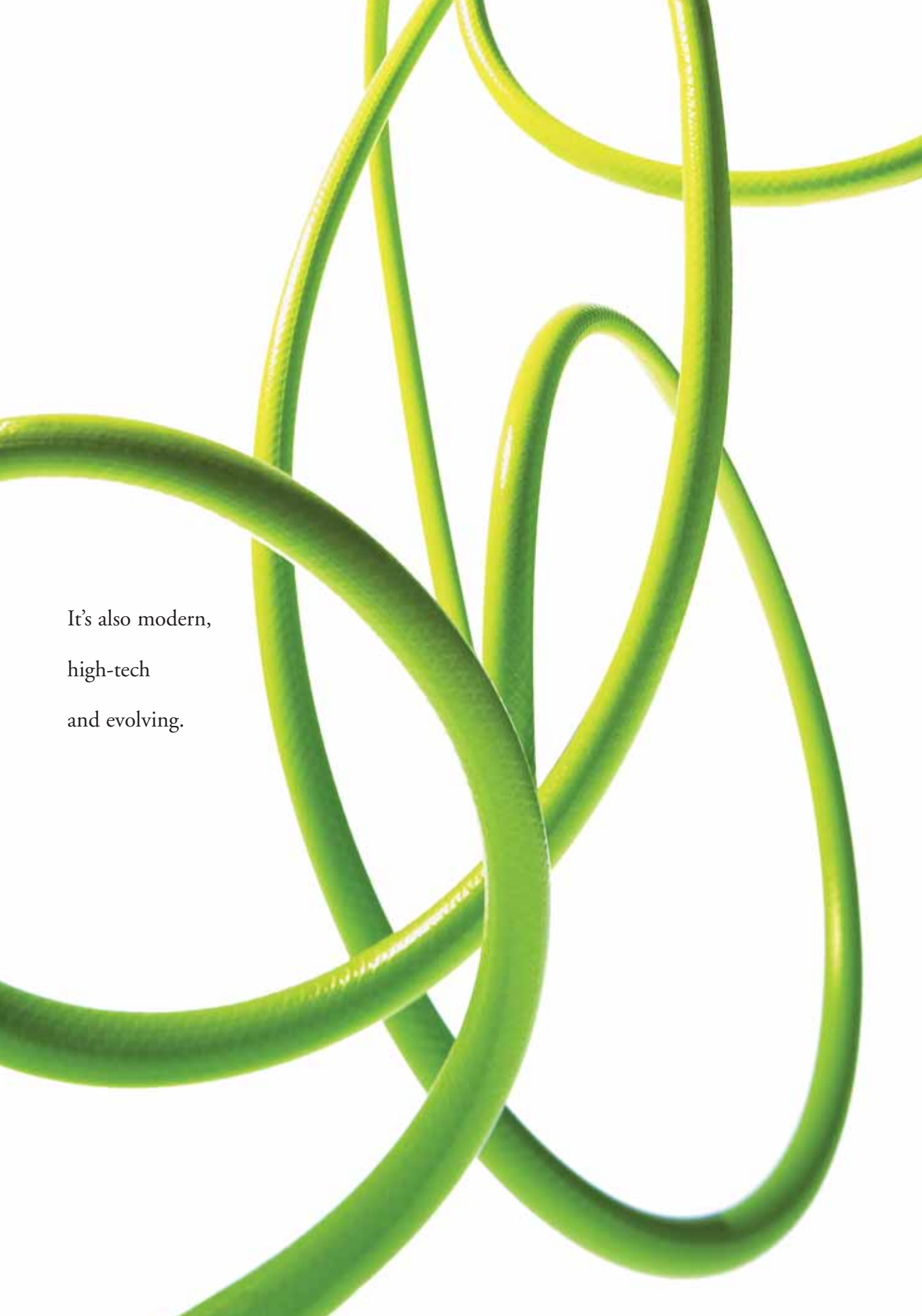




Coal *is* green.

