



tell me

At Air Products, conversations are the heart of our relationships.

So when you hear us say,

## tell me **more**,

it's our call to conversation . . . a conversation designed to share knowledge and understanding for mutual benefit.

Whether you're an investor looking for value, a customer looking for a solution, or an employee looking for a great place to work, we want to find out more and share more.

That's because as a company,
we believe we have so much more to offer.
We have more potential through our leadership positions
in four strategic growth platforms.
We've done more to manage our portfolio
and build a higher-return business mix.
We have more global reach than ever before,
with the breadth and depth to serve
growing markets around the world.
And we've done more to understand our customers' needs,
for both today and the future.

So join us in a conversation.

It's a conversation that holds the promise of more to come.

#### on the cover

Air Products people like Wendy Zhou, on-site account manager in Shanghai, China, bring understanding, integrity and passion to their relationships with customers and the communities in which they live and work.

## Contents

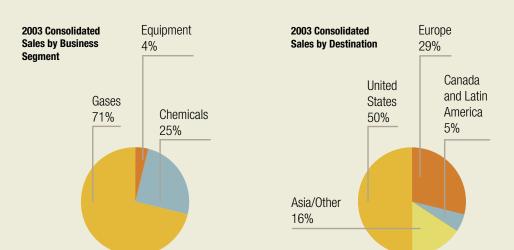
- Financial Summary
- Markets/Products/
  Trends Overview
- Chairman's Letter to Shareholders
- More Potential Through
  Our Growth Platforms
- More Portfolio Management
- 14 More Global Reach
- More to Understand Customers
- 18 More to Come
- 20 Leadership
- 21 Financial Trends
- 24 Financial Review
- **Shareholder Information**

## financial summary



For the Year (millions of dollars)	2003	2002	Change
Sales	\$6,297	\$5,401	17%
Operating income	605	775	(22%)
Net income	397	525	(24%)
Capital expenditures	1,171	806	45%
Operating return on net assets*	7.2%	10.2%	
Return on average shareholders' equity	10.9%	15.9%	
Per Share Dollars			
Basic earnings	\$1.81	\$2.42	(25%)
Diluted earnings	1.78	2.36	(25%)
Dividends	.88	.82	7%
Book value	17.08	15.83	8%
At Year End			
Shareholders' equity (millions of dollars)	\$3,783	\$3,460	
Shares outstanding (in millions)	221	219	
Shareholders	11,100	11,100	
Employees	18,500	17,200	

<sup>\*</sup>Operating income divided by five-quarter average of total assets less investments in equity affiliates.



**Note:** Financial trends on page 21 are presented on a non-GAAP basis, which excludes special items.

## markets/products/ trends overview

## there's **MOTC** to Air Products

Air Products is a leading global supplier of gases, chemicals and equipment to many of today's highest-growth markets, including electronics, performance materials, refinery hydrogen and energy, and healthcare. Founded in 1940, we are also a long-standing innovator supplying basic manufacturing sectors such as metals, glass and food processing. With operations in over 30 countries, corporate headquarters are located in eastern Pennsylvania's Lehigh Valley, near Allentown; European headquarters are in Hersham, near London; and Asian headquarters are in Singapore, with offices in Tokyo and Hong Kong. As a Fortune 500 company, our employees differentiate Air Products by building lasting relationships with customers and communities based on understanding, integrity and passion.

## **BASE BUSINESSES**

#### **GASES**

## MARKETS/FOCUS AREAS:

metals manufacturing, food and beverage, glass and ceramics, metals processing and fabrication, pulp and paper, cement, chemicals, agriculture, aquaculture, leisure, aerospace, cleaning, construction, packaging, coatings, pharmaceuticals, power generation/utilities, research and analytical, rubber and plastics, transportation/ automotive, wastewater treatment

#### MAIN PRODUCTS/SERVICES:

merchant gases, such as liquid and packaged (cylinder) oxygen, nitrogen, argon, hydrogen, helium and carbon dioxide; specialty gases; gas mixtures; pipeline gases; cryogenic and non-cryogenic on-site gas supply systems; cutting and welding supplies; gas application and related services and solutions; proprietary enabling equipment such as cryogenic food freezers, oxy-fuel combustion systems and advanced process control systems

## GROWTH DRIVERS/MARKET TRENDS:

- Growth drivers: industrial production growth, demand for productivity and efficiency solutions, demand for smaller environmental footprint, improved product quality and yield
- General industrial growth rates are higher in developing regions, and Air Products has significant presence in key Asian and other fast-growing geographies

#### **INDUSTRIAL CHEMICALS**

#### MARKETS/FOCUS AREAS:

home and home furnishings; automotive applications; agricultural chemicals, such as herbicides and fertilizers; solvents; coatings; water treatment chemicals; other industrial applications

#### **MAIN PRODUCTS/SERVICES:**

polyurethane intermediates, including dinitrotoluene and toluene diamine; higher amines; methylamines and derivatives; chemical applications and other services

## GROWTH DRIVERS/MARKET TRENDS:

- Growth drivers: industrial production growth, demand for more efficient solutions, global agricultural productivity, improved product quality
- Market values product knowhow and experience, and Air Products has leading positions in its chemical intermediate products and services
- General industrial growth rates are higher in developing regions, and Air Products has significant presence in key Asian and other fast-growing geographies





#### **ELECTRONICS**

#### **MARKETS/FOCUS AREAS:**

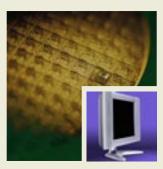
semiconductors (silicon and compound), fiber optics/optoelectronics, flat-panel displays, wafer manufacturing, device packaging/testing, printed circuit board fabrication/ testing, other microelectronics applications

#### MAIN PRODUCTS/SERVICES:

specialty gases such as fluorine compounds and hydrides; specialty chemicals, such as chemical vapor deposition precursors and photoresist ancillaries; process chemicals, such as acids and solvents; specialty materials, such as chemical mechanical planarization (CMP) slurries; pipeline, on-site and liquid nitrogen and oxygen; argon; helium; hydrogen; gas and chemical delivery equipment; MEGASYS® Total Gas and Chemical Management Services

