# Five-year Stock Price Comparisons of High-Fossil Stock Holdings

Prepared for Vermont Government Operations Committee

Michael Dworkin

**Brandon Oldham** 

February 19, 2016

My name is Michael Dworkin.

You deserve to know the major experiences that have shaped my thoughts about expected returns from investments in companies with high reliance on fossil-fuels.

#### I have been:

Vermont Public Service Board Chairman

Electric Power Research Institute Exec. Committee of Board

New England Conference of Public Utility Commissions President

NARUC Committee on Energy and the Environment Chairman

Telecom Engineering Firm Mgt. Partner

US Environmental Protection Agency Appellate Litigator

#### I now am:

Professor of Law & Director IEE Vermont Law School

Board of Directors VELCO State-wide Electricity Transmission

Board of Directors VEIC Energy Efficiency programs for

Vermont, Ohio & DC

Importantly, none of these entities are responsible for what I say today!

### <u>Abstract</u>

As supplemental information to the memo and testimony provided, the following charts aim to provide substantive evidence to consider and assist in the decision-making process regarding the divestment of currently held high-fossil stocks. The charts examine the five year historical stock prices of the three largest oil & gas and coal companies in the U.S. Market. Performance is based on stock price comparisons to the S&P 500.

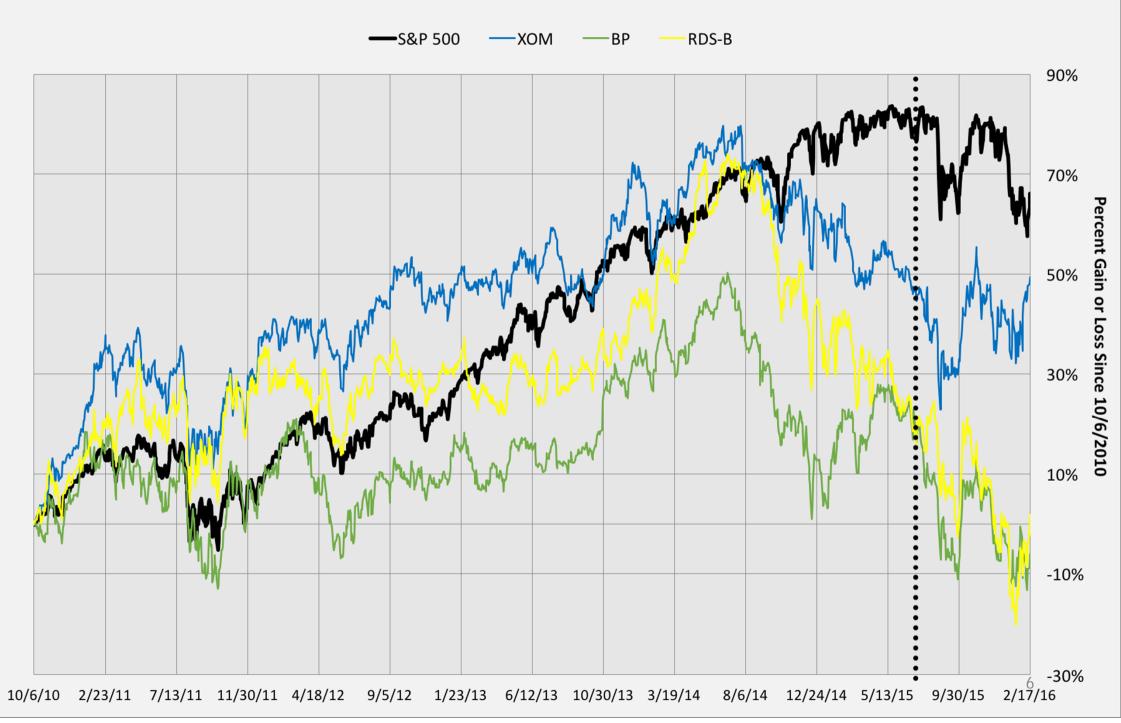
## Data Sources and Specifications

- Largest Oil & Gas and Coal Companies are based on total carbon reserves as of 2015
- Two large coal companies, Arch Coal (ACI) and Alpha Natural Resources (ANR) have gone bankrupt since October 2015, and thus were not included.
  - Reserves of ACI and ANR are higher than Rio Tinto and Cloud Peak by about 2-3 Gt CO<sub>2</sub>
- Historical stock price data and market capitalization values obtained from Yahoo! Finance®
- Data compiled and graphics generated by Brandon Oldham, brandonoldham@vermontlaw.edu, Research Associate at Institute for Energy and the Environment | Vermont Law School

### **Contents**

- Five Year Stock Price Comparison Charts
- Largest Oil & Gas Companies include:
  - Exxon (XOM), British Petroleum (BP), Royal Dutch Shell (RDS-B)
- Larges Coal Companies include:
  - Peabody (BTU), Rio Tinto (RIO), Cloud Peak Energy (CLD)

#### 5 Year Daily Close Stock Price Comparison of Largest Oil & Gas Companies against the S&P 500



#### 5 Year Daily Close Stock Price Comparison of Largest Coal Companies against the S&P 500



# Key Takeaways

- The largest oil & gas companies have consistently underperformed the S&P 500 over the last five years by an approximate margin of 40%
- The largest coal companies have consistently underperformed the S&P 500 over the last five years by an approximate margin of -100%
- There is strong reason to believe these stocks will continue to lose value in the mid to long term future due to
  - Increased supply
  - Reduced demand