1-2014

Chesapeake Energy Corporation

Brian Blaylock

David Earle

Danielle Smith

Jeffrey S. Harrison
University of Richmond, harrison@richmond.edu

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January 2014

Written by Brian Blaylock, David Earle, Danielle Smith, and Jeffrey S. Harrison at the Robins School of Business, University of Richmond.

In 2012, Chesapeake Energy Corporation, the second largest producer of natural gas in the United States, found itself at a turning point. Not only did its co-founder and long-time CEO, Aubrey K. McClendon, agree to retire in the midst of corporate governance concerns, but the company was forced to overhaul its strategic direction in effort to combat the company's growing debt levels and the lowest natural gas prices in over a decade. To make matters worse, the company posted net losses of $769 million in 2012 due to high operating expenses while in the midst of a national debate over the environmental implications of hydraulic fracturing (see Exhibit 1 for financials). As a result, much uncertainty swirled around the future of the company: How would the new leadership shape Chesapeake's strategic direction in order to recover from its recent setbacks?[1]

OIL AND NATURAL GAS INDUSTRY OVERVIEW

The oil and gas industry has its origin in the mid-nineteenth century from the demand for lamp oil. Oil for lamps at the time was provided by whales, which had a declining population due to overfishing. Needing a new source for fuel, entrepreneurs in the Northeast United States realized that kerosene, a by-product of petroleum, could be produced by expanding the petroleum ground seepages that were present in the area. In 1859, oil was struck in Titusville, Pennsylvania in a process that mirrored how wells pumped water from the ground. The first oil boom was born; however, it did not last due to a major change in technology. Thomas Edison perfected the electric light bulb, making fuel lamps obsolete. Fortunately for the oil industry, technology would once again intervene, driving the demand for petroleum to all-time highs. With the recent invention of the automobile, gasoline, another by-product of petroleum, soon outpaced kerosene.[2]

Today the industry is composed of companies that extract hydrocarbon liquids and natural gas from the earth.[3] The industry is classified into three distinct segments, with some firms choosing to specialize in one area while others operate in all three. Upstream operations involve the exploration and production of hydrocarbons and gas. Midstream operations are concerned with the transportation, storage and trading of hydrocarbons. Downstream operations focus on the refining and marketing of crude oil.[4] Projected U.S. energy consumption and expenditures by segment can be seen in Charts 1-3.

Upstream

The exploration and production of hydrocarbons is a capital-intensive process that takes years to achieve. Exploration involves locating oil and/or natural gas in the earth by geologists and geophysicists. The untapped oil and gas is referred to as a reserve. Drilling occurs once reserves are tapped into. Drilling can be viewed as a test stage to determine if there is enough accessible oil or gas in the reserve to engage in a commercial operation. The completion stage occurs if it is determined that a commercial operation should commence. At this stage, steel and cement are used to line drill holes so that they do not collapse, while a steel tube is placed in the drill hole to transport the oil or gas. These costs represent the second greatest expense in the drilling phase after payments to contract drillers. The final stage in upstream operations is known as "lifting". Lifting involves bringing the oil or gas to the surface. The method of lifting depends on what is being produced and what type of geological formation is present. Globally, upstream operations tend to be heavily influenced by state-owned companies due to land claims.[5]

Midstream

Once oil or gas is brought to surface it must be refined. Midstream operations are concerned with the activity between production and refinement. The two primary methods of transportation of oil and gas are tankers and pipelines. Tankers refer to ships that transport oil or liquefied natural gas (LNG) internationally through waterways. Tankers are an unregulated market with independent ship owners making up a majority of the market. Meanwhile, pipelines transport oil and gas across land. Within the United States, interstate pipelines are regulated by the Federal Energy Regulatory Commission (FERC). Pipelines tend to be owned by major oil companies, but smaller independent operators also participate. Storage facilities, such as terminals, ship bunkers, refinery tanks and salt caverns (for natural gas) play a critical role in managing variations in supply and demand. Storage facilities may be owned by governments or oil companies.[6]

Downstream

Downstream operations consist of refining and marketing. Crude oil can be refined into many different by-products, such as gasoline, kerosene, heating oil, jet fuel, solvents and plastics, and asphalt. By-products are produced from a crude distillation tower that can alter its pressure and temperature to induce the different boiling points needed for each by-product. Gasoline is the most prevalent product produced by refinement. Gasoline can be sold to independent gas stations or gas stations owned by the refiner. Natural gas distributers deliver their product through their own distribution facilities that are supplied by transmission pipelines.[7]

CHESAPEAKE ENERGY ORIGINS

Founded in 1989 by Aubrey McClendon and Tom Ward, Chesapeake Energy is headquartered in Oklahoma City, Oklahoma. In the beginning, the company's initial focus was on natural gas exploration and production using innovative horizontal drilling technology. Much of the company's initial success was attributed to this "growth through the drill bit" strategy which involved purchasing large leaseholds in Oklahoma and Texas to conduct exploratory drilling and develop new wells. After much success, the firm went public in 1993 and completed an IPO to fund future growth. Despite commodity price declines in the late 1990s, the firm rebounded in 2000 under a new acquisition driven strategy.[8]

Under its leasehold acquisition strategy, Chesapeake Energy grew exponentially through the acquisition and development of unconventional natural gas and oil reserves onshore in the U.S. Exhibit 2 contains a description of key Chesapeake acquisitions and joint ventures throughout the company's acquisition phase. As of 2012, Chesapeake was the most active driller in the United States, with over 45,000 oil and natural gas wells, mostly in the Haynesville/Bossier Shales in northwest Louisiana and Eastern Texas, the Marcellus Shale in the northern Appalachian Basin of West Virginia and Pennsylvania, and the Barnett Shale in the Fort Worth Basin of north-central Texas. See Exhibit 3 for a map of Chesapeake's drilling operations.[9]

In spite of a decline in 2009 due to the global recession and weakened demand for oil and natural gas, Chesapeake has still experienced fairly steady revenue growth over the past several years. However, despite this growth, the company has run up heavy debts due to the high costs associated with the company's aggressive acquisition program and low natural gas prices. In 2012, Chesapeake reported a debt to equity ratio of 81.98%, up from 64.78% the previous year. As a result, the company has re-focused its drilling efforts and has significantly curtailed its acquisition strategy.[10,11]

Today, Chesapeake provides natural gas, oil, and liquids for energy to a variety of customers throughout its vertically integrated businesses. It has six key operating segments in exploration, production, marketing, gathering, compression, and oilfield services.[12] Chesapeake is the 2nd largest producer of natural gas in the United States, as seen in Chart 4. However, Chesapeake Energy's increased focus on oil and natural gas liquids (NGL) has been at the expense of its traditional natural gas business. Less than 15% of Chesapeake's total 2013 drilling and completion capital expenditures are in the gas division. This drilling is focused in four areas; the Barnett shale, the Bossier Shale, the Haynesville Shale, and the Marcellus shale.[13]

CHESAPEAKE'S MISSION AND STRATEGIES

Chesapeake's goal is to "create value for investors by building and developing one of the largest onshore natural gas and liquids-rich resource bases in the United States".[14] With the company's CEO retiring in 2013 and stock declines, as seen in Chart 5, Chesapeake's management and Board of Directors announced three key strategies that will help the company continue its strong operational performance while improving its financial position. These initiatives are to divest non-core assets, drill the "core of the core" and shift production towards natural gas liquids.[15]

Selling Non-Core Assets

To improve its financial returns and pay off debt, Chesapeake Energy is streamlining its operations and executing an asset sales program primarily targeting non-core assets. In an effort to execute this strategy and free up capital, the company sold off significant midstream assets for $4.9 billion in 2012 and 2013 as well as selling significant assets in the Permian Basin in 2012.[16] In total, Chesapeake sold approximately $12 billion of assets in 2012 with another $4 to $7 billion in asset sales expected by the end of 2013. [17]

Key upstream asset sales in 2013 included a strategic joint venture with Sinopec for approximately $1 billion, representing 50% of Chesapeake's interest in 850,000 acres at the Mississippi Lime play. Additionally, assets in both the Eagle Ford Shale and Haynesville Shale were sold to EXCO Operating Company, LP for $617 million and $257 million respectively. Not only is divesting non-core assets providing the company with much-needed capital, but this strategy also aligns with Chesapeake's second strategy, "drilling the core of the core", which aims to focus money and resources on core natural gas and oil assets.

