Praxair, Inc.

Matthew J. White
Senior Vice President and Chief Financial Officer

J.P. Morgan Aviation, Transportation & Industrials Conference
March 12, 2014
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 which 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.
Matthew J. White
Senior Vice President & Chief Financial Officer

Matt White was appointed senior vice president and chief financial officer of Praxair, Inc. in 2014.

White joined Praxair in 2004 as finance director of Praxair’s largest business unit, North American Industrial Gases. In 2008, he became vice president and controller of Praxair, Inc., then was named vice president and treasurer in 2010. In 2011, Matt was named president of Praxair Canada. Before joining Praxair, White was vice president, finance, at Fisher Scientific and before that he held various financial positions, including group controller, at GenTek, a manufacturing and performance chemicals company.

White earned a bachelor of science degree in industrial engineering from Penn State University and a master’s degree in business administration-finance from the University of Delaware. He is a certified public accountant and a CFA charterholder.
Consistent Outperformance

Unique Revenue Model

- No speculative capex
- Long-term contracts – high renewal rates
- No commodity pricing
- Critical product, but low percentage of customer’s cost stack

Strong Profitability and Cash Flow

- Productivity – target at least 5% reduction in cost stack annually
- Integrated supply / distribution density strategy and contract terms drive profitability and high ROC

Leading value creation in the industry

Source: Factset
*Praxair non-GAAP measure; refer to Annual Report for reconciliation
Sustaining a Competitive Advantage

Strategic Focus
- Select geographies – best footprint
- Core industrial gas
- Sale of gas model
- Integrated supply
- Build density

Technology
- Product line advantage
- Total cost of ownership
- Customer applications

Execution
- Operational discipline
- Capital investment
- Safety
- Productivity
- Contract management
- Project execution
- Integrity and compliance

People
- High performers
- Disciplined operators
- Detail-oriented
- Nimble & adaptable
- Excellent leaders
- Non-hierarchical

High performance culture… takes years to build… tough to emulate
What We Do and Products We Supply

- We supply customers with atmospheric, process and specialty gases, high-performance coatings, and related services and technologies

- Atmospheric Gases
  - Produced when air is purified, compressed, cooled, distilled and condensed
  - Oxygen, nitrogen, argon and rare gases

- Process & Specialty Gases
  - Produced as by-products of chemical production or recovered from natural gas
  - Carbon dioxide, helium, hydrogen, semiconductor process gases, and acetylene
## Diverse Markets

<table>
<thead>
<tr>
<th>Category</th>
<th>Sales %</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>24%</td>
<td>Cutting – O&lt;sub&gt;2&lt;/sub&gt;, Welding – O&lt;sub&gt;2&lt;/sub&gt;, N&lt;sub&gt;2&lt;/sub&gt;, Ar, H&lt;sub&gt;2&lt;/sub&gt;, He, blends, Glass – O&lt;sub&gt;2&lt;/sub&gt;, N&lt;sub&gt;2&lt;/sub&gt;, Ar, H&lt;sub&gt;2&lt;/sub&gt;, He, Automotive – O&lt;sub&gt;2&lt;/sub&gt;, N&lt;sub&gt;2&lt;/sub&gt;, Ar, H&lt;sub&gt;2&lt;/sub&gt;, He, etc.</td>
</tr>
<tr>
<td>Metals</td>
<td>17%</td>
<td>Steel production – O&lt;sub&gt;2&lt;/sub&gt;, Stainless steel – Ar, O&lt;sub&gt;2&lt;/sub&gt;, Metal finishing / coating – H&lt;sub&gt;2&lt;/sub&gt;, Inerting – Ar, N&lt;sub&gt;2&lt;/sub&gt;</td>
</tr>
<tr>
<td>Energy</td>
<td>13%</td>
<td>Refining – H&lt;sub&gt;2&lt;/sub&gt;, Natural gas fracturing – N&lt;sub&gt;2&lt;/sub&gt;, Enhanced oil recovery – N&lt;sub&gt;2&lt;/sub&gt;, CO&lt;sub&gt;2&lt;/sub&gt;, LNG in Brazil</td>
</tr>
<tr>
<td>Electronics</td>
<td>8%</td>
<td>Semiconductor – process gases, Photovoltaics – N&lt;sub&gt;2&lt;/sub&gt;, Ar, SiH&lt;sub&gt;4&lt;/sub&gt;, Flat panel - O&lt;sub&gt;2&lt;/sub&gt;, N&lt;sub&gt;2&lt;/sub&gt;, Ar, H&lt;sub&gt;2&lt;/sub&gt;, He, NH&lt;sub&gt;3&lt;/sub&gt;</td>
</tr>
<tr>
<td>Healthcare</td>
<td>8%</td>
<td>Hospitals – O&lt;sub&gt;2&lt;/sub&gt;, N&lt;sub&gt;2&lt;/sub&gt;, CO&lt;sub&gt;2&lt;/sub&gt;, MRI – He, Sterilization – sterilant gases, Anesthesia – N&lt;sub&gt;2&lt;/sub&gt;O</td>
</tr>
<tr>
<td>Food &amp; Bev</td>
<td>8%</td>
<td>Carbonation – CO&lt;sub&gt;2&lt;/sub&gt;, Freezing – N&lt;sub&gt;2&lt;/sub&gt;, CO&lt;sub&gt;2&lt;/sub&gt;, Inerting – N&lt;sub&gt;2&lt;/sub&gt;, Hydrogenation – H&lt;sub&gt;2&lt;/sub&gt;</td>
</tr>
<tr>
<td>Chemicals</td>
<td>10%</td>
<td>Production – O&lt;sub&gt;2&lt;/sub&gt;, N&lt;sub&gt;2&lt;/sub&gt;, H&lt;sub&gt;2&lt;/sub&gt;, Coal gasification – O&lt;sub&gt;2&lt;/sub&gt;, Syngas production – CO, Process control – specialty gases</td>
</tr>
</tbody>
</table>

