Fossil Fuel Divestment: A Guide for Presbyterians

The mission and purpose of the church is to be "a provisional demonstration of what God intends for all humanity." In other words, Presbyterians seek to model right living, to include the promotion of good throughout society and the relief of suffering.

Human-induced climate change will cause massive suffering. Even apart from climate effects, fossil fuel mining and processing is a polluting, risky, and soon to be unnecessary business. Alternative power sources that avoid atmospheric degradation are currently economically competitive. The transition away from fossil fuels is inevitable. Assuming the normal rate of recapitalization, the transition will be complete in 75 years. Unfortunately, this pace is far too slow to avoid a calamitous rise in temperature. We have 9 years.

Many Presbyterians have recognized the situation. Congregations have designated themselves "Earth Care congregations" and are active on a wide variety of fronts. Among the many steps that can be taken, divesting from fossil fuel companies is one of the easiest and most effective. We examine why this is the case and discuss how to go about it.

The impact of divestment

Divestment will reduce the value of corporate stocks, which will in turn accelerate the demise of the fossil fuel industry. Some point out that it is corporate debt (loans and bonds) that primary fund operations, not stock offerings. Others say that, while divestment might feel good as a moral posture, these purported effects don't play out. Bill Gates argues against divestment and instead recommends investing in climate-positive technologies. Still others say that it is demand rather than supply that needs to be curtailed and that, if the major companies are hampered by divestment, demand will be met by even less responsible providers. So how do we reduce demand? Economists recommend a carbon tax, but this and many other regulatory approaches have been blocked.

Divesting from stock may indeed not be the strongest or most direct lever against fossil fuel usage, but divestment certainly gets the attention of top managers and major investors whose fortunes are highly sensitive to stock price. Their immediate response may be to argue their business 'fundamentals' are sound and justify a high stock price, but there is a major flaw in this argument. Companies claim vast assets on their balance sheets in the form of undeveloped fossil fuel reserves. These reserves are grossly overvalued because they are "stranded," meaning that they will never be developed. A study found that between 40% and 60% of the market value of BP, Royal Dutch Shell and other European fossil fuel companies are stranded assets. Even if governments don't put a halt to development, nature will. One estimate concludes that, in order to keep warming below 2°C, the fossil fuel industry will need to leave approximately 90% of their reserves of coal, oil, and gas unburned.

ExxonMobil, while remaining fully committed to fossil fuel, attempts to blunt criticism through public relations. The results? Over the last decade investors have taken a 25% loss. Exxon's market capitalization has gone from a peak in 2007 of $500B to $138B today (equal to Zoom). Exxon was

removed from the Dow Jones index and is defending itself in court for deceiving the public about climate change.

BP recognizes that its prospects have dimmed and is making a sincere effort to shift away from petroleum before it is too late. Groups such as the Center for Climate Aligned Finances and Climate Action 100+ are helping to form agreements among producers, investors, banks and industrial partners to voluntarily commit to lowering the climate impact of investments. These agreements will amount to more than "greenwashing" (i.e., public relations efforts without substance).

One market observer argues that conventional analysis will tell you that ESG investing (i.e., the use of Environmental, Social and Governance criteria to evaluate investments) shouldn't be profitable. Even so, ESG investors have been getting better returns for a very long time, and there are no signs that this self-reinforcing trend will stop: "It is raising the cost of capital for 'bad' companies and lowering it for good ones. If it continues, it just might result in the disappearance of the fossil fuel industry."
The most important result of divestment is the shift of investor and top management attention to alternative lines of business. $14.5 trillion has already been divested worldwide. A shift of sentiment of that size can speed along the transition from fossil fuels to alternatives.

