

Debunking the Independent Petroleum Association of America's Pension Divestment Report

Fossil Fuel Divestment and Public Pension Funds - Compass Lexecon

The Independent Petroleum Association of America (IPAA) recently commissioned a report from consultants with Compass Lexecon. The report contains a number of inaccuracies and false assumptions about pension fund investments in fossil fuel companies.

WHO IS THE IPAA?

The IPAA is an industry trade group consisting of oil and gas producers responsible for producing 54% of oil and 85% of natural gas in the United States. Sponsors of the IPAA include¹: Chevron, ExxonMobil, and Shell among others.

In its report, IPAA makes the following claims about pension fund divestment:

1. Divestment would cost pension funds trillions of dollars, an outcome that likely would significantly harm returns for pensioners.
2. Given the unique role of the energy sector in the economy, investors who chose to remove traditional energy from their investments reduce the diversification of their portfolios and thereby suffer reduced returns and greater risk.
3. These costs are further compounded when considering the additional costs of transactional fees, commissions, and compliance costs that are unavoidable when divesting.
4. Divestment may seem noble, but it has real financial implications for pension funds, many of which are already struggling to provide reliable investment returns to beneficiaries.

The modeling in the report lacks credibility: no one was considering divesting fossil fuel stocks in 1966 so modeling based on that assumption is faulty. **On a methodological level, the report is wrong about at least about one fund, the New York Teachers Retirement System. It assumes the NYTRS invested in equities for the past fifty years. Prior to 1990 the fund never invested in equities.** With such a fundamental, material fact about one of the funds being wrong, the whole study is suspect.

—
Tom Sanzillo,
Director of Finance,
Institute for Energy Economics and Financial Analysis,
Former Deputy New York State Comptroller

BP and Royal Dutch Shell have unsustainable dividends. These companies are liquidating themselves rather than facing up to the need for a dividend cut. The only thing that can save them from that eventuality is a return to sustainably higher oil prices -- something that I think is very unlikely to happen.

—
Neil Woodford,
Head of investment,
Woodford Investment Management Ltd.

Past returns are not necessarily indicators of future performance:

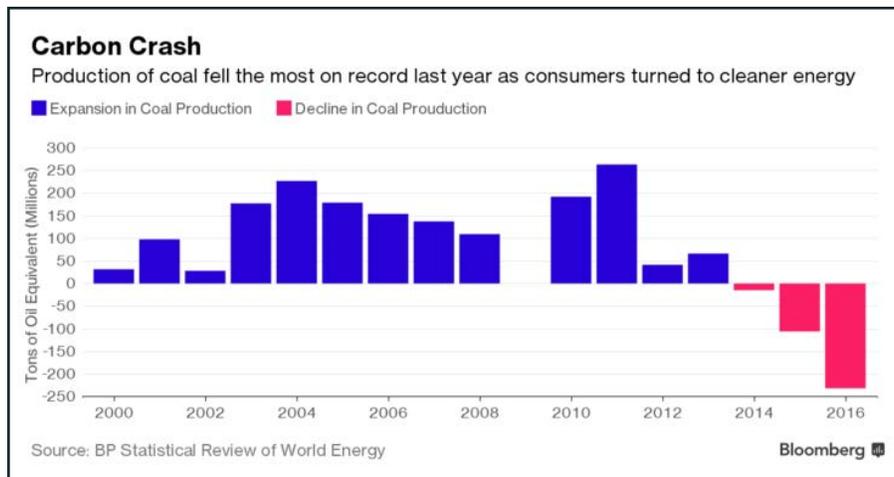
Most of future oil production currently owned by the oil majors requires oil to be at approximately \$55 a barrel for projects to break even. The price of oil has averaged \$50 in most recent years and is currently hovering around \$45 (June 28, 2017 Texas Intermediate Crude)². A significant portion of the valuation of oil companies is based on future extraction and production of resources

that are currently unaccessed in places like the Gulf of Mexico or Canadian tar sands. Much of the 'cheap and easy to produce', high margin oil has already been extracted or is currently in production, leaving companies with higher cost, lower margin future projects. Therefore, the future of the oil sector is a future of low or negative margins. Currently, analysts are warning oil and gas companies as the companies try to maintain dividends by increased borrowing and selling off assets, an approach that is unsustainable and is increasing the risk to investors.³

¹ International Petroleum Association of America. [Website](#). 2017.

² Gloystein, Henning. ["Oil prices drop as rising us fuel stocks revive glut concerns."](#) CNBC. June 27, 2017.

³ Katakey, Rahkeem ["Big Oil Vows to Keep Dividends Up as Prices Falter."](#) Reuters, March 29, 2017.