"Drilling the Core of the Core"

From 2000 to 2007 Chesapeake experienced significant growth through rapid expansion via acquisition. Under the "drilling the core of the core" strategy, Chesapeake will reduce its leasehold acquisition program and will begin to realize the benefits of these investments by developing its extensive existing acreage. Already, Chesapeake has spent approximately 50% less on new leaseholds in 2012 and is expecting to spend approximately 75% less in 2013.[18] Instead, Chesapeake plans to focus its efforts on developing assets in which the company has top ownership positions. With the proceeds from the sales of the non-core assets, Chesapeake has begun focusing on its core by expanding its horizontal drilling operations and investing in infrastructure, oilfield services and seismic data/technology. Delivering on this strategy will allow the company to drill wells more efficiently and at a lower cost.[19]

Shift to Liquids

With decreasing natural gas prices, Chesapeake Energy has shifted its strategic direction towards oil and natural gas liquids (NGLs) or, simply, liquids. The company has allocated a significant portion of its technological and leasehold acquisition knowledge towards identifying, securing and producing new unconventional liquid-rich plays. Chesapeake has already acquired and established leading positions in many liquids-rich resource plays including the Eagle Ford Shale in Texas, the Utica Shale in Ohio and the Niobara Shale in Wyoming.[20]

Chesapeake is currently number eleven nationally in the production of liquids. In 2012, liquids production increased by 54% over the prior year, based on the success of its new liquid rich plays. Production from the liquid plays generates the strongest financial returns for the company due to differences between liquids and natural gas prices. As a result, in 2012 and continuing into 2013, almost 85% of drilling and completion expenditures will be dedicated to liquids development in hopes to continue to increase liquids production. In 2013 the company projects that liquids will account for more than 25% of production and almost 60% of natural gas, oil and NGL revenue. Ultimately, the company's goal is to build a more balanced portfolio between natural gas and liquids in an effort to help improve financial performance.[21]

CORPORATE GOVERNANCE CHALLENGES

A series of corporate scandals related to the management team at Chesapeake negatively impacted the company's stock price and shareholder confidence. Corporate governance concerns focused on then CEO and Chairman Aubrey McClendon. In 2008, McClendon received a special bonus approved by the board of directors that helped him offset a margin call. The company also purchased a rare map collection from McClendon during a time of financial trouble for the CEO. Furthermore, it was revealed that McClendon was borrowing billions of dollars using Chesapeake wells as collateral.[22]

A shareholder group initiated a lawsuit over the matter of the vintage maps, which were purchased from McClendon by the company for a reported $12.1 million. The maps were on display at the company headquarters, and reasons for the sale to the company and the method for valuation were not clear. Based on the negative shareholder reaction, McClendon agreed to

purchase the maps back from the company to settle the issue, but as of April 2012 that had not occurred.

In April 2012, it came to light that McClendon had borrowed between $1.1 and $1.4 billion against investments in company wells. These loans were used by McClendon to pay for his personal stake in every company well that was drilled. This unusual arrangement with the company allowed him to have a personal investment of up to 2.5% in new wells, but he had to pay for his share. This agreement was put into place in 1993 when the company was drilling only 20 to 25 wells per year. By 2011 the number of new wells had increased to over 1,700 wells, resulting in a cost of investment to McClendon of $457M. Shareholders were upset with Chesapeake because the company was not fully transparent about the arrangement.

With the exposure of McClendon's loans there was an appearance of potentially questionable financial deals between the CEO and a variety of financial institutions that had favorable dealings with Chesapeake. Several banks that lent McClendon money received lucrative work as advisors, consultants or underwriters for Chesapeake. [23]

Board of Directors

The corporate governance issues at Chesapeake led to a shakeup in the Board of Directors in 2012, which was prompted by Chesapeake's two largest shareholders looking to move the company in a new direction. Southeastern Asset Management, Chesapeake Energy's largest shareholder with a 13.9% ownership interest, nominated a new Chairman of the board and two other new board members. The second largest shareholder for the company, Carl Icahn, with a 7.6% stake, also nominated a new board member. Both shareholders were looking for a change based on company performance and the appearance of impropriety by Aubrey McClendon.[24]

As a result, in June 2012 Archie Dunham, the former Chairman of ConocoPhillips and former CEO of Conoco, was appointed Chairman of the Board. McClendon would ultimately step down as CEO a year later. Dunham's arrival was a catalyst in the strategic shift away from acquisitions and underperforming assets and towards the development of the company's core.[25]

Along with Dunham, the board appointed four other new members: Bob Alexander, Brad Martin, Frederic Poses, and Vincent Intrieri. Since then, the board has seen additional changes with incoming CEO Robert Lawler joining in June 2013, and Louis Raspino and Thomas Ryan joining in March and May 2013, respectively. Only one member of the board remains from prior to June 2012, Merrill Miller.[26]

Top Management

Current CEO Doug Lawler came to Chesapeake with 25 years of experience in the upstream exploration and production industry. Lawler had held multiple leadership roles at Anadarko, a major player in the upstream exploration industry, with a $45 billion market capitalization.[27] Lawler collects an annual salary of $1.25M and is eligible for an annual bonus between 150% and 300% of his salary, based on achievement of certain targets and goals. In addition, he receives annual equity compensation equal to fair value of $10.5M.[28]

Like the board, top management at Chesapeake went through an overhaul due to the changes at the CEO level. A few significant holdovers from the prior management team were retained to keep a consistent approach and corporate knowledge base in place during the transitional time period. Many new faces joined the top executive team in the six months after appointment of the new CEO.[29]

OIL AND NATURAL GAS INDUSTRY TRENDS

Natural Gas Development and Pricing

The past few years have seen a major boom in the development of natural gas properties. U.S. natural gas production grew 7.9% and 4.6% in 2011 and 2012, respectfully. This growth can be attributed to the discovery of large natural gas reserves in shale formations across the U.S., advancements in horizontal drilling and hydraulic fracturing, and natural gas's more environmentally friendly clean burning characteristics.[30] Shale gas production, as a percent of total natural gas production in the U.S., increased from 7% in 2007 to 44% in 2012. This drastic increase in production, coupled with weak demand due to a mild winter, led natural gas prices to hit a ten-year low in 2012.[31]

The price of natural gas is influenced by supply and demand dynamics, global economic conditions, government regulations, global military and political matters, and even the weather.[32] Historically, natural gas prices are volatile, as seen in Chart 6. Natural gas prices were on the rise until the middle of 2008 due to declining gas reserves, greenhouse gas concerns, and fuel price increases. The global recession in 2008 caused all energy prices to drop, including natural gas. Natural gas tends to create downward price pressures due to constant oversupply. Oversupply occurs in the market from the risk of shutting off wells. Once wells are shut-off there is no guarantee that the natural gas reserve can be recovered, leading producers to generate stockpiles in gas. This oversupply led to less recovery in natural gas prices as the economy recovered because producers sold off their stockpiles.

Due to imbalances in supply and demand, some natural gas producers cut back on production to decrease supply. In May 2013, there were only 353 active rigs in the U.S., compared to 1,585 rigs in September 2008. Major gas producers, such as Chesapeake Energy and ConocoPhillips, also slashed capital expenditure spending for dry gas drilling.[33] Natural gas reserves by company are depicted in Chart 7.

Technological Advances

The early 2000's saw rapid innovation in the oil and gas industry, especially in upstream exploration. Satellite imaging and 3-D surveys, focusing on offshore exploration, have led to new reserve discoveries.[34] Horizontal drilling and hydraulic fracturing have turned once economically infeasible reserves into viable drilling options.[35] Hydraulic fracturing is the pumping of high-pressure water, sand and additives into cracks within shale formations to expand and capture deep natural gas and/or oil deposits.[36] Also, new drilling technologies allow firms to tap into "stacked" shale layers which allow companies to utilize existing infrastructure

to access untapped reserves.[37] The Energy Information Administration (EIA) has shown that U.S. Shale producers are becoming more efficient by drilling bigger and faster wells. Oil and gas output per well was 28% higher in September 2013 than the previous year. Sam Gorgen of the EIA explains, "The technology is getting better and companies are moving up the learning curve."[38]

Demand for cleaner and more efficient automobiles, airplanes and power generation has led to new technologies, such as hybrid cars, which will decrease demand for gasoline.[39] One example of this is the adoption of commercial truck fleets with compressed natural gas. Companies, such as Lowe's, Procter & Gamble and United Parcel Service, have begun accelerating their switch to natural gas with new engine technology. It was estimated that 5% of all long-distance trucks sold in 2014 would use natural gas compared to only 1% in 2013. The shift is expected to continue due to the cost savings that natural gas maintains over diesel fuel. The widespread adoption of commercial gas engines will depend on whether the price gap between diesel-fueled and natural-gas powered trucks declines (in 2013 it was a $40,000 difference) and whether the number of natural gas fueling stations increases.[40]

Shift from Gas to Liquid Drilling

Higher crude oil and natural gas liquids (NGL) prices led to an industry shift to focus on liquid exploration to achieve higher margins. Although natural gas interest remains relatively strong, the shift in the industry is evidenced by the natural gas firms' disposal of natural gas assets and increased capital spending on liquids. Industry capital investment in liquids increased roughly 20% in 2012 and was forecasted to increase 10% in 2013.[41] Increased oil prices also had an effect on downstream operations, causing margins in refinement to narrow, leading to the shutdown of some refineries.[42] Evolving product demand led to the permanent closure of some less efficient and flexible refineries as companies looked to increase refinery utilization rates in 2011.[43]

