



Carbon Asset Risk Anadarko Petroleum Corporation

Annual Meeting: May 14, 2014, The Woodlands, TX

ISSUE

Given the growing concern about, and potential responses to, climate change, investors are seeking information from Anadarko about its climate asset risk, i.e., whether and how Anadarko is preparing for potential scenarios in which demand for oil and gas is greatly reduced due to regulation or other climate-associated drivers. Investors are concerned that regulations to significantly reduce greenhouse gas (“GHG”) emissions could precipitously reduce the value of Anadarko’s oil and gas reserves and/or related infrastructure before the end of their expected useful life, creating stranded assets. To the degree that the company’s reserves cannot be freely sold, the value of the company will decline. Without additional disclosure, shareholders are unable to determine whether Anadarko is adequately managing these risks or seizing related opportunities. Previous market bubbles demonstrate the imperative that investors be closely attuned to the potentially grave effects of mispriced assets in the financial market.

RESOLUTION

Shareholders request Anadarko to prepare a report by September 2014, omitting proprietary information and prepared at reasonable cost, on the company’s goals and plans to address global concerns regarding fossil fuels and their contribution to climate change, including analysis of long and short term financial and operational risks to the company.

SUPPORTING STATEMENT: We recommend the report include:

- The risks and opportunities associated with various low-carbon scenarios, including reducing GHG emissions by 80 percent by 2050, as well as a scenario in which global oil demand declines due to evolving policy, technology, or consumer response to address climate change;
- Whether and how the company’s capital allocation plans account for the risks and opportunities in these scenarios;
- How the company will manage these risks, such as reducing the carbon intensity of its assets, diversifying its business by investing in lower-carbon energy sources, or returning capital to shareholders;
- The Board of Directors’ role in overseeing capital allocation and climate risk reduction strategies.



RATIONALE FOR A YES VOTE

The information requested in this proposal is fundamental to enabling investors to understand how Anadarko is positioned to withstand a market scenario in which the company's ability to sell its reserves is dramatically reduced.

As the reality of climate change and its impacts have become increasingly stark, investors are seeking information from companies about whether they are prepared for, and how they will fare under, conditions such as regulations designed to limit worldwide warming to 2 degrees Celsius, which imply an 80 percent reduction of fossil fuels by 2050. Such a scenario threatens to dramatically reduce the value of unprepared companies. Investors seek sufficiently detailed information from Anadarko to make a reasonable judgment about whether the company is prepared to address such a high impact event.

Although Anadarko acknowledges in its CDP (formerly known as Climate Disclosure Project) response the risk of climate change regulations and the potential for reduced demand for its products, the company fails to provide any specific information to shareholders regarding this carbon asset risk, i.e., the portion of its fossil fuel reserves and related assets that are at potential risk of stranding; how it is managing these risks; or how its capital asset plans are changed or affected.

BACKGROUND

In its 2012 World Energy Outlook, the International Energy Agency ("IEA") states that no more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2 degree Celsius goal generally recognized as the level beyond which global warming will have dire ramifications. This finding has been echoed and emphasized by increasingly forceful reports from the United Nation's Intergovernmental Panel on Climate Change.

As regulations requiring companies to internalize the costs of their carbon pollution emerge (as is currently occurring in the coal industry), fossil fuel companies' unburnable reserves and related infrastructure will be left stranded and subject to write downs. In addition, fundamental shifts in energy markets are cutting margins, increasing the sensitivity of the industry to regulatory risk. This includes fossil fuel demand decreases and plateaus; increasing costs to locate, extract, and develop new oil and gas reserves; competition from renewables; and a dramatically decreasing energy return on investment ("EROI") for most fossil fuel types.

This proposal requests a report from Anadarko delineating its plans to address these pressing, global concerns regarding fossil fuels and their contribution to climate change -- including an analysis of associated long- and short-term financial and operational risks. Further, the resolution asks Anadarko to perform an analysis of various reasonably possible scenarios in which a portion of its reserves or



infrastructure become stranded due to carbon regulation and/or reduced demand, and to discuss the impact those scenarios would have on the company's future capital expenditure decisions.

FILER

As You Sow

SHAREHOLDER CAMPAIGN

A shareholder initiative was undertaken in September 2013 in which 77 shareholders representing \$3 trillion in assets under management asked 45 coal, oil and gas, and utilities for increased disclosure about whether they are addressing Carbon Asset Risk, the impact of such risk on their capital expenditure decisions, and whether they are implementing strategies to avoid stranded assets in a carbon constrained world. The letter was followed by shareholder proposals for a number of companies, including this proposal with Anadarko.

