Credit Suisse First Boston’s Chemical Industry Conference

Opportunities for Growth

September 28, 2004

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Senior Vice President and Chief Financial Officer
Forward Looking Statements

The forward-looking statements contained in this announcement concerning demand for products and services, the expected macroeconomic environment, sales and earnings growth, and other financial goals involve risks and uncertainties, and are subject to change based on various factors. These include the impact of changes in worldwide and national economies, the cost and availability of electric power, natural gas and other materials, development of operational efficiencies, changes in foreign currencies, changes in interest rates, the continued timely development and acceptance of new products and processes, the impact of competitive products and pricing, and the impact of tax and other legislation and regulation in the jurisdictions in which the company operates.
Operating Model

♦ Focus on 10 core geographies

♦ Optimize 5 growing opportunities
  • H₂ / Energy
  • Electronics
  • Healthcare
  • China
  • Application technologies

♦ Relentless focus on execution
  • Productivity savings > $100MM/yr
    • Procurement
    • Global operational excellence
    • Six Sigma
  • Flawless project execution

<table>
<thead>
<tr>
<th>Total Shareholder Return</th>
<th>1 yr</th>
<th>3 yr</th>
<th>5 yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Praxair</td>
<td>29%</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>11%</td>
<td>1%</td>
<td>-2%</td>
</tr>
<tr>
<td>Materials</td>
<td>18%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>15%</td>
<td>10%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Business model leads to favorable shareholder returns
Unique Channels to Diverse End Markets

2003 Sales by Distribution Method

- On-Site: 24%
- Merchant: 31%
- Packaged Gases: 32%
- Other: 13%

2003 End Markets

- Manufacturing: 22%
- Metals: 15%
- Chemicals: 11%
- Other: 13%
- Food and Beverage: 8%
- Energy: 10%
- Electronics: 7%
- Healthcare: 10%
- Aerospace: 4%
Driving Growth and Profitability

Profitability Drivers
- Long term contracts / pricing
- Procurement leverage
- Lowest cost producer
- Efficient distribution network
- Barriers to entry

Growth Drivers
- Supplier of choice quality
- Sales & marketing
- Applications technology
- Industrial production
- Bolt-on acquisitions

ROC*  
Q2 2004 13.5%  

Organic Growth  
11%

*ROC = Net operating profit after tax/Average capital

Price is a fraction of customer value  
Terms capture above average ROC
Unrivalled North American Network

Onsite and Bulk Gases
♦ 300 production plants
♦ 8000 customer locations
♦ 1500 distribution vehicles
♦ 11 pipeline enclaves

Packaged and Specialty Gases
♦ 400 branches
♦ >300,000 customers
♦ 280 independent distributors
Refinery Hydrogen Pipeline System

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TEXAS
- HOUSTON
- LCR Valero
- DEER PARK
- BP Amoco Valero
- LAPORTE
- TEXAS CITY
- GALVESTON

LOUISIANA
- Motiva
- ExxonMobil
- Citgo
- Conoco
- LAKE CHARLES
- BATON ROUGE
- GEISMAR

To New Orleans Refineries

Gulf Coast HYCO Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (MM$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003A</td>
<td>$360</td>
</tr>
<tr>
<td>2004E</td>
<td>$800+</td>
</tr>
</tbody>
</table>

Sulfur Fuel Specifications

<table>
<thead>
<tr>
<th>Year</th>
<th>Gasoline On-Road (ppm)</th>
<th>Diesel Off-Road (ppm)</th>
<th>Locomotive &amp; Marine (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>2005</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>2006</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>2007</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>2008</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>2009</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>2010</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>2011</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>2012</td>
<td>120 ppm</td>
<td>15 ppm</td>
<td>500 ppm</td>
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</table>
North America Oil/Gas Well Services

- High oil and natural gas prices driving strong new business activity in Western US and Canada

- Nitrogen and CO₂ for down-hole oil well stimulation and for the fracturing of gas/oil geological formations

- Praxair services for refiners includes:
  - Leak Detection
  - Environmental Sampling
  - Cathodic Protection
  - Pressure Testing
  - Cleaning/Purging/Drying

- $170MM* sales - Expect 15% per annum growth

*Includes JV sales
Global Electronics Sales - $420MM in 2003

By Geography

<table>
<thead>
<tr>
<th>Year</th>
<th>North America/Europe</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>2002</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>2004E</td>
<td>74%</td>
<td>26%</td>
</tr>
</tbody>
</table>

