

Prudence and Loyalty in Selecting Plan Investments and Exercising Shareholder Rights

A Proposed Rule by the [Employee Benefits Security Administration](#) on [10/14/2021](#)

COMMENTS RE. ERISA RULING

Docket # EBSA 2021 0013

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Thank you for recommending restoration of the 2015 and 2016 revisions and choosing not to use the 2020 Executive Order. The proposal by Employee Benefits Security Administration is justified and I favor its adoption.

Fiduciary duty (FD) requires prudence and loyalty to beneficiaries. Evaluation of climate risk is required to fulfill FD.

Failure to internalize costs of carbon into the price of fossil fuels (FF) lowers the price of FF while escalating the cost of electricity. As climate risks increase, internalization of externalized costs is likely to increase. This will decrease demand for FF energy, imperiling profitability of FF firms.

Proxy voting by the fiduciary is required to protect the value and risk : return ratio of each security. Because there is little research indicating the efficacy of engagement for changing the business model or carbon intensity of FF firms, portfolio managers should be encouraged to use security selection and divestment. The proposed ruling makes it obvious that this is prudent.

The prudence safe harbor guideline of contrasting potential investments with securities of the same risk makes it clear that this applies to all kinds of securities including securities with high ESG scores. Proposed paragraph b.4., however, does provide a useful clarification that this includes financially-relevant ESG factors.

Declaration that collateral benefits are one of the criteria to weigh when selecting investments from a pool of options that have equivalent risk : return characteristics is an important facet of fiduciary duty. Finance research indicates that collateral benefits may be accrued without compromising risk : reward and total return of portfolios. Securities that have collateral benefits often have low collateral costs (e.g., Social Cost of Carbon). Increasing collateral benefits while decreasing collateral costs of a portfolio provides net benefits that may provide financial benefits to beneficiaries. Net benefits include lower medical bills, better health, and consequent enhanced productivity. Research on this topic warranted.

Paragraph c.3. Is justified to highlight the importance of using “financial interests of the plan” when determining the importance of collateral benefits in investment selection.

Documentation requirements in c.2. should be deleted so as not to discourage fiduciaries from using collateral benefit considerations in their portfolio construction. Prohibition of some investment alternatives as a QDIA is not justified (in d.2.ii) and should be deleted.

Removal of e.2.ii re. proxy voting is justified. Deletion of safe harbor provisions are warranted. Record-keeping requirements for proxy voting should be deleted, as you recommend.

Delete D., 2., iii because it is subsumed elsewhere (D., 2., ii., E.).

Your conclusion is valid and corroborated by an extensive *corpus* of climate finance research.

“1.8. Conclusion

In summary, a significant benefit of this proposal would be to ensure that plans do not overcautiously and improvidently avoid considering material climate change and other ESG factors when selecting investments or exercising shareholder rights, as they might otherwise be inclined to do under the current regulation. Acting on material climate change and other ESG factors in these contexts, and in a manner consistent with the proposal, will rebound, in the first instance, to employee benefit plans covered by ERISA and their participants and beneficiaries, and secondarily, to society more broadly but without any detriment to the participants and beneficiaries in ERISA plans. Further, by ensuring that plan fiduciaries would not give-up investment returns or take on additional investment risk to promote unrelated goals, this proposal would lead to increased investment returns over the long run.”

MATERIAL CLIMATE FINANCE CONSIDERATIONS AFFECT RISK : REWARD

When material climate change considerations are used to construct and back test investment portfolios, returns have increased while risk level has been attenuated. During the period from 30 June 2014 to 30 Nov. 2021, the largest FF funds had a negative total return (including dividends) in contrast to the positive total return of the SP500 and each of the other 8 sectors. This confirms the financial risk of investing in FF. The global divestment initiative began in 2012, but did not develop much momentum until 2014. Also, scientific verification of climate change has increased substantially since 2014.

	percent change	5 year Beta
FENY	(48)	1.9
ENPIX	(65)	2.6
XLE	(45)	1.8
XOP	(71)	2.3
RYE	(41)	2.3
SP500	132	1.0 (This includes stocks from each of the 9 sectors)

ETFs of the other 8 largest sectors had the following percentage return during the same period ending 30 Nov. 2021.

XLU	52	.4
XLP	60	.6

XLV	114	.7
XLY	199	1.1
XLI	89	1.2
XLF	106	1.2
XLB	72	1.1
XLK	331	1.0

Beta (B) is the volatility of a security price. It is the most widely used metric of risk relative to the SP500 benchmark. The latter has a B of 1.0. The 3-year average B of FF funds is significantly higher than the 5 year average B . This indicates that the B of FF funds has increased during the last 3 years. In contrast, there is no significant difference between the 3-year and 5-year B of other sectors. As outlined above, the sector with the highest B and lowest $Alpha$ is FF. Thus, all other sectors have a superior risk: reward ratio.

SOCIAL COST OF CARBON

The FF industry, including FF-powered utilities, emit more GHGs in Scopes 1, 2, and 3 than any other. (Scope 3 includes transportation, buildings, and manufacturing.) It is estimated that this sector accounts for 75 - 80% of anthropogenic GHGs.

SCC includes premature deaths, medical costs, degradation of natural resources, decreased GDP; property damage from climate-induced floods, windstorms, wildfires, and drought; increased cost of food, higher risk of conflict, impaired energy supply, climate migration, decreased ecosystem services of habitats, and declining values of real estate. It excludes costs of extraction of GHG emissions from the atmosphere. SCC does not include the billions of taxpayer dollars spent over decades to create regulatory policies and agencies to limit damages from FF industry. Subsidies to the FF industry, totaling \$15 billion annually in the US, are excluded.

