# Lubrizol

## Advancing portfolio upgrade

Free from public glare as a standalone company, Lubrizol continues to build and diversify its specialty chemical franchise under Berkshire Hathaway ownership. Strategy remains centered on nurturing a highly profitable, market-leading position in lubricant additives, which accounts for roughly two-thirds of sales, and growing the advanced materials portfolio, including a burgeoning life sciences segment.

Robert Westervelt

Lubrizol (Wickliffe, Ohio) says that the mandate under Berkshire Hathaway ownership is to protect the existing franchise and grow the business, which posted revenue of $6.5 billion in 2016. "It's a very unique situation, where you have probably the most capable capital allocator and investor that has maybe ever lived," says Lubrizol chairman and CEO Eric Schnur. "We have access to capital and resources that we would have struggled to tap as a public company of our size." Berkshire Hathaway, the $400-billion conglomerate controlled by Warren Buffett, acquired Lubrizol for $9 billion in 2011.

The company has made more than a dozen acquisitions since the deal closed, mostly in advanced materials. Capital spending has ramped up as well over the past few years (chart). "These have to be good opportunities," says Schnur, who succeeded James Hambrick as CEO on 2 January. "[Buffett] is known as an accomplished capital allocator for good reason. We can talk about steps to build the company over the next ten or twenty years. The vision and strategy, of course, has to make sense. Warren is not a chemistry guy. It comes down to the financials. Return on incremental invested capital is a primary criterion. And if we can meet the threshold, he's been very supportive."

### Additive investment

Lubrizol pioneered development of lubricant additives in 1920s and remains the market leader. The company estimates that roughly half of vehicles on the road today use Lubrizol petroleum additives. It remains a slow growth business with expected volume increases of

1–2%/year. The overall lubricant oil additives market was valued at roughly $14 billion in 2015, according to IHS Chemical estimates. Lubrizol, Afton Chemical, Chevron Oronite, and Infineum, a joint venture between ExxonMobil and Shell, account for roughly 90% of the market.

Lubrizol's additives business has annual sales of roughly $4 billion. "It is a very modest growth environment," says Dan Sheets, president of Lubrizol additives. "What we strive very hard to do is to position ourselves in the sweet spots where we have competitive advantage and can grow." Those advantages include strong positions in attractive regions, including China and India, and higher-value market segments or applications. "In addition, it's all about partnering with the right customers. That's really how we try to go to market and then try to get a matrix where we're in growth mode. If you grow at the rate of this market, you wouldn't be growing."

Lubrizol's additives business is in the middle of a long-term $1-billion capital investment and upgrade program that started in 2010. The largest investment is a $200-million wholly-owned additives manufacturing site in Zhuhai, China that started operations in 2013. The company is also integrating back to highly reactive polyisobutylene (HR-PIB) in the United States at its Deer Park, Texas, facility, with startup planned for the first half of 2019. HR-PIBs are a raw material for next-generation dispersants and lubricants.

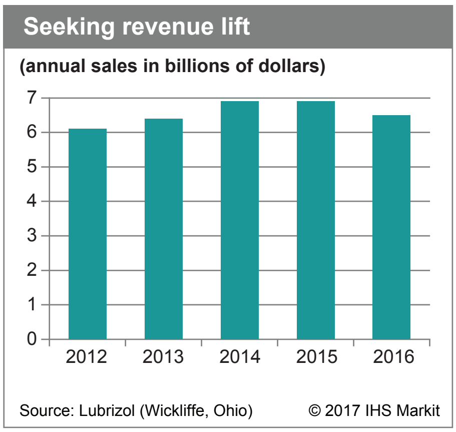
"We're going to end up spending more than $1 billion overall and that's a good thing," Sheets says. The higher spending includes the recently announced HR-PIB unit. The company hasn't disclosed that cost but Sheets says it is in the "hundreds of millions. And it gives us strong back integration capability into what's used to make dispersants, which are the single biggest component of an additive package."

