Divest-Invest Philanthropy
Doing Good. Performing Better.
Beat your Benchmarks. Beat Climate Change.

The global phenomenon known as Divest-Invest has surged in power and reach over the past year. With over $5 trillion in total assets, an increasing number of institutions and individuals are moving their money out of planet-heating fossil fuels and into climate solutions. Fiduciaries for pension funds, municipalities, universities, health organizations, faith groups, public charities, private foundations, and corporations have all reached the same conclusion: Divesting and investing in the clean energy future is a prudent financial and ethical choice.

Historically, the fossil fuel industry has been a source of strong returns for shareholders. But the risks of fossil fuel reserves becoming stranded assets, the increasing costs of extraction, and the increasing cost competiveness of renewables, now threaten those traditionally healthy yields. It is now financially prudent to move investment from fossil fuels to renewable energy and other climate solutions. It is also the clear ethical choice for foundations, who as charities, have a duty is to serve the public good.

Divest-Invest Philanthropy welcomed its first members in January 2014. Since then, more than 150 foundations are walking the talk, while beating their benchmarks. We distill some of our learnings from the past few years in this document, in the hopes that foundations on the fence will be inspired to lead also.

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"Our foundation's approach to making a difference in the world is holistic. Whether we are investing in social change or the market, we will remain mindful that money is a means, and not an end unto itself. As a foundation, our true bottom line is the good we do in the world."

- *Adelaide Park Gomer, President and Board Chair, Park Foundation*

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History of the Movement

Five years ago, hopes for a solution to climate change were at a 20-year low, the economic and political challenges too daunting. The UN climate conference held in Copenhagen in 2009 had ended without a meaningful agreement and efforts to pass a comprehensive climate bill collapsed in the US Senate in 2010.

Philanthropy had poured tens of millions of dollars into promoting settled science, and millions more into communicating that science. Additional millions were spent to pass comprehensive policy in the US and other key countries. And youth activists were encouraged to lobby for public policy *du jour* over campus-based action. Each step of the way, philanthropic and NGO resources were dwarfed by the fossil fuel sector pouring more into climate denial and lobbying. The combination of setbacks left a demoralized climate advocacy community in its wake.

Climate advocacy needed a new way forward, beyond policy debates and back-room negotiations by politicians and corporations. It had to be much more inclusive, democratic and, crucially, it had to harness the power and imagination of a grassroots people's movement. At this moment of profound reassessment, the divestment movement was born.

Taking a play from the anti-Apartheid movement, students began to call for universities to divest from fossil fuels. The US-based Wallace Global Fund was an early advisor to, and funder of, these first divestment campaigns. The Fund's Executive Director, Ellen Dorsey, herself an activist in the anti-Apartheid push, knew firsthand the power of divestment as a driver of fundamental social and political changes. She persuaded her board to support the early campaigns, and then set about recruiting other foundations to help too.

During the Apartheid era in South Africa, when governments refused to impose economic sanctions on the regime for its human rights abuses, faith leaders and students shifted the target to the companies that were directly invested in the country. Those companies had lobbied successfully against government sanctions, but activists found a new vulnerability. They began calling on institutional investors – particularly universities – to divest their assets from companies doing business with the Apartheid regime.

Archbishop Desmond Tutu credits this divestment campaign as one of the key tactics that brought down Apartheid and ushered in a new day for South Africans. Students looking for a way to break the impasse on climate change, saw a parallel with today's influence of the fossil fuel industry. What if they established a new social norm that it was not permissible to profit from an industry wrecking the planet? What if they made fossil fuels toxic in the public eye and, in turn, weakened the industry's grip over government?

In 2011, the first divestment campaigns began on college campuses. Students demanded that their college endowments divest from energy sources driving climate change: A handful targeted coal, some focused on all fossil fuels. While their call was primarily based on the moral argument that institutions of higher learning should not be supporting or profiting from industries that undercut the climate, the economic logic was also powerful. Coal had been in a state of steady decline over the past half decade. By the end of the year, there were several dozen active coal divestment campaigns across the country.

These vigorous initial campaigns were given an enormous lift when Bill McKibben published the historic "Global Warming's Terrifying New Math" in Rolling Stone calling for full fossil fuel divestment on college campuses, linking an ethical call to action with the financial risks of stranded assets laid out by the Carbon Tracker Initiative. Mapping the world's coal, oil and gas reserves against the global carbon budget we cannot surpass and stay on a 2 degrees Celsius track, Carbon Tracker's analysis exposed the risks that fossil fuel asset values are inflated. They concluded that roughly 80% of the known reserves must remain in the ground if we are to preserve a hospitable – and even habitable – planet. These massive reserves of coal, oil and gas were effectively what the finance lexicon calls "stranded assets": Their full economic potential could not be realized. Either they would be stranded – or we would. It followed that institutional investors had hidden climate risks in their portfolios.

An enormously successful U.S. tour, "Do the Math," followed, calling on student groups around the country to organize and demand change from their college administrators. Since that time the movement has truly exploded, moving from dozens of schools to hundreds overnight, and from the U.S. to Europe, Australia and beyond. And it spread to other sectors, as community-based activists called on faith groups, cities, pensions funds, and retirement accounts to divest.

Divestment as a tactic provided an on-ramp for activism that engaged individuals frustrated by the public failure to enact meaningful policy. They could use their leverage over institutional power to target the industry that was blocking progress. The theory of change behind divestment is three-fold. First, the ethical call for divestment stigmatizes the fossil fuel industry and starts to undercut its social license to operate. Second, by calling for both divest and invest, institutional investors shift capital flows away from the problem and into the solution, accelerating a transition to a future fueled by sun, wind and water. Third, and most significantly, by activating campuses, congregations, and community leaders, a broad-based constituency for climate action is born, emboldening politicians and global governments to act with increased ambition for real policy solutions. But could it work? The ethical case was simple: non-profit institutions like universities, foundations, faith groups and hospitals should not profit from businesses demonstrably and irrevocably harming the public good. Trustees were suddenly on the defensive, called on to respond to ethical concerns.

Financial arguments bolstered the ethical. Fossil investments were volatile in the short term and potentially very risky in the long term. The argument for financial risks strengthened as coal values plummeted, followed by volatility in oil prices. Portfolio managers were presented with compelling evidence of a carbon bubble that will burst when markets internalize climate risk. Increasingly the finance sector took notice and began debating stranded asset risks, first at the Davos World Economic Forum, and then in the halls of the Bank of England. Risk concerns moved quickly into the mainstream, driving some financial agencies to warn that prudent investors should apply a climate filter to their investment portfolios immediately. As a 2015 report by Mercer states, "climate change ... will inevitably have an impact on investment returns."

As financial concerns began to align with ethical considerations, divestment commitments started racking up. First a few universities took action, followed by faith groups. Municipalities, cities and states began to pass legislation calling for divestment. Hospital endowments began to look at climate's health risks and their own fossil fuel investments. Foundations stepped up in a significant way, fearing that their investments were driving the problems they asked their grantees to solve. Additionally, many of the same institutions began to seek out investment products in renewable energy, energy efficiency, clean tech and energy access, to *capitalize* and *capitalize upon* the energy transition.

The movement's progress was first chronicled in a report released in September 2014, as 400,000 people marched in New York demanding action in advance of a UN meeting on climate change. The report by Arabella Advisors documented that, in just under three years, more than 800 endowments and individuals – managing assets totaling over $50 billion – had made divestment commitments. Alongside the release of the report, several iconic commitments were announced, including the World Council of Churches, a prominent Catholic University and over 50 foundations. However, one historic announcement garnered the front page of global news outlets: The Rockefeller Brothers Fund, heir to the Standard Oil Fortune, was divesting from fossil fuels and investing in the clean energy economy. President Stephen Heintz was quoted as saying that John D. Rockefeller himself would have agreed with the move. "We are quite convinced that if he were alive today, as an astute businessman looking to the future, he would be moving out of fossil fuels and investing in clean, renewable energy," Heintz said.

Since that time, the largest pension fund in Norway, Axa Insurance, Allianz insurance, the California pension fund system, dozens of new universities, hospitals, and faith groups, have committed to divest. Endorsed by institutions such as HSBC and the World Bank, and by individuals as diverse as Ban Ki Moon, Prince Charles, and Archbishop Tutu, divestment began to move into the mainstream and commitments now appear across the world on an almost weekly basis.

In Spring 2015, a group of foundations and family offices, led particularly by the Ashden and Mark Leonard Trusts in Europe established Europeans for Divest Invest, to focus expansion efforts there. The initiative has seen 32 foundations in Europe pledge to divest invest, with assets over $8 billion including the KR and Villum Foundations in Denmark, Fondations Carasso and Ensemble in France, as well as the Wermuth Family Office and Bewegungsstiftung in Germany.

Moreover, under scrutiny and pressure, iconic investors and foundations not yet willing to commit to divest from fossil fuels have begun to make very public commitments to invest in renewable energy and other clean tech investment technologies. In June of 2015, Bill Gates, subject to a global pressure campaign led by the Guardian newspaper, pledged to invest $2 billion in "breakthrough" clean technologies. Subsequently, immediately in advance of the Paris climate talks COP21, Mr. Gates upped the ante yet again by launching "Mission Innovation," a bold pledge by 20 global governments and some of the world's wealthiest individuals to double their investments in research and development (R&D) for climate solutions.

And as it inevitably does, the market has responded. New fossil-free investment products are appearing rapidly, bolstered by research that shows that fossil-free portfolios are yielding positive, competitive and even superior returns. Indeed, just last month, an analysis by MSCI showed that fossil-free stock portfolios have outperformed standard portfolios every year for the past five years. Many of the 100 foundations that have committed to 'Divest-Invest', are tracking the impact on their portfolios with case studies and publicly available data. The results have been very positive. In this way, the movement is helping to capitalize the clean energy transition and to accelerate the paradigm shift to a new economy that respects planetary limits as well as the human potential to prosper and thrive.

World in Transition

Coal's free-fall in the markets is just one signpost of a global energy transition now well underway. The continuing volatility of oil and gas prices also gives pause to investors looking for steady, reliable returns. Chevron just announced it will slash its 2016 budget by 25% and its workforce by 10%, as it grapples with the shifting sands beneath its feet.

Meanwhile, solar is the fastest-growing power source around the world, with solar module prices falling 75% in five years. Solar has achieved grid parity in many places in just the past past few years. Most exciting, we are on the cusp of cracking the code on affordable battery storage, the final barrier to total power sector disruption. Some analysts, including UBS and Citi, predict widespread "battery parity" – the point at which renewables plus storage technology is as cheap as grid power – by 2020.

IEA's World Energy Outlook 2015 report documents that renewable energy is *now* the second-largest generator of electricity in the world and will overtake coal, currently the largest, by 2030 – if not before. Africa, China, parts of South America and India are expected to dominate as they seek to leapfrog the dirty development of the West. This coupled with Pope Francis' call to bring 1.3 billion people out of energy darkness presents a stunning opportunity for investors to do good while capitalizing on the growth industries of the present and future.

