Investing Clean and Green

A Guide for Hospitals and Health Centers on Offering Fossil Fuel Free Retirement Plan Option

Forward

The burning of fossil fuels is a leading driver of climate change and is responsible for serious threats to our health. From droughts and flooding, to increased asthma rates during periods of extreme heat, to the spread of Zika and West Nile virus and Lyme disease, every day, we are witnessing the health consequences from our addiction to fossil fuels.

The good news is that across the country, more and more health systems and health care employees are taking actions to support the transition away from fossil fuels to clean up the air, reduce disease, and help solve the climate crisis.

Every action we can take will help our patients, employees, neighbors, and communities live healthier, more productive lives.

For this reason, I am excited to share this guide with you. As you'll see, it provides comprehensive guidelines for how health systems can establish and offer retirement options for employees that are free of holdings with fossil fuel companies.

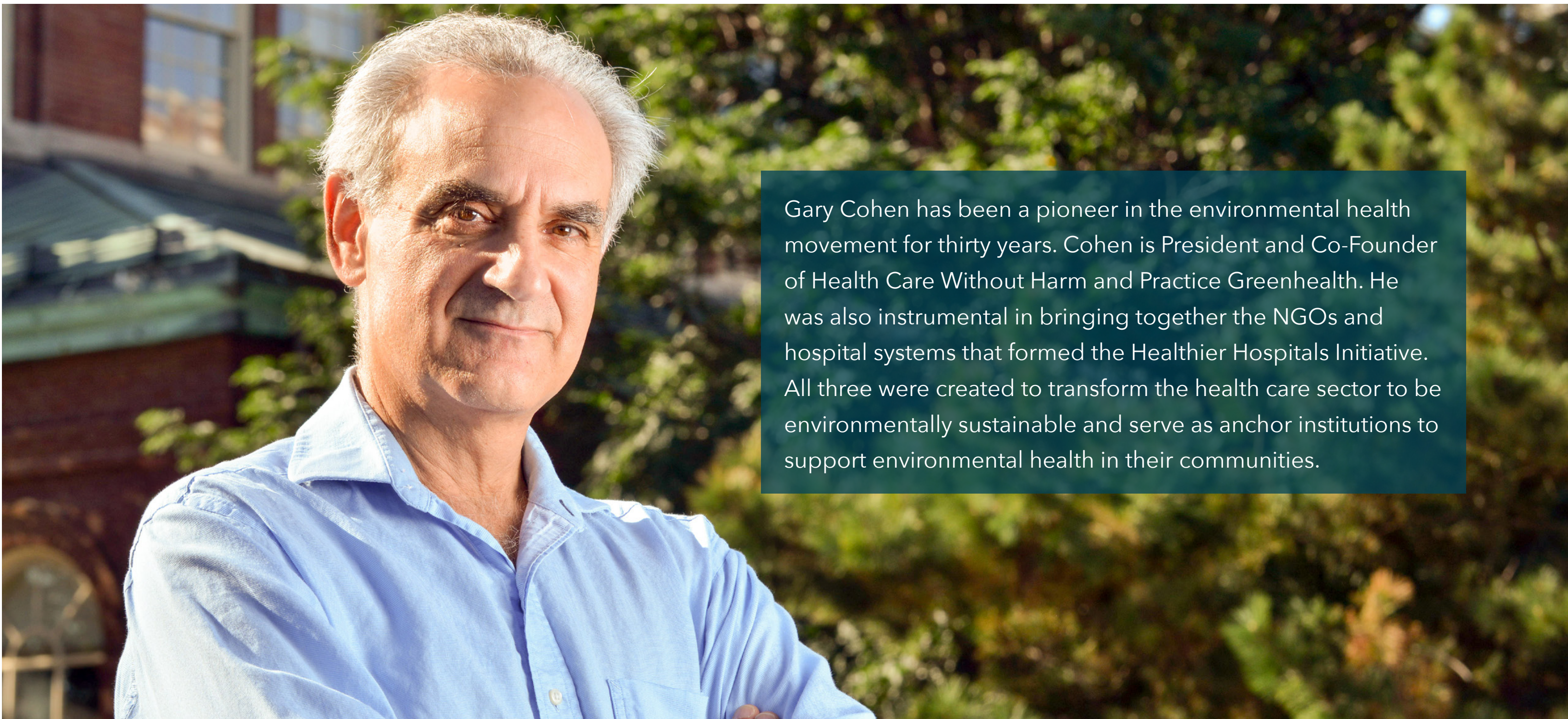
In addition to doing good for the world by establishing green retirement options, research tells us that employees seek out employers who are green and reflect their values about the environment and climate change. Benefits such as green retirement can help with recruitment of new employees, while increasing employee satisfaction and reducing turnover of current employees.