% of 2013 sales
Advantages of Praxair’s Integrated Model

CUSTOMERS

On-Site

Merchant

Packaged

Pipe Line

Air Separation Unit

CONTRACTS

- Long-term: 15 – 20 years
  - Take-or-pay provisions ensure base return
  - Pass-through escalation formulas for energy and inflation preserve return throughout project life

- Medium-term: 3 – 7 years
  - Requirements contracts with mix of open contracts, formula and other terms that anticipate changing market conditions
  - Low-cost energy purchase & efficient production drives profitability

- Short-term: 1 – 3 years or purchase order contracts
  - Bundle gas, rent, services, equipment and technology to maximize customer value

Integrated supply & contract terms drive high ROC
We are growing and building density

North America Unrivalled Integrated Supply Network

- Strength across all three countries: U.S., Canada and Mexico
- Solid growth fundamentals:
  - Metals
  - Manufacturing
  - Energy: Refining and Oil & Gas Services
  - Chemical
- Packaged gas acquisition opportunities

2013 Sales $6.2B
52% of Praxair

- 500 production plants
- 3,000 distribution vehicles
- Fully-integrated supply system
IG Opportunities in US Petchem Industry

Natural Gas/Liquids

- POX or ATR
- SMR
- Ethane Cracking
- PSA
- GTL
- Methanol
- Ammonia
- Ethylene Oxide/Glycol
- Acetic Acid

Chemical Products

- Fuels (via GTL)  
  - O₂  
  - ++++
- Methanol  
  - H₂ / CO  
  - +++
- Ammonia  
  - H₂  
  - N₂  
  - +++
- Acetic Acid  
  - CO  
  - O₂  
  - ++
- Ethylene Oxide/Glycol  
  - O₂  
  - ++
- Ethylene  
  - H₂  
  - (Source)

Potential for $1B to $2B in IG industry capex going forward
South America

2013 Sales $2.0B
17% of Praxair

- Unrivaled network, strong #1 position
- 100 years of operations
- Fully-integrated on-site, merchant and packaged gases business

Opportunities
- Domestic demand
- Vast mineral and hydrocarbon resources - energy and infrastructure projects

#1 or #2 position in 8 out of 9 countries

Best positioned and preferred supplier
Praxair Europe

2013 Sales $1.5B
13% of Praxair

- Rightsizing costs in the South, growing in the North, entering Russia
- Diverse end markets: chemicals, manufacturing, healthcare, metals, food and beverage
- Positive price attainment
- Solid project backlog and bidding activity in Russia

Pipeline enclaves: Germany, Belgium, Spain and Italy

Margin upside with recovery… continued targeted investment strategy
Praxair Russia

Praxair Locations

- Existing
- Backlog

Evraz (3,000 tpd)

KuibyshevAzot JV (1,400 tpd)

Moscow

Urals Region

Volga River Region

VolzhskyAzot Acq.