Increased Upstream Costs Spark Rush for Unconventional Reserves

As of 2013, upstream costs were rising in the industry due to cost pressures on equipment and labor. Furthermore, there have been increased taxes and royalty rates. Increased government control of energy resources has made it harder for upstream operators to access energy reserves, therefore limiting growth. Upstream operators have turned to developing unconventional reserve prospects for growth. These prospects include shale fields, such as the Eagle Ford Shale, that have higher liquid gas than traditional fields and Canadian oil sands.[44] Oil sands are a mixture of clay, water and bitumen, a substance that can be converted to gasoline.[45]

Greenhouse Gas Concerns Demand Alternatives to Fossil Fuels

Sunlight that reflects off of Earth's surface becomes infrared radiation as it heats the Earth's atmosphere. Greenhouse gases absorb this radiation and trap the heat in the atmosphere instead of allowing the radiation to travel to space. Greenhouse gases have increased 25% in the past 150 years. In the past 20 years, 75% of all man-made carbon dioxide emissions came from coal, oil and natural gas (ordered by highest carbon content). The greatest concern with greenhouse

gases is that they will cause the Earth's temperature to continue to rise, leading to radical changes in weather and sea levels. Concerns over greenhouse gases have led to increased interest in alternatives to fossil fuels. These alternatives include nuclear energy as well as renewable energy sources, such as hydroelectric, solar, wind and geothermal. As of 2011, alternative energy sources only contributed to 8% of the world's energy consumption since most are not cost-competitive with fossil fuel. New technologies could eliminate cost differences, leading to growth in alternatives. ExxonMobil has estimated renewable energy consumption growth at 7.8% per year from 2010-2040.[46]

"Fracking"

Hydraulic fracturing (fracking) has allowed companies to tap into reserves once deemed off-limits. Some of these reserves are in the backyards of Americans. Over fifteen million people in the United States live less than a mile from a well that has been drilled since 2000. Well encroachment close to homeowners' land has caused new issues to arise in the industry. Complaints about noise, traffic and environmental consequences have grown as exploration gets closer to residential properties. Wells drilled on properties owned by residents or close to residents have led companies to pay royalty checks to affected residents. In 2012 royalty checks amounted to over $500 million dollars for the industry.[47] Because fracking can occur in so may places with known reserves, and is a relatively lower risk and less expensive technology, many smaller competitors are entering the sector.

Fracking is one of the most debated topics in the United States energy landscape. Environmentalists claim that hydraulic fracturing can pollute groundwater, release air pollution into the atmosphere and cause tremors in the Earth. In April 2012, the EPA released new regulations enforced by the existing Clean Air Act on companies using fracturing, requiring them to implement green completion technologies by 2015. This regulation was seen as a win for the oil and gas sector since it did not introduce any punitive regulations or alter operations significantly, and most companies already use the technologies. The fracking debate is far from over. Environmentalists may bring legal actions against the EPA for their ruling related to emissions. Also, the tremor debate has increased with an U.S. Geological Survey that showed tremor activity in the Midwest increased to 134 instances in 2011 from 21 in 2000.[48]

U.S. Energy Regulation

Due to its nature, the oil and natural gas industry is subject to strict and complex federal, state and local regulations in an effort to protect human health and safety, the environment and natural resources. As such, it is imperative for companies to stay abreast of the ever-changing regulatory environment to ensure compliance with standards and guidelines related to natural gas and oil production, processing, transmission and storage. Companies in this industry need to pay particular attention to requirements related to air emissions, water discharges, hydraulic fracturing and global warming.

One of the main regulatory bodies is the Environmental Protection Agency of the United Stated (EPA), which is in charge of enforcing environmental regulations passed by Congress. Most recently, in 2012, the EPA released an updated set of standards, known as the New Source Performance Standards (NSPS), impacting firms operating in the oil and natural gas industry.

These updates include rules requiring companies to limit and capture natural gas emissions that escape when hydraulically fractured wells are prepared for production. The capturing process, also known as "green completion", aims at reducing emissions from smog-forming volatile organic compounds that pollute the environment and cause potential health problems. Although implementing the equipment and technology needed for green completion costs time and money, overall the rules are deemed cost effective. The projected revenues from the recovered, or captured, natural gas are expected to offset the implementation costs.[49]

In addition to the updated NSPS, the EPA is also responsible for enforcing other federal regulations that impact the natural gas and oil industry. These include the Clean Air Act, which regulates emissions of air pollutants and the Clean Water Act, which places strict controls on the release of pollutants into bodies of waters. The EPA also promotes its Natural Gas STAR program that encourages oil and natural gas companies to implement proven, cost-effective technologies and practices that enhance operational efficiency and diminish methane emissions.

Public pressure for increased oversight on drilling operations increased with the Deepwater Horizon oil spill in the Gulf of Mexico in April 2010. The U.S. House of Representatives went as far as passing legislation that would remove a $75 million liability cap on oil spills, prevent companies with poor safety records from bidding on oil and gas leases and create three new government agencies to oversee energy exploration. However, this legislation was not enacted due to U.S. Senate rejection.[50] Some Senate members had also proposed to limit carbon emission by allowing the Environmental Protection Agency (EPA) to sell carbon allowances. This proposal was also defeated.[51] These types of legislation, if passed, could drastically alter how oil and gas firms operate in the United States. However, due to government gridlock major energy legislation is hard to pass.[52]

COMPETITION

ExxonMobil

ExxonMobil operates in all three market segments as well as in petrochemicals and chemical operations. The company has U.S. domestic oil and gas production market shares of 5% and 9%, respectfully. In 2012, the firm had U.S. liquids production of 418,000 barrels/day (b/d) and U.S. gas production of 42.0 billion cubic centimeters (bcm). ExxonMobil has an even greater presence in the downstream segment, with 11% of all crude distillation capacity at 1,951,000 b/d in 2012. Exxon had roughly 10,000 retail outlets by the end of 2010. The company's strategy has been very shareholder focused, as seen through its commitment to engage in share buy-back programs. In 2011 ExxonMobil signed a cooperation agreement with Rosneft, Russia's leading oil company, to participate in joint exploration and development of hydrocarbons across the world. The firm has also partnered with ConnocoPhillips, BP and TransCanada in the Alaska Pipeline Project, which focuses on next generation Alaska resource development. The firm's most significant upstream assets are located in Texas, Lousiana, Arkansas, Oklahama, Pennsylvania, Montana, North Dakota and the Gulf of Mexico.[53]

Chevron

In 2012, Chevron was the third largest hydrocarbon producer in the U.S. The firm had U.S. oil production of 455,000 b/d and gas production of 12.4bcm. With the opening of the Pascagoula, Mississippi refinery in 2013 Chevron became the largest premium based oil supplier. As of 2012, Chevron's refinery capacity stood at 955,000 b/d. Chevron's 50% ownership of Chevron Phillips Chemical also makes it one of the world's largest chemical producers. The firm also had roughly 9,000 retail outlet stations in 2012. Chevron's major U.S. operations occur in California, Colorado, Michigan, New Mexico, Ohio, Oklahoma, Texas, Wyoming, Alaska, the Appalachian Basin and the Gulf of Mexico. The firm is one of the larger operators in the Gulf of Mexico and continues to take part in deep water exploration, as evidenced by the three exploratory wells it established in 2012. In 2011, Chevron acquired Atlas Energy to increase its presence in U.S. shale gas. This acquisition also generated a closer relationship with Indian company Reliance Industries, who had a previous partnership with Atlas. Chevron leadership has stated that 90% of its 2013 spending will occur in crude oil operations and natural gas exploration.[54]

BP America

BP also operates in all three market segments in the U.S. In 2012, the firm had domestic oil production of 390,000 b/d and gas production of 17.1 bcm. The firm had U.S. refining capacity of 993,000 b/d and has roughly 11,000 retail service stations. BP is the largest leaseholder in the Gulf of Mexico and is also the largest oil producer in Alaska. BP Pipelines North America is the second largest pipeline operator in the United States. BP has recently engaged in selling off some midstream and downstream assets to smaller competitors. These include the sale of a California refinery and 800 retail stations to Tesoro and a Texas refinery and natural gas liquid pipelines to Marathon Petroleum. BP has decided to focus on investment in higher margin upstream exploration projects. Investment in downstream operations will focus on upgrading more flexible refineries that can refine different ranges of crude oil.[55]

ConocoPhillips

With the spin-off of its downstream business (Phillips 66) to shareholders, ConocoPhillips focused on exploration and production. This was part of the firm's strategic plan to focus on portfolio returns and returning value to the shareholder. The firm had U.S. oil production of 363,000 b/d in 2012 and gas production of 16.7 bcm in 2011.[56]

Anadarko

Anadarko focuses on net asset value by accelerating production and reserve growth through proven hydrocarbon basins. The firm attempts to maintain a 50-50 split between natural gas and liquid production. The firm achieved record sales growth in 2012 attributed to its U.S. onshore holdings. The firm is active in the southern U.S. and Appalachian shale deposits, along with the Gulf of Mexico. The firm has also increased its exploration opportunities in Africa, Colombia and China. The firm had U.S. oil production of 151,000 b/d in 2012 and gas production of 25.9 bcm.[57]

NEXT STEPS FOR CHESAPEAKE

Lawler and his team have a lot on their plates, as they need to address and consider a number of important issues heading into the future. They must determine if the company's dramatic shift in strategy is sustainable over the long term. Given the extreme volatility in the natural gas business, should Chesapeake reduce its size in order to build up its liquids production? Does Chesapeake risk losing its advantage as a top natural gas and oil producer by selling off its vast leaseholds? How might the national debate over hydraulic fracturing and subsequent government regulations impact Chesapeake's drilling operations? How can the company reduce its risk from potential changes in global demand or supply of oil and gas, and the introduction of cheaper alternative energy sources? How can the company rebuild its reputation after the scandal associated with their last CEO? These are just a few of the key questions Lawler and his management team need to address as they re-position Chesapeake for the future.