The clock is ticking to protect our children, communities, and the planet from the consequences of climate change. Investments, through employer sponsored retirement plans, have an important role to play in addressing climate change.

I hope this guide will inspire your health system to take action.

Sincerely,

Gary Cohen



Gary Cohen has been a pioneer in the environmental health movement for thirty years. Cohen is President and Co-Founder of Health Care Without Harm and Practice Greenhealth. He was also instrumental in bringing together the NGOs and hospital systems that formed the Healthier Hospitals Initiative. All three were created to transform the health care sector to be environmentally sustainable and serve as anchor institutions to support environmental health in their communities.

Introduction

The *Investing Clean and Green: A Guide for Hospitals and Health Centers on Offering Fossil Fuel Free Retirement Plan Option* is designed to provide hospitals and health systems with the knowledge and actionable steps needed to offer fossil fuel free investment options through their retirement plans. The Guide offers specific actions for human resource directors, sustainability directors, and other leaders the reasons to extend their sustainability commitment to their retirement plans and the common questions or challenges they may encounter, as well as potential solutions to address them in their 401(k) and 403(b) plans.

In addition to providing background information about fossil fuel divestment and the financial and ethical reasons for fossil fuel free investing of the healthcare system and its constituents, the Guide shares insights from industry leaders that are currently progressing toward making fossil fuel free options available to employees.

Why offering fossil fuel free investing options is important for health systems puts forth reasons why divestment and fossil fuel free investing is inherently linked to the mission and values of the health sector. Unfortunately, interest in aligning an individual's or institution's values with an investment strategy is not always enough to create new options for employees. This is why the Guide also offers the financial case for avoiding coal, oil and gas company investments and investing fossil fuel free.

How hospitals and health systems offer fossil fuel free investing options for employees will equip readers with the actionable steps needed to implement these options within their organizations. Regardless of whether your organization's retirement plan platform contains fossil fuel free options or not, the Guide will help readers identify fossil fuel free investment options if they exist through the current brokerage, provide guidance about how to have them included in the retirement plan, and offer instruction for administrators to engage platform providers to include fossil fuel free funds should they not yet be available through the brokerage or retirement plan.

How to communicate the new fossil fuel free retirement options features lessons learned and suggestions for how hospitals and health systems can communicate the availability of, and reasons behind, offering a fossil fuel free investment option once they have been established.

If you are reading this, you have already taken the first step toward helping your institution invest fossil fuel free to contribute to a more responsible and sustainable economy and planet. Hospitals and health systems have an important role to play in mitigating the impacts of climate change and we hope that this guide helps you, your colleagues, and your institution fulfill their mission.

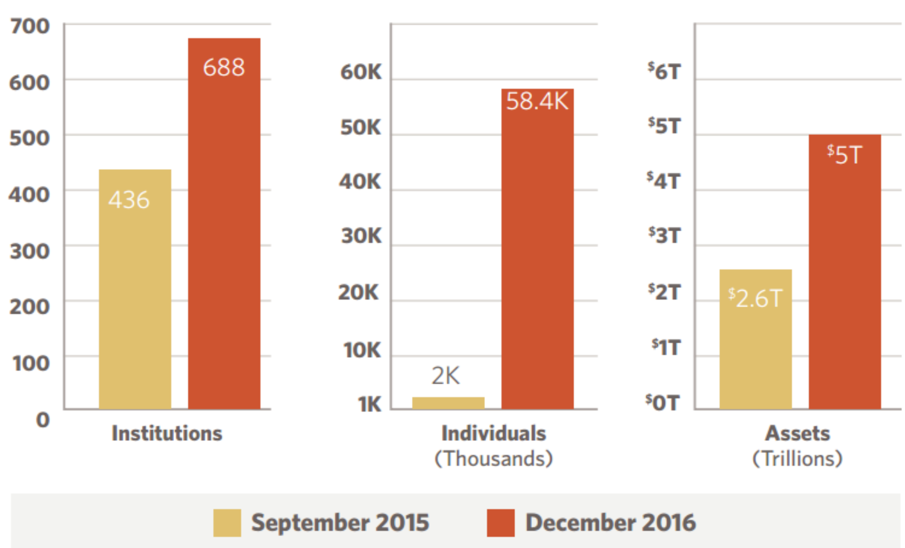
Background

Climate change is no longer a distant, abstract threat—it's here and its impacts can be felt across the world. Over the past twenty-five years, the globe has reached the warmest temperatures ever recorded; more than half of the Artic sea ice has melted; and our friends and neighbors have endured the physical and emotional damage brought on by horrific storms, droughts and flooding.