CLIMATE CHANGE RELATED RISKS IDENTIFIED BY ANADARKO

10K – Anadarko notes the following risks in its 10K. *“Climate Change.* A number of state and regional efforts have emerged that are aimed at tracking and/or reducing emissions of GHGs. In addition, the U.S. Environmental Protection Agency (EPA) has made findings that emissions of GHGs present a danger to public health and the environment and, based on these findings, has adopted regulations that restrict emissions of GHGs under existing provisions of the federal Clean Air Act. We may be required to install “best available control technology” to limit emissions of GHGs from any new or significantly modified facilities that we may seek to construct in the future if they would otherwise emit large volumes of GHGs. In addition, certain operations are subject to EPA rules requiring the monitoring and reporting of GHG emissions from specified onshore and offshore production sources in the United States on an annual basis.” p. 37

“In addition, environmental laws and regulations, including those that may arise to address concerns about global climate change and the threat of adverse impacts to groundwater arising from hydraulic-fracturing activities, are expected to continue to have an increasing impact on the Company’s operations in the United States and in other countries in which Anadarko operates.” p.27.

2013 CDP reporting – In Section 5.1a, Anadarko also addresses a variety of climate-related risks, including changes in regulations. It identifies risks to operations in non-Annex 1 countries party to the Kyoto Protocol. “Usually these countries limit their involvement in climate change regulation to hosting emission reduction projects, but they may choose at any time to implement internal or international agreements regarding emission limits and operational controls, which present inherent risk to Anadarko's operations in these countries.” Anadarko notes the potential for air pollution limits that “may require that Anadarko purchase new equipment to decrease emissions and/or implement new



processes to reduce routine emission releases to the atmosphere. Specifically, the GHG tailoring rule and the proposed NSPS for oil and gas facilities will significantly impact existing Anadarko facilities.” Anadarko notes that a carbon tax could present significant direct costs and if imposed at the upstream production level, “in regards to carbon content of the oil and gas that Anadarko produces, this type of mandate can present significant risk to Anadarko's business.” Similarly, “much like air pollution limits, cap and trade schemes present considerable potential risk to Anadarko's operations and how operations are conducted. These limits may require that Anadarko purchase new equipment to decrease emissions and/or implement new processes to reduce routine emission releases to the atmosphere.” It notes that reporting regulations would present significant costs and that “uncertainty regarding GHG emissions regulations and legislative activity presents risk to Anadarko in regards to the preparatory risk management and policy analysis required to prepare for such laws and rules. Proposed regulations are often very different from finalized regulations . . . The ups and downs of the regulatory process (and stringency and impact of these regulations to industry) provide for a challenging environment to mitigate new and pending potential risks.”

While acknowledging these risks and noting they will “have an increasing impact”, “present significant direct costs” and represent “significant risk to Anadarko’s business,” Anadarko fails to meaningfully address or explain these risks. Its brief acknowledgement of risks provides no quantification of likely impact or exposure to losses; no recognition that preventing climate catastrophe requires that upwards of 80 percent of current fossil fuel reserves must remain unburned; no discussion of what will occur if abatement technology is not sufficient to respond to regulatory carbon limits; no analysis of the extent to which carbon regulations/risks could affect the company’s value. Simply stating that risks exist that may have financial implications is insufficient.

Similarly while Anadarko admits to risk, it does not state whether or how the company plans to address such risks. For example, it states that it is reducing GHG emissions from its own operations, and identifies certain actions it is undertaking to do so, but it does not quantify how extensive those actions are (implemented at a few, a majority, or all of its wells or operations); whether these actions reduce the risk of stranded assets; whether any carbon capture and storage programs are effective and to what degree; or how it is changing its future capital expenditure program, if at all.

RESPONSE TO ANADARKO ARGUMENTS

Anadarko’s Opposition Argument is as follows:

- 1) Anadarko states that the company continually looks for ways to minimize the overall environmental impacts of its activities, including the reduction of GHG emissions. It notes that it formed a Climate Change Committee to take action on climate change and GHG emission and the committee assists with monitoring the science of climate change, monitoring the company’s measures to reduce GHG emissions, and overseeing implementation of GHG emission programs in an effort to maximize the commercial value of proactive GHG management. (2013 CDP report, s. 1.1a)



While the formation of this Committee suggests that Anadarko is considering means of reducing its GHG emissions and addressing climate change issues, it is impossible to confirm. The Committee does not appear to report its actions, has not provided the scenario planning and analysis requested by this proposal, has failed to set GHG reduction goals or offer shareholders any evidence of work-product.

- 2) Anadarko states that it already reports information responsive to the proposal that addresses the long and short term financial and operational risks to the Company of concerns regarding climate change. Anadarko also states that it annually reports climate related risks and opportunities to the CDP and that, as part of this disclosure, for each identified risk, Anadarko reports potential financial implications, methods for mitigation, and costs of mitigation.