Exhibit 1 – Chesapeake Financial Statements

Income Statement - $ in Millions

	Years Ended December 31,		
Revenues:	**2012**	**2011**	**2010**
Natural gas, oil and NGL	$ 6,278	$ 6,024	$ 5,647
Marketing, gathering and compression	5,431	5,090	3,479
Oilfield services	607	521	240
Total Revenues	**12,316**	**11,635**	**9,366**
Operating Expenses:			
Natural gas, oil and NGL production	1,304	1,073	893
Production taxes	188	192	157
Marketing, gathering and compression	5,312	4,967	3,352
Oilfield services	465	402	208
General and administrative	535	548	453
Natural gas, oil, and NGL Depreciation, depletion and amortizatio	2,507	1,632	1,394
Depreciation and amortization of other assets	304	291	220
Impairment of natural gas and oil properties	3,315	-	-
Net gains on sales of fixed assets	(267)	(437)	(137)
Impairments of fixed assets and other	340	46	21
Employee retirement and other termination benefits	7	-	-
Total Operating Expenses	**14,010**	**8,714**	**6,561**
Income (loss) from operations	**(1,694)**	**2,921**	**2,805**
Other Income (Expense)			
Interest Expense	(77)	(44)	(19)
Earnings (losses) on investments	(103)	156	227
Gains on sales of investments	1,092	-	-
Losses on purchases or exchanges of debt	(200)	(176)	(129)
Impairments of investments	-	-	(16)
Other Income	8	23	16
Total Other Income (Expense)	**720**	**(41)**	**79**
Income (Loss) Before Income Taxes	**(974)**	**2,880**	**2,884**
Income Tax Expense (Benefit):			
Current income taxes	47	13	-
Deferred income taxes	(427)	1,110	1,110
Total Income Tax Expense (Benefit)	**(380)**	**1,123**	**1,110**
Net Income (Loss)	**(594)**	**1,757**	**1,774**
Net income attributable to noncontrolling interests	(175)	(15)	-
Net Income (Loss) Attributable to Chesapeake	**(769)**	**1,742**	**1,774**
Preferred stock dividends	(171)	(172)	(111)
Net Income (Loss) Available to Common Stockholders	**(940)**	**1,570**	**1,663**

Source of Information: Chesapeake Energy, 2012. ***Form 10-K.*** *Oklahoma City, Oklahoma: Chesapeake Energy Corporation.*

Balance Sheet - $ in millions

	December 31,		
	2012	**2011**	**2010**
Current Assets:			
Cas and cash equivalents	$ 287	$ 351	$ 102
Restricted cash	111	44	-
Accounts Receivable	2,245	2,505	1,974
Short-term derivative assets	58	13	947
Deferred income tax assets	90	139	139
Other current assets	153	125	104
Current assets held for sale	4	-	-
Total Current Assets	**2,948**	**3,177**	**3,266**
Property and Equipment:			
Natural gas and oil properties, at cost based on full cost accounting:			
Evaluated natural gas and oil properties	50,172	41,723	38,952
Unevaluated properties	14,755	16,685	14,469
Natural gas gathering systems and treating plants	-	1,455	1,545
Oilfield services equipment	2,130	1,632	921
Other property and equipment	3,778	3,555	2,805
Total Property and Equipment, at Cost	**70,835**	**65,050**	**58,692**
Less: accumulated depreciation, depletion, and amortization	(34,302)	(28,290)	(26,314)
Property and equipment held for sale, net	634	-	-
Total Property and Equipment, Net	**37,167**	**36,760**	**32,378**
Long-Term Assets:			
Investments	728	1,531	1,208
Long-term derivative assets	2	-	-
Other long-term assets	766	367	327
Total Assets	**$ 41,611**	**$ 41,835**	**$ 37,179**
Current Liabilities:			
Accounts Payable	$ 1,710	$ 3,311	$ 2,069
Short-term derivative liabilities	105	191	15
Accrued interest	226	183	191
Current maturities of long-term debt, net	463	-	-
Other current liabilities	3,741	3,397	2,215
Current liabilities held for sale, net	21	-	-
Total Current Liabilities	**6,266**	**7,082**	**4,490**
Long-Term Liabilities:			
Long-term debt, net	12,157	10,626	12,640
Deferred income tax liabilities	2,807	3,484	2,384
Long-term derivative liabilities	934	1,541	1,693
Asset retirement obligations	375	323	301
Other long-term liabilities	1,176	818	407
Total Long-Term Liabilities	**17,449**	**16,792**	**17,425**
Equity:			
Chesapeake Stockholders' Equity:			
Preferred Stock, $0.01 par value, 20,000,000 shares authorized: 7,251,515 shares outstanding	3,062	3,062	3,065
Common Stock, $0.01 par value, 1,000,000,000 shares authorized: 666,467,664 and 660,888,159 shares issued	7	7	7
Paid-in capital	12,293	12,146	12,194
Retained Earnings	437	1,608	190
Accumulated other comprehensive income (loss)	(182)	(166)	(168)
Less: treasury stock, at cost; 2,147,724 and 1,552,533 common shares	(48)	(33)	(24)
Total Chesapeake Stockholders' Equity	**15,569**	**16,624**	**15,264**
Noncontrolling interests	**2,327**	**1,337**	**-**
Total Equity	**17,896**	**17,961**	**15,264**
Total Liabilities and Equity	**$ 41,611**	**$ 41,835**	**$ 37,179**

Source of Information: Chesapeake Energy, 2012 & 2011. ***Form 10-K.*** *Oklahoma City, Oklahoma: Chesapeake Energy Corporation.*

Consolidated Statement of Cash Flows - in millions

	Years Ended, December 31,		
	2012	**2011**	**2010**
Cash Flow from Operating Activities			
Net Income (Loss)	$ (594)	$ 1,757	$ 1,774
Adjustments to Reconcile Net Income (Loss) to Cash Provided By Operating Activities:			
Depreciation, depletion, and amortization	2,811	1,923	1,614
Deferred income tax expense (benefit)	(427)	1,110	1,110
Unrealized (gains) losses on derivatives	(567)	796	592
Stock-based compensation	120	153	147
Gains on sales of fixed assets	(267)	(437)	(137)
Impairment of fixed assets and other	316	46	21
Impairment of natural gas and oil properties	3,315	-	-
(Gains) losses on investments	164	(41)	(107)
Gains on sales of investments	(1,092)	-	-
Impairment of investments	-	-	16
Losses on purchases or exchanges of debt	200	5	29
Other	74	(3)	110
Increase in accounts receivable and other assets	(68)	(530)	(769)
Increase (decrease) in accounts payable, accrued liabilities and other	(1,148)	1,124	717
Cash provided by operating activities	**2,837**	**5,903**	**5,117**
Cash Flows From Investing Activities:			
Drilling and completion costs	(8,930)	(7,467)	(5,242)
Acquisitions of proved and unproved properties	(3,161)	(4,974)	(6,945)
Proceeds from divestitures of proved and unproved properties	5,884	7,651	4,292
Additions to other property and equipment	(2,651)	(2,009)	(1,326)
Proceeds from sales of other assets	2,492	1,312	883
Proceeds from (additions to) investments	(395)	101	(134)
Proceeds from sale of midstream investment	2,000	-	-
Acquisition of drilling company	-	(339)	-
Increase in restricted cash	(222)	(44)	-
Other	(1)	(43)	(31)
Cash used in investing activities	**(4,984)**	**(5,812)**	**(8,503)**
Cash Flows From Financing Activities:			
Proceeds from credit facilities borrowings	20,318	15,509	15,117
Payments on credit facilities borrowings	(21,650)	(17,466)	(13,303)
Proceeds from issuance of term loans, net of discount and offering costs	5,722	-	-
Proceeds from issuance of senior notes, net of discount and offering costs	1,263	1,614	1,967
Proceeds from issuance of preferred stock, net of offering costs	-	-	2,562
Cash paid to purchase debt	(4,000)	(2,015)	(3,434)
Cash paid for common stock dividends	(227)	(207)	(189)
Cash paid for preferred stock dividends	(171)	(172)	(92)
Cash (paid) received on financing derivatives	(37)	1,043	621
Proceeds from sales of noncontrolling interests	1,077	1,348	-
Proceeds from other financings	257	300	-
Distributions to noncontrolling interest owners	(218)	(9)	-
Net increase (decrease) in outstanding payments in excess of cash balance	(172)	353	20
Other	(79)	(140)	(88)
Cash provided by financing activities	**2,083**	**158**	**3,181**
Net Increase (decrease) in cash and cash equivalents	**(64)**	**249**	**(205)**
Cash and cash equivalents, beginning of period	**351**	**102**	**307**
Cash and cash equivalents, end of period	**$ 287**	**$ 351**	**$ 102**