## GROWTH DRIVERS/MARKET TRENDS:

- Growth drivers: technology advancements driving increased demand for specialty gases, chemicals and materials
- Market for materials that Air Products supplies is over \$4 billion and is growing around 10%
- Air Products offers a wide range of materials, with leading positions in bulk gases, specialty gases and photoresist strippers
- Industry downturn weighed on fiscal 2003 results, but Air Products expects to grow at a multiple of silicon processed (double-digit average revenue growth) over the long term



## PERFORMANCE MATERIALS

#### **MARKETS/FOCUS AREAS:**

automotive; residential, commercial and industrial construction; textiles and nonwoven fiber applications; architectural and industrial coatings; structural and nonstructural adhesives; graphic arts; industrial and institutional cleaning and electronics applications

#### MAIN PRODUCTS/SERVICES:

Performance Polymers, with an emphasis on Airflex® ethylene copolymer emulsions; Performance Solutions, focused on specialty and environmentally friendly surfactants; Performance Products, composed of polyurethane chemicals, epoxy curing agents and specialty amines

## GROWTH DRIVERS/MARKET TRENDS:

- Growth drivers: demand for quality and performance and reduced environmental impact products that meet customers' needs for value and productivity enhancements
- Air Products serves multibilliondollar markets with a broad range of applications; Performance Materials target highgrowth subsegments
- Performance Materials today represents about two-thirds of Air Products' Chemicals segment, with a focus on applications that leverage companywide surface and materials science capabilities
- Air Products plans to increase top-line growth to average double-digit range by positioning existing businesses for value while focusing resources on growth opportunities



### REFINERY HYDROGEN AND ENERGY SOLUTIONS

#### MARKETS/FOCUS AREAS:

petroleum refining, stranded natural gas conversion, liquefied natural gas (LNG), chemical/petrochemical processing, oil/gas production and recovery, clean power generation, fuel cell infrastructure

#### MAIN PRODUCTS/SERVICES:

hydrogen, nitrogen, oxygen, carbon monoxide and syngas, primarily delivered from on-site and pipeline facilities; other merchant gases; services and solutions, including plant operations, air/water quality improvement and power management; process technology and equipment for LNG production; process plant equipment

## GROWTH DRIVERS/MARKET TRENDS:

- Growth drivers: clean fuels legislation, changes in crude oil quality, monetization of large remote natural gas reserves, development of alternative energy solutions
- Market is growing at approximately 10%/year (average hydrogen volume growth from 2001 to 2008)
- Market values reliability and onstream performance, and Air Products is the leading global supplier of hydrogen with strong pipeline franchises worldwide
- Gas-to-liquids production is expected to generate 100,000 metric tons per day of oxygen demand over the next decade
- Global interest in LNG is increasing, and Air Products is the market leader for heat exchangers and related process technology



#### **HEALTHCARE**

#### MARKETS/FOCUS AREAS:

services provided in the home, products and services for healthcare institutions (hospitals/clinics)

#### MAIN PRODUCTS/SERVICES:

oxygen-based respiratory therapies; other respiratory therapies; home medical equipment; infusion services; medical gases, including oxygen and nitrous oxide; liquid helium, nitrogen and "KeepCOLD® Services for magnetic resonance imaging

## GROWTH DRIVERS/MARKET TRENDS:

- Growth drivers: aging demographic, improved quality of life, demand for new therapies, technology, cost factors driving demand for more in-home treatments
- Organic growth: ~5% for the institutional market, 7–8% for the homecare market
- Air Products serves global institutional markets and is the leader in MRI services, covering more than 7,000 magnets worldwide with better than 99% uptime
- U.S. homecare markets served are \$15 billion alone
- Air Products' homecare position: #1 in the northeast/mid-Atlantic region of the U.S., Spain, Portugal and Mexico; #2 overall in Europe
- Air Products expects average double-digit growth



John Jones (left), Chairman, President and Chief Executive Officer of Air Products, visited employees at Carburos Metálicos, Air Products' Spanish subsidiary, in October. Here, John talks with Erwin Zwicky, vice president, Southern Europe, and Mireia Sans Blasco, who works in human resources through the company's Career Development Program.



## to our shareholders

Over the past few years, we have all learned that the unusual has become the usual, the unexpected has become the expected and change is constant. I tell employees it may not be fair or logical, but it is reality and we must deal with it. Our reality in 2003 was that despite a well-defined strategy and the hard work and focused efforts of our people, we did not meet the financial goals we set for ourselves and our shareholders. We are aggressively managing those things within our control, and the many actions we took in 2003 laid the groundwork for 2004. We are determined more than ever to prove that the strategies and the tough portfolio management decisions we've made over the last several years are working to deliver results to the bottom line.

Our team understands that the greatest opportunity to improve near-term performance is to capitalize on our operating leverage. But we're not solely dependent on improving volumes. We also know we must continue our disciplined approach to capital spending while increasing productivity and actively managing our portfolio. In this report, we will tell you more about our growth areas, products, markets and geographies that support our strategy. We think we offer more—a difference. In 2004, we are determined to deliver that difference to our shareholders.

5

tell me MOCE

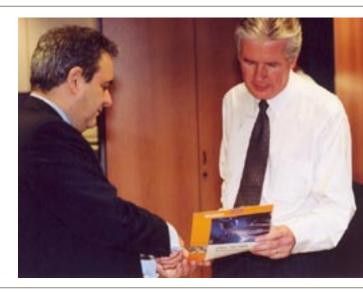
### **Our Results**

The challenges in fiscal 2003 were significant. The manufacturing environment was sluggish, resulting in weak volumes and delayed capital investment by our customers. Through the first half, we saw the continuation of the most pronounced downturn in the history of the electronics industry. And we experienced high and volatile energy and raw material costs throughout the year.

We posted earnings per share of \$1.78, which included a \$.43 charge for our global cost reduction plan. While earnings were down from last year, there is solid evidence that our strategies are the right ones to deliver superior performance going forward. For example, overall revenue growth for the company was a robust 17 percent, with Gases up 21 percent and Chemicals up 10 percent. Our base business growth and acquisitions accounted for two-thirds of the Gases improvement and half of the Chemicals improvement.