Nikochem (400 tpd)

Investment Strategy

- Integrated supply + density
- Quality customers
- Heavily industrialized zones

Sales Outlook

$MM

2013

2017F

~$25

~$250

More opportunities than expected… execution every bit as tough
Geographic selectivity… density focus… profitable growth

- Quality customers and projects
- Major pipeline systems in China

Praxair Asia

13% of Praxair

Praxair Asia Sales

$1.5B

2013

2017F

Thailand

Korea

India

China
Praxair Surface Technologies

2013 Sales $0.7B
5% of Praxair

- Apply high-tech metallic and ceramic coatings
- Supply thermal spray consumables
  - Powder
  - Equipment
- Use technical competencies to solve problems
  - Metallurgy and material science
  - Coating development
  - Application engineering

Mid-single digit growth…strong productivity and ROC
Strong Backlog - $2.2B Capital

Strong U.S. petchem proposal activity
Praxair Investment Criteria

Criteria

Lower Risk ⇔ Standard Global Hurdle Rate ⇒ Higher Risk

Guaranteed Cash Flows

Cost Reduction – Take or Pay – Merchant

Customer & Asset

Counter-party risk
Underlying asset viability

Sovereign Risks

Foreign exchange volatility
Contractual enforcement
Ease of doing business

Execution

Product line offering
Execution complexity

Strategic Alignment

Density & integrated supply systems
– Stand alone plants
– Opportunistic
Sample Project Return on Capital

- Annuity-based business model
- Accretive to ROC within ~5 years
- Successive renewals

Praxair Consolidated Return on Capital Average

Economic Term (years)

-2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16+

Investment Initial Contract Term Renewal
## Productivity Sources Over the Next Several Years

**Target a 5% Minimum Reduction in Cost Stack Annually**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sources</th>
<th>Cost Range</th>
</tr>
</thead>
</table>
| **Plant Efficiency**            | - Turbomachinery upgrades  
                                 | - Cold box optimization  
                                 | - Advanced predictive control monitoring | $400-450 MM |
| **Distribution and Customer Service** | - Dynamic tour scheduling  
                                 | - Tank optimization  
                                 | - Fuel efficiency; on-board computers | $100-150 MM |
| **Packaged Gases**              | - Network optimization and improved facilities workflow  
                                 | - Mobile filling station / automation  
                                 | - Asset tracking | $150-200 MM |
| **Reliability**                 | - Migrate new reliability technologies  
                                 | - Global preventive and predictive maintenance program  
                                 | - Vibration monitoring platform | $50-100 MM |
| **Business Process and Procurement** | - Sourcing contract management  
                                 | - Low-cost country sourcing  
                                 | - Global business process replication | $500-600 MM |

Productivity is sustainable
Praxair Five Year Outlook

Growth from diverse sources… continued leverage down the P&L

Emerging Markets
- Russia
- Mexico oil & gas
- Brazil infrastructure
- China gasification
- Air & water quality

Energy
- US petchem projects
- Canada natural resources

High single-digit sales growth

Environmental
- North America manufacturing

Disciplined pricing
- High performance culture
- Integrated supply & density

Industry-leading ROC
- Energy management
- Sustainable productivity
- P&L accountability

Double-digit EPS growth
- Increasing free cash flow
- Annual net share count reduction

Growth from diverse sources… continued leverage down the P&L
20 Years of Growth and Outperformance

Financial Leverage:
High ROC and cash flow

Operating Leverage:
Price + productivity > inflation

Continued focus on growing EPS faster than revenue

EPS
13% CAGR

OP
11% CAGR

SALES
8% CAGR

1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013
1Q14 announced 21st consecutive annual dividend increase
Balanced use of cash to maximize return to shareholders
Financial Outlook

First Quarter 2014

- EPS in the range of $1.48 to $1.53, +7% to 11%*
  - Lunar New Year, Carnival, refinery customer turnarounds, adverse weather conditions

Full Year 2014

- Sales in the range of $12.3 to $12.8 billion
- EPS in the range of $6.25 to $6.55, +5% to 10% *
- Tax rate of about 28%
- CAPEX in the range of $1.8 to $2.0 billion

*Non-GAAP measures. See January 29, 2014 press release and slides for reconciliations to GAAP amounts.
Sustainable Development Aligned with Business Strategy

Sustainable Development Targets 2009-2015

<table>
<thead>
<tr>
<th>Business Drivers</th>
<th>Economic</th>
<th>Environmental</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENERGY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENVIRONMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EMERGING ECONOMIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXECUTION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Economic**
- $3 Billion Eco-Portfolio

**Environmental**
- GHG benefit 2X total GHG emissions
- Energy Efficiency
- 1.3MM Hours invested in safety training

**Social**
- Zero Waste

Additional Information:
- Sustainable Productivity
- GHG benefit 2X total GHG emissions
- Energy Efficiency
- 1.3MM Hours invested in safety training