

## FELLOW SHAREHOLDERS



**JEFFREY M. LIPTON**

President and Chief Executive Officer

Petrochemical producers in North America were challenged in 2005 by rollercoaster shifts in sales volumes, high and extremely volatile energy costs, and two devastating hurricanes that disrupted feedstock supply and plant operations for months. NOVA Chemicals not only experienced these problems, but also endured a series of unforeseeable events that dramatically reduced our earnings.

Despite our struggles we continued to improve the operating strength of our company and I firmly believe we are extremely well positioned to take advantage of projected global economic growth and our portfolio of unique, high-value products and new business developments.

### INDUSTRY TRENDS

The balance of supply and demand is the key factor in the profitability of our industry. Demand for petrochemicals and plastics is tied to general economic growth. Plastics continue to be substituted for metals, glass, paper and wood in just about every segment of the global economy. The properties of plastics are attractive to designers, manufacturers and consumers alike. In periods of high energy and transportation costs, their strength and weight advantages are particularly valuable. As a consequence, demand continues to grow faster than Gross Domestic Product (GDP) in mature economies, and at multiples of GDP in developing countries.

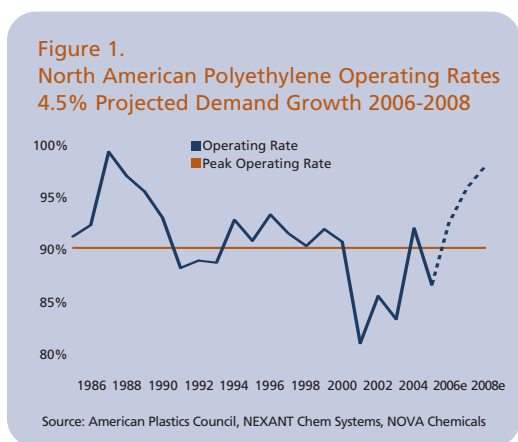
Feedstocks derived from oil and natural gas represent a very large portion of petrochemical manufacturing costs. High and volatile energy prices create tremendous uncertainty for an industry that must make

huge capital commitments to expand capacity. As a consequence, even the largest companies are reluctant to expand without long-term, stable and low-cost feedstock supplies.

Today, the only region seeing significant petrochemical capacity expansion is the Middle East. However, political instability, weak infrastructure and shortages of labor, engineering and project management capability have slowed growth plans there as well.

No major new facilities have been announced for North America and very little new capacity is planned for Europe or South America. Expansion in China and India is limited by high feedstock costs and as a consequence, the two countries will have to expand polymer imports to keep up with demand growth.

If we experience just modest global economic growth, we will see supply/demand balances continuing to tighten throughout the world for most petrochemicals and plastics – including NOVA Chemicals' two business chains, ethylene/polyethylene and styrenics. We believe the critical supply bottlenecks for our two businesses are polyethylene and styrene monomer. Consultant's projections for the North American polyethylene supply demand balance are shown below in figure 1, and similar charts for global polyethylene and styrene can be found on pages 41 and 48, respectively. The charts assume 3% Global GDP growth and are the basis for our strong belief that, barring global recession, we will see a long, strong period for our industry and NOVA Chemicals.



#### 2005 MARKET DYNAMICS

The volatility of energy and polymer prices adds an important dynamic to our markets. As long as there is some supply in excess of fundamental demand, consumers of polymer will use inventory build-up or consumption as a hedge against producer pricing.

Facing a series of price increases and concerns about supply limitations, customers in North America and other parts of the world built polymer and finished-goods inventories in the second half of 2004. By the end of the first quarter of 2005, when energy prices were moderating,

customers sharply slowed their buying and consumed inventory. As a result, polymer prices and producer margins turned down sharply in the second quarter.

However, steady fundamental growth in demand prevailed and inventories were drawn down to low levels by the beginning of the third quarter. Customer orders picked up sharply and the demand increase allowed producers to raise prices and expand margins.

The Gulf Coast hurricanes further reduced supply and as a result, prices and margins exploded for many petrochemicals and plastics, including ethylene and polyethylene in North America and in markets, like South America, that rely on North American supply. Shortages lasted until November when customers, helped by normal seasonal demand slowness, again limited their purchases.

By year-end, polymer buyers in almost every part of the world appear to have consumed inventory down to historically low levels.

In North America, published data indicates that polyethylene inventory in producers' and converters' hands is down about 3 billion pounds since March, 2005, or about 10% of annual demand. It is our view that converters must resume high volume purchases to meet end-use demand and rebuild inventory and that global markets will return to tight conditions in the first part of the year. That should lead to producer pricing and margin power in most markets, particularly in North America. We expect 2006, 2007 and 2008 to be very strong years for NOVA Chemicals and other basic chemical and polymer producers as fundamental demand grows to levels that are beyond sustainable production rates.