Arch Coal, Inc. 2005 Annual Report and 2006 Proxy



It's also modern,
high-tech
and evolving.

Financial Summary

Year Ended December 31

(in millions, except per share data)

	2005	2004	2003
Reported tons sold	140.2	123.1	100.6
Revenues	\$2,508.8	\$1,907.2	\$1,435.5
Operating income	\$77.9	\$178.0	\$40.4
Operating income excluding special items*	\$92.5	\$88.9	\$17.6
Net income available to common shareholders	\$22.5	\$106.5	\$10.1
Net income available to common shareholders excluding special items*	\$62.3	\$45.9	(\$7.0)
Fully diluted earnings per common share (EPS)	\$0.35	\$1.78	\$0.19
Fully diluted EPS excluding special items*	\$0.87	\$0.81	(\$0.13)
Adjusted EBITDA	\$290.1	\$354.8	\$220.3
Adjusted EBITDA excluding special items*	\$304.8	\$265.6	\$197.5
Dividends declared per common share	\$0.3200	\$0.2975	\$0.2300

*Adjusted EBITDA and other non-GAAP measures are defined and reconciled on page II-87 of this report.

Arch Coal is the second largest U.S. coal producer. Our core business is providing U.S. power generators with clean-burning, low-sulfur coal for electric generation. Through our national network of mines, we supply the fuel for approximately 6% of the nation's electricity. We also are a recognized leader in mine safety and land reclamation. Arch Coal maintains its headquarters in St. Louis and our stock is traded on the New York Stock Exchange under the ticker symbol ACI. For more information, **visit us at www.archcoal.com.**

The Future *of* Energy.

Coal is the energy source that powers our world today...

and a fuel that will play an even greater role in our lives tomorrow.

Today's coal mines are engineering marvels...and they are becoming more automated and efficient all the time. Coal is the energy behind our Digital Age...and it could soon become a feedstock for transportation fuels, synthetic natural gas and even hydrogen. Coal is an increasingly clean resource...and the day of a near-zero-emission coal plant is drawing closer.



What does this mean for Arch Coal?

Arch is one of the world's largest coal companies and a producer of clean-burning, low-sulfur coal exclusively. With our strategic domestic reserves, modern mines and highly technical workforce, we are ideally positioned to meet America's growing demand for this invaluable energy resource.

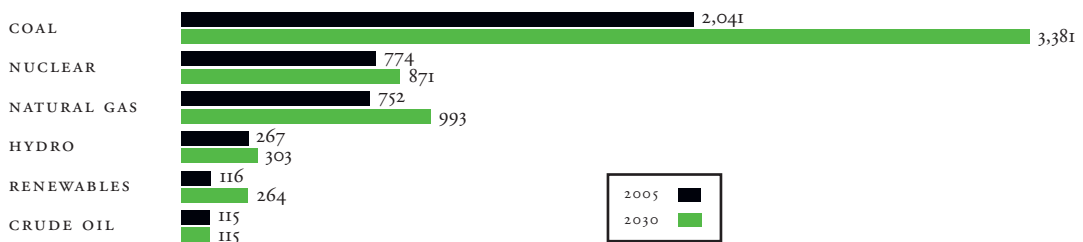
Coal *is* modern.



Arch's mines load nearly 40 miles of rail cars each day with clean-burning, low-sulfur coal bound for electric generating stations across the country. That's enough coal to power more than 20 million American homes.

THE U.S. GOVERNMENT PROJECTS THAT COAL WILL FUEL MOST NEW ELECTRICITY DEMAND OVER THE NEXT 25 YEARS.

