at each Board meeting), economic, market and competitive risk (part of business operating reports at each Board meeting, and the annual operating and strategic reviews), and global

compliance risks (supplementing reporting within the Audit Committee). In addition, risk identification and assessment is integrated into Board decision making with respect to capital projects and acquisitions, entry into new markets, financings and cash flow analysis, among other matters.

Nonfinancial performance incentives

Remuneration and incentives are linked to value creation in the short, medium and long term, and these can be mapped to the six <IR> capitals. Praxair's *2013 Proxy Statement (March 2014)* outlines the objectives of its annual performance-based nonfinancial variable compensation, which are set to motivate and appropriately reward executives for the delivery of strong business results without encouraging excessive risk taking; drive desired short-term business performance and focus executives on key objectives that position Praxair for sustained growth and that create shareholder value without compromising long-term business objectives; and deliver pay commensurate with performance.

The 2013 nonfinancial goals included goals that focused on safety, environmental responsibility, global compliance, productivity, talent management and financial controls. Targets included:

- Strategic positioning of the business for long-term performance
- Consideration of macroeconomic or other external factors and performance relative to peers
- Maintenance of industry-leading project execution goals
- Safety and environmental performance, including zero fatalities and maintenance of best in class safety rates, and performance in sustainable development
- People development, including strengthening a globally diverse leadership pipeline
- Demonstrated organizational capabilities in productivity
- Global controls and compliance initiatives, programs and training

Based on 2013 performance, the Committee determined that the Company's achievement of nonfinancial goals supported a positive adjustment. For example, the Committee noted that the company:

Economic:

- Maintained industry-leading return on capital, and exceeded design efficiency and first-year availability project execution goals
- Achieved considerable cost reductions for the fifth consecutive year
- Acquired NuCO₂ and Dominion Technology Gases, expanding core industrial gas capabilities into high-growth markets
- Expanded its supply systems product line portfolio with new offerings

External perception/performance in sustainable development:

- Was selected for the Dow Jones Sustainability World Index for the eleventh year in a row

Social metrics:

- Continued its robust succession planning and management development process, resulting in seamless senior leadership changes
- Expanded activities to develop a globally diverse talent pool at all levels within the organization
- Reinforced operational discipline at all levels of the organization and improved employee lost time injury rate to "best in class"
- Was awarded several accolades, including the "Excellence in Engineering Ethics" from the American Institute of Chemical Engineers.

Sustainable Development Governance

The Governance and Nominating Committee of the Board of Directors is the most senior body responsible for sustainable development at Praxair. It has oversight responsibility for, among other things, the company's responses to broad public policy issues in the areas of corporate social responsibility, corporate citizenship and sustainable development. The VP of sustainable development presents at least annually to the Board on these issues.

Sustainable development strategy is set and maintained by a senior executive Sustainable Development Steering Committee (SDSC), consisting of the Office of the Chairman (executive leadership team) as well as the SVPs of Human Resources, Communications & Public Relations, and the VP of sustainable development. This group meets at least biannually.

The VP of sustainable development is accountable to do the following:

- Direct corporate sustainability strategy and drive business and functional alignment and awareness throughout the organization
- Lead the SDMS and be accountable for the achievement of the corporate sustainable development targets and continued progress in community engagement
- Coordinate the corporate sustainable development council, which ensures functional alignment
- Serve as ex-officio member of each business sustainable development council

Outlook

Looking Ahead

Short Term

In line with Praxair's strategy, in 2013 the company started up 18 large on-site projects under long-term take-or-pay contracts, including three world-scale hydrogen plants around the world. It also signed 11 new projects to contribute to future high-quality sales growth.

Praxair's project backlog serves customers across several key end markets, including chemicals, energy, primary metals, manufacturing and electronics.

The backlog is well-balanced with approximately one-third of projects, by value, located in North America, one-third in Asia and the remaining in South America and Europe.

Future

Over the medium term, Praxair expects to see high single-digit sales growth and stronger operating profit growth, low double-digit growth in earnings per share and a 14–15 percent ROC. Praxair plans to retain its strategic focus on density and an integrated supply in select geographies, and on its core industrial gas/sale of gas model. Growth remains a key component of Praxair's strategy. The focus will remain on its organic and secular growth drivers: emerging economies, energy markets and environmental applications.

