



CARBON ASSET RISK CONSOL Energy

Annual Meeting: May 6, 2015, Pittsburgh, PA

RESOLUTION

Shareholders request CONSOL to prepare a report, by September 2015, omitting proprietary information and prepared at reasonable cost, on the Company's strategy to address the risk of stranded assets presented by global climate change and associated demand reductions, including analysis of long and short term financial and operational risks to the company.

SUPPORTING STATEMENT: We recommend the report include:

- Evaluate a range of low-carbon, low-demand scenarios, including a scenario in which two thirds of reserves cannot be monetized;
- Provide an assessment of different capital allocation strategies for such low-demand scenarios including diversifying capital investment or returning capital to shareholders;
- Provide information on carbon price and coal and natural gas price assumptions used in each scenario.

Summary: This proposal asks CONSOL Energy to perform an analysis of risks associated with changing market fundamentals in an increasingly carbon-constrained energy market, including scenarios for low probability, but likely high impact events such as global government adoption of rigorous climate change regulations, and high probability, high impact events such as disruptive, low-carbon technologies leading to large-scale adoption of cleaner energy sources. These scenarios would result in decreased demand for fossil fuels and lower fossil fuel prices. The risk of reduced future demand for CONSOL's products compounds investor concern about declining coal and gas revenues and creates uncertainty about forward-looking investment of capital into many fossil fuel projects.

These concerns are amplified in a market with already falling prices. Proponents and third parties recognize CONSOL's vulnerability to scenarios in which demand for its resources decline. The proposal asks CONSOL to evaluate a range of low-carbon, low demand scenarios; provide an assessment of different capital allocation strategies for such low-demand scenarios, including diversifying capital investment or returning capital to shareholders; and information on critical assumptions used in such analysis, including price assumptions. Investors need to know more about CONSOL's planning for adverse market conditions, and the assumptions CONSOL uses to estimate future market prices and break-even costs of production. It is only with these disclosures that investors can understand and



assess the risk of CONSOL's reserves becoming uneconomic to produce over short, medium, and long-term price horizons.

GUIDELINES – Guidelines suggest a recommendation in favor of resolutions requesting a company to disclose information on the impact of climate change on its operations and investments, considering whether a company already provides current, publicly available information on the impacts climate change may have on the company, as well as associated company policies and procedures to address related risks and/opportunities.

In applying these guidelines, investors and analysts should make a distinction between the different types of impacts that climate change can have on a company, and whether a company has provided information on a specific type of climate change impact to shareowners. Climate change impacts can broadly be assessed in three categories, including (1) risks to physical assets and operations. This includes climate change's potential to harm company assets such as plant, property and equipment. This may include damage caused by intense storms that shut down drilling platforms, or hurricanes that limit the ability to ship product or supplies. Risk (2) is reputational- damage to brand and goodwill resulting from climate change denial, or undermining popular and reasonable environmental policy; and (3) stranded asset risk, the risk that a company's fossil fuel reserves and associated infrastructure will be devalued such that the assets are deemed toxic and written off. Stranded assets can result from climate-related demand reductions stemming from climate change regulations, and from product substitution in response to the need to respond to climate change.

Risks from climate change result from differing causes, affect different parts of a business, and entail different solutions. For example, one solution to physical risk might be developing infrastructure that can withstand hurricane-level winds, or a sea level rise. Whereas a solution to stranded asset risk might be assessing how to avoid production and development of reserves that are uneconomic. Similarly, adopting greenhouse gas targets to reduce carbon pollution, while important, is distinct from diversifying investments in new energy sources or returning capital to investors. One solution to a given climate change risk does not necessarily solve another. Shareowners are increasingly distinguishing the risks associated with climate change and are asking companies to do so as well; both entities must exercise care to differentiate climate change risks and the respective solutions to reduce those risks.

RATIONALE FOR A YES VOTE

Shareholders recognize that fundamental shifts in energy markets are occurring that are likely to impact CONSOL Energy by creating unsaleable, stranded reserves and associated assets. The cost of finding, producing, developing, and using fossil fuel resources is increasing dramatically. Simultaneously, fossil fuel demand is on the decline due to a variety of factors including the rapid worldwide adoption of energy efficiency; global commitments from countries like China to reduce coal use; and a slowing in the rate of developing nation coal use. Competing renewable and carbon free substitute products have experienced remarkable cost reduction and adoption exceeding most analyst predictions. Meanwhile, in



response to increases in global temperatures, new carbon regulations continue to be adopted in nations, states, and localities across the world, while global government negotiations are underway to comprehensively enact strict carbon regulations that would keep warming at two degrees Celsius or less.