The current state of the coal industry and its recent, quick, and terminal decline provide insight to the possible future for oil.

- Over 50 U.S.-based coal companies went bankrupt between 2012 and 2016, destroying billions in equity and bond values.
- Even after some of the coal companies have exited bankruptcy and restructured, the outlook for the industry remains bleak. Coal once claimed 50% of United States electricity generation; today its market share is only 30%, and that share is likely to keep shrinking. Coal production dropped by a record amount in 2016, driven largely by an increase in natural gas and renewable energy production.⁴
- In the 1980's, seven of the top ten companies in the Standard and Poor's 500 Index were oil companies. Today only one oil company, ExxonMobil, is in the top ten, but it has lagged the Standard and Poor's 500 since July 2013.
- ExxonMobil recently wrote off 3.6 billion barrels of oil sands investment in Canada. This step effectively reduced ExxonMobil's global reserve portfolio by 19%. ExxonMobil's recent reserve updates were taken only after considerable prodding by the press, state Attorneys General, the United States Securities and Exchange Commission and industry-wide write downs in the oil sands.
- The oil and gas industry's \$2.3 trillion of upstream projects – roughly one-third of business as usual projects to 2025 – are inconsistent with global commitments to limit climate change to a maximum 2°C and rapid advances in clean technologies.⁵ For example, ExxonMobil risks wasting up to 50% of spending on potential high-cost projects that are surplus to supply needs if it pursues business as usual policies while Shell, Chevron, Total and Eni have 30% to 40% at risk.
- The outlook for the oil industry is negative, as persistently low prices curtail growth for this mature/declining industry.

⁴ Katakey, Rakteem. ["World Coal Production Just Had Its Biggest Drop on Record."](#) Bloomberg News. June 13, 2017.

⁵ CarbonTracker Initiative. ["2 Degrees of Separation – Transition Risk for Oil and Gas in a Low Carbon World."](#) June 2017.

Moody's Investor Service recently noted, "With the Paris Agreement in effect as of 4 November 2016, the global oil and gas industry faces significant risks from the effort to curb greenhouse gas emissions. The most immediate effects will come from stricter environmental policy and regulation, and reduced demand for fossil fuels—particularly oil—although estimates of timing and degree vary widely. Understanding and assessing these risks will require transparent and extensive disclosure by oil and gas companies regarding the comprehensive nature of their asset bases and their strategy and governance in addressing carbon transition risk (CTR). The industry is also exposed to technological advances in other sectors that could hasten demand destruction for oil and natural gas. Direct financial impacts will emerge over time as commodity prices become pressured in a falling demand environment and projects with high development costs become stranded."

Moody's Investor Service, "Oil and Gas Industry Faces Significant Credit Risks from Carbon Transition". April 26, 2017.⁶

IPAA's study ignores the power of disruptive technologies.

The internal combustion engine swept away the horse and carriage, and electric vehicles are poised to do the same to gasoline and diesel powered vehicles. Much demand for fossil fuel is expected to come from developing countries like China and India. However, falling costs of electric vehicles and solar panels could halt worldwide growth in demand for oil and coal by 2020.⁷ As outlined in a report by the Grantham Institute at Imperial College London and the Carbon Tracker Initiative, this scenario that takes into account the latest cost reduction projections for the green technologies, and countries' pledges to cut emissions, finds that solar power and electric vehicles are "gamechangers" that could leave fossil fuels stranded. Polluting fuels could lose 10% of market share to solar power and clean cars within a decade.

- China aims for non-fossil fuels to account for about 20% of total energy consumption by 2030, increasing to more than half of demand by 2050 and recently announced that 8% of new imported cars within 3 years must be electric.^{8,9}
- Renewable energy will account for more than half (56.5%) of India's installed power capacity within the 10 years to 2027, and India has already added more renewable energy capacity than thermal coal power capacity in the past year.^{10,11} If India achieves its target to install 175 GW of renewable energy capacity by 2022, it will not need to install, at least until 2027, any more coal-fired capacity than the 50GW currently under construction. India is aiming for all cars, scooters, and motorbikes to be 100% electric by 2030.¹²
- The tumbling price of solar energy in India also increases the likelihood that the country will meet – and by its own predictions, exceed – the renewable energy targets it set at the Paris climate accords in December 2015.¹³
- Some of the world's biggest pension funds, seeking long-term returns on green investments, are scouting for deals in India's solar power sector, as well.¹⁴ Canada's top pension fund managers - Canada Pension Plan Investment Board (CPPIB), Caisse de dépôt et placement du Québec (CDPQ),

⁶"[Environmental Risks: Oil and Gas Industry Faces Significant Credit Risks from Carbon Transition.](#)"; Moody's Investor Service. April 26, 2017.