The effects of climate change are leading to increases in heat-related illnesses and death; extreme weather-related injuries and mortality; aggravated chronic illnesses; spread of infectious diseases: vector -, zoonotic-, water- and food- borne diseases; increases in asthma, respiratory allergies, and chronic respiratory disorders; growing malnutrition and child development complications; increases in stress-related and mental health disorders; growing health impacts related to both population displacement and migration; as well as climate-triggered instability and conflict. The World Health Organization has even called climate change the greatest public health threat of the 21st century.

Divestment from fossil fuel companies and reinvestment in clean, sustainable investments that are progressing the transition toward a zero-carbon world is one of the most immediate, actionable steps the health system can take to encourage change.

The notion of divestment dates back to the 1960s and was used most notably in the effort to dismantle Apartheid in South Africa. Since then, divestiture, or the process of selling assets for either financial, social or political goals, has been applied to address other important issues, such as violence in Darfur, tobacco advertising, and most recently, climate change. As of December 2016, 688 institutions across 76 countries representing $5 trillion have committed to divest from fossil fuel companies, doubling the value of assets represented over the course of one year.[1]



Source: Arabella Advisors "The Global Fossil Fuel Divestment and Clean Energy Investment Movement," December 2016

1 Arabella Advisors, "The Global Fossil Fuel Divestment and Clean Energy Investment Movement." Web.

Within the healthcare sector, not only is there growing acceptance of the evidence from around the world that conclusively shows effects of climate change have a negative impact on human health, there is also an increased understanding that climate change will have major impacts on health care costs, services and delivery. Given this growth of evidence and understanding, in 2016 the World Medical Association called on national medical associations and other health organizations across the globe to withdraw investments from fossil fuel corporations and reallocate investments to solutions-oriented companies that generate energy from renewable sources and those that uphold the ten United Nations-supported principles to improve human rights, labor, anti-corruption and environmental issues.

There has been significant progress within the healthcare sector. Multiple hospitals and health systems have either begun to explore or implement divestment initiatives, but there is plenty we can all still do. Fossil fuel companies are already reporting reserves five times greater than the amount that, if burned, would increase global temperatures more than 2 degrees Celsius, which is the widely-accepted limit to prevent the most dangerous effects of climate change. Now, we have the chance to do more.

SECTION 1: WHY OFFERING FOSSIL FUEL FREE INVESTING OPTIONS IS IMPORTANT FOR HEALTH SYSTEMS

ALIGNING INVESTMENT WITH VALUES AND MISSION

Climate change poses the greatest threat to our families, communities and planet. Investors, both large and small, believe that there is not only a financial benefit to divestment and fossil fuel free investing, but also an ethical obligation to not potentially profit from businesses inherently designed to accelerate climate change, which is negatively impacting public health.

AVOID POTENTIAL FINANCIAL RISK

Fossil fuel free investment options may offer a way for hospital employees to avoid a volatile sector, the potential risk of stranded assets, and rising costs while also possibly experiencing financial benefits.

- **Volatility:** According to global index provider MSCI, the energy sector has consistently been among the most volatile sectors in the global economy since 2005.[2]
- **Stranded Assets:** Coal, oil, and gas companies are valued partially based on the reserves they hold being brought to market in the future. The reserves are counted as positive assets on a company's balance sheet under the assumption that all listed reserves will be extracted, sold and burned.

  Given the 2016 United Nations climate talks and resulting Paris Agreement, which requires 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. As ratification of the Agreement moves toward implementation, companies may have to take a loss on stranded assets and investors would likely suffer. Divesting now could allow investors to reduce their exposure to a possible collapse of the so called "carbon bubble."
- **Rising Costs:** Carbon-based energy companies' economic models are being disrupted by increasing climate regulation, the clear trend of rising production costs without corresponding growth in reserves,

