MEMO

Subject: Alpha Natural Resources – Grounds for a Yes vote on shareholder resolution requesting a report concerning the company’s response to increasing pressure to reduce pollution from operations and from use of Alpha’s products

Date: April 7, 2011

Contacts: Rob Berridge, Ceres  
(617) 247-0700 x117 berridge@ceres.org

Dan Bakal, Ceres  
(617) 247-0700 x113 bakal@ceres.org

RESOLVED: Shareholders request a report (reviewed by a board committee of independent directors) on how the company is responding to increasing regulatory, public and competitive pressure to significantly reduce pollution from the company’s operations and use of its primary products. This report will omit proprietary information, be prepared at reasonable cost, and be made available to shareholders by September 1, 2011.

Rationale for a Yes vote:

1. Alpha provides inadequate disclosure of its strategy to build long-term shareholder value despite increasing regulatory, public and competitive pressure to significantly reduce pollution from the use of the company’s primary products;
2. Alpha provides inadequate disclosure of its greenhouse gas (GHG) emissions and its strategies to reduce risks associated with them.

1. Alpha provides inadequate disclosure of its strategy to build long-term shareholder value despite increasing regulatory, public and competitive pressure to significantly reduce pollution from the use of the company’s primary products.

Alpha is the third-largest U.S. coal producer with a production capacity of nearly 100 million tons from 60 active mines.¹ The combustion of coal provides roughly half of U.S. electricity and most of the negative environmental and health effects associated with electricity production.² According to the U.S. Energy Information Administration (EIA), the five principal emissions associated with coal consumption in the energy sector are:

• Sulfur dioxide (SO2), which has been linked to acid rain and increased incidence of respiratory illnesses
• Nitrogen oxides (NOx), which have been linked to the formation of acid rain and photochemical smog

¹ http://www.alphanr.com/about/Pages/default.aspx
² http://www.nrdc.org/air/pollution/benchmarking/default.asp
Particulates, which have been linked to the formation of acid rain and increased incidence of respiratory illnesses.

Carbon dioxide (CO2), which is the primary greenhouse gas emission from energy use.

Mercury, which has been linked with both neurological and developmental damage in humans and other animals. Mercury concentrations in the air usually are low and of little direct concern. However, when mercury enters water — either directly or through deposition from the air — biological processes transform it into methylmercury, a highly toxic chemical that accumulates in fish and the animals (including humans) that eat fish.7

The U.S. Environmental Protection Agency is now moving forward with a regulatory agenda intended to protect public health and minimize negative environmental impacts of electricity production. These regulations include the Mercury and Air Toxics Standards (for emissions of mercury, other toxic metals and acid gases) and the Clean Air Transport Rule (for sulfur dioxide and nitrogen oxide emissions) as well as measures to phase out wet handling of coal combustion waste, regulate greenhouse gas emissions at power plants, and further regulate cooling water intake by power plants.4

These regulations are widely expected to add significant costs to using coal as a fuel source for electric power generation, and consequently to diminish domestic demand for coal. Together, the Mercury and Air Toxics Standards and the Clean Air Transport Rule could force the closure of 30 to 70 gigawatts (GW) of U.S. coal-fired electric generating capacity, or 10 to 20 percent of the U.S. coal-fired generating fleet.5 Bernstein Research estimates that these closures would diminish U.S. utility demand for coal by about 108 million tons, or roughly 11 percent of U.S. coal production in 2009.6

Alpha, in its 2010 Form 10-K, does discuss EPA’s emerging air and water quality regulations and how they may impact the company, including by diminishing demand for coal, Alpha’s primary product.7 For example:

The operations of our customers are subject to extensive laws and regulations relating to emissions to air and discharges to water, plant and wildlife protection, the storage, treatment and disposal of wastes, and permitting of operations. These requirements are a significant part of the costs of their respective businesses, and their costs are increasing as environmental requirements become more stringent. These requirements could adversely affect our sales by causing coal to become a less attractive fuel source of energy. (p. 31)

In particular, the Clean Air Act and similar state and local laws extensively regulate the amount of sulfur dioxide, particulate matter, nitrogen oxides, mercury and other compounds emitted into the air from electric power plants, which are the largest end-users of our coal… A series of more stringent requirements are expected to become effective in coming years… Such requirements may require significant emissions control expenditures for coal-fired power plants. Any switching of fuel sources away from coal, closure of existing coal-fired plants, or reduced construction of new plants could have a material effect on demand for and prices received for our coal. (p. 31)

Alpha also points out that a key risk for the company is early termination of contracts resulting from increasing costs and pressures against coal:

3 http://eia.gov/energyexplained/index.cfm?page=coal_environment
4 http://www.epa.gov/lawsregs/sectors/electric.html
7 Available at http://alnr.client.shareholder.com/sec.cfm
...any of our coal supply agreements contain provisions that allow a purchaser to terminate its contract if legislation is passed that either restricts the use or type of coal permissible at the purchaser's plant or results in specified increases in the cost of coal or its use to comply with applicable ambient air quality standards. Any switching of fuel sources away from coal, closure of existing coal-fired plants, or reduced construction of new plants could have a material adverse effect on demand for and prices received for our coal and a material adverse effect on our results of operations, cash flows and financial condition. (p. 30-31)

A coal company’s strategy for maintaining profitability and competitive positioning despite the risks posed by increasingly stringent environmental regulation might consist of either or both of the following:

1. Investment in and support for advanced pollution control technologies required to maintain coal’s market share in the generation of electric power;
2. Diversification beyond coal.