⁷ Press Association. "[Electric cars and cheap solar could halt fossil fuel growth by 2020.](#)" The Guardian. February 2, 2017.

⁸Mason, Josephine. "[China to boost non-fossil fuel use to 20 percent by 2030: state planner.](#)" Reuters. April 25, 2017.

⁹ Lambert, Fred. "[China is pushing for aggressive new ZEV mandate: 8% of new cars to be electric by 2018, 12% by 2020.](#)" Electrik. October 31, 2016.

¹⁰"[Non-fossil fuels will form over half of India's energy capacity in 10 years, says govt.](#)" Hindustan Times. April 19, 2017.

¹¹ Mahapatra, Saurabh. "[India Added Twice As Much Renewables Capacity As Coal Capacity In 2016-17.](#)" CleanTechnica. May 1, 2017.

¹²"[India aims to become 100% e-vehicle nation by 2030: Piyush Goyal.](#)" Economic Times. March 26, 2016.

¹³ Safi, Michael. "[Indian solar power prices hit record low, undercutting fossil fuels.](#)" The Guardian. May 10, 2017.

¹⁴ Tripathy, D. and Varadhan, S. "[Global pension funds warm to India's solar power ambitions.](#)" Reuters. April 30, 2017.

and Ontario Teacher's Pension Plan (OTPP) are looking for entry points, while Dutch fund manager APG, Canada's Brookfield Asset Management, the private equity arms of Goldman Sachs, JPMorgan and Morgan Stanley, and European utilities EDF, Engie and Enel have already started investing in India's renewable energy sector.

McKinsey & Company projected that there would be 900,000 mobile subscribers in the US by 2000 -- there were 109 million. "In 1980, McKinsey & Company was commissioned by AT&T (whose Bell Labs had invented cellular telephony) to forecast cell phone penetration in the U.S. by 2000. The consultant's prediction, 900,000 subscribers, was less than 1% of the actual figure, 109 Million. Based on this legendary mistake, AT&T decided there was not much future to these toys. A decade later, to rejoin the cellular market, AT&T had to acquire McCaw Cellular for \$12.6 Billion. By 2011, the number of subscribers worldwide had surpassed 5 Billion and cellular communication had become an unprecedented technological revolution."¹⁵

RESPONSES FROM THE EXPERTS:

Lisa Anne Hamilton,
Director, Climate & Energy,
Center for International Environmental Law (CIEL)

Dr. Fischel's report suffers from a number of flaws and omissions. In its brief 23 pages, the report fails to mention the Paris Climate Agreement, the commitments made by over 190 countries to reduce their carbon emissions under the accord, or the expected impacts that implementing those commitments will have on the future demand for fossil fuels. Where countries have already begun to implement the Paris Agreement, it is a near certainty that this global regulatory initiative presents vastly different challenges for fossil fuel investments than in previous years. As a result, the returns on fossil fuel investments over the next 50 years are projected to be vastly different than the returns over the last 50 years. The absence of any data concerning the impact of global efforts to reduce carbon emissions on future fossil fuel revenue raises serious questions about the thoroughness of the study's modeling.

Additionally, the Fischel report also suffers from selective attribution. Although Fischel references Moody's 2016 Study on Public Pension funds, the study omits Moody's statements from 2016 and April 2017 that stated "...the oil and gas industry faces significant risks compared to the past...These risks include lower demand for oil and gas over time due to policy initiatives, changing consumer preferences, and disruptive technological advancements, especially in the power and auto sectors that would add uncertainty as to the speed of change."¹⁶ Moody's findings and conclusions are in direct opposition to core assumptions underpinning Dr. Fischel's conclusions and yet the Fischel report is silent on the anticipated impacts of climate change responses on fossil fuel assets, sectors and industries. Even if Dr. Fischel concluded that the Moody's report was inconsistent with his findings, an acknowledgement of such vastly different conclusions would have been more compelling than silence on the topic.

Any fiduciary that relied on this report in isolation should question whether or not a prudent investor would consider this level of inquiry sufficient for industry accepted standards of due diligence.

¹⁵ Lozano, Angel. "[McKinsey & Company projected that there would be 900,000 mobile subscribers in the US by 2000.](#)" Department of Information and Communication Technologies. Universitat Pompeu Fabra.

¹⁶ "Oil and Gas Industry Faces Significant Credit Risks from Carbon Transition." Moody's Investor Service. April 26, 2017.

"Divestment is no longer just an ethical stance or a financial position – it now may be a legal responsibility. Pension funds, among the most risk-averse actors in the financial marketplace, must take the lead on protecting their beneficiaries from the financial risks posed by climate change, effects which will be concentrated most heavily in carbon intensive activities."

