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; 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. 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.
Praxair Key Growth Drivers

- Infrastructure development & domestic consumption
- Migrating application technologies
- Outsourcing of captive production

Emerging Economies

- Global growth of refinery hydrogen
- Coal gasification in China
- Enhanced oil recovery

Energy

- Air, water, waste regulations
- Development of alternative fuels
- Potential GHG regulations

Environment

Supports annual organic sales growth of 8-12%
Diverse Markets

Manufacturing 24%
- Cutting – O₂
- Welding – O₂, N₂, Ar, H₂, He, blends
- Glass – O₂, N₂, Ar, H₂, He
- Automotive – O₂, N₂, Ar, H₂, Xe, Ne

Metals 18%
- Steel production – O₂
- Stainless steel – Ar, O₂
- Metal finishing / coating – H₂
- Inerting – Ar, N₂

Energy 11%
- Refining – H₂
- Natural gas fracturing – N₂
- Enhanced oil recovery – N₂, CO₂

Chemicals 10%
- Production – O₂, N₂, H₂
- Coal gasification – O₂
- Syngas production – CO
- Process control – specialty gases

Electronics 9%
- Semiconductor – N₂, process gases
- Photovoltaics – N₂, Ar, SiH₄
- Flat panel - O₂, N₂, Ar, H₂, He, NH₃

Healthcare 8%
- Hospitals – O₂, N₂, CO₂
- MRI – He
- Sterilization – sterilant gases
- Anesthesia – N₂O

Food & Bev 7%
- Carbonation – CO₂
- Freezing – N₂, CO₂
- Inerting – N₂
- Hydrogenation – H₂

% of 2011 sales
# Global End-Market Trends

<table>
<thead>
<tr>
<th>FY 11 YoY Sales Growth</th>
<th>Ex-FX, Acq</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy</strong></td>
<td>+13%</td>
</tr>
<tr>
<td></td>
<td>+11%</td>
</tr>
<tr>
<td><strong>Electronics</strong></td>
<td>+6%</td>
</tr>
<tr>
<td></td>
<td>+5%</td>
</tr>
<tr>
<td><strong>Chemicals</strong></td>
<td>+15%</td>
</tr>
<tr>
<td></td>
<td>+12%</td>
</tr>
<tr>
<td><strong>Metals</strong></td>
<td>+17%</td>
</tr>
<tr>
<td></td>
<td>+14%</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td>+16%</td>
</tr>
<tr>
<td></td>
<td>+12%</td>
</tr>
<tr>
<td><strong>Healthcare</strong></td>
<td>-5%</td>
</tr>
<tr>
<td></td>
<td>+5%</td>
</tr>
<tr>
<td><strong>Aerospace</strong></td>
<td>+5%</td>
</tr>
<tr>
<td></td>
<td>+3%</td>
</tr>
<tr>
<td><strong>Food and Bev.</strong></td>
<td>+8%</td>
</tr>
<tr>
<td></td>
<td>+3%</td>
</tr>
</tbody>
</table>

* Excludes natural gas pass-through
Unique Revenue Model

**On-Site/Pipeline 25%**
- 15-year take-or-pay contracts
- Indexed to energy, inflation, currency

**Merchant Liquid 32%**
- Exclusive supply agreements
- Sourced as by-product from on-site

**Packaged/Medical 27%**
- Cylinder and equipment rental
- Sourced as by-product from bulk

Integrated supply & contract terms drive high ROC
Largest Industrial Gases Company in North America

- $5.5B Sales 2011
- On-site and Bulk Gases
  - > 400 production plants
  - > 15,000 customer locations
  - 1,500 distribution vehicles
  - Several pipeline enclaves
- Packaged & Specialty Gases
  - > 100 production facilities
  - > 500,000 customers
  - 1,100 distribution vehicles
- Unique helium, argon and rare gases production & supply capabilities

Production / Distribution density drives growth and ROC
Emerging Markets Sales

2005
$7.5B
26%
Asia
South America
US and Canada
Europe

2010
$10B
36%
Asia
South America
US and Canada
Europe

2015F
$16B
44%
Asia
South America
US and Canada
Europe

14% CAGR for emerging market growth

Accelerating growth in emerging markets
Emerging Economies – Growth Outlook

- **Brazil**
  - Growing energy, metals and manufacturing markets
  - Strong domestic growth