2 MSCI, "Responding to the Call for Fossil-fuel Free Portfolios." Web.

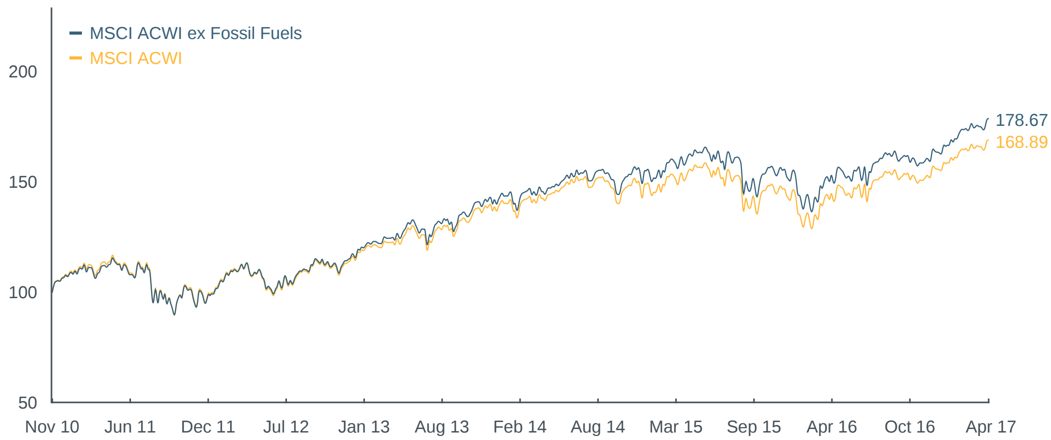
and increasing competition from cleaner renewable technologies. As such, fossil fuel companies may be facing a prolonged decline. Furthermore, health, safety, and environmental hazards and geopolitical instability only amplify the rise of divestment from fossil fuel companies.

- **Dividends:** Regarding production costs, one important financial indicator is a fossil fuel company's level of capital expenditures, which is essentially how much money it spends exploring for and developing new ways to extract fossil fuels. In other words, capital at fossil fuel companies can be wasted on high-cost projects such as offshore or Arctic drilling instead of returning to shareholders as dividends. An analysis by Carbon Tracker shows that the largest 200 fossil fuel companies, by reserves, spent $674 billion in capital expenditures and paid only $126 billion in dividends to their shareholders.[3]

HOW DIVESTMENT MAY IMPACT RETURNS

When introducing the idea of offering fossil fuel free options, a common question that arises is about the financial performance of these investments. Since fossil fuel free investing began attracting attention in 2012, there has been and continues to be a growing body of data and analysis about the financial impacts of divestment and fossil fuel free investing, which can be shared to counter the common misconception that fossil fuel free investments result in lower returns.

In fact, according to MSCI, one of the world's leading stock market index and environmental, social, and governance (ESG) research companies, investors who discarded holdings in fossil fuel companies outperformed those who remained invested in coal, oil, and gas from November 2010 to February 2017.



https://www.msci.com/documents/10199/b9fc9a1e-e1ac-4210-af4d-a0f58cbf4cb7

MSCI's analysis shows that investors who divested from fossil fuel companies would have earned an annualized five-year return of 9.53%, compared to 8.25% return earned by conventional investors.[4]

In a separate study by Aperio Group published in 2016, tracking error, a measure of portfolio volatility versus a benchmark, which is an indication of portfolio risk, showed that carbon-free portfolios' "impact on risk may

3 Carbon Tracker Initiative. "Unburnable Carbon 2013: Wasted capital and stranded assets." Web.
4 MSCI, "MSCI ACWI EX FOSSIL FUELS INDEX (USD)." Web.

be far less significant than presumed." In fact, back-tested carbon-free portfolios had a hypothetical tracking error of only 0.75% compared to the U.S Russell 3000 benchmark from 1988 through year-end 2015.[5]

In general, the level of impact depends on:

- How many companies are excluded
- How these exclusions are managed across the portfolio – including identifying appropriate replacements

It's also important to remember that when comparing overall performance between investment strategies or mutual funds, fees are deducted from net return calculations for strategies and mutual funds but not from benchmarks and indexes. In other words, performance quoted for mutual funds and strategies will be returns minus the fee an investor pays to be invested. Investors are not able to invest directly in an index, the S&P 500 for example, therefore the performance quoted is not net of fees.

REINVEST IN CLEAN, MORE SUSTAINABLE SOLUTIONS

In addition to avoiding the potential financial risks associated with companies that employ practices and policies that are dangerous and hazardous to the environment, divestment may allow the institution's employees to invest in solutions-oriented companies that pay attention to environmental, social, and governance factors and take proactive actions to address public health and environmental issues. These sustainable companies may enjoy a competitive advantage in appealing to consumers concerned about a company's commitment to sustainability, and avoid damage to their brands.