Gases operating income declined \$29 million, including a \$71 million increase in the net expense for global cost reduction plans. It benefited from improved volumes across most businesses, acquisitions and favorable currency effects—good performance in a tough environment. Chemicals operating income declined \$105 million, including a \$55 million increase in the net expense for global cost reduction plans. These disappointing results were impacted by over \$50 million in higher raw material and energy costs. Additionally, we had a weak year in our Equipment segment, primarily due to lower LNG heat exchanger activity. Bottom line, the improved performance of our Gases segment was more than offset by the weaker results in our Chemicals and Equipment segments.

Our highest priority is to improve earnings and returns by focusing on our strengths and by removing impediments to our progress. In Chemicals, we are continuing our portfolio management actions to sharpen our business mix, and we are taking definitive steps to reduce the volatility caused by raw materials. For example, we will have a new methanol sourcing arrangement from Trinidad starting in the spring of 2004; we have closed our Pensacola, Florida methanol and ammonia production facilities; and we announced plans to sell our European methylamines and derivatives business. And in Equipment, our LNG customers appear ready to place some new orders that will be key to improved earnings in that business.



John Jones and José Luis Mozo Gayo, general manager, Merchant Gases, talk about the Air Products brand alignment program being implemented at Carburos.

Fundamentally, we believe we offer more to our shareholders. Despite lower earnings this year, we remain one of the more stable companies in the chemical sector. Our market and product diversity and our attractive business models create consistently strong cash flows. And we have significant earnings leverage ahead in an improving economy with the assets we have in the ground today, particularly in electronics, chemicals and merchant gases. We believe our strategies, our disciplined approach to capital spending, and our leadership positions in growth markets set us apart.

At the start of the fiscal year, we articulated our four strategic areas of focus: growth, portfolio management, work process and change. These four areas are critical to achieving our vision of becoming the best company to invest in, buy from and work for. And we've made great progress in each area, taking advantage of a number of opportunities to shape our future.

## **More Growth Potential**

We remained committed to our four global growth platforms— Electronics, Performance Materials, Refinery Hydrogen and Energy Solutions, and Healthcare—and our positions are unique. This year, we invested 75 percent of our capital and R&D on these areas. The growth in these markets is real and durable. I invite you to read more about the exciting things we're doing in each of these businesses in the next section of this report. Today they represent more than 50 percent of our portfolio, up from about one-third just two years ago. Over time, our growth platform focus is steadily shifting us to a higher-growth, higher-return company—and a less capital-intensive one as well.

It's also critical that we focus on the right geographies with the best opportunities. Asia represents more than 15 percent of our total company sales, and we know it will become an increasingly bigger part of Air Products in the years to come. We have strong positions in electronics, base gases, chemicals and services that will drive our continued success. We are leaders today in Korea and Taiwan and are expanding our presence in China for the longer term.

## **Significant Portfolio Management Changes**

Portfolio management is an ongoing process. We have to constantly evaluate our businesses and their performance in the market and then make targeted and sometimes difficult decisions. In fiscal 2003, we were very active, making both strategic acquisitions—like our purchase of Ashland Specialty Chemical Company's Electronic Chemicals business in August 2003 and our acquisition of American Homecare Supply in October 2002—and strategic divestitures, like the sale of our Canadian packaged gas business. On page 13, you can see a list of the major actions we've taken this fiscal year. Portfolio management is a disciplined process, and we will continue to provide strong direction and objectives to help our businesses achieve their targets.

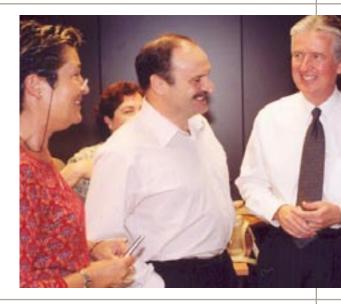
## **More Work Process Improvements Ahead**

A great deal of work was completed this year to converge many of our diverse business processes into global processes. To improve our efficiency and effectiveness in supplying customers—while achieving the financial benefits we have targeted in our SAP program—we are integrating supply chain activities across customer service, purchasing and manufacturing to better serve our businesses. Today about 30 percent of our revenues are on the SAP system, and in the spring that number will increase to about 70 percent. More effective ordering, faster cycle times and improved e-business capabilities will help us bring value to customers while reducing our overall cost to serve.

## **Embracing Change**

We completed several planned succession moves this year, transitioning to new operating leadership. I want to personally acknowledge and thank Bob Gadomski and Andy Cummins for their combined 60 years of outstanding leadership and countless contributions to this company. We all wish them well in their retirements. And we expect a seamless transition with their successors, Mark Bye and John McGlade, two excellent leaders with broad experience across many businesses and geographies.

And we couldn't have accomplished what we did in this challenging year without Air Products' people, their willingness to accept change and their commitment to our strategies. They have worked extremely hard to transform this company to a future with higher growth and returns, all with a continuing commitment to safety, operational excellence and innovation. Our people have a passion for serving customers, actively participating in their communities and caring for the environment. Their efforts helped us become selected as a component of the Dow Jones Sustainability World Indexes—2004, as well as make great strides in our other corporate responsibility initiatives.



John Jones with environmental, health, safety and quality assistants María José Pascual Quintas (left) and Felicia Soler Pérez (background), and José María de Pablo Jardón, environmental, health, safety and quality manager, Southern Europe and Medical.

## **A Focused Future**

Our priorities for fiscal 2004 are to drive earnings growth and improve return on capital. To do this, we will increase asset utilization, manage our portfolio, strengthen our global growth platforms, deliver on our process improvement commitments and invest in our people—the heart of the Air Products difference. We tell you more about these priorities on the following pages. And you can expect more from Air Products—we will deliver on our commitments to create lasting shareholder value.

