



# Praxair, Inc.

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**Senior Vice President**

**Citi Basic Materials Symposium**  
**December 4, 2007**



# 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 tax, environmental, home healthcare and other legislation and government regulation in jurisdictions in which the company operates; the cost and outcomes of litigation and regulatory agency actions; 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 latest Annual Report on Form 10-K filed with the SEC which should be reviewed carefully. Please consider the company’s forward-looking statements in light of those risks.**

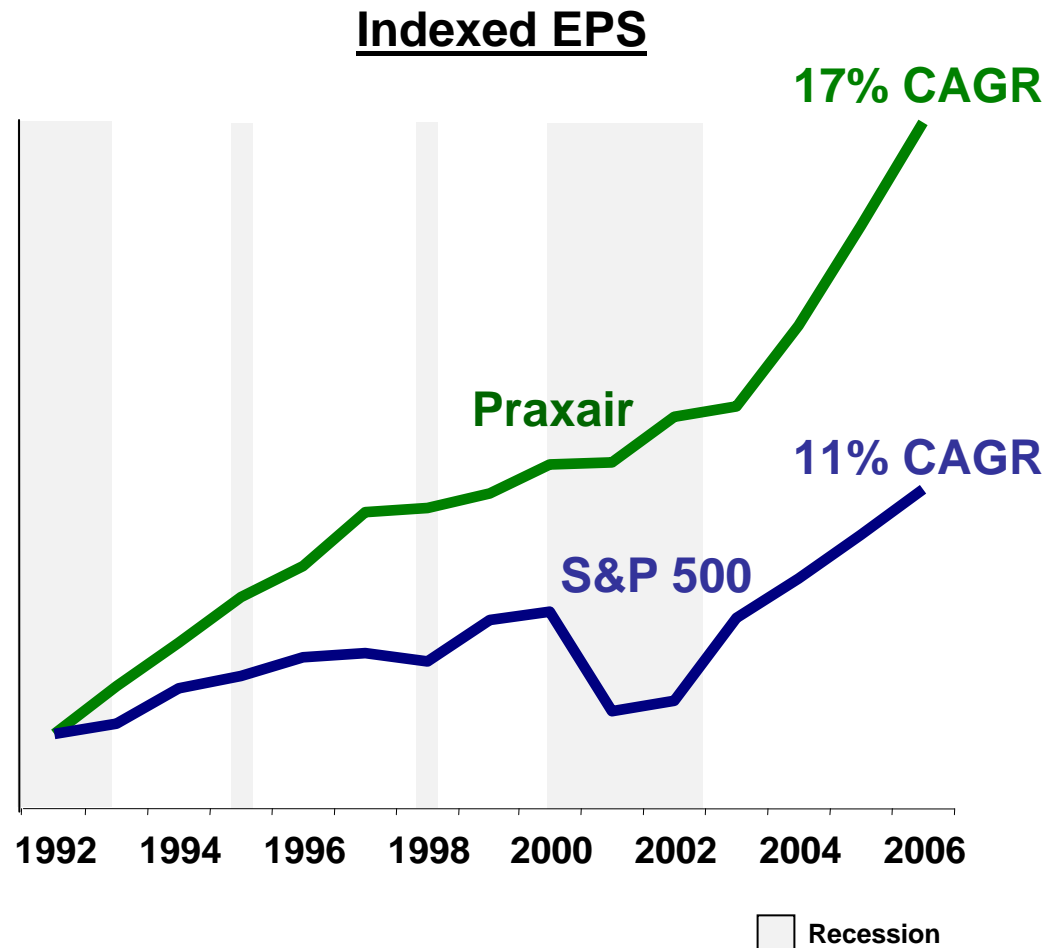
# A Growth Company for All Seasons

## Unique Revenue Model

- ◆ Dedicated supply systems
- ◆ Long term contracts
- ◆ High ROC and cash flow

## Secular Growth Drivers

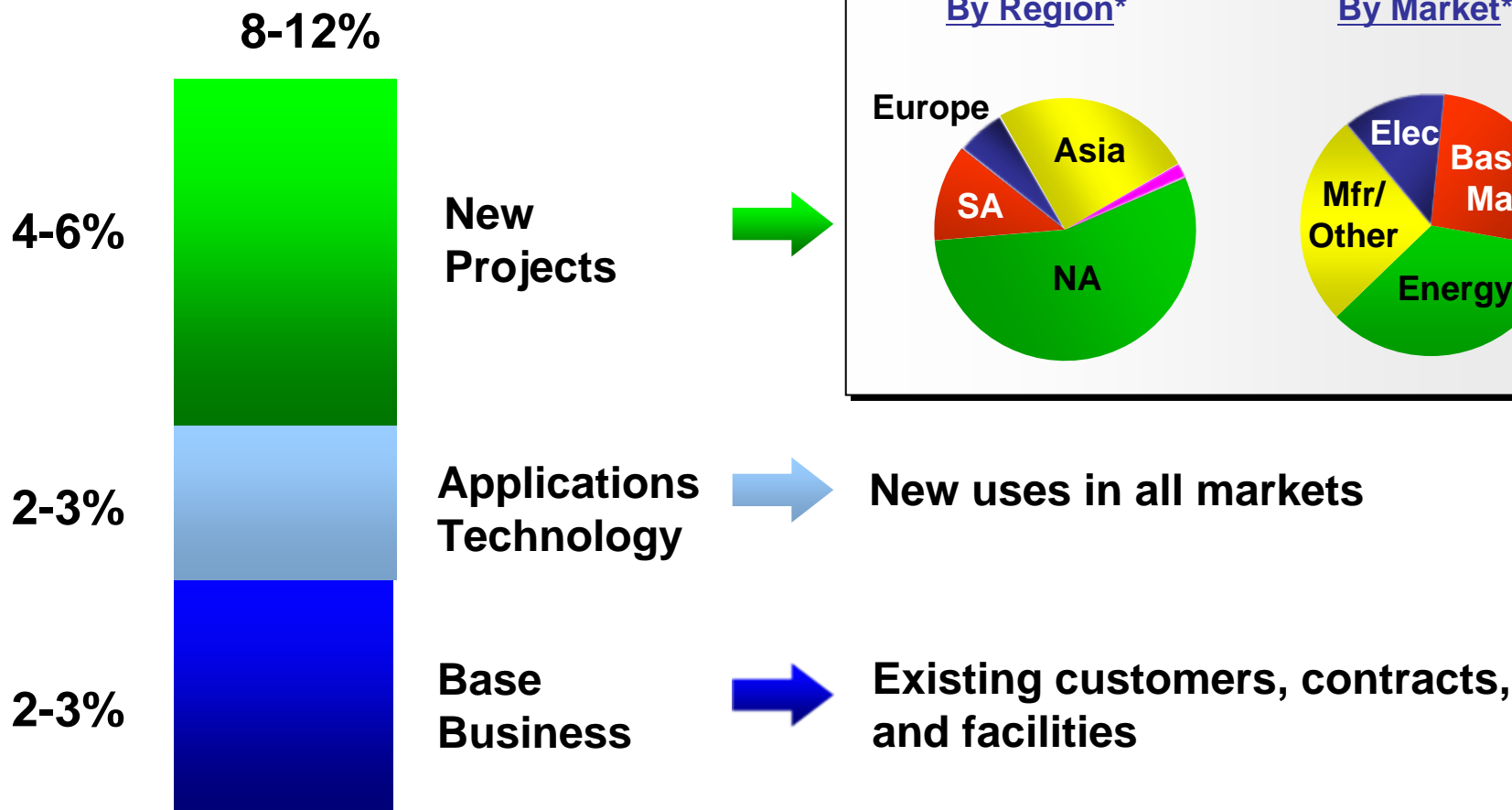
- ◆ Energy
- ◆ Environment
- ◆ Emerging economies



**Steady and non-cyclical earnings growth**

# Praxair Growth Outlook through 2010

## Annual Sales Growth



\*2007F Growth Capex

**Highly visible top-line growth!**

# Third Quarter Sales Growth

## Q3 YOY

<b>Energy <sup>(1)</sup></b>	<b>+31%</b>	<b>Higher HYCO volumes, NA oil well services strong, LNG in Brazil</b>
<b>Electronics</b>	<b>+2%</b>	<b>+14% growth in Asia offset by lower equipment sales and product rationalization</b>
<b>Chemicals</b>	<b>+0%</b>	<b>Lower sales in NA, due to customer outages, offset by growth in other regions</b>
<b>Metals</b>	<b>+7%</b>	<b>Strong growth in SA and Asia partially offset by lower volumes in North America</b>
<b>Manufacturing</b>	<b>+22%</b>	<b>Continued growth in all regions</b>
<b>Healthcare</b>	<b>+8%</b>	<b>Growth in US hospital services and homecare in Spain</b>
<b>Aerospace</b>	<b>+9%</b>	<b>Strong growth in thermal barrier coatings for OEM engines</b>
<b>Food and Bev.</b>	<b>+9%</b>	<b>Steady growth from food applications in SA, Europe and Asia</b>