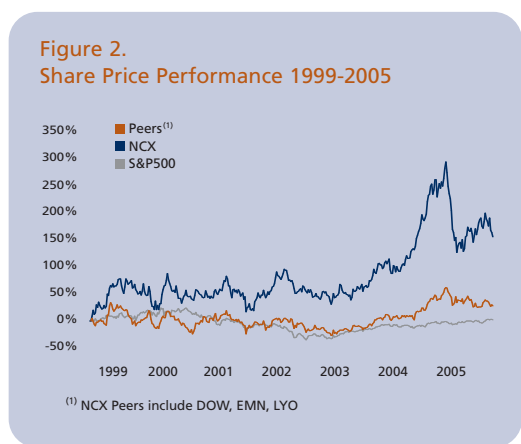
### NOVA CHEMICALS' 2005 RESULTS

NOVA Chemicals' performance followed general market conditions for the first half of the year. We had a very strong first quarter and earned \$94 million, \$1.06 per share. Demand declined sharply in the second quarter and we also experienced the first two of the three major unfortunate events that impacted us in 2005.

A 17-second electrical utility outage, caused by a grass fire under power lines on neighboring property, forced a sudden shutdown of our Corunna, Ontario complex. The repair of damaged equipment and lost business costs reduced after-tax income by \$21 million.

Then we missed a good portion of the high ethylene and polyethylene margins available in the third quarter when freak tornados in June wrecked six natural gas liquids extraction facilities in Alberta. Feedstock to our Joffre complex was cut by almost one-third for 27 days. The lost business reduced after-tax ethylene and polyethylene income by \$24 million.

We scheduled as many maintenance and expansion turnarounds as possible in 2005 to be prepared to operate at maximum rates in 2006, 2007 and 2008 when peak margins are expected for both of our businesses. The first seven went well. The last, and largest, was disastrous. We started a planned 47-day maintenance and expansion project for our Corunna cracker on September 6, 2005. The plant was not fully operational until late January 2006 and the delayed start-up negatively impacted net income by \$55



million in 2005. The project schedule was hurt by labor availability problems, and then severely impacted by a series of defects in three new compressors. We suffered, our customers suffered and our investors suffered.

The full year ended with NOVA Chemicals showing a loss of \$104 million (\$1.26 per share). Unusual costs, charges and lost business impacted net income by a total of \$240 million. (see page 34)

Our stock performance during the year was very disappointing. As you can see in figure 2, after touching an all-time high in March, our shares were buffeted for much of

the remainder of the year. We weren't alone, but the same leverage to the cycle we have in positive periods hurts our shares more than others' during more pessimistic times, such as the second quarter. In addition, the series of unusual events weighed heavily on our share price in the third and fourth quarters.

## PROGRESS IN 2005

As we begin 2006, we have our plants ready for full production and look forward to at least two years without any restrictions in sales volume. We are ready for the very strong markets a growing global economy should provide.

In addition to cycle fundamentals we have a lot going for us as we face the future. Alberta feedstock prices remain highly advantaged and we think growing demand for natural gas liquids on the U.S. Gulf Coast should result in higher relative costs for most of our competitors. Our very large-scale and energy-efficient crackers add to our advantage, particularly when energy prices are high.

In 2005, we also proved that the unique polyethylene Performance Products, made with Advanced SCLAIRTECH technology at our Joffre site, provide processing and energy savings benefits to converters and superior end-use properties for their customers. Most importantly, our customers are willing to pay for these advantages.

In numerous applications, our polyethylene Performance Products have proven to be equal to, or better than, any competitive alternatives. In 2005, demand for these high-value Performance Products grew by 52% to 438 million pounds, or better than half of the current capacity of our Advanced SCLAIRTECH technology plant. By 2008 we expect to expand this capacity to 1 billion pounds per year and sell more than 900 million pounds per year of polyethylene Performance Products.

## STYRENICS ACTIONS

We have lost an average of \$57 million per year of EBITDA in the Styrenics business during the last 5 years. Some competitors and many investors have given up on this business. We're determined and confident that we can make it successful.

About half of our Styrenics EBITDA losses came from our European business. In October, we started up a styrenic polymer joint venture with BP/Innovene (now INEOS). The joint venture has by far the largest share of the European market for these polymers.

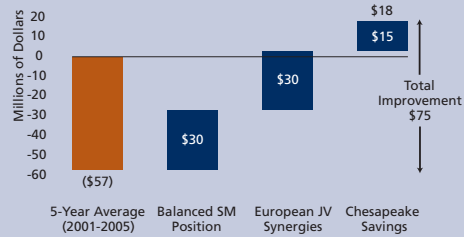
We expect the joint venture to generate a minimum of \$60 million per year of cost reduction by 2008. If the joint venture is successful, NOVA Chemicals' EBITDA will increase by \$30 million per year, even if there is no improvement in the European market.

We have seen a similar \$30 million of negative EBITDA impact per year as a result of two purchase contracts for 1 billion pounds per year of styrene monomer that came with acquired styrenics businesses. The contracts require minimum purchases and as a result of weak market conditions we have been forced to cut back production from our own lower cost plants.

One of the contracts expires by the end of 2006, the other by the end of 2007. By 2008, we will be in a much stronger earnings position even in weak markets. Of course, if markets strengthen in 2006, the penalty we suffer will moderate or turn into a positive.