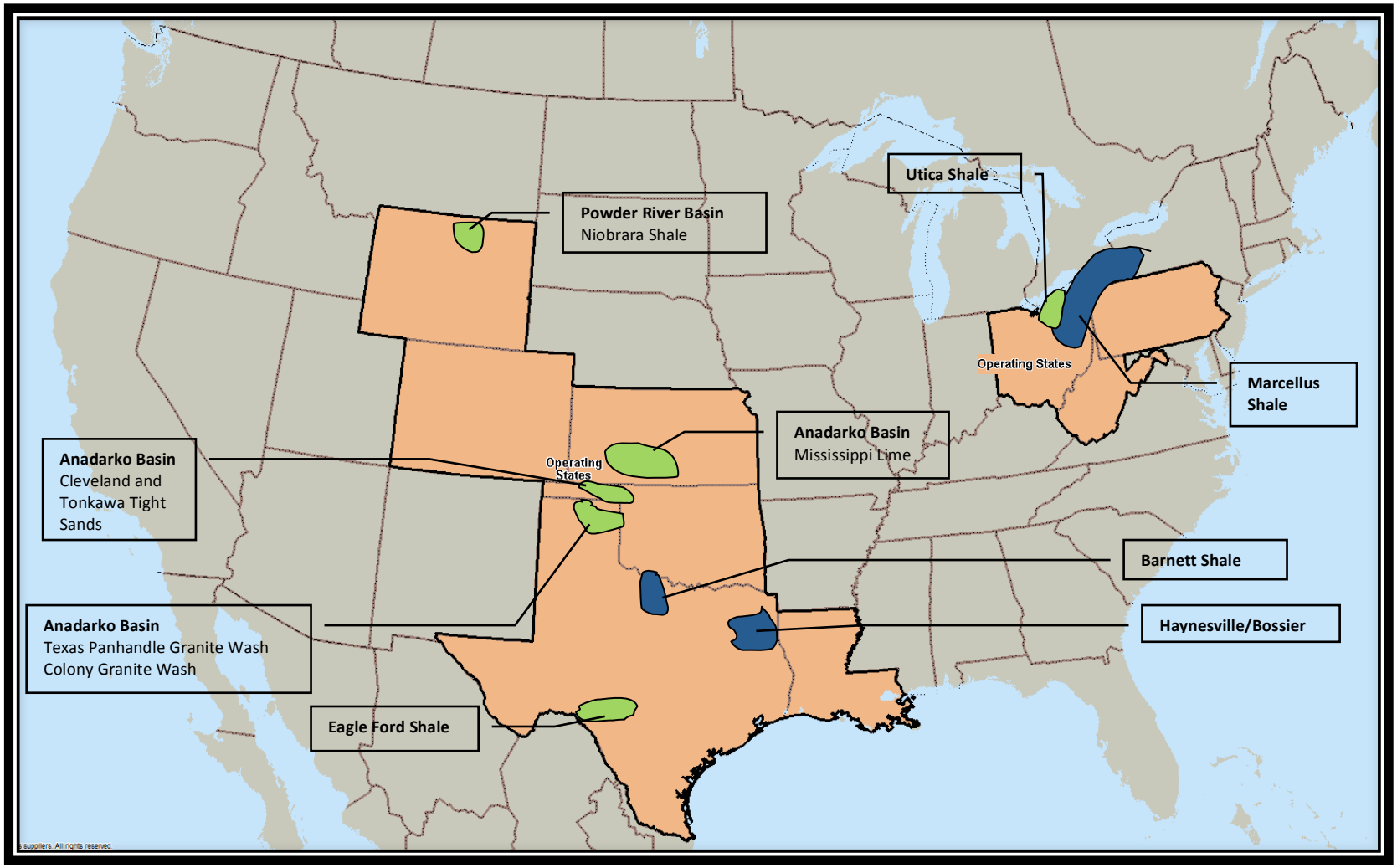
Source of Information: Chesapeake Energy, 2012. ***Form 10-K.*** *Oklahoma City, Oklahoma: Chesapeake Energy Corporation.*

Exhibit 2 - Key Acquisitions and Joint Ventures as part of Chesapeake's Acquisition Leasehold Strategy (2000-2007)

Year	Acquisition/Joint Venture
2000	Chesapeake purchased midcontinent natural gas producer Gothic Energy for $345M in stock and cash. The deal increased Chesapeake's proved reserves by 25%. With this transaction, Chesapeake became the 10th largest producer of natural gas in the U.S.
2002	Chesapeake acquired oil and gas producer Canaan Energy for approximately $118M in cash. Under the deal, Chesapeake will receive 150 billion cubic feet (bcf) of reserves within the Mid-Continent U.S. This transaction will increase Chesapeake's proved reserves by 5%.
2004	Chesapeake purchased Barnett Shale assets from Hallwood Energy for $292M. The deal includes 18,000 acres and 280 bcf of natural gas reserves in East Texas.
2004	Chesapeake entered into an agreement to purchase privately-owned Concho Resources for $420M. The deal affords Chesapeake oil and natural gas assets in the Mid-Continent, Permian Basin and onshore Gulf Coast. The transaction will be financed through 50% common equity and 50% debt.
2005	Chesapeake agreed to purchase BRG Petroleum for $325M in cash, which would add 223 bcf of natural gas reserves in Arkansas, Louisiana, Texas and Oklahoma.
2005	Chesapeake acquired Columbia Natural Resources, the fourth largest natural gas producer in the Appalachian Basin and largest leaseholder, for $2.2B in cash. This is the largest transaction in Chesapeake's history. With this deal, Chesapeake inherited a large number of natural gas reserves (an estimated 9400 undrilled locations) in West Virginia, Ohio and Pennsylvania. This location was of particular interest because the land had not been exploited by its previous owners.
2006	Chesapeake paid Energen Resources $75M in cash for a 50 percent interest in the company's existing Alabama shale plays. Additionally, the two companies partnered together to form an area of mutual interest to further explore and develop shale plays in Alabama.
2006-2007	Chesapeake purchased Fort Worth Basin Barnett Shale assets from Four Sevens Oil Co. and Sinclair Oil Corp. for $932M. This deal added another 67,000 net acres to Chesapeake's properties.

Source of Information: Chesapeake Energy Press Releases (http://www.chk.com/news/Pages/default.aspx?cat=Press%20Releases&YEAR=2006)

Exhibit 3 - Chesapeake Energy Corporation's natural gas and oil exploration and production operations throughout the United States



Source of Information: Chesapeake Energy Corporation 2012 10K Report

Key:

Liquids-Rich Plays
Natural Gas Plays

Chart 1 – Projected U.S. Energy Consumption

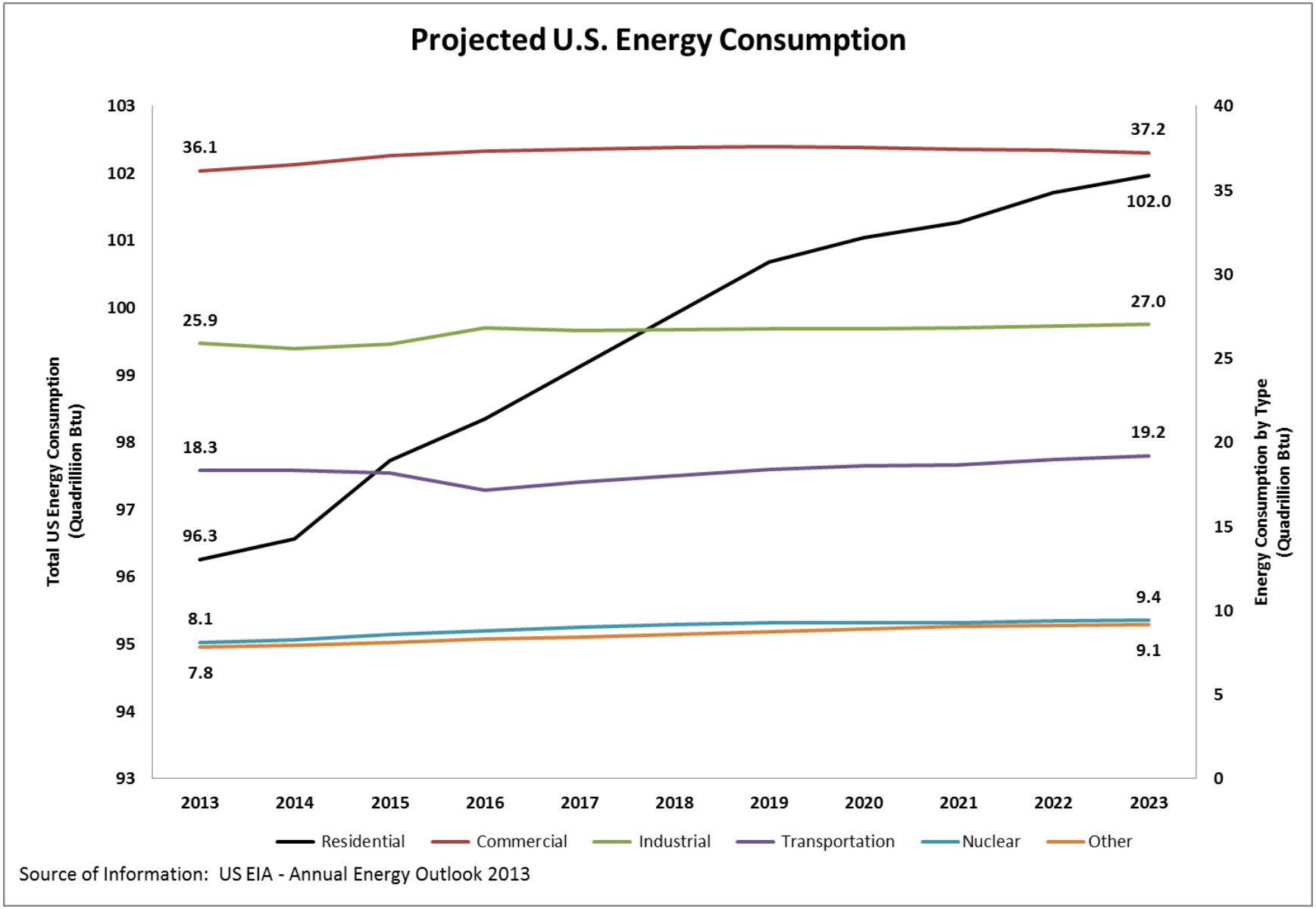


Chart 2 – Projected U.S. Energy Expenditures by Segment

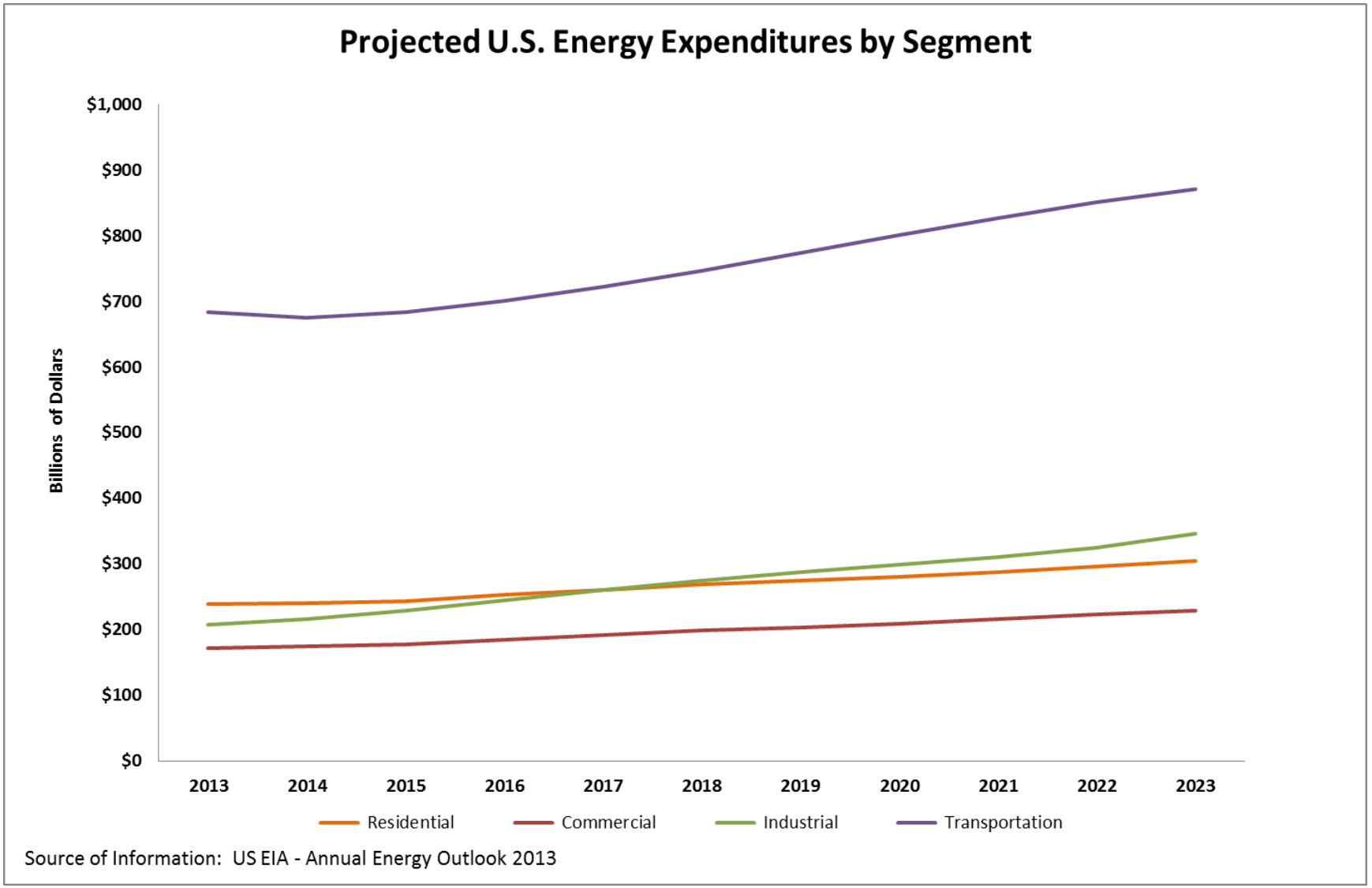
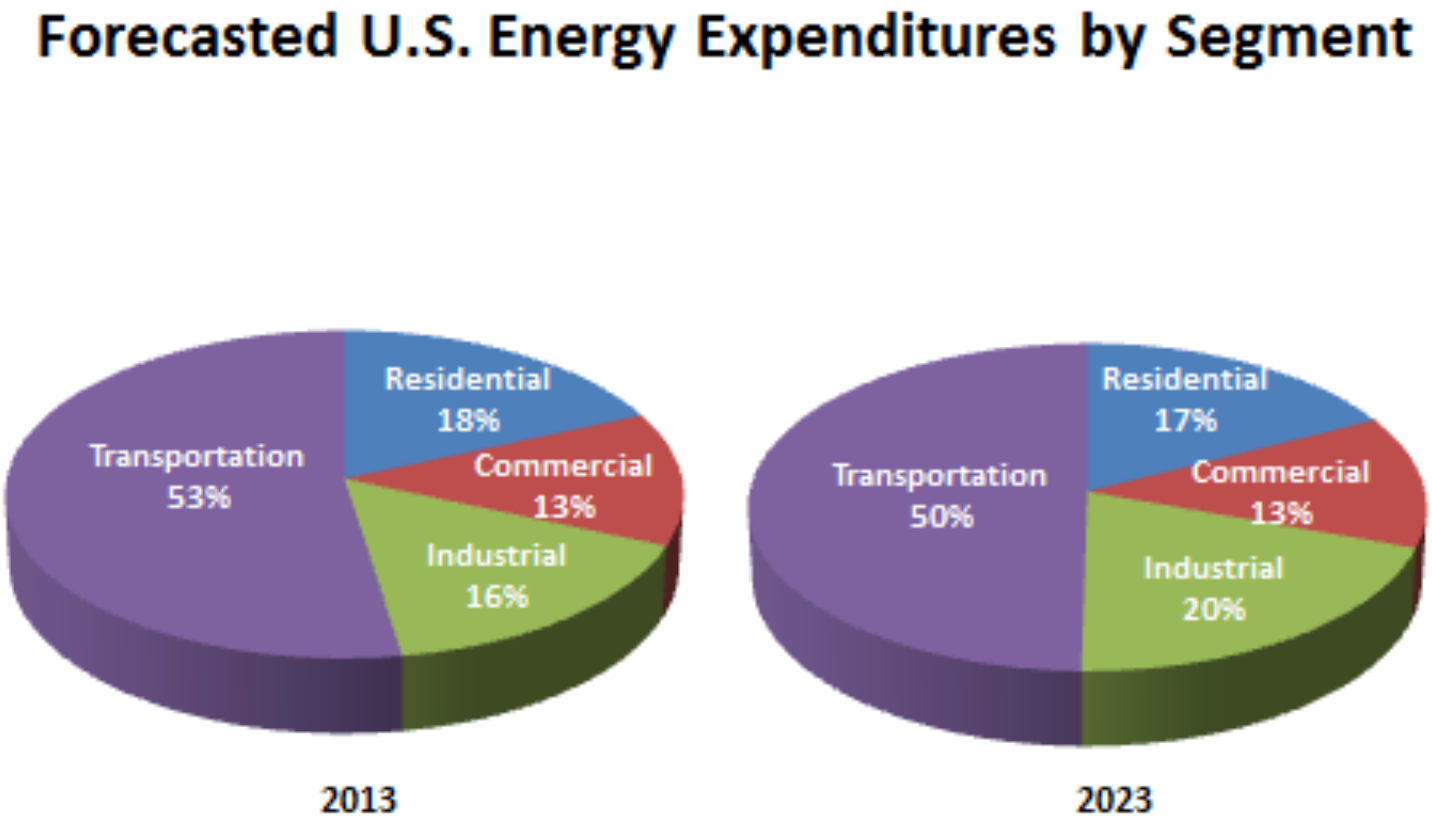