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Mercer and the Center for International Environmental Law¹⁷

Tom Sanzillo

Director of Finance,
Institute for Energy Economics and Financial Analysis,
Former Deputy New York State Comptroller

Returns for fossil fuels were large for most of the last fifty years. This is no longer the case. Since 2013 most fossil fuel stocks have lagged the S&P 500 and they are expected to do so for the next five years. Prior to that fossil fuel stocks began to lose relative position in the market in the early 1990's. Fossil fuel stocks went from dominating the market to leading it to now lagging the market overall.

Further, the report does not consider that there now are products on the market that are fossil free and meet investment targets at fees that are competitive for institutional investors, facilitating fossil free investing.

Matthew Sherwood Ph.D

Senior Manager,
Public Markets Investments,
MMBB Financial Services

"This may be looking at valuations and fossil fuels as our main energy source currently. However, the growth of technology within energy is unreal, you have wind power, for example, improving in cost-efficiency at 15% yield a year, so right now when you have wind trading at 7 to 9 cents per kilowatt/hour versus natural gas at 4 cents per kilowatt/hour, wind will actually be very competitive in the next eight to nine years. Even further than that, new technology is constantly being created with certain coals and more reliable oil, and investing those technologies with a further upside is a lot more money. That's where you generate true alpha, like investing in Tesla when it was a startup. I think the opportunities that these technologies create within energy makes it much more attractive."¹⁸

Leslie Samuelrich

President,
Green Century Capital Management

There are potential financial benefits to moving away from investments in coal, oil and gas. The IPAA report is best understood in context. The report is funded by the very industry that it addresses so is inherently biased. The industry likely had to do its own report because they could not find any credible report that shows the divesting over the long-term will reduce the endowment. In fact, every few months there is a study published that contradicts the IPAA conclusions.

¹⁷ Center for International Environmental Law. "[Trillion Dollar Transformation: Climate Risk Must Inform Pension Investment Decisions.](#)" December 19, 2016.

¹⁸ Chief Investment Officer. "[Pensions, CIOs Rebuke Fossil Fuel Divestment Report.](#)" June 9, 2017

Divesting from fossil fuels may benefit investors in both the long and short term and is financially responsible:

- According to global index provider MSCI, the energy sector has consistently been among the most volatile sectors in the global economy since 2005.¹⁹
- Coal, oil, and gas companies are valued partially based on the reserves they hold being brought to market in the future. Given the recent United Nations Climate Talks and resulting Paris Agreement, which will require countries to report on national inventories of emissions by source, and as appropriate, removals, these reserves may become devalued or “stranded assets” as we transition toward a low-carbon global economy.
- Capital at fossil fuel companies can be wasted on high cost projects such as off shore or Arctic drilling instead of returning to shareholders as dividends.²⁰ For example, in 2013 the top 200 fossil fuel companies, by reserves, spent \$674 billion in capital expenditures and paid only \$126 billion in dividends to their shareholders.²¹
- All of Green Century’s mutual funds are fully divested from coal, oil and gas companies, going beyond the global divestment campaign ask of avoiding the 200 companies with the highest levels of carbon reserves.²²

Thomas Van Dyck

CIMA® Managing Director – Financial Advisor, SRI Wealth Management Group,
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Member NYSE/FINRA/SIPC

The energy sector has been under-performing over the last few years, and this is likely to continue as the world moves away from fossil fuels towards renewable sources of energy to meet the Paris Accord. As we saw with coal, the trend is clear that owning carbon for the long haul is not a sustainable strategy. With the transition away from carbon well on its way, investing in the fossil fuel industry will potentially hurt long-term returns. Transaction fees of divestment are and will likely be negligible compared to the under-performance of the energy sector.

Eric Becker, CFA

Chief Investment Officer,
Clean Yield Asset Management

The IPAA report assumes that over the next 50 years fossil fuel stocks will behave the same way they have over the past 50 years. The flaws of this approach are so profound that the value of the study is close to zero. Basing investment decisions on this report would likely be a breach of fiduciary duty. Past performance is not a guarantee of future returns. The study fails to take into consideration numerous factors that will profoundly alter the landscape and potentially make fossil fuels obsolete. Among them: technological developments, policy developments, and a fast-changing climate that will accelerate the transition to a low-carbon economy.

¹⁹ MSCI. [“Responding to the Call for Fossil Fuel Free Portfolios.”](#) December 2013.

²⁰ CarbonTracker Initiative. [“Capex Tracker. A lead indicator of global warming.”](#) February 25, 2015.

²¹ CarbonTracker Initiative. [“Unburnable Carbon 2013: Wasted capital and stranded assets.”](#) 2013.

²² [Top 200 Fossil Fuel Companies](#). Fossil Free.



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