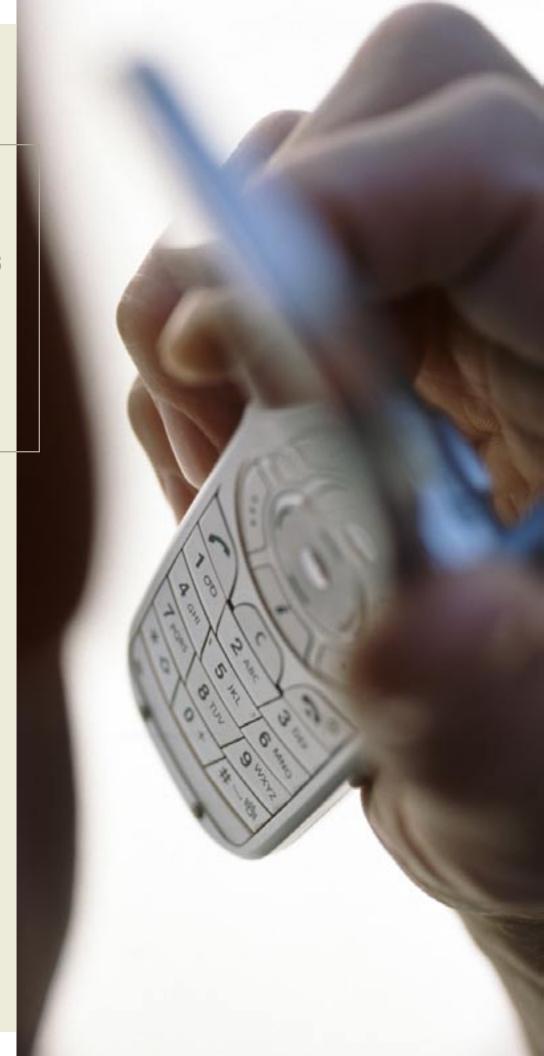
John P. Jones III

Chairman, President and Chief Executive Officer

# more potential through our growth platforms



Air Products is a leading materials and service solutions provider to the global electronics industry, supplying a wide variety of gases and chemicals for chips that make their way into cell phones, computers and other electronic devices people rely on each day. As the world continues to digitize, we're doing more to support the technology revolutions of the future.



## we have **MOTC** potential through our growth platforms . . .

When you serve such a wide variety of end markets with gases, chemicals, equipment and service solutions, you build a stable stream of cash flows. And today that stability has become an important part of the Air Products value proposition.

But if you really want to deliver more to your shareholders, you have to balance stability with growth.

That's why we're focused on four global growth platforms, representing more than 50% of our sales and 75% of our R&D spending and capital investment in fiscal 2003. These four businesses are ones where we've built leadership franchise positions with differentiated strengths. They have average double-digit, top-line growth prospects, with market drivers that are real and now.

### **Electronics**

We deliver solutions—materials solutions—to the global electronics industry. Many of our gases and chemicals literally are the building blocks for semiconductor chips. These chips then go into electronic devices that directly influence the quality of our personal and business lives, every day. As the world continues to digitize, the more than \$4 billion market for the kinds of materials we supply will continue to grow, supporting everything from PCs, flat-panel displays, cell phones and PDAs, to the wireless, digital and nanotechnology revolutions of the future.

The semiconductor industry has gone through a major downturn, far worse than anyone expected. But as a leading supplier of bulk and specialty gases, we've continued to build our global supply capabilities with a focus on specialty materials. Today, specialty materials represent about 55% of our electronics sales, and they are growing at a faster pace than the industry, as each generation of chips becomes more complex. This complexity requires more advanced materials and services to make new technology leaps, and we continued to innovate this year.

We introduced several new specialty materials products, including an OptiPattern™ Surface Conditioning photolithography solution that's helping semiconductor manufacturers overcome pattern collapse—a difficult and costly problem in the integrated circuit manufacturing process. Also, our Germane, used to make silicon germanium, is helping chips operate faster, use less power and create less electronic noise than traditional silicon-only chips. Our White Ammonia™ product is helping LED manufacturers take a significant step closer to achieving "white" light—widely

considered to be the future replacement for incandescent lighting. And low-k materials—including proprietary products like diethoxymethylsilane (DEMS) and precursors like trimethylsilane (Dow Corning® Z3MSTM\*)—are delivering powerful solutions for increased device speed and performance. At the end of August, we acquired the Electronic Chemicals business of Ashland Specialty Chemical Company, a division of Ashland Inc., further building our electronic materials portfolio. You can read more about this important addition to our Electronics Division family in the next section of this report.

In addition to focusing on the right products, we're also growing in the right geographies. Most of the electronics growth over the next decade is expected to come from Asia, and we continue to build our infrastructure in sync with our customers' current and future needs. For example, in Taiwan, which today has the largest concentration of 300mm fabs, we brought onstream the world's largest ultrahigh-purity nitrogen plant at the Tainan South Science Park—with an eight-kilometer pipeline connecting to major fabs—and a new specialty materials center. And for the second consecutive year, Taiwan Semiconductor Manufacturing Company (TSMC) named San Fu Gases Company, in which Air Products has a 70% interest, the electronic gas supplier of the year. We also continue to win important supply contracts with major customers in key countries. Two examples include our contract with Shanghai LanBao Photoelectric Materials Co., Ltd in mainland China and an agreement to supply Samsung's 300mm fab in Hwasung, Korea.



Matthew Egbe (far left), senior staff development chemist, and John Parks, senior lab technician, review images from a scanning electron microscope to assess the effectiveness of ACT® etch residue removal and photoresist stripping products in the semiconductor manufacturing process. The ACT product line became a part of Air Products' portfolio with the August 2003 acquisition of Ashland Specialty Chemical Company's Electronic Chemicals business.

## **Performance Materials**

We formed our Performance Materials Division at the beginning of the fiscal year to capitalize on our unique combination of gas and chemicals skills. This growth platform combines our technology and market leadership strengths in specialty surfactants, Airflex ethylene copolymer emulsions and amine catalysts, specialty amines and epoxy curatives. These are "performance" materials with physical properties that deliver value in use by enhancing customers' processes or products. In addition, these materials frequently help customers meet increasingly stringent environmental requirements.



We expanded our Performance Materials supply position in Asia with the March 2003 acquisition of Sanwa Chemical, a leading producer of specialty polyamide resins and epoxy curing agents. As a production technician

at the Sanwa Singapore facility, Yan Li Zhong oversees control and manufacturing of these additives used in high-performance coatings and construction applications.