CONSOL and its forward looking valuation is vulnerable to these market changes. Shareholders seek information from CONSOL to better understand whether and how the company is positioned to address changes in energy markets which are likely only to grow in proportion to climate change intensifying. CONSOL is uniquely exposed to carbon asset risk, as a fossil fuel centered company with revenues reliant on sales of coal and natural gas. The information requested by this proposal will allow shareowners to make reasonable judgments about the benefits or risks associated with continued investment in the company.

CHANGING MARKETS

Falling Demand for Fossil Fuels - Falling from its strong market position just five years ago, analysts now predict that coal demand may have peaked or is likely to do so in the next decade. Goldman Sachs states that “most thermal coal growth projects will struggle to earn a positive return for their owners” and finds that even when carbon prices are low, “the downside risks of future regulation can offset the cost advantage of thermal coal relative to alternative energy sources.” Between 2007 and 2014, coal’s share of electricity generation in the U.S. fell from 48.5 percent to 38.7 percent.¹ China’s demand for coal is likely to peak by 2020 according to a recent analysis from Standard & Poor’s,² while other analysts predict the peak will be sooner. Indeed, a slowing level of coal use in China and OECD countries contributed to a ‘stall’ in international emissions growth in 2014.³ Similarly, HSBC indicates that declining coal demand after 2020 could reduce the current discounted cash flow valuation of coal producers by 44%.⁴ The World Bank and European Investment Banks have placed restrictions on the financing of new coal projects.⁵ The future of natural gas is also unclear, with historical and likely future price volatility, an uncertain demand future, and the significant impacts of fracking operations.⁶

¹ See

http://www.slate.com/articles/business/the_juice/2015/03/peak_coal_yes_the_u_s_and_other_big_economies_are_falling_out_of_love_with.html

² See <http://www.rtcc.org/2014/07/22/china-coal-demand-to-peak-by-2020-standard-poor/>

³ *Global energy-related emissions of carbon dioxide stalled in 2014*, International Energy Agency (March 13, 2015) <https://www.iea.org/newsroomandevents/news/2015/march/global-energy-related-emissions-of-carbon-dioxide-stalled-in-2014.html>

⁴ See <http://reneweconomy.com.au/2014/hsbc-says-20bn-market-value-of-coal-assets-at-risk-36748>

⁵ World Bank. 2013. *Toward a sustainable energy future for all : directions for the World Bank Group’s energy sector*. Washington DC ; World Bank. <http://documents.worldbank.org/curated/en/2013/07/18016002/toward-sustainable-energy-future-all-directions-world-bank-group’s-energy-sector>; see

<http://www.bloomberg.com/news/articles/2013-06-26/world-bank-to-limit-coal-power-financing-to-rare-circumstances>; <http://www.ran.org/coal-finance-reportcard-2013>

⁶ See e.g., <http://knoema.com/ncszerf/natural-gas-prices-long-term-forecast-to-2020-data-and-charts>



Natural gas price volatility – As of January of this year, natural gas prices have dropped to their lowest levels since September 2012, reflecting domestic overproduction and inventory buildup.⁷ Future demand for natural gas is also unclear; natural gas is threatened by the same market forces as those that affect oil and coal, and the impacts of hydraulic fracturing are subject to particular scrutiny. Natural gas has also been forecast to peak by 2020,⁸ and many gas plays have been overestimated, and or are being exhausted ahead of schedule.⁹

Global Movement Toward Renewable Resources – Low carbon solutions have been adopted by consumers at a higher rate than most analysts predicted, and costs have come down faster than predicted. Renewable energy adoption levels have been unprecedented, putting the transition to a low carbon economy six years ahead of schedule.¹⁰ Bloomberg’s 2030 Market Analysis predicts that, “[b]y 2030, the world’s power mix will have transformed: from today’s system with two-thirds fossil fuels to one with over half from zero-emission energy sources.”¹¹ Deutsche Bank predicts that that solar systems will be at grid parity in up to 80 per cent of the global market within 2 years.¹² As prices of renewable energy become equal to or less than fossil fuels, an aggressive shift to these forms of energy is likely to occur due to benefits including low and predictable costs, minimal fuel costs, ease of scalability and distribution, environmental pollution reductions, minimal regulatory risk, and public health benefits.