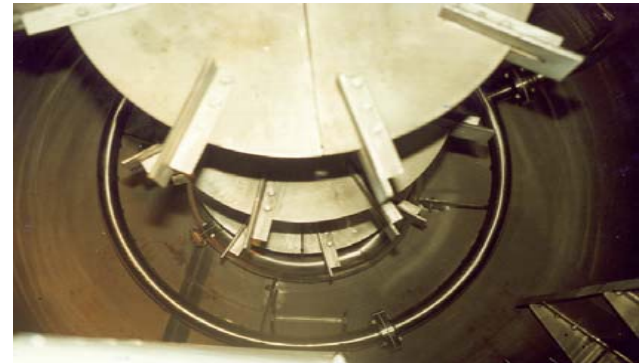
(1) Excluding natural gas pass-through

# Growth from New Applications Technologies

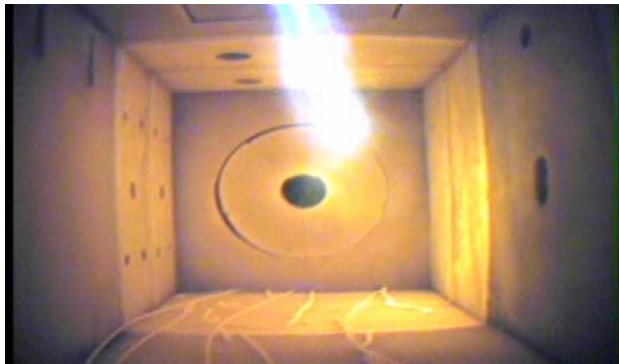
- ◆ 20-30 new applications commercialized each year