SCC also excludes the costs of remediation of leaking pipelines and abandoned wells. In most states including CA, FF firms that own this infrastructure are required to post surety bonds or indemnity bonds. However, the required amount of liability coverage is well below the actual cost. FF bankruptcies are rising and bankruptcy law allows firms to avoid paying the full cost of remediation. Thus, taxpayers are forced to pay an increasing portion of remediation costs. In the US there are several million abandoned wells. This climate finance risk jeopardizes the profits of FF firms, shareholders, and insurers.

Many epidemiologists regard climate change as a factor that increases the risk of pandemics, including zoonoses. Let's consider one example - coronavirus-19. The decrease in global GDP was several trillion dollars during the initial year of the COVID-19 invasion.

Most research on SCC excludes at least a few of the above variables. Thus, most estimates of SCC are significantly lower than the actual cost. There is widespread consensus that the SCC is rising annually.

A July 2020 article published in *Nature Climate Change* estimates the current SCC to be between \$100 and \$200/MT (1). Let's use \$150/MT.

In 2020, 4.6 billion MT of CO₂ were emitted in the US (significantly less than in 2019 due to COVID (2)). Multiplying this by \$150 equals \$690 billion.

1 <https://yaleclimateconnections.org/2020/07/trump-epa-vastly-underestimating-the-cost-of-carbon-dioxide-pollution-to-society-new-research-finds/#:~:text=The%20latest%20research%20by%20an,to%20nearly%20%24600%20by%202100.>

2 [In 2020, the United States produced the least CO₂ emissions from energy in nearly 40 years - Today in Energy - U.S. Energy Information Administration \(EIA\)](#)

MORBIDITY AND MORTALITY

There is widespread consensus that morbidity and mortality due to fossil fuel emissions are part of the Social Cost of Carbon. Let's consider some suggestive statistics that estimate the effect of investment in and divestment from FF companies. More research of this topic is warranted. It would help governments plan cost: benefit studies comparing fossil energy with clean energy options.

In 2018, 8.7 million people suffered premature mortality from FF industry particulate matter (PM) emissions (3). A 2021 study estimated 10.2 million (4) Estimates of the number of annual premature deaths from FF PM in the US range from 335,000 to 355,000. 340,000 times the Value of a Statistical Life in the US (\$10,000,000) (5), equals \$3.4 trillion.

Combustion of FF emits about one dozen toxics. Mortality from the other toxic co-pollutants was not estimated. Many of these toxics are also GHGs, which are the foremost cause of climate change.

What is the death toll from climate change (that is not due to toxic airborne pollution)?

One estimate for the world is 150,000 annually (6) This is a very conservative estimate because cause-of-death records rarely mention air pollution. There is a high probability that premature mortality from climate change, as well as toxic co-pollutants, will continue to increase as long as FF combustion continues. Between 2030 and 2050, over 250,000 deaths per year are projected to be caused by weather extremes (7). Notice how small these numbers are when contrasted with premature mortality from FF PM.

3. <https://www.seas.harvard.edu/news/2021/02/deaths-fossil-fuel-emissions-higher-previously-thought>

4 [Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem - ScienceDirect](#)

5 [Value of life - Wikipedia](#)

6 <https://www.who.int/heli/risks/climate/climatechange/en/>

7 <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

Let's examine only one FF stock, XOM - a globally diversified oil major. The following amounts are for 2020.

Gross revenue was \$179B

Global revenue from the entire industry was \$2,100T (8,9)

XOM's percent of global FF industry revenue was 8.5% (\$.179B/\$2.1T).

The product of 8.7 million x 8.5% is 739,500. This is the number of worldwide deaths attributable to PM from XOM operations in 2020. (This does not include traumatic occupational deaths and injuries of XOM workers and death due to other toxics and GHGs).

To eradicate all gross revenue of XOM would require divesting the entire market cap of XOM. This was \$174B in 2020. Each divestment of \$1.74B (1% of market cap) would decrease premature mortality, on average, by 1%, i.e., 7,400 lives.

The total economic costs of FF industry emissions include medical as well as many other kinds of damage (10). Note that the costs exceed the total revenue from the global industry.

Most of the top ten (non-communicable) illnesses causing death, globally, are exacerbated or caused by fossil fuel emissions. Most of these ills are chronic (11,12,13).

PROBABLE BENEFITS TO BENEFICIARIES FROM AVOIDING FF SECURITIES

If portfolio managers exercise their fiduciary duty, beneficiaries will probably reap the following financial benefits:

- decreased medical claims

- decreased total of co-payments

- decreased insurance premiums (health and property & casualty)

- decreased income taxes for climate mitigation and remediation

- decreased risk and increased returns of the pension portfolio

- decreased costs of property damage and deductible payments due to climate change

- decreased volatility of the value of their accounts

8 [How much money is the fossil fuel industry worth? \(askinglot.com\)](#)

9 [Global Oil & Gas Exploration & Production - Market Size | IBISWorld](#)

10 [Wayback Machine \(archive.org\)](#)

11 [Health and Economic Costs of Chronic Diseases | CDC](#)

12 [Heart Disease Facts | cdc.gov](#)

13 [FastStats - Heart Disease \(cdc.gov\)](#)