(net generation by fuel type, in billions of megawatt-hours)



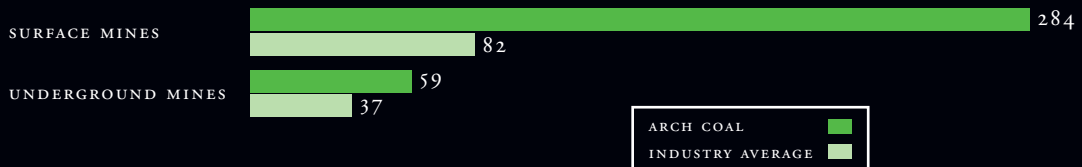
Our modern, diverse and increasingly digital economy runs on electricity from coal. Coal is responsible for approximately half of the electricity generated in the United States each year—and that percentage is expected to grow. Believe it or not, the average American used nearly 8,000 pounds of coal in 2005 alone—as the electricity that powered our air conditioners, iPods, high-speed computers and flat-screen TVs. The U.S. government estimates that America’s annual coal consumption will increase by more than 50%, or nearly 600 million tons, over the next 25 years. In fact, 135 new coal-based generating units are already on the drawing board.



Coal *is* high-tech.

ARCH'S LARGE AND MODERN MINES ARE AMONG THE MOST PRODUCTIVE IN THE UNITED STATES. *(sources: MSHA/Platts)*

Tons per employee-shift *(based on data published for trailing 12 months ending 9/30/05)*





Arch operates some of the largest and most technologically advanced mines in the world. These mines employ GPS-enhanced systems, nuclear coal analyzers and highly automated production equipment. The application of such technologies, along with our safety-driven culture, enabled Arch to achieve a lost-time incident rate that was four times better than the industry average in 2005. Arch's mines are also highly productive. Our surface mines produced an average of 250% more coal per employee-shift than the competition during 2005, while our underground mines were 50% more productive. During 2005, Arch was named one of *Business Week's* "Web Smart 50" and *CIO* magazine's "CIO 100" for the resourceful use of information technologies.