**Food Safety**



**Biological and Fermentation**



**Combustion Efficiency**

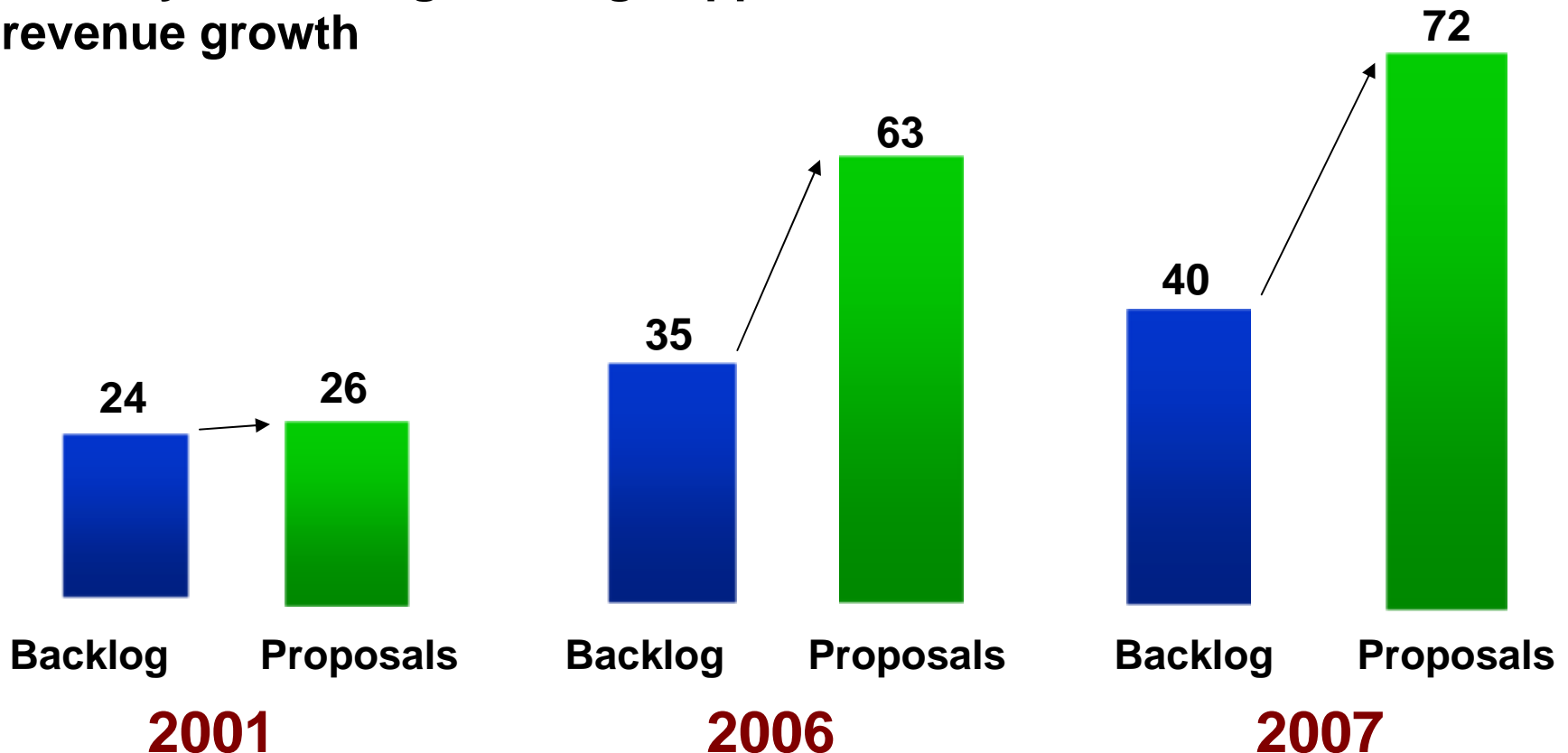


**Waste Treatment**

**Revenues from new applications have 2X average OP margin**

# Record Project Activity

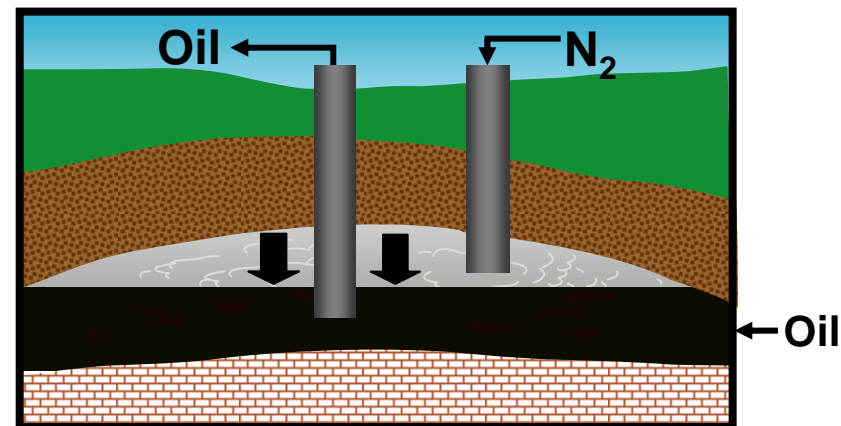
- ◆ Robust activity for global supply systems
- ◆ Steadily increasing backlog supports future revenue growth



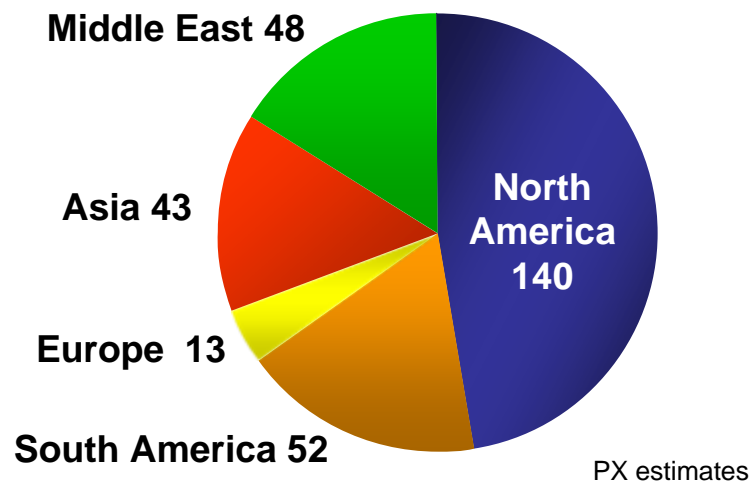
Number of projects coming on stream is increasing

# Enhanced Oil Recovery (EOR)

- ◆  $N_2$  or  $CO_2$  injection in large quantities at high pressure
- ◆ Tertiary recovery can enable incremental production of 10% to 30%
- ◆ Oil prices above \$35 support EOR – price expected to remain elevated
- ◆ Huge global market potential
- ◆ PEMEX 6,500 TPD  $N_2$  plant