In January of 2006, we announced the shutdown of our Chesapeake, Virginia site. This will allow NOVA Chemicals to lower fixed costs by \$15 million per year, reduce working capital and allow us to run all of our remaining polystyrene plants at higher, more efficient rates. Together these three changes will posi-

**Figure 3.**  
Styrenics EBITDA Improvements<sup>(1)</sup>



<sup>(1)</sup> Expected improvements by 2008.

tion us to generate positive EBITDA even in weak markets like the one we've experienced during the past five years (figure 3).

The earnings growth we expect from our styrenic Performance Polymers and new business developments will be the second major factor in improving this business. ARCEL is a unique packaging foam and is our most exciting Performance Product. It sells for about \$2.00 per pound and provides superior value to flat screen TV, computer, printer, and other electronics manufacturers by reducing damage, returns and transportation costs. ARCEL

production capacity was up five-fold during the last three years. Despite building production capacity as fast as we can, we were sold out again in 2005. We expect to have 100 million pounds of capacity by the end of this year and seven times the current capacity, or 225 million pounds per year, by the end of 2008.

Other new styrenic Performance Polymers enable our customers to make food packaging with superior freezer performance and freezer-to-microwave capability. In addition, new styrenic business developments based on unique, protectable technology are being pursued through joint ventures in the construction and beverage cup markets.

Should we give up on the Styrenics business? My answer is an unequivocal NO. We are doing things we can control to stop negative cash flow - even if we do not see market improvement. I believe that when we deliver on the promise of Performance Products, we will make it a good business that can be sustained through an entire cycle.

As for the market itself, the fact that benzene prices have returned to their historical relationship with crude oil and other feedstocks is very important. There is little doubt that extraordinarily high benzene prices and the resulting higher styrenic polymer prices have limited the growth of styrenic materials during the past few years. As a consequence, demand growth for the entire styrenics chain fell below historical levels.

Since the middle of 2005, benzene prices have fallen sharply versus crude oil, and are now at normal competitive levels compared to other petrochemicals. This should allow more competitive pricing of styrenic materials and a return to historic growth patterns for styrene monomer.

The combination of stronger demand growth and the reluctance of producers to invest in what has been a very poor return business, should tighten supply/demand balances a lot faster than most expect.

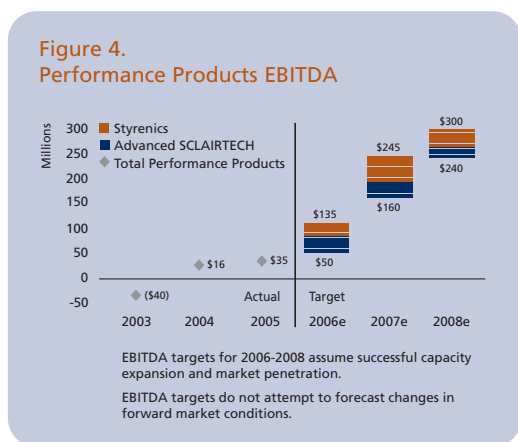
### STRATEGY EVOLUTION

Since its founding in 1998, NOVA Chemicals has utilized a five-point strategy that reflected our highly leveraged position. We have (1) focused on our two core product chains; (2) worked to be the low-cost supplier of every grade of every product we make; (3) built on our sustainable competitive advantages, including low feedstock costs and proprietary technology; (4) invested only for high returns; and (5) actively participated in industry consolidation.

The tight focus, and our rapid growth, resulted in tremendous leverage to the cycles associated with our two businesses. Investors saw our company as a vehicle with very high upside to the coming market peaks but also significant risk to the downside.

We mitigated downside risk by building and maintaining a strong balance sheet. We sold non-strategic assets for good prices and we managed working capital better than any company in our industry. Our success in developing proprietary process technology, unique patented products and the development and acquisition of valuable and unique forward integration technology changes the nature of our company's risk/reward equation.

We are putting more and more emphasis on product and business differentiation in our operations, Research & Development programs and capital expenditure plans within our two core product chains. We believe our Performance Products and new business developments have the potential to generate \$300



million per year of EBITDA in 2008 (figure 4). That level of cash flow and the exciting growth potential beyond will not only add earnings at the top of the cycle but also provide a durable earnings base at the inevitable bottom of future cycles.

The combination of more stable Performance Product margins, styrene supply more balanced with internal consumption and large Styrenics cost reductions will change our company. We will be positioned to generate very strong earnings and cash flow at cycle peaks but face much less risk at cycle troughs.

I believe we will approach the risk/reward equation of larger, more diversified companies in our industry. That should generate higher equity price-to-earnings ratios and cash flow than typical commodity chemical producers – and add significant upside to most analyst projections of our stock price during the next few years.

To close, I want to thank our employees, directors, and investors for their support through the period of misfortune we experienced in 2005. We are more determined than ever to reward them for their faith in our company.

**JEFFREY M. LIPTON**

President and Chief Executive Officer

February 10, 2006