It is not just the power sector that's being disrupted. A 2014 UBS report noted: "The market is not yet looking at the topics of solar, EVs and stationary batteries with a holistic view. Our proprietary model shows it is the combination of the three that makes solar fully competitive … As a consequence, we expect transformational changes in the utility and auto sectors."

Transformational changes like this give rise to winners and losers: Financial analyst Mark Lewis has compared the fossil fuel producers with European utilities caught off-guard 10 years ago by the switch to wind and solar. Since 2008, utilities' share prices were slashed by two-thirds. "The utilities told us that renewables would have no impact on their business models, and now they are facing an existential crisis," Lewis said. One stunning result is the decision by German utility giant E.ON to spin out its fossil fuel business to focus on renewables. It is the kind of adaptation utilities and fossil fuel companies alike will require to stay relevant in a changing world.

"EON will in the future totally concentrate on renewable energy, the distribution network and customer solutions, and with that concentrate on the most important elements of the new energy world. In no other form of power generation is so much capital flowing as in renewables, a trend which will not slow down but accelerate. Renewable energy revolutionizes not only power generation but also together with other technical innovations the whole role of the customer. He can already produce a large part of his own needs with a solar system. Going forward thanks to energy storage solutions he will be able to become independent of the classical distribution of power and gas."

- *Johannes Teyssen, Chief Executive Officer, E.ON*

The Case for Divest-Invest

To Divest-Invest is to pledge, over five years, to sell holdings of fossil fuel shares and invest instead in climate solutions, such as centralized *and* distributed renewable energy, clean tech, sustainable water and food projects, climate justice program that bolster community ownership in the new energy economy, resilient infrastructure, smart cities and energy efficiency. It is now a global and diverse movement, with pledges from *over 500 hundred institutional investors and tens of thousands of individuals*. As of Dec. 2, 2015, the assets under management of divesting institutions exceeded $3.4 trillion – up from $2.6 trillion just over one month prior.

Divest-Invest is rooted in science that requires that the vast majority of fossil fuels have to stay in the ground if we are to avert catastrophic climate changes. Because carbon dioxide persists in the atmosphere for hundreds, sometimes thousands, of years, it is the *net* amount of carbon emitted since the Industrial Revolution that is determinative. Humanity has a finite "carbon budget" – one trillion tons – that tracks to the 2 degree Celsius limit global governments committed not to cross at the Copenhagen climate negotiations in 2009.

The economic underpinnings of the Divest-Invest movement come from the disruptive analysis of the Carbon Tracker Initiative in 2011, which mapped the carbon content of global fossil fuel reserves against the carbon budget, and concluded 60-80% of those reserves cannot be burned if we are to keep warming to 2 degrees Celsius above pre-industrial times.

It follows that if we are to prevent catastrophic climate changes, the bulk of reserves on the books of of both state-owned and publicly-traded coal, oil and gas companies are “stranded assets” whose economic value won’t be realized. Instead, these assets will burn investors who do not divest before the carbon bubble bursts. Divestment is only one half of the equation. All members of Divest-Invest Philanthropy also pledge to invest at least 5% of their portfolio in climate solutions, broadly defined. Clean alternatives are popping up across every sector of the economy, and investors are poised to capture the upside of these new growth industries.

Divest-Invest: Theory of Change

Some question whether Divest-Invest is really an effective strategy, suggesting variously that the movement cannot really undercut the financials of the fossil fuel industry, or that only economy-wide policies like carbon pricing can move the needle on effecting the energy transition the world needs now. Meanwhile, major industry players like Peabody Coal have specifically noted that divestment poses a material threat to their business. And global leaders like Christiana Figueres have asked movement leaders to push for new commitments after the Paris climate talks *as a means to* keep the pressure on policymakers to pass and implement effective climate legislation.

But critics miss a more fundamental point: Divest-Invest is a *social movement* that is changing the way people conceive of and talk about the climate problem and its solutions. Every great societal change in modern democratic history is backed by a people’s movement that dares to defy conventional wisdom and shine a light on what is possible. Politicians and bureaucrats are generally constrained by notions of political feasibility and expediency. Social movements say, no, the status quo will not do. They open a debate, and start to expand hearts and minds. As argued by a report from the Royal Society of Arts, the question is not what is 'realistic', but how we can best shape reality so that the energy transition that is already underway is accelerated. That reality-shaping process is where the divestment movement and the Divest Invest campaign begins to look so compelling. Ultimately, social movements – from Civil Rights in the 60s and the anti-Apartheid campaign in the 80s, to marriage equality and Black Lives Matter today – crack the status quo and help usher in transformational change. They contribute to an ecosystem *in which* new policies can be passed and implemented. Divest-Invest, in concert with the broader people's climate movement, is helping create the conditions in which carbon taxes and other financial reforms to end short-termism in the markets can see the light of day.

In more specific terms, Divest-Invest has a three-part theory of change: First, the ethical call for divestment is stigmatizing the fossil fuel industry and questioning its business model, which ignores external costs and treats the planet like a company in liquidation. Second, by calling for both divest and invest, institutional investors are shifting capital flows away from the problem and into a future fueled by sun, wind and water. Third, and most significantly, by activating campuses, congregations, and community leaders, the movement is building a broad-based constituency for climate action, emboldening politicians and global governments to act with increased ambition for real policy solutions.

> "The outcome of the stigmatization process, which the fossil fuel divestment campaign has now triggered, poses the most far-reaching threat to fossil fuel companies and the vast energy value chain. … In almost every divestment campaign we reviewed from adult services to Darfur, from tobacco to South Africa, divestment campaigns *were successful in lobbying for restrictive legislation affecting stigmatized firms*. If during the stigmatization process, campaigners are able to create the expectation that the government might legislate to levy a carbon tax, which would have the effect of depressing demand, then they will materially increase the uncertainty surrounding the future cash flows of fossil fuel companies.
>
> - *Smith School of Enterprise & The Environment, University of Oxford, October 2013*

Why Fossil Fuels will be Stranded: 3 Trends

Either fossil fuels will be stranded, or we will. To date, financial markets have systematically ignored the threat of stranded assets and associated carbon bubble. There is an eerie similarity to the collective blinders preceding the 2008 housing collapse. Three trends are creating a perfect storm that will undercut the financial value of fossil fuel companies and imperil their investors. They were summarized nicely in an article by David Blood and Al Gore in the Wall Street Journal last year.

First, there is regulatory risk. As governments impose policies to limit global warming, the unburnable reserves of listed fossil fuel companies will become liabilities, aka stranded assets. It follows that investors are sitting on a carbon bubble, a concept that has gained rapid recognition since 2011 due to the work of Carbon Tracker and subsequent campaigns around fossil fuel divestment. The carbon bubble is now taken seriously by major financial houses, including Citibank, HSBC, Moody's and the Bank of England, which is currently conducting an inquiry into the risks of fossil fuel stranded assets.

Second, carbon assets will be stranded by market forces as renewables continue their explosive growth, energy becomes more efficient, and new technologies emerge. The cost of renewable energy has rapidly declined and, in many areas, matches or out-competes fossil fuels on price, leading analysts to argue that the energy transition will be primarily driven by economics. Particularly as battery storage becomes cheaper – solving the intermittency problem – renewable energy will become the obvious, mainstream choice.

> "Renewable sources can now produce electricity at close to or even below the cost of new fossil fuel-based power stations."
>
> - *International Energy Agency, 2015*

Third, stranding is being accelerated by sociopolitical pressures, such as the Divest-Invest movement, grassroots protests and changing public opinion. These forces work to revoke the social license of fossil fuel companies to operate, while lifting up clean and equitable alternatives. One recent victory by the climate movement was President Obama's rejection of the Keystone XL pipeline.

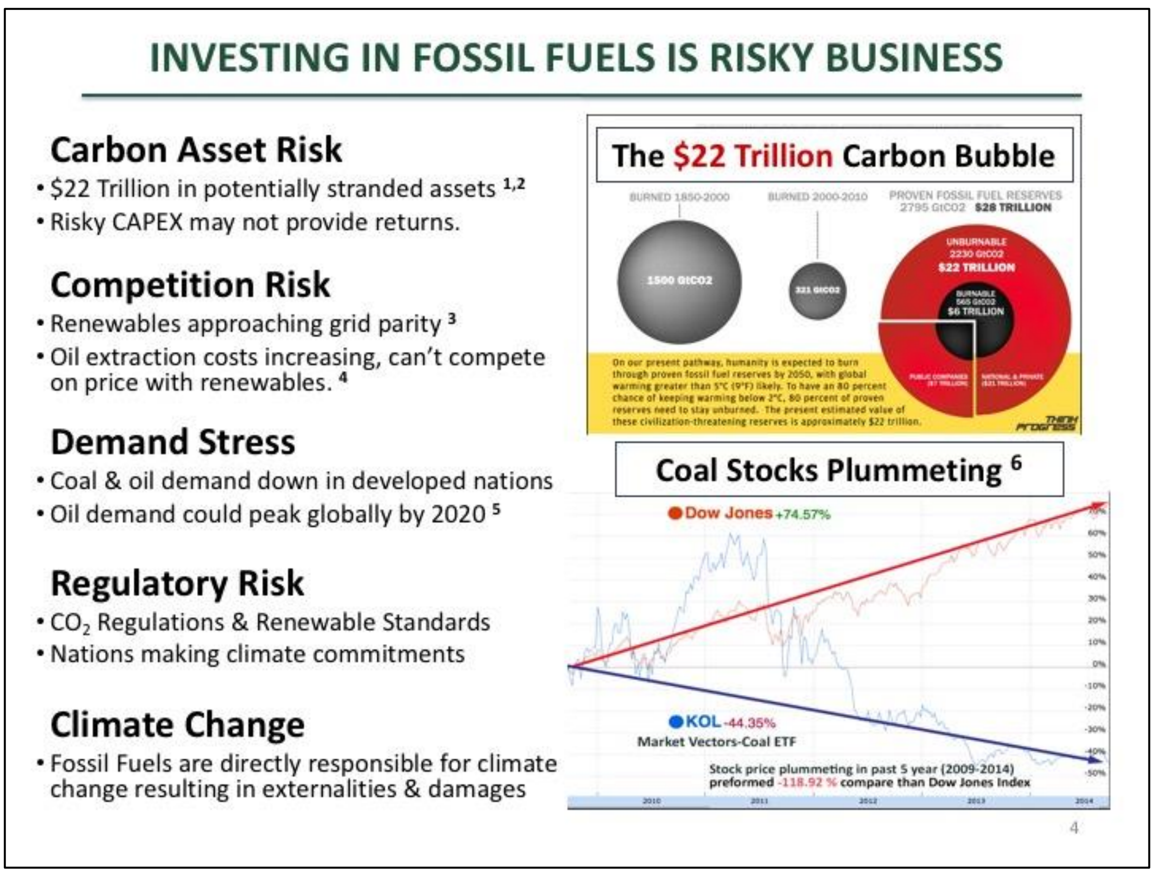
Combined, these factors pose enormous risk to fossil fuel investors. While these risks have not been properly priced by the market to date, change is coming. Investors can limit their exposure to fossil fuel companies by joining Divest-Invest – hedging against climate risk while enjoying the upside of the clean growth industries of the present and future.