## 296 Prospective Fields



**Interest in EOR is increasing globally**



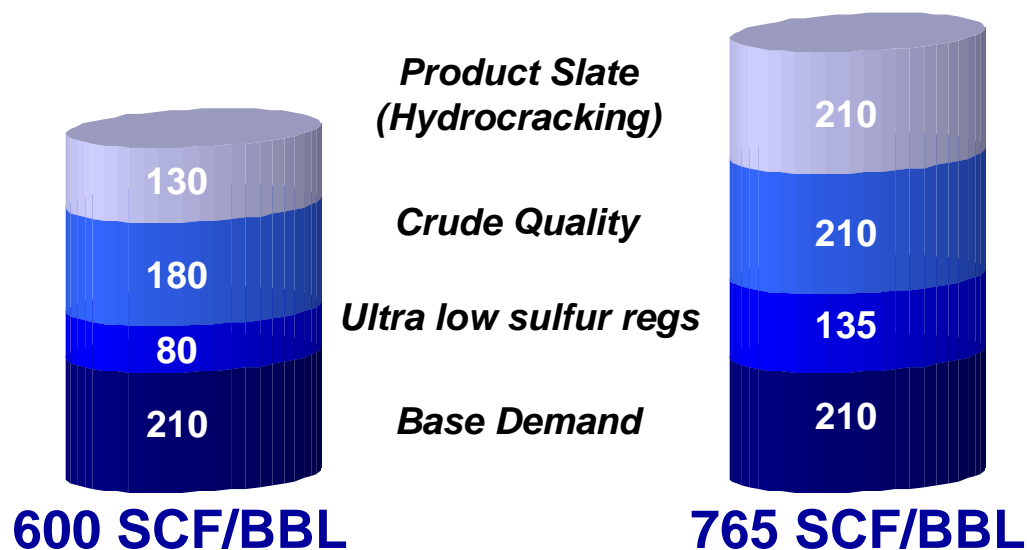
# Hydrogen for Refining

- ◆ Environmental regulations, crude quality, and product slate driving higher demand
- ◆ Purchased hydrogen market in North America expected to increase by 3,200 MMSCFD by 2015



Equivalent to 32 large scale SMR's

Hydrogen Used Per Barrel of Oil  
2007 2015



PX estimates

**Strong demand for hydrogen expected to continue**

# Oxygen Supply for Energy Projects

*Now*



- ◆ **Coal gasification in China**
  - Power
  - Chemical Feedstock – 3000 TPD O<sub>2</sub> plant for SOPO

*5+ years*



- ◆ **Refining pet-coke gasification**
  - Low-value fuel source
  - Poly-generation – hydrogen, power
- ◆ **Oxy-coal combustion**
  - CO<sub>2</sub> capture-ready power production, retrofits possible
- ◆ **Integrated Gasification Combined Cycle (IGCC)**
  - CO<sub>2</sub> capture-ready power production

Power Production

Oxy-Coal (600MW)

IGCC (600MW)