For example, in our Performance Solutions area, more than 1,000 customers throughout the world are evaluating and commercializing new formulations based on the performance and environmental properties of our EnviroGem® specialty surfactants. Applications include coatings, inks, adhesives, industrial and institutional cleaners, and oil field chemicals. Similarly, our Airflex® EF811 emulsion, introduced last year by our Performance Polymers business area, has helped us establish substantial commercial positions with both national and regional paint producers throughout the U.S. The product is delivering on its promise, delivering the performance advantages of vinyl acetate-ethylene copolymer emulsions at a cost comparable to vinyl acrylic technologies, all while providing significantly better environmental characteristics through low VOCs. Finally, within our Performance Products area, our epoxy product line continues to deliver cost-effective innovations in response to demands for more environmentally friendly and high-performance coatings. In particular, we made several advances in waterborne systems this year, including our Anguamine® 287 high-performance primer and sealer to solve the challenges associated with coating new concrete and returning it rapidly to service—a big cost benefit for our customers.

With sales of about \$1 billion, Performance Materials is a strong business for us. By focusing our resources on growth market segments in adhesives, coatings, automotive products and construction while honing in on new market applications, we are set to take the business to an even higher level of performance. We plan to get there by continuing to drive internal product and applications development, making strategic acquisitions and forming alliances that will build our portfolio or increase our market share. A great example this year was our March acquisition of Sanwa Chemical Industry Co., which enhanced our epoxy product line. In the next section, you can learn more about how that move is helping us further build our Asian market position as well as deliver superior technical solutions to our customers in other regions.

## **Refinery Hydrogen and Energy Solutions**

Major trends in global energy markets are providing more opportunities for our Refinery Hydrogen and Energy Solutions growth platform, both now and into the future. This year, we consolidated our many energy-related business development activities under our Energy and Process Industries Division, reflecting a broader focus on our opportunities with the markets and customers we serve.

We continue to supply the needs of U.S. and European refiners who use hydrogen to process heavier feedstocks, meet strict environmental requirements for transportation fuels, and produce more high-value products. Today, we are the leading global supplier, with more than 1.3 billion standard cubic feet of hydrogen, carbon monoxide and synthesis gas, and we have major on-site and pipeline franchises throughout the world that are key to our reliability. Through these franchises, we serve customers under stable, long-term contracts, sometimes up to 20 years in length.

This fiscal year we had a number of new wins, including supply agreements with two refineries in the Lake Charles, Louisiana area; Marathon Ashland's refinery in Catlettsburg, Kentucky; IES in Mantova, Italy through our Italian affiliate; and Petroplus Refining's facility in Cressier, Switzerland. With our demonstrated reliability, unmatched expertise, and partnership with Technip for the development and supply of world-class steam methane reformers, we're bringing more to our relationships with customers.

But we also participate in many other energy opportunities beyond hydrogen. For example, there is an established and growing market for LNG, and we are the leader, with a high percentage of the world's LNG produced using our technology and heat exchangers. Longer term, demand could increase further if markets like the U.S. begin to import LNG in greater quantities. We are also building two large oxygen plants for offshore "mega-methanol" projects. And we think a very large market is emerging for converting remote natural gas into products beyond LNG



(Left to right) Fred Stiers, refinery manager for ConocoPhillips; Stacey Moore, Air Products' Westlake, Louisiana site manager; Tom Barracato, Air Products' senior project manager; and Tom Heller, plant manager at Air Products' Port Arthur, Texas facility survey the construction of a new hydrogen steam methane reformer in Westlake.

When it starts up in spring 2004, the plant will produce more than 100 million standard cubic feet per day of product to serve the growing requirements of ConocoPhillips, the world's fifthlargest global refiner, and other customers. The plant also will be connected to our existing West Gulf Coast hydrogen pipeline system, which currently supplies more than 40 customers.

and methanol. The biggest opportunities are gas-to-liquids facilities, or GTL, in which natural gas is converted into a sulfur-free, transportable liquid fuel. This year, we were awarded a contract to build two 3,500 metric ton-per-day air separation units to supply ORYX GTL's facility in Qatar—the world's largest and most advanced GTL facility. These air separation units, due to be completed in the fall of 2004, will be the largest ones we have built in our 63-year history.

In the longer term, we expect an increased demand for hydrogen as we move toward a fuel cell-based hydrogen economy. Building on more than 50 years of experience with hydrogen generation and supply, we've become an important contributor to many hydrogen fuel cell infrastructure projects. To date, we've designed and built over 20 hydrogen fueling stations for demonstration projects in the U.S. and Europe, including cars, taxis, buses, boats, and even submarines.

With all of these opportunities ahead, our Energy and Process Industries Division also has formed a new services and solutions unit to provide operating, emissions compliance, efficiency improvement and other services to our customers. You can read more about that initiative in the next section.

## **Healthcare**

What are the trends driving growth in healthcare? An aging demographic coupled with technology. An effort to control healthcare costs by moving to more efficient and cost-effective ways to deliver treatments. And patients who are turning to more in-home treatment options to improve their quality of life and who want the best care, right now.

At Air Products, we're very well positioned to serve these needs. After all, for about 60 years now, we've supplied medical gases as well as cryogenic services for MRI units to the institutional markets. Today, we are the leading supplier of these °KeepCOLD cryogenic fill services, with over 100 highly trained, full-time technicians who perform over 40,000 fills annually.

It was also about 50 years ago when we first placed a cylinder of oxygen in a patient's home, representing one of the first respiratory therapy applications to be delivered in Europe. This year, we extended that expertise into the \$15 billion respiratory therapy, home medical equipment and infusion services market in the U.S. We acquired American Homecare Supply on October 1, 2002 (later renamed Air Products Healthcare), and in doing so, increased the number of countries where we provide home medical services to 14. The Air Products Healthcare acquisition also has helped us build our global capabilities to serve more than 320,000 patients worldwide (including affiliates), strengthening our number one homecare position in the northeastern U.S., Spain, Portugal and Mexico, and our overall number two position in Europe. Find out more about the success of this business—and our subsequent bolt-on homecare acquisitions in the U.S.—in the next section.



At his stationery distribution company's sales office in Sheffield, UK, Air Products Medical patient Martyn Neale (left) gets a visit from Joanne Lait, marketing executive for Air Products' Medical Group in the UK and Ireland. Martyn uses a portable oxygen cylinder system (called a PA2) to maintain his freedom and flexibility on the job. Weighing only 3 kilograms, the PA2 is one of the lightest medical oxygen cylinders available from the UK's public healthcare service.

With a total global sales run-rate in excess of \$600 million per year, including affiliates, we continue to focus on our opportunities to provide real value. Homecare represents nearly 65% of our total Healthcare business, and we're focused on bringing specialized services to patients, along with safety, quality, consistency and compliance expertise.