While Alpha does support advanced coal technologies, there remains a substantial disconnect between the scale of Alpha’s involvement and the scale and timeline required for successful implementation of carbon capture and storage technology, or CCS (which is the essential breakthrough to enable coal-fired power plants to burn coal without releasing carbon emissions into the atmosphere).

The Electric Power Research Institute (EPRI), a non-profit research group whose members generate most of the nation’s power, stated in 2008 that “a ‘full portfolio’ of innovative technology approaches is needed to make substantial CO₂ emissions reductions, while minimizing economic impacts of reductions policies,” and said that a “significant part of that portfolio” is the existence of commercially viable CCS by 2020. But numerous delays and cost overruns have hindered CCS development – specifically with FutureGen, the CCS demonstration project with which Alpha is affiliated – and CCS is no longer expected to reach commercial viability by 2020. While Alpha has partnered on a CCS research project, there remains a significant gap between its activities and the commercialization of technologies required to support the sale of its products and progress toward climate goals in the 2020-2025 timeframe.

Peabody Energy, an Alpha competitor, describes its more extensive activities to develop advanced coal technologies, including its international partnerships, in its 2010 Form 10-K:

To maximize our coal assets and land holdings for long-term growth, we are... pursuing Btu Conversion projects that would convert coal to natural gas or transportation fuels and advancing clean coal technologies... Btu Conversion involves projects designed to expand the uses of coal through coal-to-liquids (CTL) and coal gasification technologies... We also own an equity interest in GreatPoint Energy, Inc., which is commercializing its coal-to-pipeline quality natural gas technology. (p.5)

We continue to support clean coal technology development and other "green coal" initiatives seeking to reduce global atmospheric levels of carbon dioxide and other emissions. We are the only non-Chinese equity

---

11 Available at http://phx.corporate-ir.net/phoenix.zhtml?c=129849&p=irol-sec
partner in GreenGen, which is constructing a near-zero emissions coal-fueled power plant with carbon capture and storage (CCS) near Tianjin, China. The first phase of GreenGen operations is expected to be online in 2011. In Australia, we made a 10-year commitment to the Australian COAL21 Fund designed to support clean coal technology demonstration projects and research in Australia. (p. 6)

A recent EPRI analysis\(^\text{12}\) assumes that CCS won’t come online until 2030 and predicts that coal-fired power generation could decline significantly under a scenario that reduces U.S. carbon emissions 80 percent by 2050 (see graphic below). This suggests that it may be particularly important for coal producers to diversify beyond coal.

![Graphic showing energy efficiency and price response](http://mydocs.epri.com/docs/SummerSeminar10/Presentations/1_Specker-EPRIFINAL.pdf)

Alpha’s efforts in this area lag far behind industry leader CONSOL Energy, which now bills itself as a “diversified energy provider” after acquiring Dominion Resources’ natural gas exploration and production business in 2010.\(^\text{13}\) CONSOL’s 2010 Form 10-K\(^\text{14}\) describes its expansion beyond coal into unconventional natural gas resources:

CONSOL Energy is an industry leader in the development of coalbed methane production in the Eastern United States and is also a leader in the development of the Marcellus shale… At December 31, 2010, we had 12,587 net producing wells… Additionally, we provide energy services, including river and dock services, terminal services, industrial supply services, coal waste disposal services and land resource management services. (p. 5)

2. **Alpha provides inadequate disclosure of its greenhouse gas (GHG) emissions and its strategies to reduce risks associated with them.**

\(^\text{12}\) [http://mydocs.epri.com/docs/SummerSeminar10/Presentations/1_Specker-EPRIFINAL.pdf](http://mydocs.epri.com/docs/SummerSeminar10/Presentations/1_Specker-EPRIFINAL.pdf)

\(^\text{13}\) [http://www.consolenergy.com/Powering/OurNaturalGas.aspx](http://www.consolenergy.com/Powering/OurNaturalGas.aspx)

\(^\text{14}\) Available at [http://phx.corporate-ir.net/phoenix.zhtml?c=66439&p=irol-sec](http://phx.corporate-ir.net/phoenix.zhtml?c=66439&p=irol-sec)
Alpha does acknowledge in its 2010 Form 10-K that concerns about climate change and legislative and/or regulatory approaches to control heat-trapping greenhouse gas emissions pose risks to its business:

> Global climate change continues to attract considerable public and scientific attention with widespread concern about the impacts of human activity, especially the emissions of greenhouse gases (“GHG”), such as carbon dioxide and methane... Any international greenhouse gas agreement in which the United States participates, if at all, could adversely affect the price and demand for coal. (p. 30)

These risks aren’t limited to the emissions associated with the use of Alpha’s coal, but also extend to include its mining operations. As Alpha explains:

> …[I]f regulation of greenhouse gas emissions does not exempt the release of coalbed methane, we may have to curtail coal production, pay higher taxes, or incur costs to purchase credits that permit us to continue operations as they now exist at our underground coal mines. (p. 22)

But what are Alpha’s GHG emissions? Nowhere in its 2010 Form 10-K – or anywhere else, apparently – does the company disclose its GHG footprint, the extent of its possible GHG-related financial liabilities, GHG emissions reductions targets, or strategies to comply with future mandated GHG emissions reductions at lowest overall cost.