Specifically, renewable energy companies continue to have reduced costs that have made wind and solar power projects competitive with traditional energy sources such as coal, oil, and gas, both in terms of the energy produced and cost of investment. In fact, investment in renewables out-paced those in fossil fuels two-to-one from 2008 through 2015.[6]

OUTLINE THE BENEFITS THESE INVESTMENT OPTIONS WILL PROVIDE YOUR HOSPITAL AND ITS EMPLOYEES

Examples include:

- Aid in recruiting and hiring staff, especially millennials. 76% consider a company's social and environmental commitments when deciding where to work.*
- Increase employee satisfaction. 88% say their job is more fulfilling when they are provided opportunities to make a positive impact on social and environmental issues.*
- Increase the potential for higher participation rates and contribution amounts from employees who care about public health, climate change or sustainability in their investment choices.
- Promote sustainability inside your hospital, which can spur closer relationships with patients and other stakeholders who prefer to use institutions that demonstrate their commitment to public health.

* http://www.conecomm.com/research-blog/2016-millennial-employee-engagement-study

5 Aperio Group, "Building a Carbon-Free Equity Portfolio," Web.
6 Randall, Tom "Wind and Solar Are Crushing Fossil Fuels." Bloomberg 6 Apr. 2016

SECTION 2: HOW HOSPITALS & HEALTH SYSTEMS OFFER FOSSIL FUEL FREE INVESTING OPTIONS FOR EMPLOYEES

RESEARCH WHAT FOSSIL FUEL FREE REALLY MEANS

Each institution needs to decide on its own definition of "fossil fuel free." Most divestment campaigns call for avoiding the top 200 fossil fuel companies by reserves. The Carbon Underground™ top 200 (http://fossilfreeindexes.com/research/the-carbon-underground/) identifies the top 100 public coal companies globally and the top 100 public oil and gas companies globally, ranked by the potential carbon emissions content of their proven reserves.

But, when an institution inquires about avoiding fossil fuel investments, it is typically with the intent to eliminate coal, oil, and gas companies from the portfolio entirely, which is more comprehensive.

While there is no regulated or universally accepted definition for fossil fuel free, one leading firm defines it as:

- No investments in any company that explores for, extracts, processes, refines, or transmits coal, oil, and gas.
- No investments in any utilities that burn fossil fuels to produce electricity.
- No investments in any company with proven carbon reserves.

As the institution considers different definitions and options, it is useful to share the following when options are being considered:

- Terms used to describe funds are not regulated nor follow the same definitions. What is "fossil fuel free" to one firm is not the same to another.
- "Low carbon" is not synonymous with fossil fuel free. A fossil fuel free fund is likely low carbon, but a low-carbon fund is not necessarily fossil fuel free. For example, there have been extensive reports on new exchange-traded funds (ETFs) that have been marketed under a fossil fuel free umbrella. With a little investigation, however, it is clear that many of these offerings are not fossil fuel free. Depending on the product, the funds can hold companies that explore for, extract, process, or refine coal, oil, and gas as well as utilities that burn fossil fuels in order to produce electricity.
- Fossil fuel free products may not use any other value-based screens. For example, the product may include companies linked to tobacco, alcohol, genetically modified organisms, or civilian and military weapons.
- Review the prospectus. The prospectus is a legal document that provides details about the funds' objectives, investment strategies, risks, and performance, as well as other details. Without a clear statement addressing what fossil fuel free means in the prospectus, reference to "fossil fuel free" may simply be a marketing tactic to engage the growing pool of investors interested in fossil fuel free investing.

DETERMINE WHAT FOSSIL FUEL FREE INVESTMENTS ARE IN THE CURRENT PLAN

How to identify if the retirement plan already offers fossil fuel free options

The vast majority of mutual funds, ETFs and separately managed accounts (SMAs) include investments in the stocks of coal, oil and gas companies. So, while it is unlikely that the retirement plan already has a fossil fuel free option, it is a good idea to check.

1. If the Human Resources department does not have access to the companies included in the investment option, it or another appropriate entity, such as the Investment Committee, can ask the retirement plan consultants, financial advisor or even the mutual funds or ETF providers directly.
2. If the plan uses a separately managed account, ask the Investment Committee to provide the most recent available listing of holdings in each of the investment options.

How to add new, fossil fuel free investment options

1. **Gathering Information**

   When the organization has come to a consensus about its fossil fuel free definition, it is time to consider the options.