DivestInvest PHILANTHROPY

EUROPEANS FOR DivestInvest

"Here is the relevance of carbon to investing: There is consensus within the scientific community that increasing the global temperature by more than 2°C will likely cause devastating and irreversible damage to the planet. Reliable measurements make it clear that we will easily cross this threshold in the near term at our current rate of CO2 emissions. So in an effort to avoid it, the International Energy Agency has calculated a global 'Carbon Budget' that accommodates the burning of merely one-third of existing fossil fuel reserves by 2050. Put differently, at least two-thirds of fossil fuel reserves will not be monetized if we are to stay below 2°C of warming—creating 'stranded carbon assets.'"

- *Al Gore and David Blood, Wall Street Journal, October 29, 2013*



Source: As You Sow, 2015

A Surging Movement

Each week more organizations and individuals are committing to Divest-Invest. On December 12, 2016, we announced that the scope of global fossil fuel divestment had doubled over the past 15 months, with institutions and individuals controlling $5.197 trillion in assets pledging to divest. The announcement came on the first anniversary of the Paris Agreement on climate change. According to the analysis released that day by Arabella Advisors, 688 institutions and 58,399 individuals across 76 countries had committed to divest from fossil fuels. Those sectors that have historically propelled the movement — including universities, foundations and faith-based organizations — accounted for 54 percent of new commitments made.

"One year after the adoption of the historic Paris Climate Agreement, it's clear the transition to a clean energy future is inevitable, beneficial and well underway, and that investors have a key role to play," said UN Secretary-General Ban Ki-moon. "I commend today's announcement that a growing number of investors are backing a shift away from the most carbon intensive energy sources and into safe, sustainable energy. Investments in clean energy are the right thing to do — and the smart way to build prosperity for all, while protecting our planet and ensuring no one is left behind."

Previously, on December 2, 2015, at the Paris COP21, the movement announced that divesting institutions and individuals collectively held over $3.4 trillion in assets. The movement has seen exponential growth over the past year: In September 2014, 181 institutions and 656 individuals representing $50 billion had committed to divest from fossil fuel companies. One year later, 436 institutions and 2,040 individuals across 43 countries and representing $2.6 trillion in assets had committed. *This marked a fifty-fold increase in one year.*

The new commitment in November 2015 by global insurer Allianz was another step-change in the dollar value of the movement's influence: Representing over $600 billion in assets, Allianz brought the movement tally to *more than $3 trillion* as of late November 2015. Also since September, the number of individual signatories has exploded – totaling more than 46,000 people as of mid-November – as everyday-citizens and high net worth individuals are being inspired to fight climate change with their dollars.

Within philanthropy, over 150 philanthropies with over $12 billion in assets have pledged to date. The geographic spread of divesting philanthropies has increased dramatically. In 2014, more than 80 percent of foundations committing to divest were based in the US. Since then, the movement has spread around the world, particularly to UK foundations. In 2015, 64 percent of divesting foundations were based in the US, 20 percent are based in the UK, and 10 percent are based in Australia. Other foundations are based in Canada, France, Denmark, China, Germany, the Netherlands, and Senegal. Organizations that have committed to divest from all fossil fuels include:

Church of Sweden	**The Velux Foundations**
Rockefeller Brothers Fund	**United Church of Christ**
Glasgow University	**Children's Investment Fund Foundation**
British Medical Association	**Canadian Medical Association**
Guardian Media Group	**Newcastle, Australia**
World Council of Churches	**California Institute of Arts**

In addition to those organizations that have pledged to divest all fossil fuels, a number of organizations have committed to divest from the most polluting or risky investments, such as coal and Canadian tar sands. These include:

Axa Insurance	**Norwegian Sovereign Wealth Fund**
Allianz Insurance	**London School of Economics**
Stanford University	**Church of England**
Oxford University	**California State Pension Funds**

A full and regularly-updated list of divesting institutions can be found at gofossilfree.org.

Divestment & Financial Performance

The financials of divestment are strong. Study after study supports fossil fuel divestment as a prudent financial choice. MSCI, the world's leading stock market index company, launched a fossil-free version of its All Country World Index (ACWI) in October 2014. One year later, ACWI ex Fossil Fuels had outperformed its parent index by 60%, producing gross returns of 6.5% compared to 4.1% for the ACWI. MSCI previously published a comparison of the indexes over five years using back-tested data (i.e., calculations of how the fossil-free index might have performed had it existed): Investors who dumped holdings in coal, oil and gas boosted their annual average earnings by 1.2% over that period. In September 2015, Trillium Asset Management released an analysis of the California public pension fund system that showed beneficiaries lost $5 billion in one year due to bad fossil fuel investments.

Perhaps the biggest disruption came in November, when the Canadian research group Corporate Knights released a new tool, the Decarbonizer, that essentially automates the Trillium analysis – allowing anyone to plug-and-play to see how a fossil-free version of an endowment would have fared over a set time window. Of the 14 major endowments featured at time of the tool's release, all but one would have performed better had it divested. The Bill and Melinda Gates Foundation, for example, left $1.9 billion on the table over the past three years. Together, the combination of funds worth roughly $1 trillion would have been $23 billion better off had they divested. With results like these, the case for Divest-Invest starts to become straightforward.

Divestment & Fiduciary Duty

Money managers for foundations and other institutional investors often express concern that divestment could violate their fiduciary duty. However, it may be their fiduciary duty *to divest*. Fossil fuel assets are subject to significant political and regulatory risk due to international efforts to tackle climate change. Mounting evidence suggest that climate risk has not yet been properly priced by the market, but soon will be. In addition, fossil fuel producers increasingly face significant litigation risks, a point highlighted recently by the New York State Attorney General's decision to investigate Exxon Mobil for climate fraud. Trustees and investment committees can divest to manage these risks.

Authorities in the US and Europe agree that profit-maximization is not the only purview of a fiduciary. It is appropriate to consider Environmental, Social and Governance (ESG) factors when making investment decisions, especially when those factors represent underlying financial risk. A recent legal opinion in the UK suggests that a charity with a health, environment or poverty focus, likely violates fiduciary duty if it does *not* divest from fossil fuels.

The Obama administration's Labor Department recently issued Interpretive Bulletin 2015-01, which clarifies for pension funds what factors to consider when choosing investments. The guidance explicitly requires and elevates ESG factors to be within a fiduciary's "primary analysis." With U.S. pensions valued at $9 trillion, the guidance has significant implications and helps redefine fiduciary duty in a time of climate change.

> "Environmental, social and governance issues may have a direct relationship to the economic value of the plan's investment. In these instances, such issues are not merely collateral considerations or tiebreakers, but rather are proper components of the *fiduciary's primary analysis* of the economic merits of competing investment choices."
>
> - *U.S. Labor Department Oct. 26, 2015*

Irrespective, fossil fuel divestment does not require investors to choose between profits and values: All the evidence to date shows fossil-free portfolios outperforming their conventional counterparts.

Divestment & Shareholder Activism

To date, there is no evidence that engaging with fossil fuel companies will be an effective tool to reduce global carbon emissions in the time required. The threshold question in evaluating the value of shareholder activism must be: What is the goal? Is it to encourage fossil fuel companies to transform their business to renewable energy? Is it to wind-down the fossil fuel business and return value to shareholders?

The experience of Divest-Invest Philanthropy member, the Rockefeller Brothers Fund, is emblematic of the failure of shareholder activism to move the needle. Over a decade ago, members of the Rockefeller family tried to get ExxonMobil to stop funding climate denial and transition their business model toward clean energy. The oil giant was the family's legacy, as the Standard Oil Company that John D. Rockefeller founded ultimately became Exxon. Using a variety of tactics – including personal letters, meetings, and shareholder resolutions – the descendants of John D. Rockefeller worked tirelessly to persuade Exxon to change course.

"We were really begging the company to look harder at what they were doing. They were still into climate denial and funding deniers and really against any positive steps," said Neva Rockefeller Goodwin, Rockefeller family member who helped lead the effort. "This was the family trying to get into a friendly conversation with ExxonMobil, feeling we have a strong historical connection with that company. We wanted to start talking with the company about their view of the future and how they could be a constructive player as well as part of the problem." Over the ensuing years, Goodwin and about a dozen other Rockefellers launched three separate shareholder resolutions pressing Exxon to recognize climate change and invest in renewable energy. All three resolutions were easily defeated.

> "It makes a very clear point that engaging with fossil fuel companies to get them to change their ways is unlikely to work if the family of the founder can't get Exxon to shift."
>
> - *Bill McKibben, Co-founder 350.org*

Most fossil fuel companies acknowledge the reality of climate change yet base their business plans on fossil fuel demand that would cause greater than 2°C global warming. Not only this, but few significantly account for any changes associated with climate regulation or an economically driven energy transition. IPIECA – the global oil and gas industry association for environmental and social issues – states that there is no clear evidence of a 'carbon bubble' and that markets are pricing oil and gas companies rationally.

> "We came to the conclusion that it was impossible for today's oil and gas majors to adapt in a timely and intelligent way to the imperative of radical decarbonization. We felt we had no option but to end our long-standing partnerships with both Shell and BP … These are companies whose senior managers know that their current business model threatens both the stability of the global economy and the longer-term prospects of humankind as a whole. It got harder and harder for me to look them in the face knowing what they knew, and witnessing at first hand the intricate patterns of denial and self-deception that they were forced to adopt."
>
> - *Jonathan Porritt, Founder-Director, Forum for the Future*

Following recent shareholder resolutions, the boards of Shell and BP have agreed to increase disclosures of their corporate strategy on climate change as part of routine reporting from 2016. Meanwhile, Shell continues its efforts to explore for oil in the Arctic, and its direct greenhouse gas emissions increased from 73 million tons of CO_2 equivalent in 2013 to 76 million in 2014. This type of failure to match what they know intellectually about the causes and impacts of climate change with global intentions to reduce emissions could be a dangerous constraint on progress unless it is effectively challenged.

Taking Exception: One avenue for shareholder activism

Fossil fuel companies continue to invest billions each year – $580bn in 2013 – in the development of new reserves that cannot be burned. This is akin to tossing half a trillion dollars to the wind each year. Shareholders should demand a stop to this capital waste, calling for the monies be returned to them as dividends or some other constructive purpose.