Growing Carbon Constraints - The International Energy Agency, in its 2012 World Energy Outlook, recognized that no more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to have a chance at limiting warming to 2 degree Celsius, the level beyond which dire consequences occur for economics, market participants, and the environment. Global governments have acknowledged this limit as a policy goal, and are amidst negotiations to achieve it. The only way to halt, mitigate, or slow climate change is to eliminate carbon emissions, which are caused primarily by fossil fuel use. Thus, laws and regulations adopted to limit carbon emissions and stave off climate change impacts will force reduction of fossil fuel use, affecting producer competition, commodity prices, and raising the cost of doing business. These effects are likely to leave the vast majority of fossil fuel companies with significant stranded assets in the form of uneconomic reserves and underused infrastructure.

⁷ <http://www.eia.gov/todayinenergy/detail.cfm?id=19751>

⁸ *US natural gas production could peak in 2020; Research project forecasts much less production than government estimates*, ARS Technica, Dec. 4, 2014

<http://arstechnica.com/science/2014/12/us-natural-gas-production-could-peak-in-2020/>; see also *Who to Believe: U.S. Natural Gas may Peak in 2040. Or 2020*, Money Beat (Dec. 4, 2014).

<http://blogs.wsj.com/moneybeat/2014/12/04/who-to-believe-u-s-natural-gas-may-peak-in-2040-or-2020/>

⁹ See *Natural Gas: The Fracking Fallacy: The United States is banking on decades of abundant natural gas to power its economic resurgence. That may be wishful thinking*, Nature (Dec. 3, 2014).

¹⁰ <http://www.bloombergvew.com/articles/2015-04-08/clean-energy-revolution-is-way-ahead-of-schedule>

¹¹ 2030 Market Outlook, Bloomberg New Energy Finance,

<http://bnef.folioshack.com/document/v71ve0nkr8e0/who42hnkr8fo>

¹² See <http://cleantechnica.com/2015/01/14/deutsche-bank-predicts-solar-grid-parity-80-global-market-2017/>



Taken together, these fundamental changes in energy markets suggest that demand for coal, oil, and natural gas will decrease over time, reducing commodity prices, and increasing the risks and uncertainties around investing shareholder capital in developing new fossil fuel assets. Shareowners ask the Company to evaluate a range of low-carbon, low-demand scenarios and describe how the Company is positioned to address these coming changes in energy markets and to assess capital allocation strategies for such low-demand scenarios, including diversifying capital investment or returning capital to shareholders.

SHAREHOLDER SUPPORT

A shareholder initiative was begun in September 2013, which has been adopted by the Global Investor Coalition, in which shareholders representing \$23 trillion in assets under management have asked 45 coal, oil and gas, and utility companies for increased disclosure about whether they are addressing carbon related risk and associated demand reduction, the impact of companies' capital expenditure decisions in light of these growing risks, and how the companies are prepared to manage risks under these scenarios.

INADEQUATE DISCUSSION OF STRANDED ASSET RISKS BY CONSOL

CONSOL Energy, in its 10K, recognizes that climate change regulations could pose risks to the company and to shareholder value, including that climate change regulations could impact the companies' ability to sell its reserves and reduce the value of those reserves, including: that regulations of greenhouse gases could impact the market for natural gas and coal (p.34); that the environmental aspects of coal could make it more costly to use and therefore reduce the volume of coal sales (p.33); and that a failure to appropriately allocate capital and resources among strategic opportunities may adversely affect its financial condition (p. 44).

While acknowledging the risks raised in the proposal, including risks associated with climate change regulations, shifting demand, and competition from renewables, CONSOL provides no quantification of likely impact, no analysis of the extent to which such regulations/risks could affect the company's value, or whether or how the company plans to address such risks. Given the likelihood that these risks have the potential to dramatically affect shareholder value, shareholders are asking CONSOL to undertake the requested scenario analysis.

Knowing that the company has evaluated these potentially low likelihood, but high impact events, such as a 2 degree carbon regulation, and how they may impact the Company's business, is important to shareholders. Companies that have undertaken this analysis, using a range of demand and price scenarios, and that have developed plans to address the impacts are more likely to survive and remain profitable. Shareholders also seek disclosure of such information, including the range of price scenarios the company has analyzed.



RESPONSE TO CONSOL ARGUMENTS

- 1) CONSOL states that “As You Sow’s concerns are misplaced and strategic decisions and investors’ action have shown this.”