O<sub>2</sub> Requirement

10,000 - 12,000 TPD

5,000 – 6,000 TPD

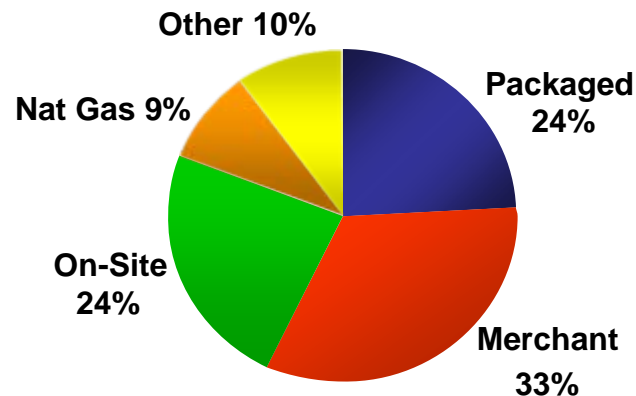


**Massive  
Projects**

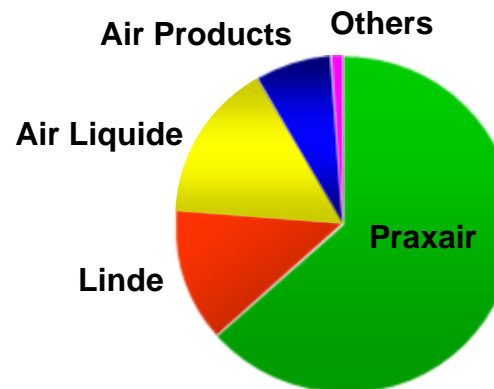
2007F Sales \$1.6 B



## Brazil Market Segments



## Brazil Market Share



Source: Company reports

**Forecasting strong profitable growth**

# Growing in China

\$230 MM\* sales growing to ~ \$550 MM by 2010

## ◆ Petrochemical parks

- Caojing, Shanghai
- Daya Bay, Nanhai

## ◆ Metals

- Shanghai
- Guangzhou

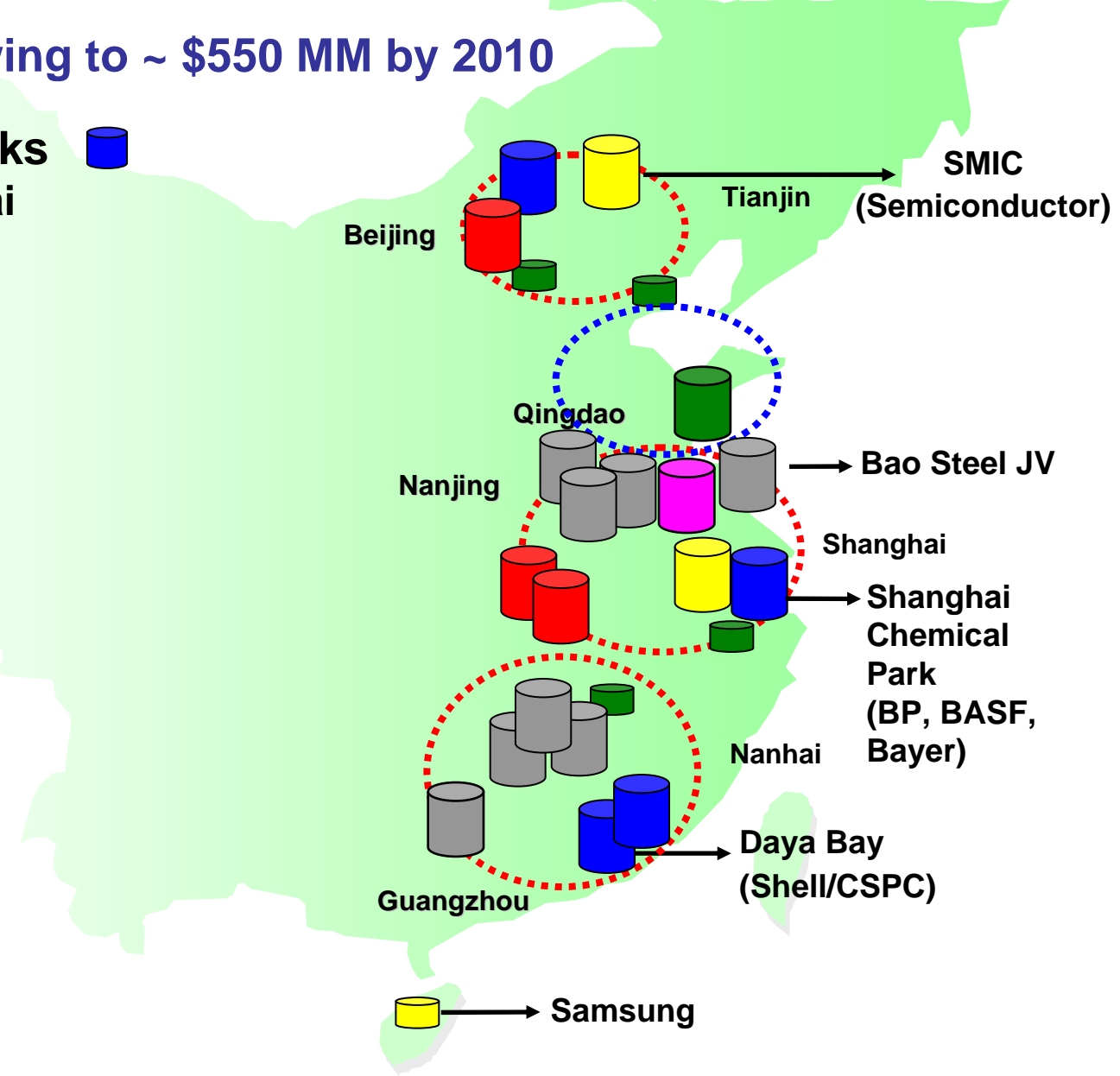
## ◆ Gasification

- Shanghai region

## ◆ Electronics

- Beijing
- Shanghai
- Taiwan

 CO<sub>2</sub> Plant    
  Other

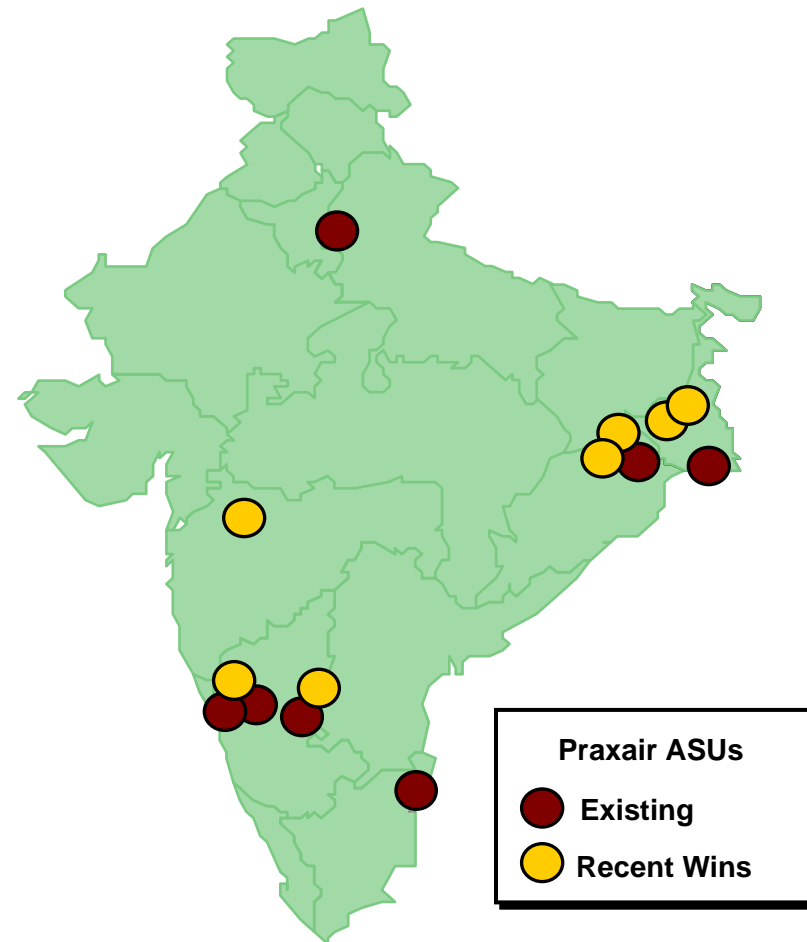


\*2007F Combined sales