2. **Understand what types of options are available**

   The specific investment options available are determined by the platform, sometimes referred to as the record keeper, that is used by the retirement plan or consultant. Another way to describe a platform is the menu of options available to your hospital. This menu is determined by a few factors that are helpful to know as the organization begins the process.

   - If the organization uses a financial advisor who is affiliated with a firm such as Fidelity, the retirement plan most likely offers investments carried on Fidelity's platform. Or, for example, if the hospital uses TIAA (formerly known as TIAA-CREF), most of the options in the past were TIAA funds. Increasingly, retirement plan providers are expanding options using open architecture, which simply means that clients can invest not only in that provider's financial products, TIAA in this example, but also in other and potentially competing firms' financial products. If the organization uses an independent financial advisor, they may use open architecture more willingly and not rely on their own firm's products as much as an affiliated advisor.
   - If a hospital's Investment Committee uses one or more investment consultants, the consultant(s) will identify options and present them for consideration. Large institutions with a higher number of employee participants can experience cost savings on fees through a number of investment options, including using an existing asset manager(s) to create separately managed accounts for the hospital. These separately managed accounts are either established investment strategies that multiple institutions use or they may be customized for your organization.
   - Some smaller institutions, such as health care centers, will use mutual funds and ETFs. If your organization plan uses a 403(b), your institution may be required to use mutual funds.

Knowing factors that the Investment Committee and other decision-makers may consider:

1. **Options and restrictions of current retirement plan**

> **FIDUCIARY DUTY**
>
> The Investment Committee and any Financial Consultants must act in ways that fulfill its and their fiduciary duty
>
> There is a common misunderstanding that pursuing sustainable or fossil fuel free options may not align with one's fiduciary duty. However, sustainable and responsible investment options have now been ruled acceptable within Employee Retirement Income Security Act (ERISA)-governed plans. This development was first introduced in October of 2015 and decision makers may not be fully aware. For more information, please refer to the Resources section of this guide.

Present new, fossil fuel free investment options for consideration

> **INFLUENCERS**
>
> HR Department • Sustainability Department • Investment Committee • Retirement Plan Advisors and Consultants • C-Suite Executive Leadership.

2. **If the plan invests in mutual funds and ETFs:**
    - Present funds and ETFs for consideration. It is easier for the Investment Committee to move forward if it has a specific request, such as fossil fuel free funds. The more specific the recommendations are, the better.
    - Some retirement plans use open architecture or offer a self-directed brokerage account. A self-directed brokerage account, sometimes known as an open window option, is an option within the retirement plan for participants to access more than the list of funds presented. It allows the participants to access many, if not all, of the other funds and ETFs that are available on the platform. For example, if the hospital or health system uses Fidelity Investments as its platform, the open window option is called "Brokerage Link." If self-directed choices are not available, it often can be added to the plan for an additional fee.
    - The upside to the window option is participants can choose from hundreds or thousands of options. The downside is that there is usually no way to search for fossil fuel free or socially responsible funds on the platform's site. This means that the participant must know which fund(s) they want by name and or ticker symbol and those extra steps might limit participation to those willing to do their own search.
    - What fund to suggest:
        a. There are a number of websites and resources to help you identify fossil fuel free options. Please refer to the earlier section, "Determine what fossil fuel investments you want added to the plan." You should also consider the cost of the newly proposed option and select the lowest-cost share class available. For example, an Institutional Share Class is typically lower in cost than an Individual Share Class.
        b. The record keeper must have an agreement with the fund in order

to be added to the investment option lineup. If the record keeper does not have a selling agreement with the fund, one can be requested and completed by contacting the fund family directly.

If the plan uses a separately managed account:

- The Investment Committee or consultant should be able to discuss what options are available to help your organization divest and begin investing fossil fuel free.
- Additionally, this team or individual should be able to offer several options, including investing in a new portfolio or creating a unique product.
- If the consultant or brokerage are unable to meet your requirements, please know alternative avenues exist. Within the financial services community, particularly those involved in social, responsible, and impact (SRI) investing, there are several organizations that can help clients achieve a fossil fuel free portfolio. For more information about these practitioners, please refer to Section 5: Resources, specifically the directory of practitioners of sustainable and responsible investments as well as the chart of sustainable and responsible separately managed accounts provided by The Forum for Sustainable and Responsible Investment (US SIF).

SECTION 3: HOW TO COMMUNICATE THE NEW FOSSIL FUEL FREE RETIREMENT OPTIONS

A common obstacle to onboarding new fossil fuel free investment options is garnering enough participants to make them cost effective. So, communicating the new fossil fuel free investment option will be an important step.