CONSOL maintains that the concern of carbon asset risk is misplaced due to the fact that CONSOL has made large investments in natural gas operations and that investors do not view carbon asset risk as substantial. While natural gas demand is not exposed to as much risk as coal demand in the 2-degree scenario, natural gas is not insulated from risk. For instance, In the 2-degree scenario, global natural gas demand is expected to be 25% lower than a business as usual scenario.¹³ This drastic difference in natural gas demand would have supply and price ramifications across the entire industry and impact CONSOL’s performance.” Similarly, unpredicted decreases in demand for natural gas, in an environment with significant supplies, could also negatively impact the company.

A report quantifying and disclosing the impacts of the 2-degree scenario and the assumptions used, and assessing a variety of likely low demand scenarios, would provide information to investors as to whether or not CONSOL’s strategic investment decisions have made carbon asset risk a non-substantial concern. Additionally, as noted above, many investors, including long term institutional investors, understand carbon asset risk to be an important factor to consider, reflecting an increased prioritization on climate-associated risks. The Bank of England has also publically addressed carbon asset risk and the potential for stranded fossil fuel assets in its *One Bank Research Agenda* noting that climate change presents “risks for central banks to consider, including the potential for carbon intensive assets becoming ‘stranded.’” Similarly, other leading financial institutions have considered carbon asset risk and the 2-degree scenario, including HSBC in its report *Coal and Carbon: Stranded Assets – Assessing the Risk*. The concern of carbon asset risk is a significant priority for many investors, which CONSOL can address through a report analyzing the financial risk and investment strategies in low demand scenarios.

- 2) CONSOL argues that it practices responsible use of its land and other natural resources and that it maintains a research and development department focused on meeting the technical challenges arising from the production and marketing of coal and natural gas.

Responsible land use, while laudable, is not responsive to the proposal. Similarly, a statement of R&D projects to reduce emissions does not explain how these technologies will adequately prepare the company for a low carbon scenario or what impact this research would have on the ability to sell CONSOL’s coal or gas assets in a carbon constrained economy. Providing shareholders with greater information about how the company can address risks in a carbon constrained economy is the type of information requested in this proposal, but CONSOL has not yet provided the information requested. This proposal requests a scenario analysis in which long- and short-term financial risks

¹³ International Energy Administration. *World Energy Outlook 2012*. (2012).(pg 126)
<http://www.polsci.chula.ac.th/pitch/ep13/weo12.pdf>



associated with carbon constraints and associated low-demand market change are disclosed. This is not adequately addressed through CONSOL's R&D discussion.

- 3) CONSOL notes that it belongs to the Center for Sustainable Shale Development, which promotes safe and environmental responsible development of shale resources coupled with third-party evaluations.

Again, while important, this is not responsive to the proposal. That third parties deem a producer environmentally responsible in its hydraulic fracturing operations does not insulate the Company from fundamental demand, supply, and price risks associated with a 2-degree and other carbon-related low demand scenarios. Investors have asked CONSOL to outline how its operations are responsive to carbon-related demand reductions, including, for instance, what might happen if natural gas is found to be more carbon-intensive than expected due to methane leaks in production or transport, a subject which is under intense scrutiny now.

- 4) CONSOL also makes reference to its corporate responsibility report (CRR) and disclosure of risks in its Form 10-K, noting that air and GHG emissions are material concerns for CONSOL and that the CRR outlines specific initiatives undertaken by CONSOL to reduce its own carbon footprint as well as to assist our customers with these issues.

As previously stated, CONSOL's 10-K reporting discloses general climate change risk statements, but does not discuss plans to address identified long- and short-term financial risks associated with low demand scenarios and specifically the 2-degree scenario. CONSOL's CRR addresses some issues of climate change concern, such as minimizing carbon emissions, but does not provide the scenario assessments requested by this resolution, how those scenarios would impact company performance and investment strategies, or disclose key assumptions associated with those scenarios. While goals to reduced carbon intensity of resources is important, CONSOL does not address the issue raised in this proposal which calls for the company to detail financial risks of low demand scenarios, addressing what amount of its reserves CONSOL believes it would be able to sell, what carbon price and selling price of natural gas and coal are used in these scenarios, and an assessment of diversification investment strategies or other uses of shareholder capital.

- 5) CONSOL argues that it already complies with a variety of applicable laws and regulations.

While CONSOL is subject to a variety of laws, regulations, and disclosure requirements in which risks of climate change are generally acknowledged, these reports are not responsive to the proposal. None require disclosures that address financial and operational risks associated with a 2-degree scenario, for instance. Regarding future low-demand scenarios related to climate change, CONSOL does not provide an analysis to address how much risk the company faces, whether it will retain or lose value under such circumstances, whether its assets will be rendered uneconomical, how it will fare in comparison to its competition, and whether capital investment decisions it is making now are appropriate.