Moreover, the cost of extracting fossil fuels has increased dramatically as cheap reserves are exhausted: no large project has come online at a break-even cost for almost three years. In July 2015, oil groups shelved $200 billion in new projects primarily due to low oil prices. This fall, oil giant Chevron announced it will be forced to slash its 2016 budget by 25% and cut its workforce by 10%. These are the vital signs of an industry in decline. Shareholders should call for an end to capital expenditures for new projects, and ask their companies to proffer a business plan aligned with a 2°C world.

Signatories to Divest-Invest can retain de minimus shares of fossil fuel companies for purposes of shareholder activism.

The Ethics of Divest-Invest

It is no longer an ethical choice to continue to invest in fossil fuel companies whose business model requires wrecking the planet and its people. Communities of conscience, especially faith groups, human rights NGOs, and the medical profession, are raising their voices in support of Divest-Invest, and climate action now.

Climate change is already having major humanitarian consequences, even though global average temperatures have only risen by 1°C. The refugee crisis in the Middle East and Europe is just a foretaste of human struggles to come, as climate change undermines food and water security for hundreds of millions. Storms fueled by climate change have devastated communities – Hurricane Sandy and Typhoon Haiyan are just two examples. Coupled with rising seas, coastal storms become especially lethal as storm surge penetrate ever further inland. Disease, malnutrition, and extreme heat are other forces we will have to reckon with.

Perhaps no voice was as clear in defining the moral case for climate action and equity than Pope Francis. His historic 2015 Encyclical on the environment, *Laudato Si*, asks us to reimagine our social compact so that it prioritizes the health of our common home, and elevates the rights of the poor and less fortunate. The new system he envisions does not prioritize market growth for its own sake, but seeks to harmonize human needs within planetary limits. The late stage of the climate crisis requires a fundamental shift in the global economy, the Pope says, and a clean break with the industries of the past.

While the Pope's voice has been loudest, it is by no means the only. Here is a sampling of what other faith traditions have had to say.

"For human beings… to degrade the integrity of the earth by causing changes in its climate… these are sins".

- *Pope Francis*

"Climate change is the most pressing moral issue in our world."

- *Archbishop of Canterbury, Justin Welby*

"One way of addressing our own responsibility would be to…move our money from spending that helps …burn our planet to spending that helps to heal it."

- *Rabbinic Letter on Climate Change*

"We particularly call on the well-off nations and oil-producing states to lead the way in phasing out their greenhouse gas emissions as early as possible."

- *Islamic Declaration on Climate Change*

The international health community has been unequivocal that climate change is a grave risk to human health. A University College London-Lancet Commission described climate change as “the biggest global health threat of the 21st Century.” Climate change is also jeopardizing the global biodiversity and ecosystems on which we all depend.

> “Climate change is a medical emergency. It thus demands an emergency response, using the technologies available right now.”
>
> - *Hugh Montgomery, director of the UCL Institute for Human Health and Performance, co-chair of the Lancet commission on Climate Change*

The ethics of divesting take on a special relevance in the context of charities and other mission-based organizations. Non-profit institutions, including universities, foundations, faith groups and hospitals, should not profit from businesses irrevocably harming the public good.

The New Climate Economy

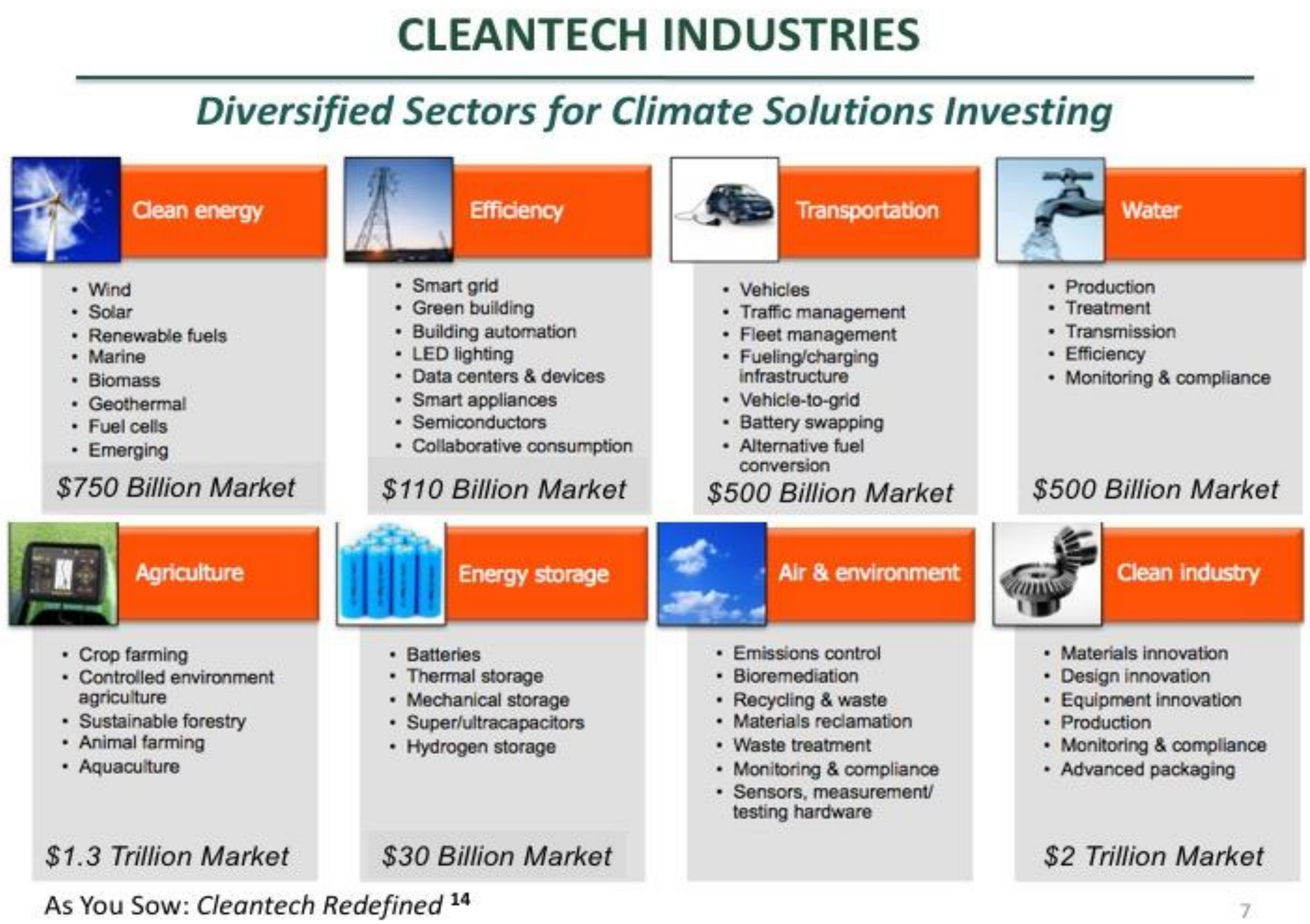
Since the 2006 Stern Review, economists have been clear that the costs of delay in tackling climate change would be prohibitive while acting now could spur great prosperity. The landscape was very different a decade ago, when investors did not yet have comfort that clean energy and other climate solutions investments could offer competitive returns.

Investors stand on very different footing today, as industry mavens like Tesla have shown investing in climate solutions can be quite lucrative indeed. Fossil-free stock indexes and mutual funds are now regularly outperforming their conventional counterparts. Demand by the Divest-Invest movement has sparked generation of new investment products, available to both institutional and personal investors alike. For example, in November 2015, Etho Capital launched ETHO, a diversified exchange-traded fund (ETF) comprised of the most climate efficient companies in each sector. ETHO is fossil-free, and now trading on the New York Stock Exchange.

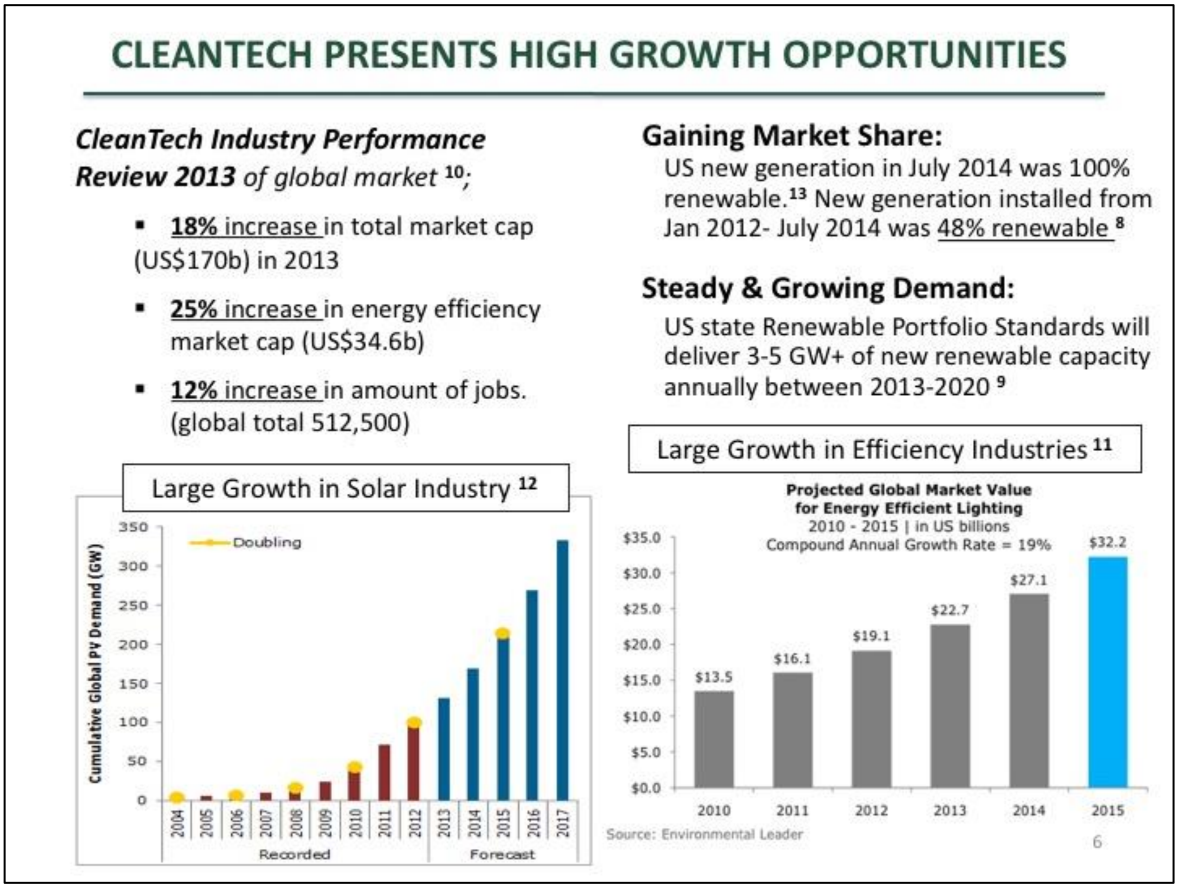
> Tackling climate change would lead to global GDP gains of between \$1.8 trillion and \$2.6 trillion a year by 2030 – in terms of new jobs, increased crop productivity and public health benefits.
>
> - *World Bank, 2014*

Climate Solutions Investing

This is the Divest-INVEST movement. Divest-Invest is about getting out of the problem *and* getting into the solution. Signatories commit to investing in "climate solutions, broadly defined." Climate solutions include renewable energy, climate justice initiatives, resilient infrastructure, sustainable agriculture, water projects, and more. The options are diverse to reflect the fact that every sector of the economy must pivot to meet our existential challenge. Below is a summary chart that previews climate solutions at a glance.