- **Factsheet:** Develop a factsheet about the fossil fuel free investing option as well as information about how these options help align employees' values with their investment choices. This factsheet can be emailed or posted to the organization's website.
- **Video:** Video is a popular form for providing information. Produce a video that introduces the new option, which can be emailed internally or posted to your organization's website.
- **Webinar:** Holding an interactive webinar introducing the new investment options and that allow prospective participants to pose questions can also be a valuable tool to communicate these new investment options.
- **Educational meetings:** If the organization has one or multiple locations, holding a series of informational meetings that introduce the new options and allow prospective participants the opportunity to ask questions may help communicate the new investment options as well as increase subscriptions of the new fossil fuel free investment options.

Please note that members from the Investment Committee, or the Committee in its entirety, as well as any third-party investment consultants will likely need to be involved in these communications to present information in an unbiased manner to fulfill their legal obligations.

GUNDERSEN HEALTH SYSTEM

Employees: more than 7,000

Location: Headquartered in La Crosse, Wisconsin, Gundersen Health serves communities across the state of Wisconsin, as well as communities in Minnesota, and Iowa.

OVERVIEW

The implementation and offering of sustainable and fossil fuel free investing options through the organization's retirement plan is part of Gundersen Health System's broader commitment to the environment, sustainability, and health of the communities it serves. Through Gundersen Health System's environmental program Envision®, the organization is providing leadership for the healthcare industry, which demonstrates that "green" is healthy, socially responsible and economically beneficial.

IMPLEMENTATION

In Gundersen's case, the initiative to add socially responsible fossil fuel free investment options to the organization's retirement plan came from executive leadership and was viewed as a natural extension of the Health System's mission to ensure the health and well-being of its patients. As is often the case within large institutions, challenges were encountered during the process of implementation. The two primary challenges encountered by Gundersen revolved around how to define fossil fuel free and ensure the implementation of socially responsible fossil fuel free investment options remained within the scope of its Investment Committee's fiduciary duty.

Once these common obstacles were overcome, through research, both internally and via third-parties, such as investment consultants and asset managers, Gundersen Health System was able to successfully implement new, socially responsible fossil fuel free investment options for its employees.

KEY STRATEGIES EMPLOYED

- **Identify a champion:** An executive leadership-initiated review and implementation of an environmentally responsible and fossil fuel free investing option helped facilitate and expedite the process.
- **Evaluate employee support:** At Gundersen, the Investment Committee conducted a survey to gauge interest, which was a pivotal factor in moving the initiative forward.
- **Clarity and focus:** Gundersen decided on the new investment, which the retirement plan consultants then used.

> "Implementing these options for our employees is a natural extension of our mission. We realized that this was something we could do to improve the health of our community – it was a matter of integrity."
>
> \- Mark Platt, Senior Vice President,
> Business Services at Gundersen Health System

SECTION 5: RESOURCES

For information regarding consideration of environmental, social, and governance (ESG) criteria within fiduciary responsibility under the Employee Retirement Income Security Act of 1974 (ERISA), visit:

- https://www.federalregister.gov/documents/2015/10/26/2015-27146/interpretive-bulletin-relating-to-the-fiduciary-standard-under-erisa-in-considering-economically; or https://www.dol.gov/agencies/ebsa/employers-and-advisers/guidance/advisory-opinions/1998-04a

To research the Carbon Underground™ top 200:

- Click here to access the list through the www.gofossilfree.org
- Visit www.fossilfreeindexes.com/premium-downloads/ to download the list in Excel. The Carbon Underground™ top 200 is updated on a quarterly basis for subscribing customers. The entire 2016 publicly-available annual rankings list is available at no charge to individual investors, asset owners, not-for-profit organizations and the media, and can only be used for non-commercial purposes.

To search for mutual funds invested in fossil fuels within your portfolio or retirement plan, visit:

- https://fossilfreefunds.org/

To research fossil fuel free investment strategies:

- Click here to see the information on fossil fuel free mutual funds and investment managers compiled by 350.org or visit http://gofossilfree.org/usa/your-road-map-to-personal-divestment.
- Visit http://greenamerica.org/fossilfree/ to see the mutual funds and investment managers compiled by Green America.
- Visit http://www.ussif.org/AF_MemberDirectory.asp for a directory of practitioners of sustainable and responsible investments.
- Visit http://charts.ussif.org/mfpc/ to search for a variety of socially, responsible, and impact investing funds and http://charts.ussif.org/sam/ to search for sustainable and responsible separately managed accounts compiled by The Forum for Sustainable and Responsible Investment (US SIF).