Stocks to avoid

It is not a simple matter to identify corporations that significantly contribute to global warming. Criteria vary widely; does it include fossil fuel consumers, investors, banks, insurers, servicing companies, and so forth? Included on everyone's list are companies that extract large amounts of coal, petroleum, and gas that are the material source for greenhouse gas emissions (to include methane and refrigerants as well as CO2.). The most aggressive developers of fossil fuel reserves, such as those that extract Arctic oil and Canadian tar sands, surely qualify. The Carbon Underground 200 is an annually updated list of the top coal, oil, and gas extractors globally. One study points out that "just 100 companies are responsible for a whooping 71% of global emissions since 1988. Incredibly, only 25 corporations and state-owned entities were responsible for [i.e., on the front end of the supply chain for] more than half of global industrial emissions in that same period." Beyond publicly traded producer companies, one could add targets such as the major banks that finance fossil fuel projects, plus the companies that insure and reinsure projects.

There are other means to influence the fossil fuel system besides stock divestment. One could, for example, move a bank account from JP Morgan Chase (the largest financier of fossil fuel projects) to a fossil-free bank such as Aspiration Bank. One could also avoid Liberty Mutual, the largest insurer. Bill McKibben offers a concise scan of the complete financial system that keeps fossil fuels afloat, plus the levers that might be applied to crack it open. Curious Presbyterians are encouraged to explore these additional pressure points, but for this guide we resume the focus on producer stocks.
It would be quite a chore to determine exactly which portion of your current holdings are targets for stock divestment. Thankfully, Fossil Free Funds that assists in determining the exposure to fossil fuel stocks within most mutual funds. The average overall fossil-fuel exposure in broad stock indexes is between 10% and 11% of assets. Cutting out just the major fuel producers can knock that portion down to 3-4%. There are plenty of substitute funds that will reduce fossil fuel participation, but do

they add risk by reducing diversification? Over the past several years the subtraction of fossil fuel stocks from the S&P 500 index produced a better and steady return compared to their inclusion. Even so, keep in mind that this performance has been boosted by a lucky coincidence: broad ESG funds that drop fossil fuels end up being weighted toward tech companies, and the tech sector has grown for reasons that have nothing to do with ESG. Further discussion of the upside to divestment is discussed here and here. We discuss more specific substitutions in the context of two basic styles of investing.

Options for the Indexed Investor

Many experts recommend holding broad baskets of stocks and bonds that are indexed to the total market, then rebalancing among funds to maintain proportions aligned with your age and retirement plans. This strategy was popularized by John Bogle at Vanguard who also pioneered lower expenses. The Bogle plan is to hold indexed funds in three categories: US stock, international stock, and bonds (which may further be divided into US and international). Every year a few of the funds that are run by stock pickers will out-perform the broad index funds, but none can achieve this over long periods. Vanguard features unmanaged index funds, while Fidelity and most of the other major investment houses now offer essentially the same choices, and many of them have lowered expenses to match Vanguard. Another way to keep expenses down is through ETFs (exchange traded funds). Below are some ***sample*** substitute funds in each category that omit fossil fuel companies. They are not the only ones, and they are not recommendations. The full range of funds that screen out fossil fuel companies are listed and rated in this database and at fossil free.org.

50% US Stocks VOO, IVV, etc. S&P 500 ETFs (D) VTI Vanguard Total Stock Market (D)	18% 21%	26% 40% 20% 25%	ESGV ESG US Stock ETF (B) VIGAX Vanguard Growth Index Fund (B) SPYX S&P500 Fossil F Resvs Free ETF (C) CHGX Change Finance US LCap FFF (A)
20% Int'l Stocks VEU Vanguard FTSE All World Ex-US ETF (D)	11%	14% 12% 10%	VSCGX Vanguard ESG Int'l Stock ETF (B) GCINX Green Century MSCI Int'l Index (B) EFAX SDR Fossil Fuel Free ETF (B)
30% Bonds VBTLX Vanguard Total Bond Market	4.6 %	4.3%	CGAFX Calvert Green Bond Fund

Notes on funds listed in the table. The grade in parentheses is from fossilfree.org:

- ESGV ESG US Stock ETF. The ESG criteria screen out many other categories of objectionable companies.
- VIGAX (Vanguard Growth Index Fund). This is weighted toward companies expected to grow, and that often equates to IT and other advanced technology.
- SPYX (SPDR S&P 500 Fossil Fuel Reserves Free ETF) takes the standard S&P 500 index and subtracts only the Carbon Underground 200 companies. SPYX holds 5.72% of its portfolio in oilfield services firms and coal-fired utilities. It gains a "C" rating from Fossil Free Funds, but compromises to that standard are inevitable in a broad market index fund. Its 12% three-year annualized return ranks in the best decile of the large-blend Morningstar Category. SPXE (ProShares S&P 500 Ex-Energy ETF) cuts out the entire energy sector but leaves in fossil fuel-consuming utilities.
- CHGX (Change Finance U.S. Large Cap Fossil Fuel Free ETF) divests entirely from problematic stocks and sectors. Not only does CHGX exclude oil and gas producers, it also excludes coal miners, oil and gas refiners, and processors and utilities that burn fossil fuels. It is one of the

few ESG U.S. equity ETFs that exclude Tesla, Facebook, Amazon, McDonalds, Uber and additional companies that have been criticized for labor, privacy, and other environmental issues. Despite omitting many stocks, the result doesn't significantly deviate from a complete index fund.

International stock index funds

- VSGX (Vanguard ESG International Stock ETF) excludes adult entertainment, alcohol, tobacco, weapons, fossil fuels, gambling, nuclear power, failure to meet UN global compact principles, and diversity criteria.
- GCINX Green Century MSCI Int'l Index (B) 12.17% return.
- EFAX (SPDR MSCI EAFE Fossil Fuel Free ETF), and partner EEMX (SPDR MSCI Emerging Markets Fossil Fuel Free ETF) which charges 0.3%.

Bond funds

- CGAFX (Calvert Green Bond Fund). Green bonds are issued to finance projects that contribute to climate-change solutions. While green bond funds aren't fully diversified, they are composed of bonds that are only marginally riskier. 6.99% return.
- BGRN (iShares Global Green Bond ETF) tracks the Bloomberg Barclays MSCI Global Green Bond Select (USD Hedged) Index and has an expense ratio of 0.2%. Because its bonds must be investment-grade and are a mix of government and corporate issues, it could fulfill part of an investment-grade bond allocation.
- NUBD (Nuveen ESG US Aggregate Bond ETF) (0.2% expense ratio) has fossil fuel exposure of 1.3%. 4.48% 1-year return.
- EAGG iShares ESG US Aggregate Bond ETF (0.1% expense ratio) has overall exposure of 1.6%. 1.65% return.

"Robo" whole portfolio investment services	
- Betterment Climate Impact Portfolio: ● CRBN (½ of stocks) ● SPYX, EFAX, EEMX fossil fuel free funds (½ of stocks) ● BGRN Global Green Bond Fund	22.3%
- Betterment Core Portfolio (ESG)	15.9%
All-in-One ESG funds	
- SWYEX Schwab Target 2030 - VASGX Vanguard Life Strategy Growth	14% 15%

Individual stock portfolio strategy

For at least a portion of one's holdings, a common strategy is to assemble a portfolio of individual stocks. The Motley Fool advisory service is a proponent of this approach. (Tom Gardner, a founder, happens to be a PC-USA leader in the National Capital Presbytery.) Their approach is to buy between 15 and 30 high-potential stocks and hold each for at least 3 to 5 years while making a few adjustments along the way. The theory is that at least one or two of the stocks is likely to do extremely well, but you can't predict which ones. The big winners are likely to outweigh any losers, though with volatility. This strategy may sound risky, but if it is applied with discipline it rarely fails and often works much better than the Bogle strategy. You may need some help from analysts to identify the "high potential" stocks. Consider that plenty of analysts, along with Motley Fool, singled out Amazon, Netflix, and similar stocks that grew exceedingly well, despite temporary downturns.