5. CONSOL also argues that the proposal is overreaching, unnecessary and unlikely to be prepared at reasonable cost and would require the company to engage in speculation on a variety of matters outside of its control and would not be prepared at a reasonable cost.

Far from being overreaching, this proposal asks CONSOL to undertake an analysis of a particular financial risk associated with climate change that is widely acknowledged as possible. Although some may believe that reaching an agreement that might avoid destructive global temperature rises is a remote possibility, its impact on fossil fuel energy companies would be very high, and thus shareholders have asked that a range of scenarios, including this one, be considered and discussed. The proposal does not require that CONSOL merely speculate about these possibilities. Multiple recent studies have assessed the magnitude of stranded asset risk and the impacts to the value of coal and gas assets of not burning 2/3 of worldwide fossil fuel reserves, as well as other low demand scenarios. Far from being speculative, this proposal asks CONSOL to undertake an analysis of a scenario that has been considered and studied by many scientists and policy makers; including the IPCC, IEA, UN, while assessing the specific impact on the company.

The analysis and planning called for by this resolution—an examination of significantly reduced demand scenarios for fossil fuel reserves—is a reasonable undertaking. Proponents acknowledge that there is no certainty on this issue, but the lack of certainty does not excuse inaction. The company is fully equipped to provide a range of reduced demand/usage scenarios, to describe how each scenario would financially affect the company, and to provide information regarding how, or whether, the company plans to address those risks and in what circumstances.

This information is critically important to shareholders, the majority of whom may not be aware of the potential for stranded assets or the likely significant impact to fossil fuel companies. Studies and information exist to assist the company in projecting these types of scenarios such as the demand-by-fuel-type included in the 2014 World Energy Outlook prepared by the IEA. Bloomberg also provides a tool that can assist companies in predicting carbon asset risk. In sum, proponents are not asking CONSOL to randomly speculate or to accurately predict the future, but to use its planning teams to assess risks and to provide shareholders with information about how the company is prepared to withstand or make use of opportunities related to carbon constrained, low demand scenarios.

Other basic requests of the proposal are whether and how the company's capital allocation plans account for the risks and opportunities in these scenarios. This issue is important and useful to shareholders and should be assessed by CONSOL. Another straightforward request in the proposal is whether and how CONSOL plans to manage these risks such as, for instance, diversifying its business by investing in lower-carbon energy sources or returning capital to shareholders. Finally, CONSOL can also, without any guessing, provide information about the Board of Director's role in overseeing capital allocation in carbon-constrained realities where demand for fossil fuel-related reserves decline dramatically. This information is also not currently provided by CONSOL.



6. CONSOL argues that proponents' do not have the Company's best interests at heart. CONSOL argues that the organization representing the proponent's proposal published a report in 2011 on coal companies and offered divestment as a solution to the systematic and regulatory risk related to coal.

Proponents see no conflict. Divestment of assets losing, or likely to lose, value is common in the business world -- divestment is a financial word for sell. CONSOL knows this because the company has divested a large proportion of its own coal assets. This move saved the company and its shareholders possibly billions of dollars in assets that could be toxic had they remained under company ownership; CONSOL's peers that have not divested coal assets are now losing significant value, as proponents predicted in their 2010 report the "Financial Risks of Coal." Proponents are concerned with CONSOL's best financial interests and those of shareholders. Given the continuing changes in markets for fossil fuels as discussed above, it is important that CONSOL analyze and share with investors the potential risks, including worst case scenarios, and how the company is, or will, manage them.

PEER COMPARISON

In 2014, ExxonMobil publicly agreed to issue a report on carbon asset risk. Although this report only met shareholder requests on the margins, it was the first company to undertake the task. Shell and BP have made public statements that they are supporting similar shareholder proposals addressing the financial risk and investment strategies associated with low demand scenarios.

CONCLUSION

The information requested in this proposal is important to shareholders. In order to effectively manage risks associated with the potential for stranding of reserves and associated assets due to climate change drivers, shareholders need to be fully informed of if, or how, the company is planning for a carbon constrained future and whether it is addressing the risk of stranded reserves. This valuable information will enable investors to analyze how the company is positioned to address climate change and carbon restrictions and to make reasonable judgments about the benefits or risks associated with investing in this company.