Emerging economies continue to build infrastructure, modernize and outsource captive production and demand new applications technologies; see chart below. These trends will drive increased demand for industrial gases. Praxair expects to participate in — and contribute to — that growth. The *Feature Story: Emerging Market Growth and Innovation* shows how Praxair has positioned its innovation assets in these areas to help drive growth.

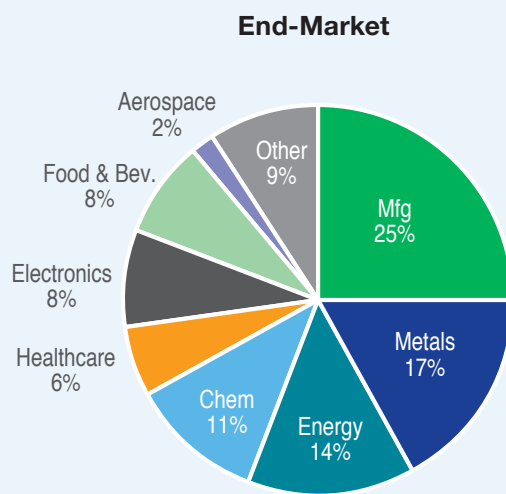
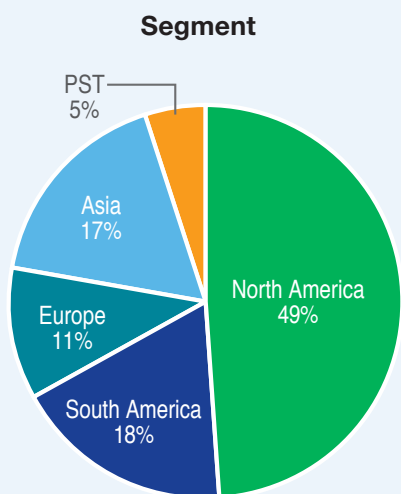
In energy markets, Praxair expects to capitalize on a number of proposed projects driven by an abundance of low-cost natural gas in the United States and refineries globally. Furthermore, as energy demand

grows around the world, the company will take advantage of the demand for oil and gas services, both on-shore and off-shore. In regard to the environment, there is increasing emphasis on air and water quality in all parts of the world. Praxair applications technologies, many of which help customers reduce emissions, drive energy efficiency and improve water quality, are attracting customers in a wide range of industries. The *Feature Story: Praxair Applications Deliver a Sustainable Net GHG Benefit*, shows that Praxair applications are helping to meet global challenges for resource efficiency — and can be expected to do so into the future.

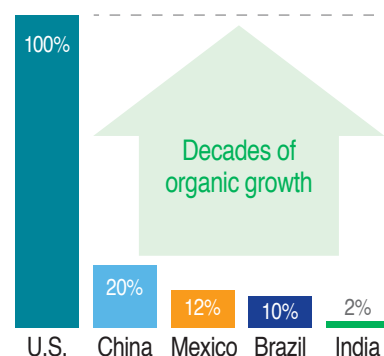
Praxair's world-class execution model of productivity, disciplined pricing, energy management and P&L accountability will continue to expand operating profit. Its high-performance organizational culture of safety, integrity and compliance, and its deep bench of disciplined operators and versatile leaders, will enable the replication and continuous improvement of these results. The Feature Stories on *Driving Revenue*, *Safety and Environmental Stewardship* and *Sustainable Productivity* demonstrate the long-term value of Praxair's people and culture. This organizational culture has delivered results for years past and is sustainable for years to come.

Praxair Five-Year Outlook

2017F Sales



Industrial Gas Consumption per Capita (% of US) shows decades of growth opportunity in emerging economies



Report of Independent Auditor on Review of Nonfinancial Information



10 East 38th Street, 11th Floor
New York, NY 10016
646-499-0083

www.CarbonVerificationService.com

July 8, 2014

To the Management of Praxair, Inc.