As You Sow: *Cleantech Redefined* [14]



Source: As You Sow, 2015

Beyond financial gains, investment in climate solutions will benefit human prosperity through job creation, energy access for those that have none, improved air quality and reduced health costs. Investment in communities most impacted by climate change, and with the fewest resources to cope, is a target area for many Divest-Invest signatories, who seek to bolster local ownership in the new economy and advance principles of climate justice. Investment in community banks and credit unions that offer equitable loan terms, jobs programs to help transition workers from brown to green industries, microfinance, green revolving funds for energy-efficiency retrofits, solar leasing and direct investment in communities themselves, are among the options investors have to ensure the energy transition is just and equitable, benefiting the many and not just the few.

While Divest-Invest cannot recommend particular climate solution investments, we can begin to map the landscape – describing in broad strokes trends and options. It is essential that institutions seeking to Divest and Invest work with a financial advisor with expertise in fossil-free investing. Opportunities now exist across every asset class of a portfolio, opening the door to rich and exciting diversification strategies. It also bears noting that the movement is catalyzing new investment products and opportunities. Investors should seize the opportunity to work with asset managers to create the products they want.

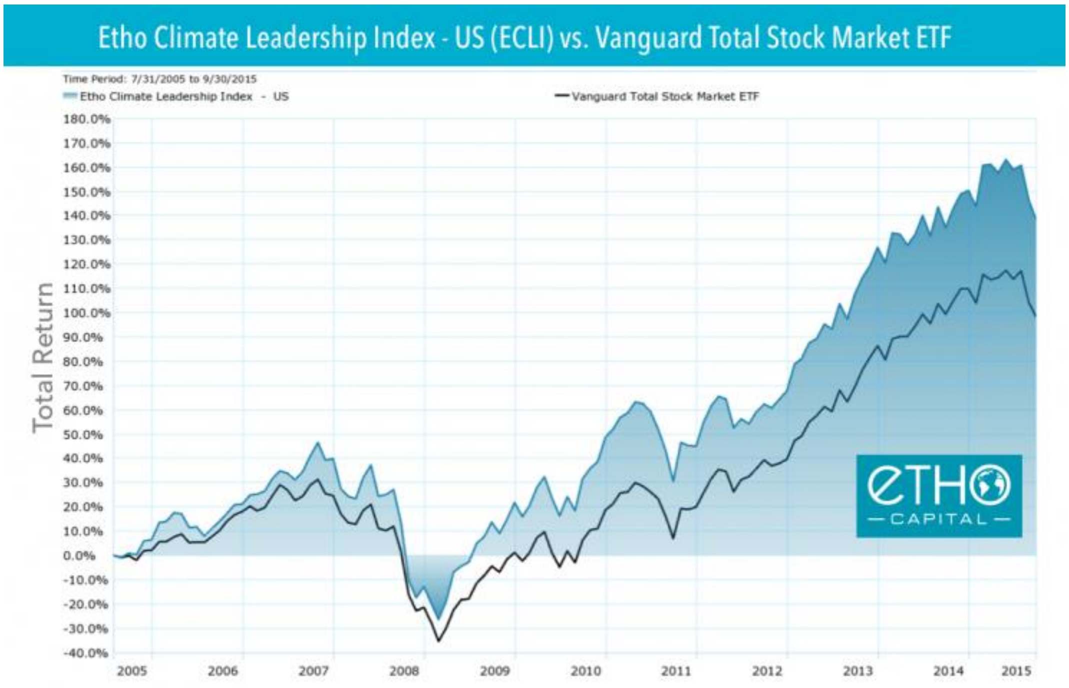
"The IMF, the World Bank and IEA all reach the same conclusion: Investing at scale in clean, efficient power offers one of the clearest, no regret choices ever presented to human progress. The alternative of business as usual will leave firms and investors locked into hundreds of billions of dollars in stranded fossil fuel assets, as emissions are ratcheted downwards and renewable energies wins the price parity race. Friends, the greatest investment capital shift in history will be long and complex, but as you are showing, it is well underway and it is now unstoppable. I congratulate you on reaching the $2.6 trillion mark. I am sure that as a result of Paris and the support of finance initiatives worldwide -- such as this one -- we can look forward very soon to celebrating the $4 trillion mark, then the $5 trillion mark and more."

- *Christiana Figueres, Executive Secretary of the United Nations Framework Convention on Climate Change, Divest-Invest press conference, September 22, 2015*

Below is an overview of climate solutions options across three major asset classes – equities, mutual funds, and fixed income. Climate solutions also exist in other asset classes, such as private equity, real estate and cash equivalents. Talk to your investment professional to learn more.

Equity & Index Investing

Fossil-free indexes are now regularly outperforming the market. MSCI, the world's leading stock market index company, launched a fossil-free version of its All Country World Index (ACWI) in October 2014. One year later, ACWI ex Fossil Fuels had outperformed its parent index by 60%, producing gross returns of 6.5% compared to 4.1% for the ACWI. The new ETHO Climate Leadership Index – based on ten years of backtesting – has outperformed the S&P 500, and virtually every other major index. Outperformance holds true whether one considers international or domestic indexes.



With respect to individual stocks, investors can check company websites for sustainability and performance reports, or visit the Carbon Disclosure Project website for more information. Additional specialists in assessing companies on their carbon emissions include Trucost, Inrate, Camradata, Money Footprint, South Pole, MSCI, Asset4, CO2 Benchmark, and others. Inquire also with firms and NGOs that specialize in assessing companies on environmental, social responsibility and corporate governance (ESG) issues, such as as You Sow, the Center for Political Accountability, and the Initiative for Responsible Investment.

Mutual Funds

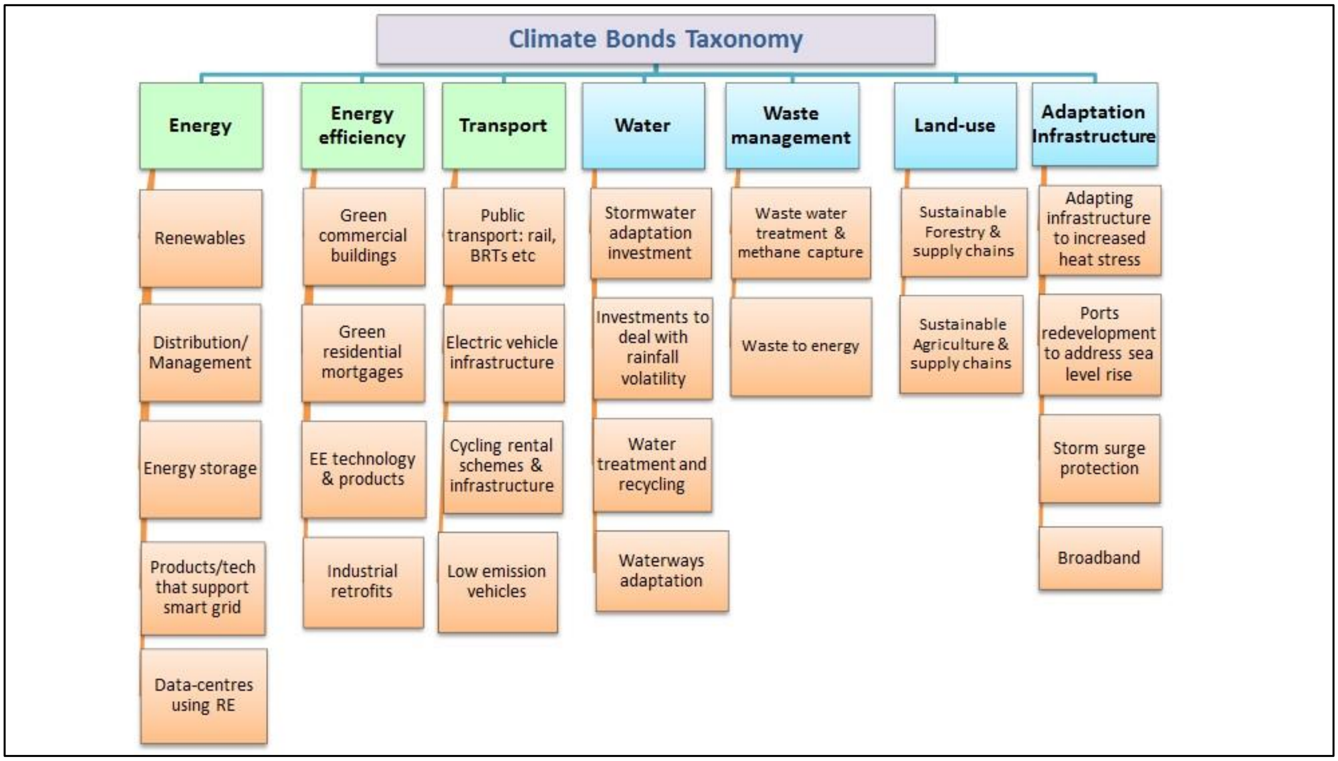
The number of fossil-free and low-carbon mutual funds has exploded over the past few years to reflect growing demand. The list below, compiled by the International Business Times, summarizes the top 15 U.S. mutual funds with an environmental focus (not necessarily fossil-free), based on their total annualized 5-year returns.

Environmentally focused investment fund	Total Ret Annlzd 5 Yr (Mo-End)
Alger Green A	12.28
Allianz GI Global Water A	10.92
Calvert Global Energy Solutions A	-3.81
Calvert Global Water A	9.51
DFA Intl Sustainability Core 1	6.93
DFA US Sustainability Core 1	16.15
Fidelity® Select Envir and Alt Engy Port	8.35
Firsthand Alternative Energy	-2.83
Great-West Ariel Mid Cap Value Init	16.66
Green Century Balanced	10.85
Green Century Equity	14.35
Meeder Utilities and Infrastructure	9.28
New Alternatives A	7.14
Pax World Global Envrnmntl Mkts Instl	10.67
Portfolio 21 Global Equity R	8.06

Source: Morningstar

Fixed Income: Climate Bonds & More

Investors seeking to balance the volatility of the stock market with fixed returns have more options than ever. Climate bonds are booming. As of 2015, the total value of climate-aligned bonds stands at $597.7 billion, a 20% increase from last year. The state-of-play is updated annually by the Climate Bonds Initiative, an international, investor-focused NGO focused on mobilizing the $100 trillion bond market for climate change solutions. Climate-aligned bonds are a combination of labeled and unlabeled bonds: Labeled bonds are those that carry a “green” designation as part of a formal certification process, while unlabeled bonds are not yet designated, but which otherwise meet the Climate Bonds Initiative’s stringent criteria. The Initiative also publishes a climate bonds taxonomy that allows investors diverse choices across industries.