To join the global divestment movement:

- For students, cities, and institutions that want to learn more about the global divestment movement: visit http://gofossilfree.org/
- For individuals that wish to be counted in the global divestment campaign, register your intention to divest with DivestInvest at wedivestinvest.org
- For institutions that wish to be counted in the global divestment campaign, register your intent to divest with DivestInvest at divestinvestguide.org.

SECTION 6: CONCLUSION

There are compelling ethical and financial reasons to divest from fossil fuels and invest fossil fuel free. The health care sector is a massive consumer of energy. The societal, and health care sector's, reliance on fossil fuels is leading to an unprecedented global health crisis by accelerating and exacerbating the negative impacts of climate change. Our reliance on coal is of particular concern. Coal negatively impacts people's health throughout its lifecycle, from mining it to consuming it to emitting it in the atmosphere. Coal is directly linked to heart disease, asthma, low birth weight and increased risk of stroke. Coal is also the largest contributor to the global climate change. So as a matter of global public health, we need to phase out our use of coal and transition to cleaner energy sources.

Health care can play a unique role in leading the transition toward a lower-carbon economy and world by providing employees with mutual fund and other retirement options that are fossil fuel free. Health systems can also divest from fossil fuel industries and reinvest endowments in fossil fuel free, alternative, and solutions-oriented companies.

For hospitals and the health system, investing in clean energy sources and other sustainable investment strategies makes sense for a number of reasons. Primarily, because it aligns with the health system's mission to support the health of the communities it serves.

We hope this guide has both provided you with the inspiration, information, and tools to create fossil fuel free retirement options for employees. It is never too early, or too late to offer investment options that forward the mission of your institution to protect public health.

Acknowledgements

Health Care Without Harm would like to thank the Kresge Foundation for its generous support and Green Century Capital Management for serving as the primary advisor for the development of *Investing Clean and Green: A Guide for Hospitals and Health Centers on Offering Fossil Fuel Free Retirement Plan Option*. The authors would also like to acknowledge Sarah Cleveland of Sarah Cleveland Consulting, Paul Hilton of Trillium Asset Management, Craig Metrick of Cornerstone Capital, Rob Thomas of Social(k), John Wrenn of UBS, Jim Wrenn of UBS, Mark Platt and Gary Wickus of Gunderson Health System, and Timothy and Rose Yee of Green Retirement.

Glossary

401(k): is a qualified employer-established plan to which eligible employees may make salary deferral (salary reduction) contributions on a post-tax and/or pretax basis.

403(b): is a retirement plan for specific employees of public schools, tax-exempt organizations and certain ministers. These plans can invest in either annuities or mutual funds.

Paris Agreement: is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gases emissions mitigation, adaptation and finance starting in the year 2020

Stranded assets: fossil fuel energy and generation resources which, at some time prior to the end of their economic life (as assumed at the investment decision point), are no longer able to earn an economic return (i.e. meet the company's internal rate of return), as a result of changes in the market and regulatory environment associated with the transition to a low-carbon economy.

Carbon bubble: refers to the idea that there is a bubble in the valuation of companies dependent on fossil-fuel-based energy production, because the true costs of carbon dioxide in intensifying global warming are not yet taken into account in a company's stock market valuation.

Dividend: a sum of money paid regularly (typically quarterly) by a company to its shareholders out of its profits (or reserves).

Backtesting: is the process of testing a trading strategy on relevant historical data to ensure its viability before the trader risks any actual capital. A trader can simulate the trading of a strategy over an appropriate period of time and analyze the results for the levels of profitability and risk.

Benchmark: is a standard against which the performance of a security, mutual fund or investment manager can be measured. Generally, broad market and market-segment stock and bond indexes are used for this purpose.

Index: is an indicator or measure of something, and in finance, it typically refers to a statistical measure of change in a securities market. In the case of financial markets, stock and bond market indices consist of an imaginary portfolio of securities representing a particular market or a portion of it.

Cost of investment: Also known as return on investment (ROI). ROI means the investment gains compare favorably to investment cost. As a performance measure, ROI is used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. In purely economic terms, it is one way of considering profits in relation to capital invested.

Exchange-traded fund: a type of investment fund that is traded on a stock exchange.

Separately managed account (SMA): is a customized share portfolio where the assets are owned by individual investors. An investment is allocated across one or more available investment models, which will determine the portfolio allocation between shares.

Fiduciary duty: is the highest legal duty of one party to another, it also involves being bound ethically to act in the other's best interests.