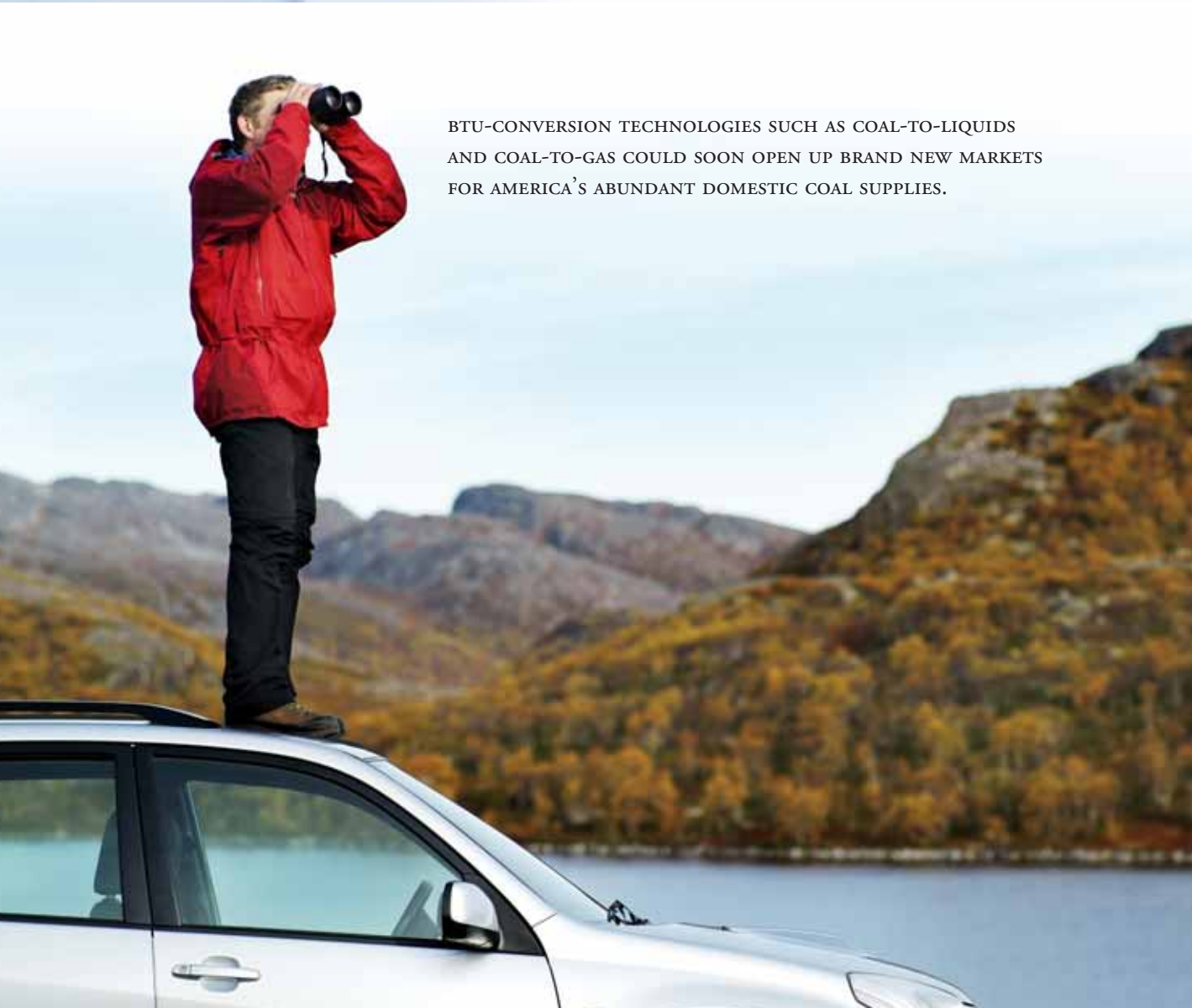


GPS-ENHANCED DISPATCH As just one example of our creative use of technology, we employ a GPS-enhanced dispatch system to streamline and optimize the efficiency of the entire 70-plus truck fleet at our Black Thunder mine.





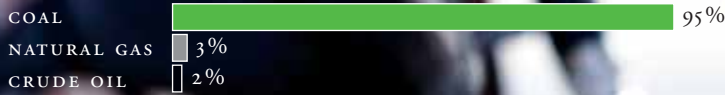
Coal *is* evolving.