Source: Climate Bonds Initiative 2015

In 2014-2015, a major development was that green bonds kicked off in emerging markets, with India and China leading the way. There is big potential for additional issuances in the months and years ahead.

> "Investors representing $43 trillion of assets under management signed a statement at last September's UN Climate Summit about the importance of addressing climate change and their willingness to invest accordingly, subject to meeting their risk and yield requirements. This report shows them that there's a large and liquid $600 billion universe of bonds they can invest it – and it's 90% investment grade."
>
> - *Sean Kidney, CEO, Climate Bonds Initiative, 2015*

World Bank Green Bonds comprise a subset of labeled climate bonds: Since 2008, the World Bank has issued around USD 8.5 billion equivalent in Green Bonds through 100 transactions in 18 currencies. World Bank Green Bonds are an opportunity to invest in climate solutions through a high quality credit fixed income product. The bonds support World Bank lending for eligible projects that seek to mitigate climate change or help affected communities adapt. *The triple-A credit quality of the Green Bonds is the same as for any other World Bank bonds.*

Climate bonds are just one form of debt investment available. Zooming in from global to local, investors can also work with community development financial institutions (CDFIs), which make targeted loans and investments to underserved markets. CDFIs use financing to promote climate and social justice goals, including economic equality, sustainability, education, food access, and health care. They serve as intermediaries between investors and a wide range of borrowers, including small businesses, nonprofits, and affordable housing developers. To learn more, watch a brief video and visit information service Aeris, whose CDFI ratings tool can help you evaluate opportunities that align with your impact goals and risk parameters. Other examples of fixed income products are summarized in the chart below.

Source: As You Sow

DivestInvest PHILANTHROPY

EUROPEANS FOR DivestInvest

Divest-Invest & the Road Through Paris

As governments gather in Paris for COP21, civil society must keep an uncompromising focus on global action that matches what the science requires, rather than what leaders consider politically expedient. Current pledges on the table put the planet on a 2.7° to 3°C warming trajectory – not sufficient to keep us safe from runaway climate change. Experts like Michael Liebreich from Bloomberg New Energy Finance note the crucial need for periodic review of country commitments and a ratchet mechanism to ensure pledges are ultimately commensurate with what the science requires.

Christiana Figueres, World Bank leader Jim Kim, President Obama and other global leaders have all endorsed divestment as a crucial accelerator of global action on climate. Indeed, Ms. Figueres has urged movement leaders to continue recruiting new Divest-Invest pledges after the Paris talks conclude, to keep the pressure on policymakers and industry leaders to up their ambition in the crucial years ahead. Divest-Invest and the climate movement more broadly are keeping leaders accountable and moving faster in our race with time.

Appendix 1 – Divest-Invest Arguments at-a-Glance

Values-oriented	Given the catastrophic economic, environmental, and social impacts of climate change it is a moral imperative to ensure that the financial assets of the philanthropic community are not supporting industries that are the greatest emitters of carbon dioxide (CO_2) and other harmful GHGs. An organization's values and investments must be aligned.
	The board's fiduciary duty is to consider environmental, social, and governance factors (ESG) that represent a material risk to an organization's financial viability. Remaining invested in fossil fuel companies poses a significant risk that requires board action.
	Divest-Invest helps send a clear and powerful signal to global policy makers that a universal climate agreement must be reached and implemented on the Road through Paris.
	Invest in companies and industries of the future to accelerate the transition to a sustainable, low carbon energy economy. Significant investment is needed to build the market infrastructure for new business models, products, and technologies.
	Increase pressure on traditional financial institutions to provide climate advisory services and financial products to a broader range of institutional and retail customers. There is an opportunity to help road test, prove, and mainstream alternative investment strategies through a demand-drive process.
	Ensure future generations inherit a clean environment and sustainable global economic system that is based on the principles of justice, equality, and shared prosperity.
Financial-oriented	The stranded assets hypothesis contends that fossil fuel companies will experience a significant devaluation since 60 to 80 percent of known fossil fuel reserves cannot be burned to ensure global temperatures do not increase by more than 2°C. Consequently, the risks of climate change are not being properly priced by the market and fossil fuel companies are dangerously overvalued.
	Renewable energy sources are becoming rapidly cost competitive with fossil fuels, representing a promising source of competitive financial returns.
	Fossil fuel divestment will not materially impact financial returns, and, based on a body of growing evidence may actually lead to better performance over the medium- to long-term.
	Coal's stock value has plummeted and analysts have raised concerns about future oil price volatility and how it might impact the overall stability and mid-to-long-term financial performance of the fossil fuels sector.

Appendix II – Divest-Invest Philanthropy Case Studies: *Getting Your Board to "Yes"*

Never before has the financial, ethical, and legal case for Divest-Invest been so aligned. Nevertheless, change is scary. There remains concern – particularly among larger foundations – that financial performance will suffer if they divest. After all, modern portfolio theory insists that maximum diversification is the capstone of prudent investing. Conventional fund managers and advisors warn that divestment could significantly impact returns, undercutting foundation's grant-making ability.

Yet, for foundations that persevered these old ideas were discredited. Many Divest-Invest Philanthropy signatories were surprised to find that fossil fuels comprised only a small slice of their portfolio, generally between 5 and 11 percent. Suddenly, divestment became an easier lift. The Divest-Invest commitment, moreover, is a principled pledge and not a draconian enforcement regime: There are no divestment police. Foundations have room to navigate their own unique circumstances – for example, a legacy investment with a long tail or commingled investments. Looking under the hood of your portfolio is the first step to owning what you own.

Below are four case studies outlining the process by which three foundations became Divest-Invest Philanthropy signatories. They describe how staff navigated common concerns, educated their boards of directors, and, ultimately, brought the organization over the line to "yes" on Divest-Invest.

A. Case study: General Service Foundation (GSF)

GSF is a private foundation that was incorporated in Illinois in 1946, but headquartered in Aspen, Colorado. Its 16-member board of directors is composed of 13 family members and three rotating, outside experts. The mission of GSF is to bring about a more just and sustainable world with program areas in human rights and economic justice, reproductive justice, and justice and leadership in Colorado.

GSF was an early adopter of impact investing and divestment (via both positive and negative screens) as a strategy for ensuring their organization's values and investments were aligned. Presently, impact investing represents roughly 25 percent of the organization's portfolio. In 2013, the GSF board set up its Impact Investing Working Group to provide an opportunity for younger generation leadership, as well as broader learning (across generations and programs) and impact aligned with deeply held mission and values. To that end, the Impact Investing Working Group tasked its members with investigating how it could expand its activities.

The working group discerned that Divest-Invest could be the answer, but had a few concerns. First, GSF's current level of exposure to fossil fuels was unclear and, if it were high as was expected, there would likely be resistance on two fronts. First, certain funds might be difficult to act on or control; second, board members with investment backgrounds might push back on how Divest-Invest would impact GSF's financial returns. At the same time, many of Foxley's fellow board members were strong supporters of environmental causes.

From its inception, the working group framed Divest-Invest as an educational learning opportunity that required no upfront commitment or decision. The working group gathered more information and reported back with findings. Fortunately, GSF has a valuable resource and partner in Taylor Jordan, co-founder of Imprint Capital, an impact investing firm, which serves as GSF's mission-related investing portfolio manager.[1] Taylor shared his latest thinking on the Divest-Invest movement, including the present state of the economy, macro- and micro-level factors, and the current discussions on global climate change and COP 21. Then, Taylor, with the help of the foundation's overall portfolio manager Mozaic LLC, screened GSF's portfolio against the Carbon Underground 200 to quantify its fossil fuels exposure. The end result was surprising – the portfolio only had three investments in companies listed on the Carbon Underground 200. With this information in hand, the Working Group discussed with the board the moral, ethical, and financial reasons for joining Divest-Invest that would serve as the basis for a final decision.

[1] Imprint Capital was acquired by Goldman Sachs in July 2015.

The advanced preparation of GSF's exposure to fossil fuels and values-oriented arguments met the needs of its board members unanimously. The working group's case was clear, quantifiable, consistent with GSF's strategic goals, and well aligned with the values of their organization.[2] At the end of the meeting the head of the committee asked, with a smile, "Should we have a vote?"

B. Case study: The Russell Family Foundation (TRFF)

In November 2012 in Seattle, two members of The Russell Family Foundation's 10-member board of directors attended Bill McKibben's newly launched "Do the Math" tour on fighting climate change.

The timing of McKibben's tour was fortuitous as it coincided with TRFF's November board meeting—where the trustees then shared their lessons learned from the McKibben presentation. Richard Woo, TRFF's CEO, was also taken with the energy, logic and scale of the divestment movement. Woo recognized the importance of addressing these questions; it was particularly relevant to TRFF because environmental sustainability is a core program area of the organization. George and Jane Russell founded TRFF in 1999 after selling their company, the Frank Russell Company, which is best known for developing the Russell Indexes.[3] TRFF's board is comprised of multiple generations of the Russell family and independent members from the community.

At the end of the November 2012 board meeting each member agreed that their top priority was to answer the question, "What should we know to even consider divesting of fossil fuels?" The board asked Woo to develop a process to enable the board to make an informed decision. From Woo's perspective, one of the major strengths of the TRFF board is its members' broad range of social and worldviews. An equally important strength was the organization's experience with MRI and the importance of ensuring, in Woo's words, "Integrity…it's about getting all the different parts of what you value and care about, the actions you take, and getting them into alignment. And, in many cases it means making a commitment."

[2] GSF defines its values as leadership, integrity, diversity, experimentation, accountability, justice, and excellence.
[3] The Russell Indexes are a set of global equity indices that allow investors to track the performance of distinct market segments worldwide.

The challenge was to develop an approach to efficiently gather relevant information, present it to the board in an easy-to-understand format, and ensure each board member's voice was heard during the deliberation process. Woo described the approach as a, "Compass…the four points allow you to look at the divest & invest opportunity from different and distinct directions." The chart below summarizes Woo's compass framework.