Carbon Verification Service, LLC was commissioned by Praxair, Inc. to perform verification of its global 2013 Key Performance Indicators (KPI) and other social metrics. 2013 was the fourth consecutive year that Carbon Verification Service was retained by Praxair to verify its KPIs. Immediately upon being retained, Carbon Verification Service conducted a conflict of interest review to insure that its review would be free of bias and would be done on an independent basis. Carbon Verification Service provides only verification and auditing services to its clients, including Praxair, to avoid conflict of interest concerns. Carbon Verification Service is not owned or operated by any other entity.

The objective of the verification was to provide limited assurance of the reported KPI values and to assess the accuracy, completeness, relevance, consistency and transparency of Praxair's information and assertions. Carbon Verification Service assessed conformance of Praxair's GHG emission inventory with The Greenhouse Gas Protocol. The verification protocol employed for verification of Praxair's 2013 GHG emissions was ISO 14064-3 (2006): Specification with guidance for the validation and verification of greenhouse gas assertions. Consensus protocols for the verification of the KPI metrics, other than GHG emissions, do not currently exist. Carbon Verification Service utilized the same verification principles prescribed by ISO 14064-3 to guide the verification of this data.

Carbon Verification Service, LLC reviewed selected quantitative KPIs. The verification was based on site visits to Danbury, CT, Burns Harbor, IN and Ontario, CA. Review of documentation from eight other locations was also performed. We did not review all information and supporting documentation associated with the KPIs for all of Praxair's global locations and facilities.

Praxair management is responsible for the reported KPIs and for the process of assembling the data upon which the reported KPI values are based.

Based upon the verification work performed from April through June 2014, there is no evidence that Praxair's KPI data assertions, which appear in the table below, are not materially correct and are not a fair representation of data and information and have not been prepared in accordance with accepted standards and practice.

Sincerely,
For Carbon Verification Service, LLC

A handwritten signature in black ink, reading "James J. Groome".

James J. Groome
President

Praxair reported the following Key Performance Indicators:

METRIC	REPORTED VALUE	UNITS OF MEASURE
GHG ¹		
GHG Emissions Scope 1	6,152,000	Metric Tons CO2e
GHG Emissions Scope 2	11,883,000	Metric Tons CO2e
GHG Emissions Scope 3 - Contractor Driving	239,000	Metric Tons CO2e
Year-over-Year Change - Scope 2 Emissions	4.9	percent
Energy ²		
Electricity Consumption	22,085,000	MWh
Natural Gas Consumption	2,031,000	MWh
Diesel/Gas Oil	281,000	MWh
Steam	764,000	MWh
Distillate Fuel Oil #2	11,000	MWh
Air Emissions ⁴		
NOx Emissions ²	1,750	Metric Tons
SOX Emissions	25	Metric Tons
VOC Emissions	448	Metric Tons
Waste		
Zero Landfill ⁵	98,627,784	Lbs. of waste not landfilled
Water		
Water Use ³	55,400,000	Cubic meters
Chemical Oxygen Demand	779	Metric Tons
Occupational Health & Safety		
Lost Time Injury Rate	0.04	Lost time injuries per 200,000 hours worked
	0.18	Lost time injuries per 1,000,000 hours worked
Community Engagement		
Cash raised or donated by employees and facilities ⁶	\$936,017	USD

¹ Praxair reported Scopes 1, 2 and 3 GHG emission data for its global facilities, including air separation units, hydrogen production, carbon dioxide production, packaged gases, electronics, surface technologies, trucking and corporate offices. The GHGs verified included the six Kyoto Protocol GHGs (CO₂, CH₄, N₂O, HFCs, SF₆ and PFCs).

² Consumption of energy including natural gas, diesel and electricity.

³ Water use excludes "once through" cooling water.

⁴ Based on its company-wide usage of fossil fuels, NO_x, SO_x and VOC emissions were also verified by Carbon Verification Service. These exclude emissions due to contractor driving.

⁵ Lbs of waste not sent to landfill, among 210 sites that participated in Praxair's Zero Waste to Landfill program in 2013.

⁶ Excludes donations from Praxair Global Giving.

Pictured on back cover: Sue Guardino, director, IT applications, with Praxair colleagues, helping to clean up a children's play area at Tarywile Park in Danbury, CT.



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