By Product

<table>
<thead>
<tr>
<th>Year</th>
<th>Industrial Gases</th>
<th>Materials Science &amp; Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>2002</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>2004E</td>
<td>49%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Investments in Asia and new technologies will drive growth
Key Growth Initiatives - Semiconductors

♦ Materials Science for 300mm
  • Thin film metal deposition: PVD, CVD, & ALD
  • CMP consumables: belts, pads, slurries
  • Advanced components

♦ Supply Chain Services
  • Generic components
  • Parts management
  • Applied Materials alliance

♦ Electronic Gases
  • On-site high purity gases
  • Select specialty gases
  • Expansion in Asia

Improving profitability and reducing cyclicality
Global Healthcare Business

Sales by Region

- **North America**: 66%
- **South America**: 18%
- **Europe / Asia**: 16%
- **Homecare**: 60%
  - 17 Countries
  - 258 Locations
- **Institutional**: 40%
  - 24 countries
- **30 Years in Homecare Business**
- **Operates as Praxair Healthcare Services in US**

2004F Sales of $750 MM*

*includes 6 mos. Home Care Supply acquisition

Significant healthcare platform has been established
Healthcare: Multiple Growth Opportunities

Expected Growth Rates:
- Organic Growth 7%
  - Institutional
  - Homecare
- New Starts 3%
- Acquisitions 0-20%
  - Total 10% +

Acquisition Discipline
- High % respiratory
- Geographic overlap
- Valuation inclusive of rate cuts
Praxair China Strategy

♦ Leading position in steel
  • Baosteel
  • Shaoguan
  • Meishan

♦ Leading position in semi-conductors
  • 46% of contracted N₂
  • Shanghai - SMIC & Tailong
  • Beijing - SMIC 300mm wafer fab

♦ Shell Nanhai Complex
  • Shell & CNOOC $4.3B
  • O₂, N₂ & Ar supply

♦ Caojing petrochemical park
  • 50/50 JV with Air Liquide
  • BP, BAYER, BASF & SINOPEC $8B
  • O₂, N₂ & H₂ supply
China - Profitable Growth

Investment and Return on Major Projects

Improving return on capital
Operational Performance Metrics

Unit Cost of Production

Indexed unit cost of prod. (capital and power)

1996 Plants

2002 Plants

Plant size (tons per day)

Atmospheric Gases Volume/Trip

Cubic feet per mile

1999 2000 2001 2002 2003

On-stream Reliability

% Availability

1995 1996 1997 1998 1999 00 01 02 03

Per Unit Power Consumption

Unit Power

99 00 01 02 03
Robust Free Cash Flow Generation

♦ Operating cash flow
  11% CAGR

♦ Capital spending discipline - increased hurdle rates

♦ Uses of free cash flow
  • Dividends
  • Debt reduction
  • Selective acquisitions
  • Share repurchases

Free Cash Flow 1996-2003 ($MM)

(1) Non-GAAP measure. Free cash flow equals operating cash flow minus capital expenditures
(2) Excludes Leased Asset Purchase in 2003
Financial Outlook

Third Quarter 2004

♦ Sales and operating profit growth of 12% to 15%

♦ Diluted EPS in the range of $0.51 to $0.53

♦ Effective tax rate of 25%

Full Year 2004

♦ Sales growth of 13% to 15%

♦ Operating profit growth of 15% to 18%

♦ Diluted EPS in the range of $2.03 to $2.09

♦ Effective tax rate of 25%

♦ CAPEX in the area of $700MM
Principles of Sustainability

**Governance and Integrity**

Foster a culture of integrity and accountability throughout the company through rigorous compliance with all laws, and by establishing and following effective corporate governance practices.

**Customer Commitment**

Continuously develop new products and applications that help our customers improve their productivity, energy efficiency and environmental performance. Provide the highest levels of service, reliability and quality to our customers.

**Environmental Responsibility**

Continue to improve the efficiency of energy consumption. Reduce the intensity\(^1\) of air emissions, including greenhouse gases.

**Employee Safety and Development**

Maintain a safe work environment with a goal of zero accidents. Provide training and career opportunities that allow employees to develop to their fullest potential. Increase the diversity of our workforce so that it is more representative of the communities in which we operate.

**Community Support**

Help to improve the welfare and future of the communities in which we operate by sharing our knowledge, expertise and resources related to environmental protection, and community health, safety and security.

**Financial Performance**

Continuously improve our financial performance and provide attractive returns to our shareholders. Generate operating cash flow to reinvest in business growth and pay dividends.

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\(^1\)Intensity is per-unit-of-production measure