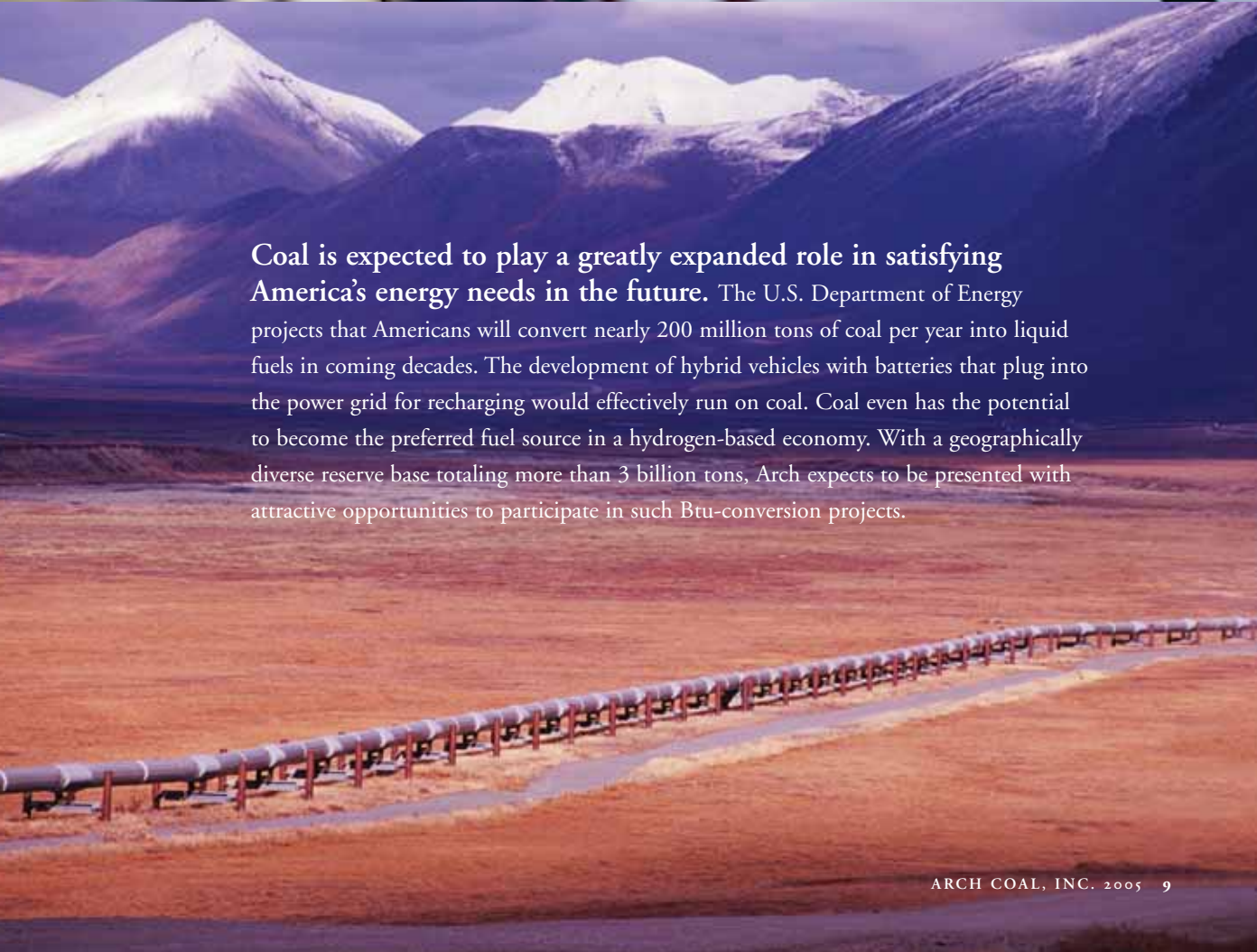
BTU-CONVERSION TECHNOLOGIES SUCH AS COAL-TO-LIQUIDS
AND COAL-TO-GAS COULD SOON OPEN UP BRAND NEW MARKETS
FOR AMERICA'S ABUNDANT DOMESTIC COAL SUPPLIES.



U.S. ENERGY RESOURCES (source: EIA)



Coal is expected to play a greatly expanded role in satisfying America's energy needs in the future. The U.S. Department of Energy projects that Americans will convert nearly 200 million tons of coal per year into liquid fuels in coming decades. The development of hybrid vehicles with batteries that plug into the power grid for recharging would effectively run on coal. Coal even has the potential to become the preferred fuel source in a hydrogen-based economy. With a geographically diverse reserve base totaling more than 3 billion tons, Arch expects to be presented with attractive opportunities to participate in such Btu-conversion projects.





Coal *is* green.

The increasingly clean use of coal has led to dramatic improvements in the quality of America's natural environment.

Since 1970, emissions from coal-fired power plants have declined by roughly one-third, despite a tripling in the use of coal for electric generation over that time frame. That progress is continuing. Moreover, new technologies such as coal gasification could result in a near-zero-emission coal plant by the end of the next decade. Great progress also is being made in the science of land reclamation. Nature thrives on our reclaimed mine sites, with highly productive soils, new water sources and abundant wildlife. Our subsidiaries have claimed the top national honor for land reclamation in each of the past two years, and the top honor in the state of West Virginia in each of the past four years.

THE VAST MAJORITY OF ARCH'S COAL RESERVES MEET THE MOST STRINGENT REQUIREMENTS OF THE **CLEAN AIR ACT** WITHOUT THE APPLICATION OF SCRUBBING TECHNOLOGY.