## more portfolio management



In September 2003, the American Lung Association (ALA) of Pennsylvania, working with East Coast Touring Co. of Easton, Pennsylvania, organized its ninth annual "Oxygen Cruise" for people with chronic obstructive pulmonary disease and their caregivers. Air Products Healthcare provided all of the oxygen and newly purchased medical equipment for the cruise—free of charge. Before leaving from New York for the Bahamas on Norwegian Cruise Line's Norwegian Dawn, Janet Liberty (right), an Air Products Healthcare patient, got some last-minute reassurances from Sharon Bortz, ALA volunteer and administrative coordinator for Air Products. Janet enjoyed a great vacation without feeling restricted by her special needs.



## we've done **MOTC** to manage our portfolio . . .

It's no secret that Air Products is a company in transition. We're very different than we were many years ago, or even just two or three years ago. We're proud of our heritage and the culture of innovation and operational excellence that have helped us build the positions we have today. But we also have to deal with the reality of where markets are going. We have to align resources with opportunity. We have to focus on profitable growth.

That's why our portfolio management process is so important. It's the framework we're using to move toward a higher-growth, higher-return business mix. We continually evaluate our businesses and resource those with the greatest potential. We develop alternative business models. We close or divest businesses or assets that no longer fit with our strategy or our financial performance goals. And we make strategic decisions about acquisitions and other relationship-building opportunities that can improve the value we bring to customers.

Since 2000, the proceeds from our divestitures and our spending on acquisitions have been in balance—about \$850 million and \$900 million, respectively. This fiscal year, we've done more to manage our portfolio than ever before.

- The October 1, 2002 purchase of American Homecare Supply made us the number one homecare provider in the northeastern and mid-Atlantic regions of the U.S. We subsequently made six small bolt-on homecare acquisitions in the U.S. All of these are now operating under the Air Products Healthcare banner, enabling us to provide innovative product and service solutions that meet and exceed patients' expectations.
- Early in the calendar year, we completed the sale of our graphics arts business and the associated Langley, South Carolina resin and acrylics production facility. The sale reflected our commitment to focus on core competencies in Airflex ethylene copolymer emulsions chemistry.
- Under our Performance Materials growth platform, in March we acquired Sanwa Chemical Industry Co., a leading producer of specialty polyamide resins and epoxy curing agents used in industrial coatings and construction applications. With operations near Tokyo, Japan and in Singapore, the Sanwa acquisition is our first Performance Products manufacturing operation in Asia, further enhancing our existing chemical businesses and capabilities in the region.



Joining the "Oxygen Cruise" to keep the medical equipment in proper working order was technician Kenny Wright (left) from Air Products Healthcare's A&J Care branch in Glendale, New York. He made sure that patients like Harold Mann and his wife Pauline had the support they needed to truly relax and enjoy their trip.

- During the spring, we completed the sale of our Canadian packaged gas business—a transaction consistent with the divestiture of our U.S. packaged gas business in 2002—and other western Canada operations. We are now focused on optimizing our positions in Ontario and Quebec for tonnage and on-site facilities, as well as merchant liquid bulk gases. We also divested our industrial gas business in Puerto Rico.
- Also in the spring, through our new Services and Solutions group within our Energy and Process Industries Division, we announced a new NOx reduction service that helps industry achieve compliance in regulated zones. As part of this service, the group also has developed a Large Scale Vortex<sup>™</sup> Burner technology, which can significantly reduce the cost of achieving low-NOx emissions in combustion applications.
- In our fiscal third quarter, we announced a global cost reduction plan that involved closing several underperforming merchant and on-site facilities and terminating some incomplete capacity expansion projects. We also announced plans to sell our European methylamines and derivatives business and close our Pensacola, Florida methanol and ammonia production facilities in preparation for converting to a long-term methanol purchase arrangement.
- And finally, in Electronics, we acquired the approximately \$200 million Electronic Chemicals business of Ashland Specialty Chemical Company at the end of August. In addition to bringing about 800 knowledgeable people on board, we've added Ashland's ACT photoresist, etch residue and low-k dielectric and copper strippers; high-purity process chemicals, CMP slurries and post-CMP cleaners; and fab services offerings to our portfolio. The acquisition is giving us a more intimate knowledge of electronic chemicals processes, helping us leverage our unique skills as the world's only combined gases and chemicals company.

## more global reach



More than 35 years ago, Air Products revolutionized the polyurethane industry with the introduction of Dabco® Crystal Catalyst. This pivotal product quickly became the industry standard amine catalyst. But that was just the beginning. Today, Air Products is a global leader in polyurethane additives, offering a broad range of catalysts and surfactants for all types of flexible, rigid and microcellular foams. For example, our Dabco catalysts are increasingly being used by our customers throughout the world in the production of many different types of shoe soles.



## we have **more** global reach . . .

It's true—we're more global than ever before. Although our headquarters are in the U.S., today we operate in over 30 countries, and half of our sales are outside of the U.S. It's a target we've worked very hard to achieve.

### **Asia**

About \$1 billion, or more than 15% of our total company sales, including affiliates and exports, are in the high-growth region of Asia. We've operated there for nearly 25 years, starting with strategic joint ventures we formed with local family partners. Over the last five years, we've significantly increased our ownership positions in several countries, and we now control nearly 75% of our sales in the region.

With 50 entities, more than 4,400 employees and major operations in nine countries, we're leveraging our growth platforms as well as focusing on infrastructure development needs. With our affiliates, we've grown at a compounded rate of 15% since 1996. And we expect this growth will continue, as much of the increase in the world's industrial production will occur in Asia over the next decade. Current estimates are that almost two-thirds of new semiconductor fabs and a major portion of new ethylene and basic chemical capacity will come to the region.

Today we are the leading gases company in Korea and Taiwan—areas of the highest absolute growth in the near term. We are also a leading supplier of Airflex ethylene copolymer emulsions through Air Products Korea, Inc. and have a strong market position supplying epoxy curing agents throughout Asia. In addition, we are actively building infrastructure in mainland China that will provide significant opportunities in the longer term. We're ready to serve customers and leverage our strengths and opportunities.