- **Mexico**
  - Strong growth from energy sector
  - Upswing in industrial investment

- **China**
  - Petrochemicals and gasification
  - Industrialization of inland provinces

- **India**
  - Expanding middle class
  - Infrastructure investment

- **Middle East and Russia**

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**Per Capita Industrial Gas Consumption (% of US)**

100%

- U.S.
- ME*
- Rus
- Mex
- Brazil
- China
- India

**Decades of Organic Growth**

*GCC countries
Source: Spiritus Consulting
South America

- Unrivaled network
  - 145 production units
  - 285 branches and filling stations
  - 2,050 distribution vehicles
  - 150,000 customers

- Largest markets include metals, manufacturing, healthcare, food and beverage, energy and chemicals

- Strong growth from project backlog

- Expanding domestic demand

- 2011 Sales of $2.3B

Best positioned and preferred supplier
Praxair China

2011 Sales of $600 MM*

- Petrochemical
- Metals
- Gasification
- Electronics
- Food & beverage
- Other
- Under construction

Increasing density and expanding footprint

* Combined Sales
Expanding in the Middle East and Russia

Growth Drivers
- Massive infrastructure investment
  - Metals, Petrochemicals
- Energy production

Middle East
- ROC jv – leading position in UAE and Kuwait
- New oxygen contract for steel co – Bahrain

Russia
- Attractive opportunities in Urals district, Volgograd region and N. Novgorod – diverse industries
- Significant outsourcing opportunity – replace inefficient ASUs

Same business model – select new geographies
Energy Markets Drive Hydrogen Growth

- **New Refinery Capacity**
  - Self-sufficiency in emerging countries
  - Middle East exports

- **More Hydrogen Intensity per Barrel**
  - Shift to heavier more sour crude
  - Tighter fuel specifications
  - More complex refineries

- **Increased Hydrogen Outsourcing**
  - From ~20% to ~30% in 2015

### Refining Capacity Growth (2010 – 2015)

<table>
<thead>
<tr>
<th>Region</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>US/Europe</td>
<td>2%</td>
</tr>
<tr>
<td>India</td>
<td>15%</td>
</tr>
<tr>
<td>China</td>
<td>20%</td>
</tr>
<tr>
<td>Middle East</td>
<td>24%</td>
</tr>
<tr>
<td>Brazil</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: Purvin & Gertz, Praxair estimates

Praxair hydrogen volumes expected to grow 20% p.a.
Global Shift to “Complex” Refining

Volume expansion; Hydrogen intensity 800-1200 scf per barrel
Environmentally-Friendly Applications Technologies

- Oxy-fuel Combustion
- Renewable Biofuels
- Water Treatment
- Photovoltaics

~2-3% per year sales growth from high margin applications
Driven by emerging country and energy markets

Backlog by Market

- Energy 41%
- Manufacturing 26%
- Metals 11%
- Electronics 10%
- Chemicals 12%

Backlog $B

- 2006: $1.2B
- 2008: $1.8B
- 2010: $2.2B
- 2011: $2.7B

H₂ and ASU contributions
Return on Capital Drives Shareholder Value

- Smaller bolt-on projects in high-density regions
- Large stand-alone ASU or H₂ projects
- Future contribution from:
  - Incumbency positions
  - Pipeline enclaves
  - Co-product opportunities

Future implications:
- Incumbency positions
- Pipeline enclaves
- Co-product opportunities
Praxair Externally Recognized for Execution Excellence

- Extracted ratings from 2010 Independent Project Analysis (IPA), benchmarking
- High quintile performance among global players
- Predictable high quality project management