# Rapid Growth in India

**\$430 MM industrial gas market**

- ◆ Domestic demand driving opportunities
  - metals, petrochem, pharma, auto
- ◆ Praxair #1 position
- ◆ Winning projects at good returns
- ◆ Strong project pipeline
- ◆ Praxair global engineering center



**Sales of \$150 MM growing 20% per year**

## Aerospace Market – Commercial Engines

- ◆ Contracted position with GE
  - New coater online 1Q08
- ◆ Increasing demand
  - Engine builds
  - Parts coated in engine

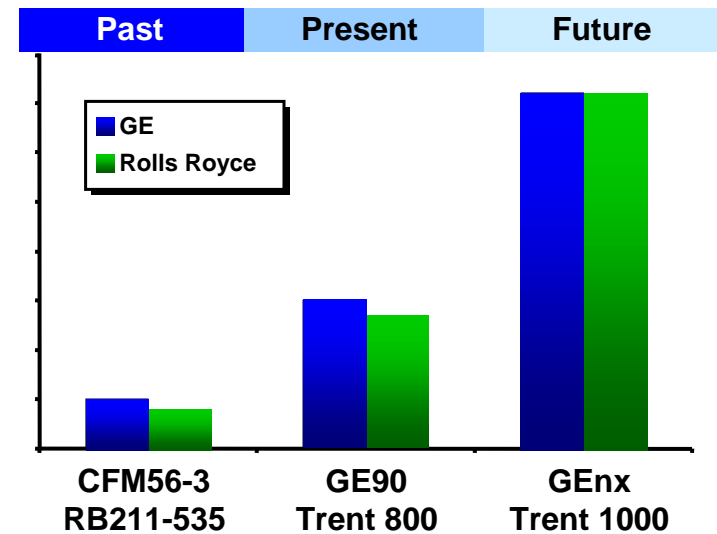
## Energy Market

- ◆ Industrial Gas Turbines
  - Leading supplier to key OEM's
  - Thermal barrier protection
- ◆ Oil Production
  - Coatings for exploration and completions