The push for fuel efficiency and higher engine performance plays well to Lubrizol's strengths. "The rate of change for the lubricants industry has been accelerating in the last five to seven years," Sheets says. "Performance requirements across our portfolio have changed pretty quickly. And the technical burden to meet those has also risen. And so as a result, you're offering more and more higher-performance products." That has helped producers maintain the significant improvement in margin over the past 15 years. Additives' EBITDA margins have moved from the single-digit range in the 1990s to the mid-20% range or higher. "Overall, industry has been able to get more value for what it offers to the marketplace," Sheets says.

More demanding requirements, and higher-value additives, should help maintain that performance despite modest volume growth. "Not too long ago cars generally had four-speed automatic transmissions," Schnur says. "And now, it's eight or nine speeds. It significantly improves fuel efficiency because your car rarely gets above 2,000 RPM anymore. That, however, requires different fluid formulation and a lot more demands are placed on them. The opportunity to add value with all the resources and assets that we have is probably as great now as it's been as long back as I can remember."

**SHEETS:** Targeting spots for growth in additives.

**TOLIN:** Life sciences is key investment focus.




Lubrizol does not see a near-term threat from electric vehicles. "Our current view is limited market penetration," Sheets says. "There are about 1 billion vehicles on the road currently. That's projected to grow to 1.6 billion within the next 15 years or so even as electric penetration remains modest overall. So when you think about that overall growth, and you think about the average age of a vehicle, in the United States it's 11 to 12 years now, any shift toward electric that occurs would have a very minor impact. With a transition occurring very slowly over time, we're going to be just fine."

### Advanced materials

In the late 1990s, Lubrizol started looking to develop a specialty chemicals component to offset the low growth in additives and diversify the portfolio. The company made some small surfactant acquisitions, but the core of the advanced materials business was brought in as a result of the $2-billion acquisition of Noveon in 2004. Lubrizol's personal, skin, and home care specialties business has a strong position in acrylate rheology modifiers, based on Carbopol technology. Performance coatings are a major supplier of specialty resins, polymers and additives. In engineered polymers, the company is a provider of thermoplastic urethanes and chlorinated polyvinyl chloride.

Life sciences has become a key growth focus. "This isn't a guarantee, but there is the possibility in the future that that life sciences will be as big of a business for us as additives," Schnur says. "And that doesn't assume that additives will shrink." Acquisitions have included Vesta, a maker of medical devices, and Particle Sciences, a contract drug development and manufacturing organization. Lubrizol announced plans last week to invest $60 million to increase capacity and product capabilities in life sciences at several manufacturing sites. The investments are aimed at excipients, polymers, drug formulation, and medical device contract manufacturing. Expansions include a commercial drug product manufacturing line at the Particle Sciences site at Bethlehem, Pennsylvania, expected to be complete in the fourth quarter of this year.

Lubrizol's life science capabilities build on the company's formulation capability in urethane chemistry and Carbopol technology to develop materials for drug delivery systems, says Rick Tolin, president of Lubrizol's advanced materials business, "It could be a lotion, it could be a tablet, or it could be a polymer implant where you're delivering medicine at a controlled rate," he says.

Advanced materials growth overall will be aided by steps Lubrizol is taking to get more familiar with customer needs and moving beyond supply on ingredients. "We are working to better tie our molecules, synthesis and application development capability closer to end users," Tolin says. "In additives, it's about knowing engine requirements, but in advanced materials it's about the needs of human beings. We have 7 billion opportunities to try to come up with a formulation."

### Closer to the customer

One key initiative for Schnur is extending Lubrizol's reach down the value chain. The company often lacks a deep view into OEM, brand owner, and customer needs, Schnur says. "We don't have as much visibility into how the applications and end products are used [as we'd like]," Schnur says.

Lubrizol is working to develop a "fundamental understanding of customer and market behavior and customer needs," Schnur says. "It's not just a technology discussion, but also a conversation on ways to deliver on consumer needs."