<table>
<thead>
<tr>
<th>Quintiles</th>
<th>Absolute Cost Performance Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Wacker</td>
</tr>
<tr>
<td></td>
<td>Praxair</td>
</tr>
<tr>
<td></td>
<td>Johnson &amp; Johnson</td>
</tr>
<tr>
<td>2nd</td>
<td>Rio Tinto Alcan</td>
</tr>
<tr>
<td></td>
<td>Merck</td>
</tr>
<tr>
<td>Others</td>
<td>Cargill</td>
</tr>
<tr>
<td></td>
<td>Flint Hills Resources</td>
</tr>
<tr>
<td></td>
<td>Sunoco</td>
</tr>
<tr>
<td></td>
<td>Alyeska Pipeline</td>
</tr>
<tr>
<td></td>
<td>Eastman</td>
</tr>
<tr>
<td></td>
<td>Chevron Phillips</td>
</tr>
</tbody>
</table>
Target 5% of cost stack annually ~ $300 MM
Praxair Track Record

Strong Underlying Fundamentals...

<table>
<thead>
<tr>
<th>Competitors</th>
<th>Praxair</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Growth*</td>
<td>6%</td>
<td>5%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Operating Margin**</td>
<td>21%</td>
<td>17%</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>EPS Growth*</td>
<td>14%</td>
<td>3%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Return on Capital**</td>
<td>14%</td>
<td>11%</td>
<td>8%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Driving Industry - Leading Returns (5-year TSR)

- Praxair: 14%
- Competitor 2: 10%
- S&P 500 Chemicals: 7%
- Competitor 1: 7%
- Competitor 3: 6%
- S&P 500: 0%

* 5-year CAGR
** 2010 calendar year; for Praxair, refer to annual report item 7

Source: Bloomberg

Leading value creation in the industry
We Generate Strong Cash Flow and Are Able to Reinvest at A Greater Rate

*Refer to 2010 Annual Report Item 7.

<table>
<thead>
<tr>
<th></th>
<th>Praxair*</th>
<th>Competitor 1</th>
<th>Competitor 2</th>
<th>Competitor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 Cash Flow as a % of Sales</td>
<td>20%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Capital Spend as a % of Sales</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Refer to 2010 Annual Report Item 7.
Long-term Growth Objectives

Sales Growth Components

- **ASU**: 3% - 4%
- **Hydrogen**: 1% - 2%
- **New Applications**: 2% - 3%
- **Base Business**: 2% - 3%

- **Onsite project backlog**
- **Accelerates volume growth**
- **Follows industrial production**

Annual organic growth: 8-12%
Long-term Growth Objectives

**Annual Organic Growth**

<table>
<thead>
<tr>
<th>Component</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>8-12%</td>
</tr>
<tr>
<td>Operating Profit</td>
<td>10-15%</td>
</tr>
<tr>
<td>EPS</td>
<td>12-18%</td>
</tr>
</tbody>
</table>

- Growing project backlog
- Emerging markets growth
- Continued productivity
- Pricing > cost inflation
- EBITDA ~30% of sales
- Capex ~15% of sales

**Free cash flow for**
**increasing dividends and share purchases**

*Non-GAAP measure, see page 39 of the 2010 annual report*
Dividend Growth

10-year CAGR 19%

* Proforma – assumes Q1 dividend rate for full year 2012

19th consecutive annual increase
Cash Flow Projections – 2011 to 2015 cumulative

Cash Flow Generated from Operations
$18B

Capital Expenditures
$11B

Cash Flow Distributed
$7B

US & Canada
South America & Mexico
Europe
Asia

Share Repurchase
Dividends
Principles of Sustainable Development

Governance and Integrity
Maintain strong systems and a culture of global corporate governance, compliance, ethics, human rights, integrity and accountability.

Strategic Leadership
Stay current with, and take advantage of, emerging global opportunities, developments and challenges to position Praxair for the future.

Customer Commitment
Focus relentlessly on the delivery of customer value through continuous innovation that helps our customers enhance their product quality, service, reliability, productivity, safety, energy efficiency and environmental performance.

Environmental Responsibility
Achieve continuous environmental performance improvement and energy efficiency in our operations.

Employee Safety and Development
Provide opportunities that allow employees to develop to their fullest potential in a creative, inclusive and safe environment.

Community Support
Participate in community development in regions where we operate.

Financial Performance
Maintain year-on-year recognition from shareholders and stakeholders for top-tier financial performance.

Stakeholder Engagement and Communication
Partner with internal and external stakeholders to achieve a strong, secure and sustainable society, economy and environment.