## New Technologies

- ◆ Temperature sensitive metals and composites
- ◆ More complex parts

## Engine Coating Usage



**Expect 8 - 12% annual sales growth**

# Productivity - How Much Opportunity Exists?

◆ Air separation

◆ CO<sub>2</sub> production

◆ Hydrogen

Cost \$ B

2.3



◆ Packaged gases

◆ Merchant distribution

1.8

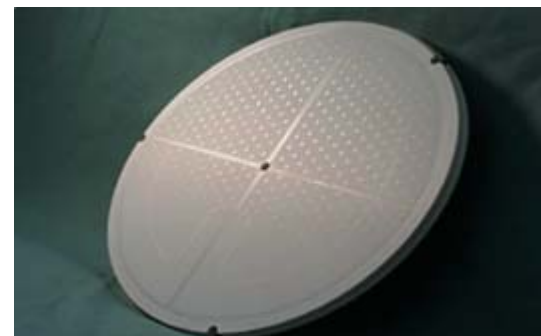


◆ Electronics

◆ PST

◆ Healthcare

1.9



**\$6 Billion opportunity - on going replenishment**

# The Productivity Pipeline of Projects Underway

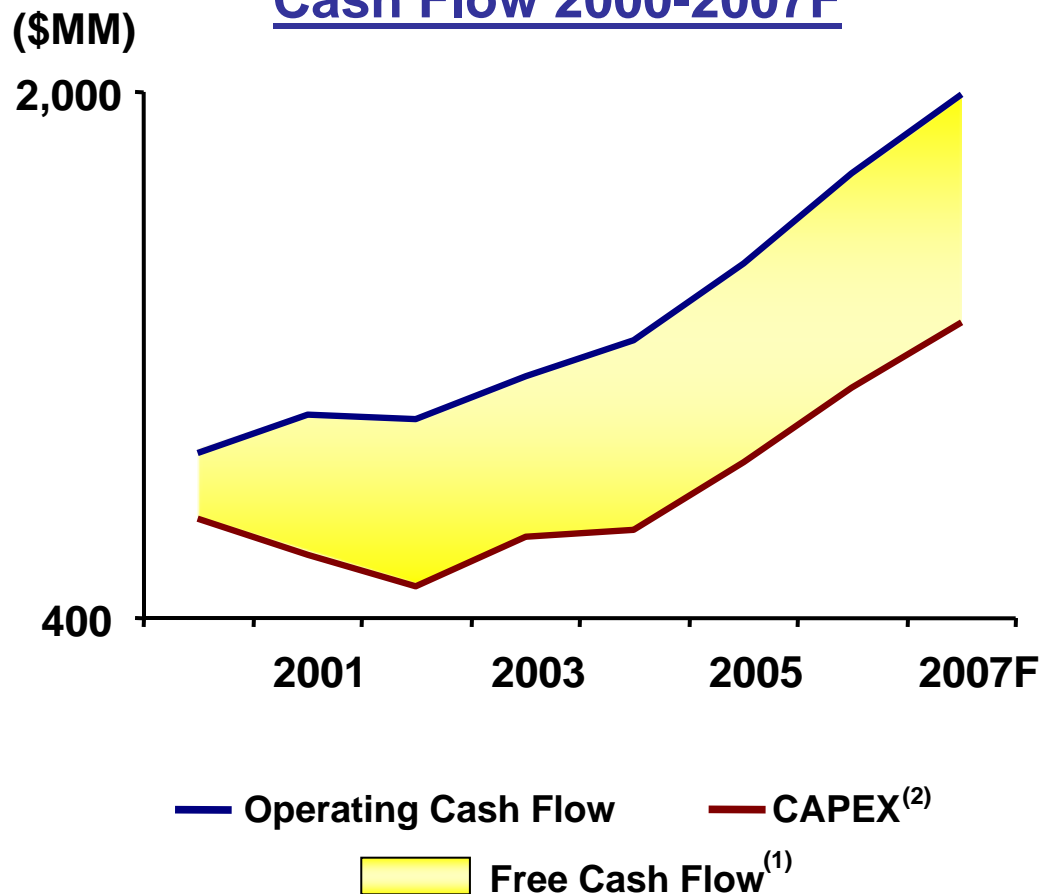
	(\$MM)
<b>◆ ASU/SMR Production Efficiency</b> <ul style="list-style-type: none"> <li>– Turbo-machinery – 400 plants</li> <li>– Advanced control Systems</li> <li>– O<sub>2</sub> enhanced reforming</li> <li>– Automated fill stations</li> </ul>	200-250
<b>◆ Product Distribution</b> <ul style="list-style-type: none"> <li>– Routing optimization</li> <li>– Equipment</li> <li>– Advanced technology</li> </ul>	200-250
<b>◆ Lean Manufacturing</b> <ul style="list-style-type: none"> <li>– Cost of poor quality</li> <li>– Labor savings</li> <li>– Transaction processing</li> </ul>	150-200
<b>◆ Business Processes</b> <ul style="list-style-type: none"> <li>– Shared services center</li> <li>– ERP systems</li> </ul>	<u>200-300</u> 750-1,000

**\$750-1,000 MM of cost savings over 5 years**



# Strong Cash Flow Generation

## Cash Flow 2000-2007F



<u>2007F</u>	<u>\$MM</u>	<u>%Sales</u>
Operating Cash Flow	\$1,990	21%
Capital Reinvestment	\$1,300	14%
Free Cash Flow	\$690	7%

1) Non-GAAP measure. Free cash flow equals operating cash flow minus capital expenditures.

2) Excludes Leased Asset Purchase in 2003

**Return on capital of 15% after tax generates cash flow for growth and shareholder return**

# 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<sup>1</sup> 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.

<sup>1</sup>Intensity is per-unit-of-production measure