## **Europe**

Today our total European sales are about \$2 billion, including affiliates. We operate in 14 countries, with over 175 locations and more than 5,500 employees, including affiliates, and we have strong engineering and equipment manufacturing capabilities to support and leverage our growth platforms. We have outstanding performance in healthcare and a very strong packaged gas business. Europe also holds great opportunities for our Performance Materials businesses, enabling us to leverage our skills in surface and material sciences. For example, today our largest regional market position for polyurethane additives, part of our Performance Products business, is in Europe.

Within the region, the United Kingdom is our largest country by sales. We are number two in gases and have significant chemicals operations as well. In Spain, we have the number one position, supplying primarily

People like Dr. Torsten Panitzsch, a senior chemist at our world-class applications development polyurethane additives lab in Norderstedt, Germany, support our business by developing new products, providing support and offering troubleshooting tools to deliver value to customers. These global capabilities have helped us build in-depth knowledge and understanding of regional customer needs.



gases, with a major focus on healthcare. We are also number two in the Portuguese market and have the number two merchant and tonnage gas business position in the Benelux. In addition, we continue to see new growth opportunities in central Europe, where we are active in the Czech Republic, Slovakia and Poland. And we have the number three position in Italy through our 49% ownership in Sapio S.r.l., with revenues of about \$300 million per year.

## **Latin America**

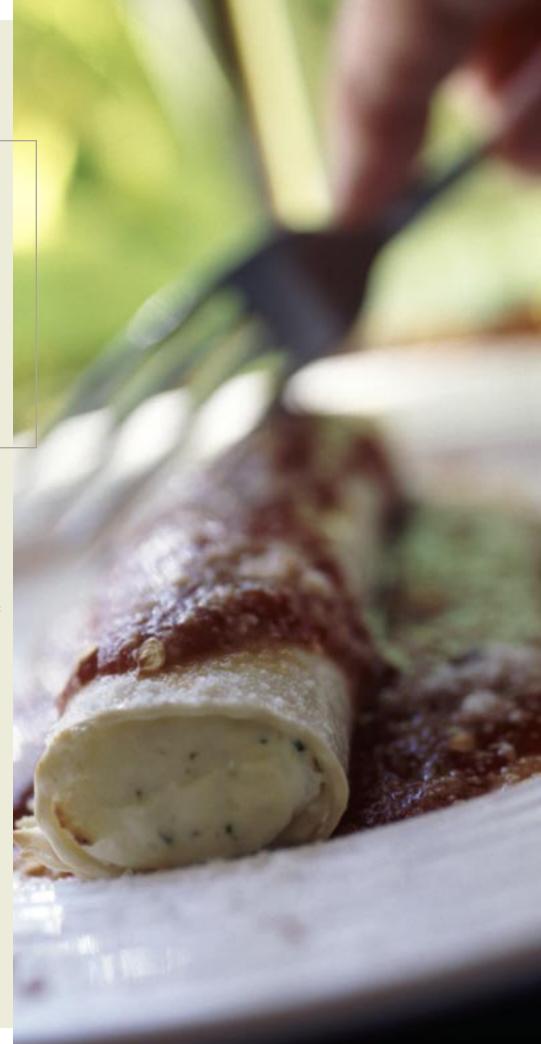
We continue to be selective in building strong, strategic positions throughout Latin America. For example, through our joint venture partner, the Infra Group, we've built and strengthened our number one position in Mexico with over \$300 million in sales. We have a leading position serving homecare markets there, and we also continue to develop innovative products for customers in other industries. For example, this year, the Infra Group and European packaged gases teams worked together to launch a new gas mixture that's helping metals fabricators throughout Mexico improve their productivity and have a better working environment.

In Brazil, we were awarded several on-site oxygen and nitrogen supply arrangements, and our Chemicals higher amines facility serving regional agricultural markets had another record year. We also operate in Guatemala and in the Argentine homecare market, and most recently, we extended our Latin America presence into Trinidad and Tobago, where we will supply over 4,000 tons per day of oxygen and nitrogen products from our joint venture on-site plant supplying the 1.7 million tonnes-per-year Atlas methanol production facility. Atlas will become the long-term methanol source for our Chemicals operations.

# more to understand customers



Leading foods manufacturer Casa Di Bertacchi Corporation was looking to get more out of its Vineland, New Jersey plant. Using Air Products' breakthrough Freshline<sup>TM</sup> Z Tunnel Freezer to process manicotti, cannelloni and other mouthwatering pasta products, the company has seen significant productivity increases, cost savings and improved product quality.



## we've done **MOTC** to understand our customers . . .

If there's one thing customers tell us they want, it's a company that understands their business more. That's why we spend quality time talking about their concerns and about the challenges they face every day. We want to know what keeps them awake at night. We want to help them get more out of what they have today and still plan for the future. We want to take the knowledge learned from our conversations and put our resources to work for them.

We're listening to our customers to understand how they view their relationships with us and what they value. Since 2002, when we implemented our Customer Loyalty Process, we've engaged 3,300 key customers worldwide, listening to what they tell us are the product and service attributes that create the greatest value and enhance our relationships. We then act on those learnings to drive continuous improvement and refine our offerings for specific customer segments. It's an ongoing process for which Air Products received national recognition, both as the winner of the American Marketing Association's 2003 EXPLOR award—based on best practices in the business and consumer marketplaces for interactive marketing research—and as the national cowinner of the Quality Progress Customer Satisfaction Challenge, part of the American Society for Quality's Business Excellence and Customer Satisfaction Conference.



The Freshline Z Tunnel Freezer has made the relationship built on understanding between Air Products' food technology specialist Barbara Allen (left) and Casa Di Bertacchi's pasta production supervisor, Michael Donaldson, even stronger.