Arch produces 100% low-sulfur coal and is a leader in land reclamation. We have made select investments in technology companies seeking to make coal combustion cleaner and more efficient.





Dear Fellow Shareholders:

As this report highlights, there is indeed much about coal that the average American finds “surprising.” But soaring energy prices, geopolitical uncertainty and advances in combustion technology are making coal increasingly difficult to overlook. It appears that America is finally awakening to the tremendous potential of this abundant, reliable and cost-competitive fuel.

This awakening was certainly evident during 2005. Electric utilities broadcast plans to build dozens of new coal-fueled power plants over the next two decades. Congress passed strategic energy legislation aimed at boosting coal use and advancing clean coal technologies. Investment dollars began to flow into projects seeking to convert coal into synthetic natural gas, ultra-low-sulfur diesel fuel and even hydrogen.

In short, the drive to tap coal’s enormous potential is well underway. I’m pleased to report that Arch Coal—with its state-of-the-art mines, strategic reserve base and highly skilled workforce—is exceptionally well positioned to capitalize on coal’s resurgence.

GETTING READY

During 2005, we continued to ready ourselves for the exciting days ahead. We redoubled our focus on safety, environmental stewardship and shareholder value—and racked up a long list of accomplishments.

Among the highlights:

- We set a new safety record for the second consecutive year, with a lost-time incident rate approximately four times better than the industry average.
- We won the nation’s top honor for land reclamation for the second straight year—and the state of West Virginia’s top honor for the fourth straight year.
- We achieved a total return to shareholders of more than 120%, outperforming the average return for the S&P 500 for the sixth year in a row.
- We sharpened our focus in Central Appalachia through the sale of select assets—and reduced our legacy liabilities by more than \$500 million in the process.
- We moved ahead with major expansion projects in each of the nation’s three principal low-sulfur coal supply regions.
- We completed a reserve swap and asset sale at our Black Thunder mine that further enhanced the competitive position of that world-class operation.

These accomplishments and the countless other steps we have taken in recent years have placed Arch in an enviable position as we look to the future. We believe the stage is now set for a sustained period of upward momentum in revenues, earnings and cash flow for your company.

BOOMING ENERGY MARKETS AROUND THE GLOBE

Global energy markets encountered one disruption after another in 2005. Surging energy demand in China and India showed no signs of abating. Energy experts speculated that world oil production was nearing full capacity. Political tensions mounted in key oil-producing countries. Back-to-back hurricanes in the U.S. Gulf Coast reduced oil and gas output and demonstrated the fragility of America's offshore energy infrastructure.

These developments prompted utilities to do everything possible to maximize output at coal-fired power plants. As a result, coal use climbed nearly 3% during the year—with coal consumption outstripping production for the third consecutive year. Meanwhile, utilities pushed ahead with plans to expand the capacity of the U.S. coal-based fleet. More than 80 gigawatts of new coal-based capacity have been announced—a total that would increase the installed base by more than 25%. Such an expansion could ultimately translate into nearly 300 million tons of new coal demand.

The U.S. Department of Energy projects that coal demand will increase by nearly 600 million tons by 2030—and that coal's share of America's electricity requirements will climb to 57% compared to 50% today.

COAL'S VERSATILITY

But interest is also growing in putting coal to work in brand new ways. Coal-to-liquids facilities are making inroads in foreign markets, and interest is growing here at home as well. In its annual energy outlook, the U.S. Department of Energy projected that America would be converting nearly 200 million tons of annual coal production into transportation fuels within 25 years. That's a staggering figure—one with the potential to transform the marketplace for our product.

While such facilities won't spring up overnight, the potential is real. In fact, if oil continues to trade anywhere near current levels, that figure could prove to be conservative.

Through the leveraging of our large and highly strategic reserve base, Arch expects to be presented with attractive opportunities to participate in such conversion projects. Arch has already made select investments in companies seeking to make coal cleaner, more efficient and more valuable—and we continue to evaluate many other opportunities.