TRFF Compass Approach

Compass direction	Primary activities	Data gathering?	Board input?
✓ 1) Internally	• Review the portfolio's current exposure to the fossil fuels sector • Conduct a board self-survey to identify core values, attitudes toward climate change, and background knowledge • Discuss long-term investment goals and trade-offs		
✓ 2) Externally	• Research and interview investment advisors, impact investors, peer organizations, and energy executives • Review current scientific literature on climate change (to "get smart" on the subject)		
✓ 3) Retrospectively	• Examine the foundation's founding values, past environmental programming, and legacy of business leadership in the investment services field		
✓ 4) Prospectively	• Articulate how a re-allocated portfolio will make a greater, tangible impact in the world that is consistent with the foundation's mission, values, and vision of "a sustainable and peaceful world for people, places, and communities."		

As a first step, Woo and his team focused their energies on the external environment to understand the most current thinking on climate change, the divestment movement, stranded assets, and related topics via interviewing experts and conducting desk research. The end goal of this effort was to produce a white paper that synthesized their findings and codified the compass approach; in effect, the white paper was both a tool for board education and a roadmap to reach a decision on divest-invest. TRFF's financial advisor, Threshold Group, was an instrumental partner in helping Woo and his team throughout this process.

During the next board meeting in February 2013, Woo invited the executive director of a prominent New York foundation to share her experience with challenging the coal industry. Woo also circulated the white paper and an internal values survey to gain more insight into each board member's perspective on thematic topics related to divestment & investment, such as the environment and sustainability. The board responded positively to these activities. First, members reported "significant value" from the white paper that provided them with more complete information. Second, the opportunity to use the organization's financial assets to help shape a sustainable, low carbon future was compelling. However, serious questions remained on the financial implications of divestment and board members requested more information on TRFF's portfolio and exposure to fossil fuels. The Threshold Group screened the portfolio against the Filthy 15, a list of the most polluting publicly held coal companies, and found that the exposure was lower than expected.

During the May 2013 board meeting, Woo and members of the Threshold Group shared their findings from the financial analysis. After a round of discussion, the board approved divesting of coal, seeking reinvestments in sustainable alternatives, and continuing the path toward fossil fuel divestment. The entire process of research, stakeholder outreach, and self-education took six months.

C. Case study: The Park Foundation

Jon Jensen, Executive Director of the Park Foundation, received a call from the leader of a peer organization in late 2013 to discuss becoming a potential founding signatory of Divest-Invest Philanthropy. Jensen viewed it as a promising opportunity that was a strong fit for the organization. The Park Foundation has long been an early adopter of mission-related investing (MRI) and awards $18 million per year nationally in higher education, environment, media, animal welfare, and locally in sustainability and human services program areas. This is in large part due to Adelaide Park Gomer, current President of the foundation and board chair, who in the late 1990s was a strong advocate for philanthropic organizations to "walk the talk" to make the planet a better place for its inhabitants. She considered it a contradiction to make grants to environmental nonprofits while, at the same time, being invested in corporations that were generating the very problems their grantees were attempting to solve.

Over time, Gomer was able to convince her board to make a handful of MRIs that performed well – even during the 2008 recession. In her words, "Our foundation's approach to making a difference in the world is holistic. Whether we are investing in social change or the market, we will remain mindful that money is a means, and not an end unto itself. As a foundation, our true bottom line is the good we do in the world."

The opportunity to divest-invest occurred at the same time the board was refining its ESG Policy Statement. The timing was beneficial since it allowed Jensen and Gomer to frame the divest-invest opportunity within the broader of the organization's overarching MRI strategy. On one hand, Jensen recognized that his board was generally aligned around its values and had extensive experience with MRIs and negative screens; on the other hand, the board was attempting to answer a handful of fundamental questions such as, "Why is Divest-Invest important? How can we incorporate it into our ESG criteria? How will divesting from fossil fuels and carbon intensive industries impact our financial performance? How does this fit into our broader investment strategy?"

Jensen, similar to Woo and TRFF, relied heavily on the organization's financial advisors, Tom Van Dyck and Catherine Chen, from the RBC Wealth Management. Together they were able to collect additional information on carbon risks, screen against the Carbon Underground 200, and develop a general idea of what financial returns might look like. With this information in hand, the team was able to make a compelling case to their investment committee and board, and secure approval to become a founding Divest-Invest Philanthropy signatory.

D. Case study: The Lemelson Foundation

The Lemelson Foundation recently became a DI Philanthropy signatory in September 2015. Similar to the Park Foundation, they have a long history of MRI and investing in climate solutions. The first climate-related discussions of the Lemelson Foundation board and staff occurred in 2006 during a roundtable on MRI and later, in 2007, the board conducted an environmental portfolio review to identify holdings that were not consistent with their values. At the end of this process, they made two investments in the sustainable energy sector and divested from Alberta coal-tar sands.

In 2010, the Lemelson Foundation engaged a new investment consultant firm, Threshold Group. One of the criteria for selecting Threshold was their ability to provide more tailored advice around mission-related investments, particularly those that relate to climate-change. In 2011, Dr. Carol Dahl, Executive Director, joined the foundation. Up until that time the board had engaged in a fair amount of climate-change related work in a piecemeal fashion but they lacked a clear strategy on how to move forward. Two unique features of the foundation were clearly established by this point in time. First, its history – Lemelson was founded in the early 1990s by prolific US inventor Jerome Lemelson, his wife Dorothy, and their children Eric and Robert to ensure a robust pipeline of inventors, inventions, and invention-based enterprises. The first decade of the foundation's work focused on establishing core US programs; in 2003, they broadened their scope to include developing countries, focusing on inventions and technologies that address basic human needs and sustainable development. The second unique feature of the foundation is that its five-member board has a deep interest in and passion for environmental sustainability and systems-level thinking.

Culturally, the Lemelson Foundation is an evidence-based and data-driven organization. Given that the board was aligned on the moral rationale for divest-invest the most critical questions they asked themselves were, "How will Divest-Invest impact our long-term financial performance? What is the nature of our fiduciary responsibility?" In collaboration with the Threshold Group, the board, Dahl and Chief Financial and Administrative Officer, Philip Varnum, crafted a robust strategy and roadmap to navigate their next steps.

As a starting point, the team ran the portfolio through multiple screens, including the Filthy 15, Carbon Underground 200, the energy sector, and related industries. In parallel, they educated themselves on the unaccounted costs due to increasing carbon legislation and the possibility of stranded assets. *Other factors such as decreasing clean energy technology costs, increasing water scarcity, and more robust polluter pays regulations forced them to re-think their fiduciary responsibilities and how to best protect the long-term interests of their financial assets*. One of their advisors put it succinctly, “If you do not quantify your portfolio’s carbon exposure then you cannot manage that risk…you leave yourself wide open to the system-level shocks that are coming.”

In follow-up conversations the board made a strategic decision to go beyond Divest-Invest, and focus on reducing the total carbon footprint of their portfolio. For the Lemelson Foundation, the evidence around climate change risk factors was too compelling to ignore and, equally important, there was an opportunity to “invest in the industries of the future” and support innovative companies that are developing alternative energy solutions.

For further guidance on the Divest-Invest process, see also Aperio Group, Building a Carbon-Free Equity Portfolio; and, Trillium Asset Management,

Appendix III – Frequently Asked Questions

How large is the global Divest-Invest movement?

As of December 2016, divesting institutions control over $5 trillion in assets under management – a doubling of assets under management by the movement in 15 months. The 2016 analysis by Arabella Advisors showed divestment commitments from 688 institutions and 58,399 individuals across 76 countries. Fifteen months prior, the report by Arabella Advisors estimated that the global Divest-Invest movement had mobilized over $2.6 trillion in capital with confirmed commitments from 436 institutions and governments, and 2,040 individuals across 43 countries. The 2015 tally represented a 52x in committed assets since September 2014.

Why does Divest-Invest matter now?

Policy makers have agreed that the average global temperature rise not exceed 2°C above the pre-industrial average. Yet, at the current rate of greenhouse gas emissions, the average global temperature is predicted to increase by more than 4°C. It is widely agreed this would have catastrophic consequences to human health, the global economy, and national security.
Climate scientists have calculated that to have a fair chance of keeping warming below 2°C throughout the twenty-first century, between 60-80% of known fossil fuel reserves must remain in the ground. Globally, this is approximately a third of oil reserves, half of gas reserves and over 80 percent of current coal reserves.

By pledging to Divest-Invest now, investors are speeding up the transition to a low carbon society. Time is of the essence: the carbon dioxide concentration in the atmosphere crossed 400 parts per million (ppm) threshold this spring, the highest in more than 800,000 years. The Intergovernmental Panel on Climate Change has said that we still have the chance to avoid dangerous climate change and meet our increasing energy needs if we reduce fossil fuel use, improve energy efficiency and switch energy production to renewable sources.

What is my organization committing to if we take the Divest-Invest Philanthropy pledge?

The DI Philanthropy pledge asks that signatories divest 100 percent of their equities in the top 200 fossil fuel producers and reinvest at least 5 percent of their portfolio in climate change solutions – within five years of signing the pledge. A list of the top 200 fossil fuel equities can be found at Fossil-free Indexes' Carbon Underground.

Won't divestment compromise financial returns?

No. Divesting fossil stocks has negligible impact on returns over the past ten years and a positive impact over the past five years, while large cap clean indices have outperformed large cap fossil indices over the past five years for which they have been established. Over the five-year period to Dec 31st 2015, the MCWI Ex Fossil Fuels Index has outperformed the MSCI ACWI by an annualized 136 bps. The FTSE Environmental Opportunities 100 Index--which tracks the 100 biggest companies with significant (>20%) revenue exposure to environmental solutions returned an annualized 5.7% over the five year period to Dec 31st, 2015 , while the MSCI World Energy Index lost an annualized 3.21%.

Won't divestment significantly curtail portfolio diversification because fossil fuel companies comprise most of the economy?

No. The dirtiest companies which own and burn the majority of carbon make up less than 10% of most major stock market indices. Coal, responsible for a third of human-caused greenhouse gases, is less than 2% of major global equity indices.

Where do we reinvest? Aren't clean companies too tiny to soak up significant investments?

There are over 1,300 companies with a collective market value of over $2.3 trillion that Bloomberg has identified as earning at least 10% of revenue from the new energy economy. That is bigger than the collective $2 trillion value of the largest global coal and oil stocks as tracked in the MSCI World Energy index. The FTSE Environmental Opportunities 100 Index has a collective market value of just under $2 trillion

How can I help my institution Divest-Invest?

Divest-Invest requires leadership. Typically, one or more champions lead the way for their organization by raising the issue at the C-suite or Board level. Getting the conversation started is the first step. See the case studies in Appendix II for best practices gleaned from the experience of Divest-Invest Philanthropy signatories to date.

How long does the Divest-Invest process take?

The short answer … it depends. It depends on your organization, board, financial advisor, and other important decision-makers in the process. As a reference point, a sampling of Divest-Invest Signatories took between four months and a year to complete various stages of the divestment process.

At what stage should we engage external consultants or financial advisors?