It would aid R&D spending and efficiency, as well. "In most cases, if new products aren't successful it's not because we weren't able to deliver on the technology requirements. Most often, it's because we did not understand the market need that was driving us to start the work in the first place," Schnur says.

As CEO, Schnur hopes one of his key successes will be transforming Lubrizol's go-to market capability. "It's not a quantitative measure, but qualitatively we will know we're succeeding if major brands and OEMs are requesting that we meet with them. We've had some success moving from just supplying ingredients. Next, the big question is, can we get to a meaningful market opportunity discussion? We're better today than we were five years ago. But compared to where we need to get to, we've got a little ways to go," he says.

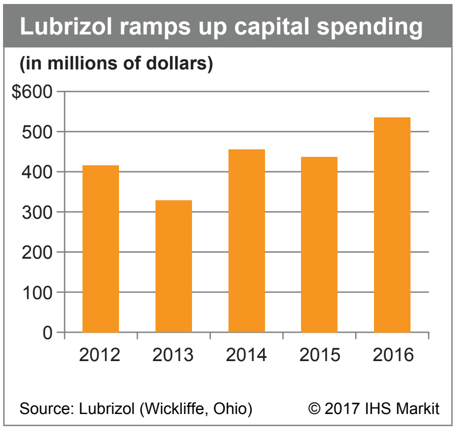
### Measuring performance

Schnur says not much changed in terms of the metrics that measure performance under Berkshire. "The main financial metrics that we look at are operating income and also return on assets," Schnur says. "You can get growth in operating income, but you'd better be doing it in an efficient way in terms of your investment." The company also tracks new product introductions and innovation closely.

The portfolio will continue its shift toward advanced materials. "Two-thirds of our business is lubricant additives and we're thankful for that. It's really a strong business. But five or ten years from now, it shouldn't be still be two-thirds of the company. Maybe life sciences will be as big as Lubrizol


**OUT OF THE PUBLIC GLARE:** Berkshire Hathaway continues to support capital investment, acquisitions.

additives is," Schnur says. Previous CEO Hambrick, who had served as CEO since 2002, and led the push to diversify beyond additives, had said that the long-term goal was a $10 billion company with sales split evenly between additives and specialty




chemicals. "It's a case of when not if we hit that target," Schnur says.

### Berkshire support

In an April town hall with Lubrizol employees in Ohio, Buffett said that Lubrizol was an important part of Berkshire's portfolio. "Lubrizol was our largest industrial operation up until the [2016] acquisition of Precision Castparts," Buffett told employees. "And it's a terrific business. It's big and I hope it gets bigger. I'd love to have five more [like Lubrizol], but they're very hard to find. Wonderful businesses are not scattered all over the landscape and they take decades to build."

Schnur says the company has fewer distractions to keep it from focusing on long-term strategy now that it is free from Wall Street's focus on quarter-to-quarter results. One of the key reasons Lubrizol agreed to the Berkshire buyout was frustration around the trading discount relative to specialty chemical peers despite significant operating income improvement in the years before the deal. "It's not that short-term performance is not important anymore. If we lose a piece of business or have a bad quarter somewhere, we will address it," Schnur says. "But Berkshire allows us to manage the company the way we think the company should be managed for the long term. That's a tremendous benefit."

The company does not report detail on operating income performance under Berkshire. Schnur says a 12-year streak of operating income gains was broken in 2016 and the company is determined to reverse that. "Most of the decline was because of oilfield chemicals, which we are addressing. But when you look at the rest of the business, the rate of growth is slow and depending on how closely you look at the bar chart, it's darn near flat. We have to get stronger income growth and be more intelligent about where we investing capital."

Improvement of the long term will come from being better able to innovate in spaces that are higher value. "That comes down to the need to improve our understanding of those end markets," Schnur says.

This approach aligns well with what will determine success for specialty chemical makers going forward, he adds. "If you're going to be a successful specialty chemical company, you have to continue to keep asking, how am I improving the lives of people using our product? And if you can't answer that question, then you are relying on somebody else to determine your fate. We'd rather determine that ourselves."