Section 5.1b of the CDP climate change module asks companies to address the potential financial implications of risk driven by changes in regulation, methods used to manage this risk, and the costs associated with these actions. While Anadarko does identify some programs it is undertaking to reduce greenhouse gas emission risk, it does so summarily and its cost reporting is extremely general. For example

- Anadarko states that it is already making operational changes to new and existing facilities to reduce potential regulatory impacts, “all at an operational cost and in some cases, reduced operational efficiency.”
- “For the proposed NSPS, Anadarko is currently evaluating the cost implications of installing all low-bleed pneumatic devices and requiring flaring at every completion event. Additional cost implications regard resources required, both in terms of labor as well as management systems, to efficiently manage data required for compliance with applicable laws and regulations as well as provide associated reports and documentation to officials. Lastly, costs are also associated with noncompliance in the form of fines or litigation in some cases.”
- Anadarko further states in section 5.1b that “Regulatory risk is managed by internal teams via Anadarko's internal risk management process. This process assesses the business implications of various regulatory risks and models financial implications using detailed cost estimates of various components of compliance.” Yet, Anadarko does not disclose what risks are addressed by this process, the results of the modelling, its financial implications, or what business decisions follow from the analysis.

While shareholders appreciate Anadarko’s assurance that it is managing risks, investors require a detailed, transparent assessment of risk scenarios, including whether assets, including reserves, are likely to be stranded; the potential scope and size of the losses associated with such scenarios, if any; and forecasts of the financial implications of various responses and mitigation measures.

- 3) “To further demonstrate its commitment to responsible environmental stewardship,” Anadarko notes that it has incorporated best practices into its operations to reduce GHG emissions including leak detection surveying and pipe replacement; systems to recover and reduce vented CH₄;



replacement of natural gas-fired pneumatic pumps with solar pumps; and replacement of older, less efficient compressors. It also states that it supports and participates in ongoing GHG emission-mitigation research, including partnering with EDF and university research teams to find and more accurately measure leaks and releases across the natural gas supply chain, determine the impacts, and ultimately reduce them.

Again, while good, these strategies do not provide the carbon asset risk analysis requested in the proposal, which requests data answering the question: what losses do investors face when carbon regulation, or decreased demand due to carbon constraints, render many of Anadarko's assets unusable? Methane leaks, deplorable as they are, likely represent a small portion of Anadarko's overall carbon asset risk.

- 4) Finally, the company notes that it would be required to engage in speculation on a variety of issues in order to respond to the proposal, including possible future carbon restrictions and the conduct of consumers in response to any such regulation. Anadarko argues that the company cannot, at a reasonable cost, determine what actions political bodies are likely to take in the future relating to restrictions on fossil fuels and their contribution to climate change.

To the contrary, the primary scenario analysis requested in the proposal has been the subject of extensive public discussion, mainstream news media coverage, and various published analyses. Far from being speculative, this proposal asks Anadarko to undertake an analysis of a scenario in which government acts to protect the climate by instituting regulations that require that fossil fuel reserves remain unburned. Not only should this type of forecasting be a regular, customary part of the typical risk management activities of a company of Anadarko's size in the energy sector – and thus relatively simple to generate -- there are financial tools that exist solely to assess carbon asset risk. Further, recent studies, on which Anadarko can draw, have also assessed the magnitude of the risk. These studies have been brought to the company's attention in this proposal, in the letter provided by shareholders to the company, and through conversations between the Company and shareholders. It is this risk that shareholders are requesting that Anadarko disclose, analyze, and provide a report on the potential impact to the company and its goals and plans, if any, to address the potential risk. Further demonstrating that this request is reasonable, as described below, certain of Anadarko's peers in the coal, and oil and gas industry have begun to produce such analysis at shareholders' request.

PEER COMPARISON

Both Peabody Energy and ExxonMobil have recently acted as leaders in the field, publicly agreeing to issue reports on Carbon Asset Risk ("CAR"). As demonstrated by Exxon's recent CAR report, providing an analysis of the potential for stranded assets and other risks associated with climate change does not require a company to conclude that their assets are at risk. Critically important, however, is providing shareholders with the information and assumptions on which a company bases such conclusions such that shareholders can assess the risk associated with their positions in the company.



CONCLUSION

In order to make informed investment decisions, shareholders must be aware of the financial risk Anadarko faces related to stranded reserves and infrastructure, and whether or how the company is planning to maintain operations in a carbon constrained economy. This information will allow investors to assess the company's value and risk more accurately, analyze whether the company is positioned to thrive in the future, and provide context for future investment decisions. If the company's reserves cannot be freely sold in the future, the company's future long term solvency is uncertain. It is critical that companies are transparent with investors as to the risks threatening the value of their investments.