- We're developing new tools and solutions to make business easier. For example, the Air Products Direct (APDirect®) Customer Portal has become an important resource, enabling customers to place more than 25,000 orders each month, track the status of their deliveries, and create and print reports. Today, we also have 23 country-specific Web sites in 17 languages, as well as nine business area showcase sites with tools to help our global customers identify the products they need as well as the optimal quantities and supply modes.
- We're introducing tailored product and service solutions to make our customers' operations easier and more cost-effective. By understanding what they value, we can continue to develop tailored products and services that exceed customers' expectations. One great example is our Freshline Z Tunnel Freezer, first launched in Europe and this year, in the U.S. The system combines cryogenic refrigeration, indirect heat transfer, and impingement technology—a first in the industry. And it's helping our food freezing customers set new standards in efficiency, operational safety, freezing quality and throughput-to-footprint ratio.
- We continue to implement "single-instance" SAP to make our relationships stronger. By revenue, about 30% of our businesses are now running on a single, integrated instance of this strategic business management solution. By this coming spring, it will be up to about 70%. And we'll continue to work the process until we've achieved full implementation, targeted to be completed in 2005. More effective ordering capabilities, faster cycle times and improved e-business capabilities will make our relationships with customers and suppliers even stronger.
- We're focusing on supply chain to improve the customer's experience with us. We know that the benefits of SAP will only be realized if we maximize our business process improvement efforts. That's why we formed a Supply Chain Center of Excellence that has combined our Customer Engagement, Energy and Materials, and Business Process Improvement groups into a single Supply Chain organization. We're working hard to integrate global processes into supply chains that will eliminate waste and improve our efficiency and effectiveness, translating into direct value for our customers.
- We're becoming one company to serve customers better.

  More than ever before, we're sharing knowledge and resources across groups, business areas and geographies. And it's breaking down barriers. We strive to present a single face to our customers so that no matter where or how they contact us, the quality of their experience will be the same. Our goal is to create a globally consistent experience that builds understanding and delivers what the customer truly values.

## more to come



Not only is Air Products focused on the needs of customers today, we're doing more to serve the needs of emerging markets. For example, we supplied the hydrogen fueling systems for Challenge Bibendum, one of the premier competitions to objectively test and rate advanced technology vehicles. Created and organized by the Michelin Group and held in Sonoma and San Francisco, California in September 2003, the event featured more than 100 passenger and commercial vehicles from major manufacturers on three continents.



## there's **MOTC** to come . . .

So we've talked about our growth platforms and how we're managing our portfolio. And about our global reach and the things we're doing to help our customers succeed. So what's next for Air Products? In keeping with our vision of becoming the best company to invest in, buy from and work for, here are some of the areas where you can expect to see more from us.

- More growth in our four growth platforms. We're a leading global supplier in electronics and hydrogen today. We're a leader regionally in healthcare. And we're a leader in most of our performance materials products. We'll continue to invest in resources and in technology to make sure we stay at the forefront in these areas. Of course, we'll also pursue new opportunities and new markets where our gases, chemicals and equipment may have powerful applications.
- More returns from our existing assets. We have significant assets in the ground today serving our growth and core markets, with considerable earnings leverage. To capitalize on that leverage, we need to load these assets as well as continue to focus on productivity improvements. We also will remain disciplined in where we invest new capital.
- More portfolio management. We'll continue to make wise decisions in line with our higher-level targets and strategies, moving toward a higher-growth, higher-return business mix. This is an ongoing process, and we are committed to looking at all of our businesses with the same set of lenses.
- More continuous improvement efforts that we can put to work for our stakeholders. We'll continue to standardize and simplify global work processes, find new and more efficient ways of performing these processes, and then share these innovative ideas with each other to give the company even greater competitive advantage and bring more value to our customers and shareholders.



Don Eichelberger (left), Air Products' commercial development manager for Future Energy Solutions, talks with Jeff Wolak, the technical team leader for General Motors' Hy-wire fuel cell vehicle, at the Challenge Bibendum. Hy-wire is the world's first drivable fuel cell vehicle that combines a hydrogen fuel cell with drive-by-wire technology.

- More innovation. We'll continue to focus our R&D programs into areas where there are strong drivers for growth and "real and now" opportunities to solve tough customer problems with our unique capabilities. At the same time, we'll continue to focus on longer-term trends and major technology breakthroughs that could bring new solutions in the future. And our Corporate Development Office will continue to manage our strategic planning, mergers and acquisitions, and venture investing activities to help our businesses translate innovation into growth for the future.
- More learning and knowledge sharing. We'll continue to break down organizational barriers and communicate as a truly global company. This means finding new ways to share knowledge and build trust across former boundaries. Above all, it means giving our people the support and resources they need to make meaningful contributions.

## leadership

## Board of Directors



John P. Jones III Chairman, President and Chief Executive Officer. Director of the company since 1998.



Mario L. Baeza
Founder and Controlling
Shareholder of Baeza & Co.
and Chairman of TCW/Latin
America Partners, L.L.C.
Director of the company
since 1999.



Michael J. Donahue Group Executive Vice President and Chief Operating Officer of BearingPoint, Inc. Director of the company since 2001.



Ursula F. Fairbairn
Executive Vice President,
Human Resources and
Quality of American Express
Company. Director of the
company since 1998.



Edward E. Hagenlocker Former Vice Chairman of Ford Motor Company and former Chairman of Visteon Automotive Systems. Director of the company since 1997.



James F. Hardymon Retired Chairman and Chief Executive Officer of Textron Inc. Director of the company since 1997.



Terrence Murray
Retired Chairman and
Chief Executive Officer
of FleetBoston Financial
Corporation. Director of
the company since 2002.



Charles H. Noski Chief Financial Officer of Northrop Grumman Corporation. Director of the company since 2000.



Paula G. Rosput Chairman, Director, President and Chief Executive Officer of AGL Resources, Inc. Director of the company since 2001.



**Lawrason D. Thomas**Former Vice Chairman of
Amoco Corporation. Director
of the company since 1994.

## Corporate Executive Committee (CEC)



John P. Jones III Chairman, President and Chief Executive Officer.



**Leonard V. Broese van Groenou** Vice President–Human Resources.



**W. Douglas Brown** Vice President, General Counsel and Secretary.



Mark L. Bye Group Vice President— Gases and Equipment. Joined CEC 10/13/03; succeeded Robert E. Gadomski 12/1/03.



Andrew E. Cummins Group Vice President— Chemicals. Retired 11/1/03; succeeded by John E. McGlade.



Robert E. Gadomski Executive Vice President— Gases and Equipment. Retiring 01/04; succeeded by Mark L. Bye.



Arthur T. Katsaros Group Vice President— Development and Technology.



John E. McGlade Group Vice President— Chemicals. Joined CEC 10/13/03; succeeded Andrew E. Cummins 11/1/03.



**John R. Owings** Vice President and Chief Financial Officer.