RAPIDLY IMPROVING PROSPECTS

Since the beginning of 2004, coal prices have risen dramatically—doubling in most U.S. supply basins and tripling in some. Because Arch sells most of its production under longer-term contracts, we have yet to fully benefit from this trend. That will soon change. Over the next three years, the vast majority of our sales contracts will expire. If coal markets remain strong, the roll-off of these contracts should have a very positive impact on our bottom line.

GROWING DELIBERATELY

Internal growth projects represent another source of future value creation. Arch has spent the past 10 years aggregating one of the industry's largest and most strategic reserve bases—picking up most of our assets at some of the lowest points in the energy cycle. As a result, we are uniquely positioned to respond to booming coal demand.

In the past two years, we have launched plans to expand our capacity in each of the nation's leading low-sulfur coal basins. In the Powder River Basin, the nation's fastest growing coal supply region, we are well on our way to restarting the Coal Creek mine at a targeted annual production level of 15 million tons. In the Western Bituminous Region of Utah and Colorado, where Arch is the market leader, we are installing a longwall mine at the Skyline complex that will boost production in that supply-constrained region by 3 million tons. In Central Appalachia, we are developing the 8-million-ton-per-year Mountain Laurel mining complex, which we expect to become the centerpiece of our operations in the region for many years to come.

THE INDUSTRY'S STRONGEST BALANCE SHEET

During 2005, Arch disposed of select non-strategic assets in Central Appalachia that sharpened our focus in that region, unlocked the value of those assets, and greatly strengthened our balance sheet. In the process, we reduced our total legacy liabilities by nearly 60%—ending the year with just \$285 million of post-retirement medical, workers' compensation and reclamation liabilities. That total is a small fraction of the liabilities carried by most major coal companies.

We also streamlined our capital structure during 2005 by inducing the conversion of 95% of our preferred shares into common stock—a move that will reduce our future fixed dividend obligations and improve our credit standing. At present, our net debt to total capitalization ratio stands at approximately 38%—down nearly 50 percentage points when compared to the same period five years ago.

We believe our balance sheet differentiates us from virtually every other U.S. coal company—and provides us with the financial flexibility to capitalize on new opportunities that may arise in a marketplace that is bursting with potential.

OUR NO. 1 PRIORITY

Without question, I am most proud of our record safety performance during 2005.

The lost-time incident rate at Arch's mines declined by 37%—to 0.88 incidents per 200,000 hours worked. That's approximately four times better than the industry average—and a rate that would rank among the very best of all of America's heavy industries.

Working safely is a core value at Arch Coal—one that permeates every aspect of our corporate culture. Our No. 1 priority at the start of every day is to make sure that every employee goes home safe and healthy when their work day is done. The tragic events in the U.S. coal mining industry during the first weeks of 2006 have further strengthened our resolve. We won't be satisfied until we achieve a perfect safety record at every one of our mines, each and every year.

CREATING FUTURE VALUE

With other fuels faltering, coal is quickly moving to center stage in global energy markets. We have been preparing for this moment for more than a decade, and we are ready to make the most of it.

Through the hard work and dedication of the entire Arch Coal team, we have built a very advantageous position. Our strategy of focusing on the lowest-sulfur coals has put us in the market's sweet spot. Our aggressive growth initiatives during the trough of the last energy cycle are paying off. Our emphasis on employing the most advanced technologies has made us one of the industry's most efficient miners. Our tremendously talented workforce is achieving productivity rates that are vastly superior to most of our competitors.

As we look ahead, we will continue to build our future on the three pillars of safety, environmental stewardship and shareholder value. We are convinced that these core values hold the key to long-term success in our industry, and we plan to pursue them in an unwavering fashion. We are confident that there are great days ahead for your company, and we appreciate your continuing support.

Arch Coal *is* ready.

Sincerely,



Steven F. Leer, *President and Chief Executive Officer*

MARCH 10, 2006

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