Chart 3 – Forecasted U.S. Energy Expenditures by Segment



Source of Information: US EIA – Annual Energy Outlook 2013

Chart 4 – Top U.S. Natural Gas Producers (2012)

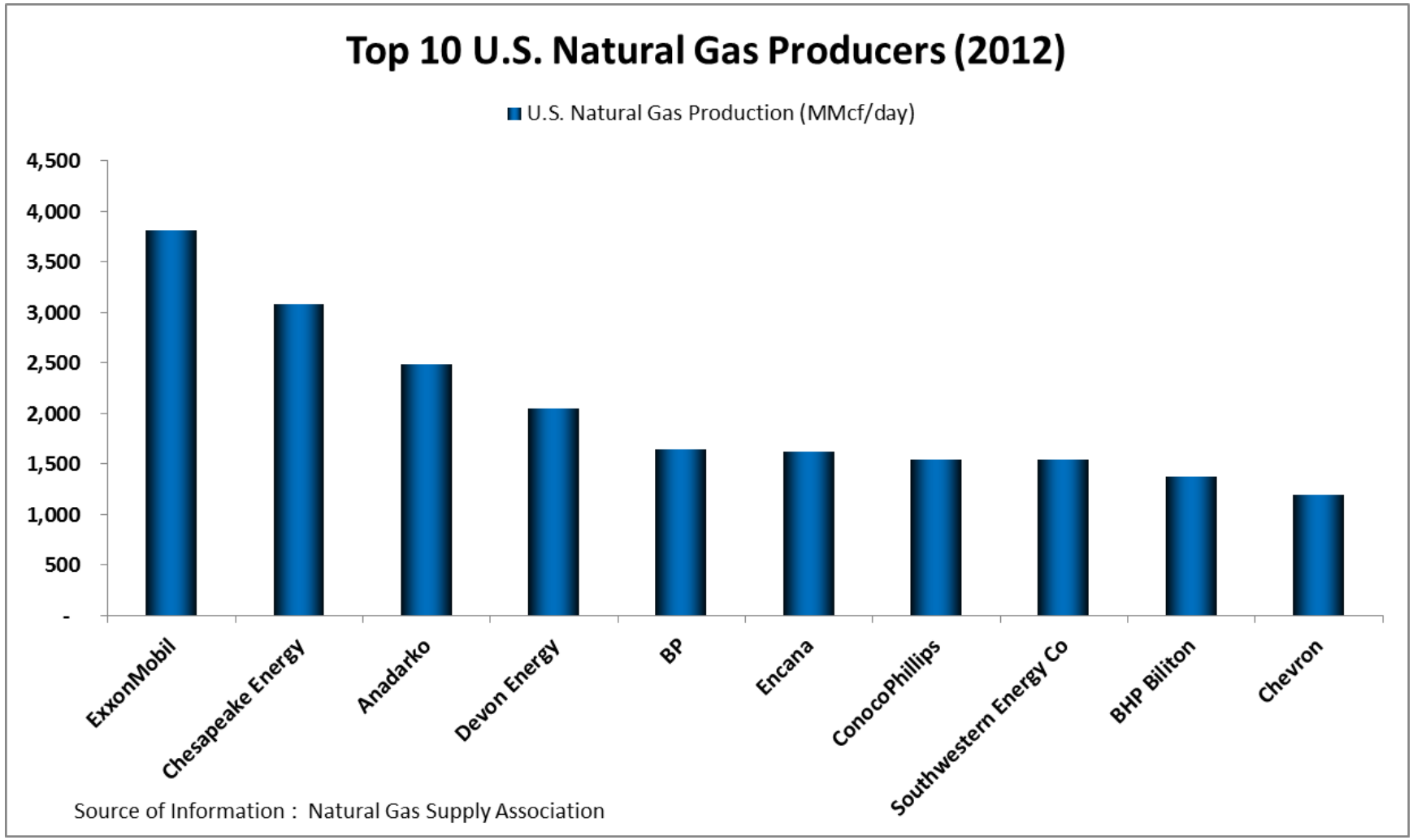


Chart 5 – Chesapeake Energy Historical Stock Price

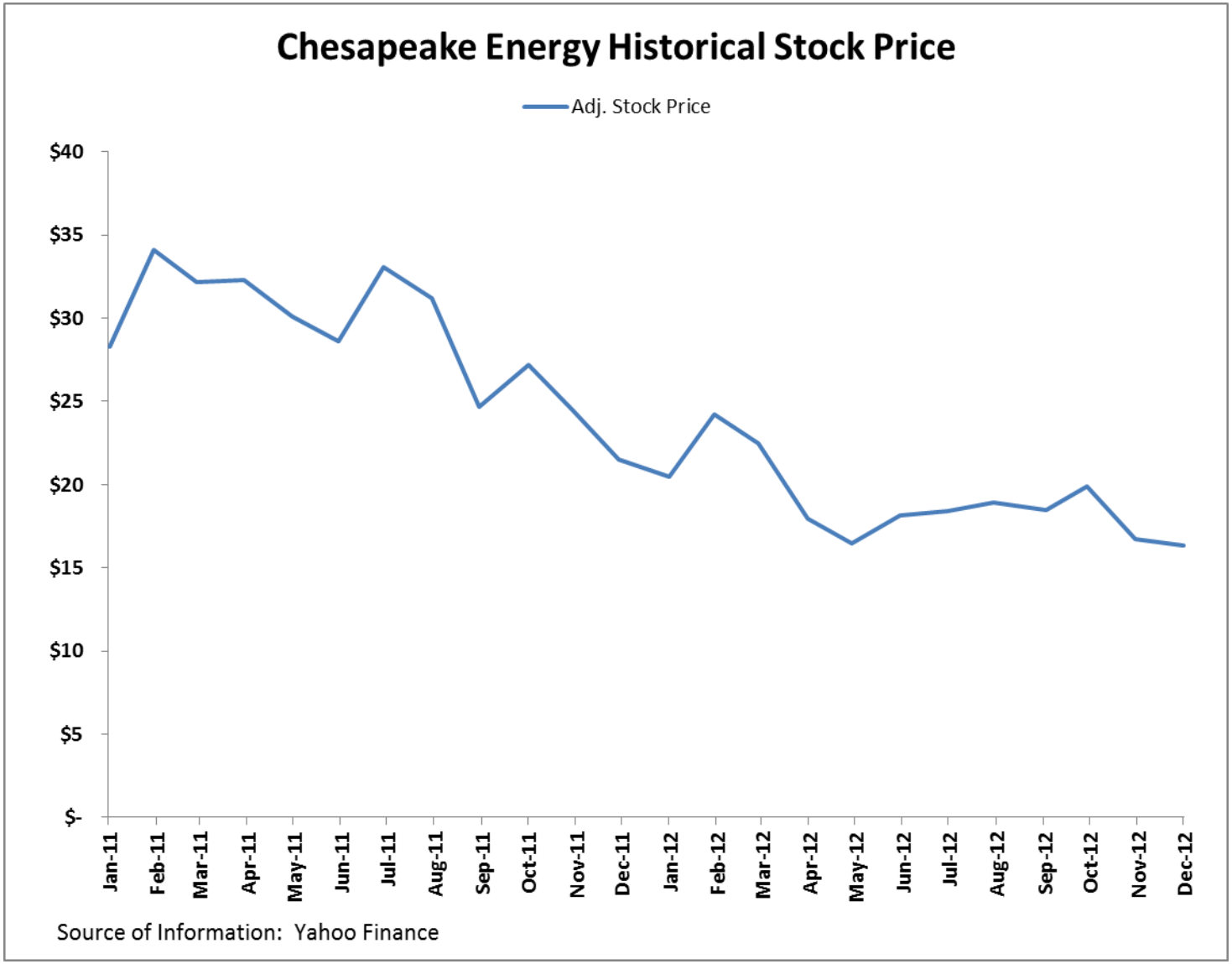


Chart 6 – Historical U.S. Natural Gas Price

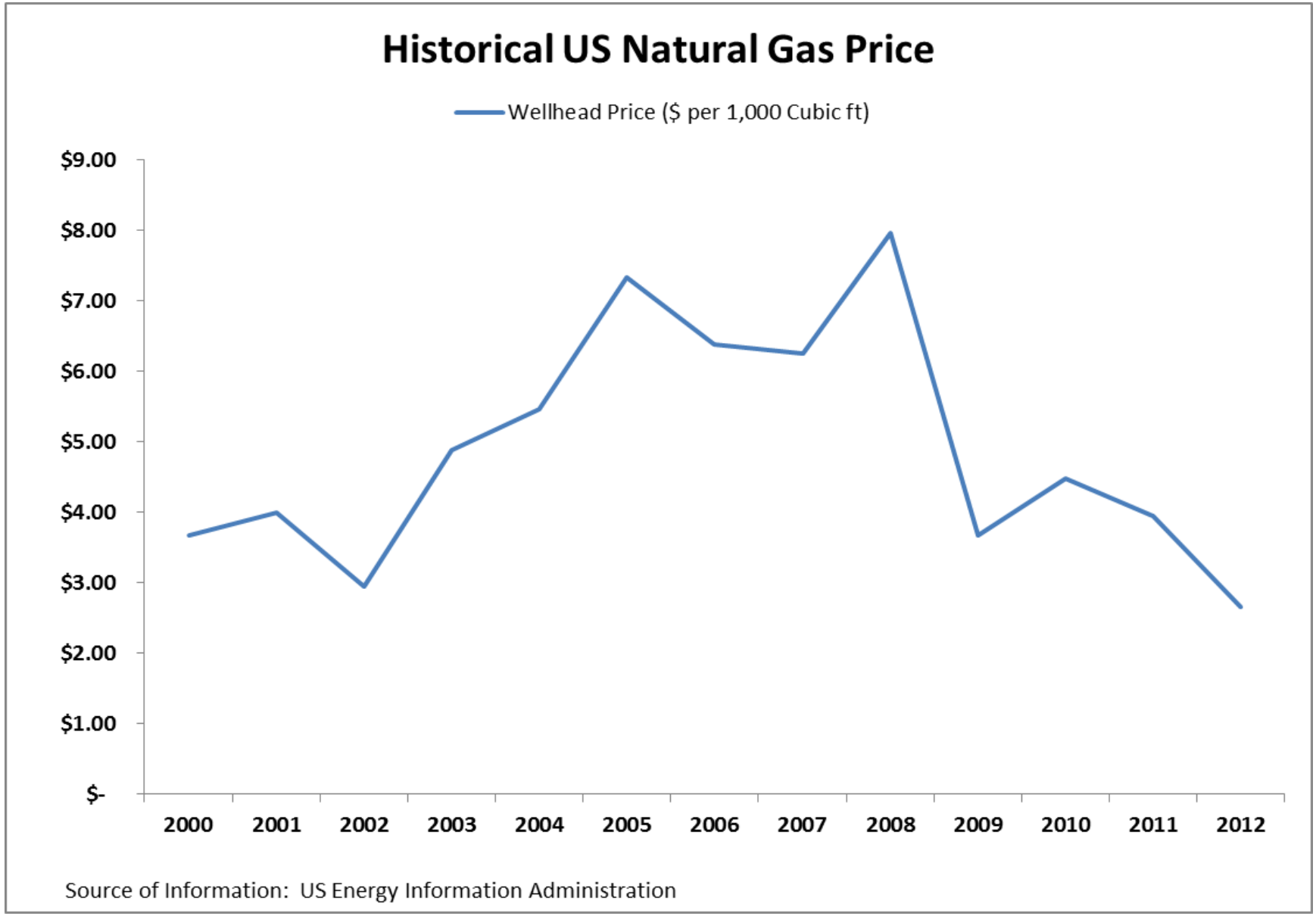
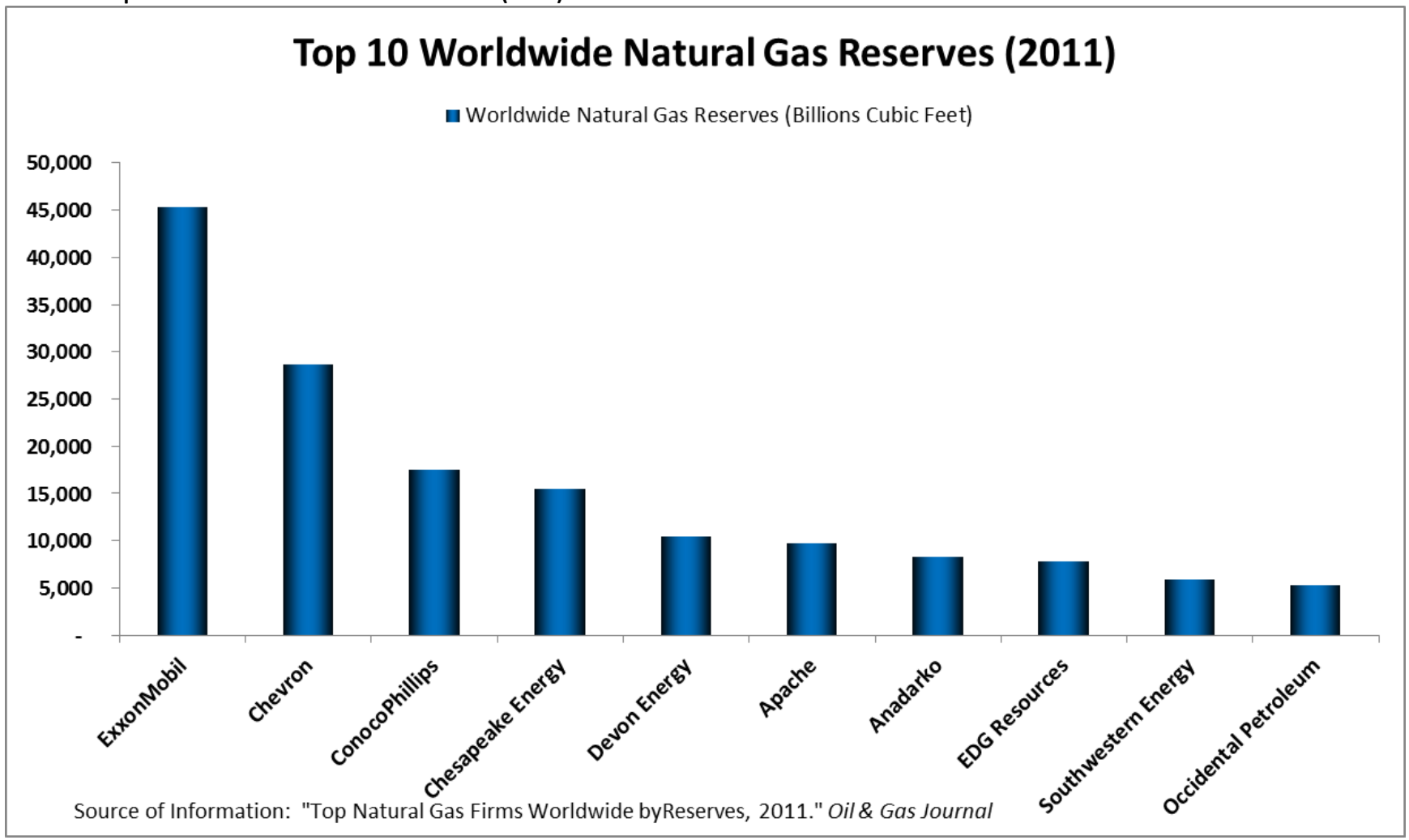


Chart 7 – Top 10 Worldwide Natural Gas Reserves (2011)



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CHESAPEAKE ENERGY CORPORATION

DISCUSSION QUESTIONS

1. Describe Chesapeake's businesses. Does their new focus make sense?
2. What are the features that make the oil and gas industry attractive for investment? What makes it unattractive?
3. How hard would it be to enter the oil and gas industry? What are the barriers to new entrants?
4. Does Chesapeake seem to possess any unique and hard-to-imitate resources or capabilities that give the company a sustainable competitive advantage over its major competitors? If not, what might they do to develop such resources or capabilities?
5. What are the most important factors in the external environment that are important to Chesapeake's business? How can the company effectively deal with each of these factors?
6. Was it ethical for Chesapeake to allow its CEO to claim a stake in every well that was drilled? Why do you suppose he got such a contract in the first place? Would you consider McClendon dishonest or unethical to take advantage of his contract? If so, why? If not, then why did he step down?
7. The board and top management shakeup at Chesapeake hurt the company's reputation. Now there are a lot of new faces in these positions. How can a humiliated company like Chesapeake restore the confidence of its shareholders and the financial community?
8. Should Chesapeake's managers try to mitigate risks or is it in the interests of the shareholders for them to simply deal with changes as they come? What could Chesapeake do to mitigate its risks in this highly volatile industry?
9. Should Chesapeake invest in solar energy technology? Why or why not?
10. Would you invest in Chesapeake in 2013? Why or why not?