Many analysts argue that climate-positive technologies and services will prosper, and that several companies that serve these markets will have outstanding performance. Venture capital has been pouring into climate-positive schemes, based on the dual promise of technological innovation and a rapid shift from fossil fuels. This includes electric vehicles, batteries, and wind, solar, and hydrogen-based technologies. Some stocks in these areas will succeed wildly, some will fail miserably, and most will have volatile prices. Motley Fool has discussed stocks that look good to them in the areas of renewable energy and in energy more generally. Stocks in one's full portfolio must range over a variety of markets, of course, but climate-positive stocks could certainly be included. One could revert to an indexing approach just for this sector, for example with the S&P Global Clean Energy Index that surged over 100% in 2020. See below sample climate-positive stocks from an actual portfolio:

Market segments	Sample climate-positive high-potential stock portfolio	6 month gain to Feb 2021
	TOTAL 16 stock portfolio	25%
electric car	SOLO Electra Meccanica	8.5%
autonomy	APTV Aptiv	23.1%
wind	VWDRY Vestas Wind Systems	10.9%

solar	SEDG SolarEdge	13.3%
hydrogen	BE Bloom Energy	5.4%

Two additional factors may be of interest when picking stocks for a portfolio. Some climate-related stocks may have local relevance, where one might have an opportunity to exert influence through supporting legislation or by speaking up at stockholder meetings. Virginia's Dominion Energy, for example, has made significant shifts lately toward wind and solar, partly due to a thaw in legislation. Another interesting direction is to consider B Corporations that make explicit and audited pledges involving climate change mitigation. While many of these companies are not listed on the major stock exchanges, there are newly available ways for qualified investors to participate (e.g. SPACs).

Evaluating your divestment decisions

Tools are available to help select and evaluate fossil-free portfolios. The Portfolio Decarbonizer tool shows the financial implications of divesting high carbon companies in favor of those that derive at least 20% of their revenues from environmental markets or new energy. This tool shows what would happen to a portfolio that shifted to clean energy companies beginning in October 2012. One scenario shows that the New York State pension fund would have been $5.3 billion dollars richer today if it had divested fossil fuels holdings and reinvested in clean energy.

Special concerns for institutional investors

Those who oversee institutional investments have strict fiduciary responsibility. While this reduces one's options, a prudent institutional policy no longer requires significant fossil fuel holdings: "In 1980, the [fossil fuel] industry claimed 29% of the S&P 500. Today, it only occupies 5.3%, the lowest level in more than 40 years. During the latter part of the last thirty years, the sector remained an important component of fund portfolios even as market support for the industry eroded. For investment advisors and fiduciaries that continue to hold oil and gas stocks, it is a much smaller task to reallocate 5% of an investment portfolio than 29%."

Over 1,300 large institutions, holding over $14 trillion in assets, have changed policy and made commitments to avoid fossil fuel stocks. Religious institutions make up a large share of those divesting, led by the Episcopal Church, the United Church of Christ, and the World Council of Churches. Other major divesting institutions include the Rockefeller Brothers Fund (the legacy of the Standard Oil fortune), Ivy League and other universities, New York City, New York State ($225B), and Ireland. Parts of PC USA are also participating. Some pension funds, such as TIAA, are holdouts and may need encouragement from its beneficiaries.

Additional reading

Fossil Free PCUSA is a project of Presbyterian Peace Fellowship. In 2014 leadership of FFPCUSA and representatives from 12 concurring presbyteries traveled to the General Assembly in Detroit to present an Overture to divest. This overture was sent to the Mission Responsibility Through Investment (MRTI) committee for further study. In 2016, the support for an updated overture grew to 31 concurring presbyteries. and in 2018 there were 40 concurring presbyteries.

"Make a Clean Break: Your Guide to Fossil Fuel Free Investing," 350.org.

Bill McKibben writes a newsletter for the *New Yorker* available here. Also see his latest book, *Falter: Has the Human Game Begun to Play Itself Out?,* Henry Holt, 2019.

Naomi Klein, *On Fire: The (Burning) Case for a Green New Deal,* Simon & Schuster, 2019. Also, *This Changes Everything: Capitalism vs. the Climate,* Simon & Schuster, 2015.

William MacAskill, Does Divestment Work? *New Yorker,* October 20, 2015. More detailed analysis of the mechanisms and impact.

Nathaniel Bullard. "Fossil Fuel Divestment: a $5 trillion challenge," *Bloomberg New Energy Finance,* 2014. Covers a wide range of divestment topics with detailed research.