Alpha, unlike some of its industry peers and more than 3,000 companies around the world, has not provided carbon emissions data to the Carbon Disclosure Project (CDP), which represents over 500 international investors with US$71 trillion in assets under management.\(^\text{15}\)

By contrast, mining company Rio Tinto’s 2010 CDP response\(^\text{16}\) provides investors with an estimated net present value of the potential impact of climate legislation on the company (over $1 billion) as well as the company’s actions to respond to risks associated with climate change:

> An Energy and Climate Strategy team has been formed at Group level to develop a comprehensive strategy, which includes:
> - Engaging directly with policymakers and advocating for economically and environmentally sound climate policy, particularly in Australia, the US, the EU, Canada and New Zealand
> - Analysing the commercial and financial implications of regulatory risks
> - Engaging in collaborative efforts, such as the US Climate Action Partnership and various industry bodies
> - Setting targets for improved energy efficiency and emissions performance of the Group
> - A global corporate programme of ensuring that emissions reporting meets increased regulatory requirements
> - Sharing information across the Group that enables analysis undertaken for one jurisdiction is available for use in others.

Rio Tinto also reports two GHG emissions targets – an intensity target\(^\text{17}\) of 6% below 2008 emissions levels by 2013, and 10% by 2015 – and provides investors with detailed information about its current and planned efforts to reduce GHG emissions. Rio Tinto also discloses a particularly robust strategy for addressing the physical risks associated with climate change.

---

\(^\text{15}\) [https://www.cdproject.net/en-US/WhatWeDo/Pages/overview.aspx](https://www.cdproject.net/en-US/WhatWeDo/Pages/overview.aspx)

\(^\text{16}\) Available at [https://www.cdproject.net/en-US/Results/Pages/responses.aspx](https://www.cdproject.net/en-US/Results/Pages/responses.aspx)

\(^\text{17}\) An intensity target, unlike an absolute target, is normalized to commodity production.
climate change (e.g., changes in precipitation patterns and the frequency and intensity of extreme weather events, which could significantly impact mining operations):

To manage these risks, each operating site for which a climatological model has been used, uses these results in their risk management process. In the case of projects these results are considered in the formal technical review which is conducted prior to the approval of large projects. Some of the ways in which operating sites adapt to the risk of climate change include:

- Including the results of the modeling in water management programs
- Ensuring engineering design is sufficiently robust for extreme weather events
- Mitigation plans for operations that rely on ice roads

While no companies in the coal sector have set an explicit target for GHG reductions from products yet, emissions from products are significantly larger than operational emissions and are more likely to be affected by climate regulations. Other companies recognize the importance of addressing the issue. Xstrata, for instance, discloses on its website the carbon footprint of its products (approximately 227 million tons), points out that this is 10 times greater than its operational emissions, and explains that its strategy is to “support the research, development and commercialization of low carbon emission technologies that will reduce the impacts associated with our customers’ use of the coal we produce, in partnership with other coal producers, governments, and scientific and academic organizations.”

In discussions with shareholders pursuant to a proxy resolution filed in 2009, Alpha stated that in the wake of its merger with Foundation Coal it would create two new senior-level positions dealing with risk management and sustainability that would oversee the company’s climate change response and report to the CEO. More than a year later, it’s unclear what progress if any has been made in this area; Alpha’s 2010 Form 10-K mentions risk management only in relation to commodity price volatility, does not include the word “sustainability,” and concludes that “predicting the economic effects of climate change legislation is difficult given the various alternatives proposed and the complexities of the interactions between economic and environmental issues.” (Contrast this with Rio Tinto’s estimate that prospective climate legislation could impact the company by $1 billion or more.) To date, Alpha still hasn’t articulated a position on climate change.

Alpha, like the rest of the mining industry, will be required by the EPA to report its greenhouse gas emissions in 2012 for the year 2011. How prepared Alpha is to produce audit-quality data about its GHG footprint and subsequently manage and reduce this footprint while building long-term shareholder value is anyone’s guess.

Conclusion

Shareholders need to know that Alpha has a plan for remaining profitable despite increasing regulatory and public pressure to significantly reduce pollution from the company’s operations and use of its primary product, coal. Compared with leading peers, Alpha provides shareholders with relatively limited information about how the company will adapt. A Yes

18 http://www.xstrata.com/sustainability/environment/climatechange/reducingemissionsfromcoal/
19 Alpha Natural Resources 2010 Form 10-K, p. 31.
vote on this resolution will encourage management to further develop and disclose this strategy. We urge shareholders to vote in support of this proposal.