Divest-Invest Philanthropy signatories emphasize the importance of including their financial advisor, external consultants, and experts in the Divest-Invest process as early as possible. The decision to bring in external viewpoints is dependent on your organization's needs, resources, and capabilities, as well as your financial advisor's level of experience with divestment, climate finance, and alternative investment strategies. Below are questions that may help inform your decision:

Does your current financial advisor…

- Have experience with screening out fossil fuels and re-optimizing a portfolio via redistributing fossil-fuel capital across renewable energy companies and other asset class with a similar return profile to fossil fuel companies?
- Have a receptive attitude that supports the decision to divest-invest?
- Understand the difference between divesting to eliminate fossil fuel holdings versus divesting to minimize your portfolio's carbon footprint?
- Have an up-to-date understanding of different divestment strategies and which ones would be best suited to meet the strategic goals of your organization?

What are the short-to-medium term financial implications of divest-invest?

Some investors have raised concerns about the short-to-medium term financial impact of divesting from fossil fuels. It has also been asserted that a rapid transition towards a low-carbon economy would come at a significant financial cost to investors. Numerous studies demonstrate that these financial risks are not substantiated.

A report by financial consultants Mercer, Investing in a Time of Climate Change, states that that climate change will inevitably have an impact on investment returns and investors need to view it as a new return variable. It points out that over the next ten years average annual returns from coal could be eroded between 26% and 138%, while renewables could see average annual returns increase by between 4% and 97%.

Indeed, research suggests fossil-free equity investments are already capable of generating better returns. Analysis of the MSCI World Index found that removing fossil fuels and adding renewable energy and energy efficiency alternatives would have generated better returns than the existing fossil fuel-dependent portfolio over the past five years.

Divestment may be ok for small endowments, but surely it's risky for large institutions and foundations?

The era when the fossil fuel industry was a source of strong returns for shareholders is coming to a close. The precipitous drop of coal in the markets, the growing risk that fossil fuel assets will be stranded, the increasing cost of extraction, and the falling cost of renewables are all signposts that the clean energy transition is underway. It is now prudent to move investment from fossil fuels to renewable energy and other climate solutions.

The Fall 2015 pledge of the Children's Investment Fund Foundation (CIFF) was significant. Representing $4.3 billion, CIFF's commitment discredits the position of some big foundations that their investments are too complex and/or commingled to be susceptible to divestment.
The growing number of divestment pledges from very large institutional investors, such as sovereign wealth funds, pension funds, and entire university systems, further shatter the "Too Big to Divest" myth. The fact is, big investors who have rejected calls to divest are already suffering major losses. The Trillium Asset Management analysis documenting that the California pension fund system lost $5 billion in one year is just one example.

Isn't engagement with fossil fuel companies a more effective avenue for change?

Shareholder resolutions can be an effective tool for change in most industries, but the fossil fuels sector is unique. Here are three reasons to divest rather than engage.

a) Speed: We need to transition to a zero carbon economy now. Engagement has been very slow to create change.
b) Scale: Normally, engagement is intended to improve a particular aspect of a business, such as governance. In the case of fossil fuels, however, it requires the company fundamentally to reinvent itself, given their business plans are to go beyond safe levels of warming. By divest investing, the same signal is sent to company directors but we simultaneously support initiatives to scale up competition and innovation.
c) Narrow impact: Engagement fails to influence the social license of companies to pollute and lobby against progressive government intervention. While it may have limited impact on a particular organization, it doesn't catalyze other industries to respond to the challenge.

To those who despite the above arguments still prefer to engage, we would suggest that such a strategy includes certain guidelines, as developed by organizations including Aviva Investors; have firm targets and a timeline for change so that if engagement doesn't prove to be having a significant enough impact, then a divest invest strategy should be adopted.

Don't we need fossil fuels?

Fossil fuels have been workhorses of the global economy, but this is changing quickly. The International Energy Agency has predicted that world primary energy demand will grow by anywhere between 20% and 40% between 2009 and 2035, driven by growing income and population in emerging economies and to improve access to electricity for many people who still lack it. A major wave of investment will be required to meet this demand. How that money is spent is critically important: it can help build robust, flexible, low carbon energy systems that will serve countries well for decades to come, or it can lock in an energy infrastructure that exposes countries to severe climate change, future market volatility, air pollution, and other environmental and social stresses.

> "For the past 250 years, fossil fuels have been the primary driver of development and growth. Burning fossil fuels has provided us with outstanding progress and opportunities, and I for one am grateful to the many generations of men and women who have so sincerely labored in this sector. However, unbeknownst to all those generations of laborers is that this progress has also put increasing pressure on our planet. We now know that we have precipitated the imbalance of the earth's ecosystem and its vital life cycles. Fossil fuels have brought us this far, but now it's time to change."
>
> - *Christiana Figueres, Executive Secretary of the United Nations Framework Convention on Climate Change,* *November 13, 2015*

I drive a car and fly in planes: Isn't it hypocritical for me to champion Divest-Invest?

This is one of the greatest red herrings in the fossil fuel divestment debate. The idea that individual complicity within a rigged system is the same as the rigging of the system itself is not a tenable position. It is one nevertheless trotted out by credible voices like Drew Faust, president of Harvard College. Change has to begin somewhere. The individuals and institutions committing to divest their own assets is courageous, not hypocritical.

Coal may be in decline, but won't oil and gas will continue to offer solid returns?

Oil and gas prices are extremely volatile. A new global accord in Paris, buttressed by subnational climate policies all over the world, will continue to drive prices up for oil and gas companies. Moreover, extraction from conventional fields maxed out in 2005, leading oil companies to pursue increasingly expensive risky projects: e.g., drilling in deep water, tight shale and perhaps most Kafka-esque, the Arctic, where warming temperatures have made exploration and extraction possible in the harshest climate on earth.

Oil's recent dips to below $50 per barrel are hurting the financials of even the biggest fossil titans, many of whom have been considered "too big to fail." Chevron's recent disclosure that it will slash its 2016 budget and workforce, by 25% and 10%, respectively, is another signpost of an industry on shaky ground. IHS Global Insight said the average return on oil and gas exploration in North America has fallen to 8.6%, lower than in 2001 when oil was trading at $27 a barrel. Ian Taylor, CEO of Vitol, the world's largest energy trader, said he believed the world has hit "peak demand" for oil. So while oil and gas prices may enjoy a rebound or two in coming decades, they are hardly prudent strategies for long-term investing.

The above does not consider the biggest gamechanger for oil producers – the rise of the electric vehicle and concomitant innovations in solar plus battery technology that will allow householders to charge their cars via the sun. Oil powers cars, ships and planes and was seen as relatively impervious to the rise of renewable energy for electricity-generation. However, as UBS, the Rocky Mountain Institute and Citi have all validated recently, solar plus storage grid parity is coming soon with the potential to disrupt both the power and auto sectors.

While one cannot say the returns from every single oil and gas company will decline. The overall picture looks very unfavorable.

What about the vast fossil fuel reserves of state-owned companies?

Publicly-owned fossil fuel companies are a strategic target. First, investors can vote with their dollars, moving capital from high-carbon to low-carbon choices across energy, transportation, the built environment and more.

State owned companies own larger reserves, but they largely need private sector finance and expertise to extract the fuels within them. The listed companies can and often do provide the expertise and the capital that helps the national oil companies get their fossil fuels out of the ground. The cheaper climate solutions become, and the louder public support grows, the easier it will be for states to develop these and leave fossil fuels in the ground.

Also, national oil companies come to the financial market for capital to fund fossil fuel extraction. Carbon Tracker has calculated that around half of future production could involve listed companies – even though the proportion of reserves controlled by states is higher than that. The listed companies therefore will be determinative in whether society succeeds in limiting temperature rise to 2°C.

How much investment is needed in climate solutions? Can Divest-Invest make a difference?

The International Energy Agency estimates that $965 billion (£632 bn; €880bn) per year of investment is needed to achieve the transition from fossil fuels and meet growing energy needs. Global investment in renewable energy is currently at $290 billion (£190 billion; €264 bn). More than 50% of the investment required is needed in the energy efficiency sector. Divest-invest signatories are helping to unlock and catalyze private sector financial flows towards climate solutions, and are absolutely making a difference.

> "Fortunately, with over $50 trillion invested in the global stock markets, and a further $100 trillion held in sovereign and intergovernmental debt, on the face of it, there should be no shortage of capital available. The speed and scale of the growth in sovereign debt that was issued to underpin the global financial system during the financial crisis demonstrates that it is possible to secure financing at the speed and scale implied here. The key is the existence of political will."
>
> --Centre for Science and Policy, Cambridge University

What are the investment opportunities?

There are exciting growth opportunities in climate solutions. Investors in renewable energy, energy efficiency, clean technology and energy access can benefit financially from the inevitable expansion of this sector and help to accelerate the transition to low carbon energy for all.

There are an increasing number of fossil-free investment funds around the world, as well as several fossil-free indexes, including the MSCI All Country World Index (ACWI) ex fossil fuels, the FTSE Developed ex Fossil Fuels Index, and Etho Capital's ETHO Climate Leadership Index. While these are currently outweighed by conventional funds that include fossil fuels, there is a growing call among investors for more fossil-free portfolios from asset managers and the Divest-Invest community.

> "Renewables could see average annual returns increase by between 4% and 97%."
>
> --Mercer

How is Divest-Invest affecting the fossil fuel industry?

We have seen an enormous rise in the amount of money divested and reinvested in just one year, and the industry is paying attention. In a 2015 securities filing, Peabody Energy, one of the country's biggest coal producers, listed the divestment movement as a risk factor that threatened its share price. The head of World Coal Association attacked divestment as a misguided strategy.

The stigmatization of the fossil fuel industry is among the most powerful outcomes of the Divest-Invest movement. That stigma opens the door to new policies and regulations that will keep carbon in the ground. As the Smith School at Oxford University has pointed out: "If during the stigmatization process, campaigners are able to create the expectation that the government might legislate to levy a carbon tax, which would have the effect of depressing demand, then they will materially increase the uncertainty surrounding the future cash flows of fossil fuel companies."

Appendix IV – Additional Resources

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

Arabella Advisors. September 2015. "Measuring the Growth of the Global Fossil Fuel Divestment and Clean Energy Investment Movement."

Ansar, Caldecott, and Tilbury. October 2013. "Stranded assets and the fossil fuel divestment campaign: What does divestment mean for the valuation of fossil fuel assets?" University of Oxford, Smith School of Enterprise and the Environment.

Cambridge Associates. 2015. "Introducing the Impact Investing Benchmark."

Carbon Tracker Initiative. 2014. "Unburnable Carbon: Wasted Capital and Stranded Assets."

Ferguson, Anders and Scott, Lily. April 2014. "Emerging Research on Climate Change Risk and Fossil-Fuel Divestment." Veris Wealth Partners.

Geddes, Patrick. 2014. "Building a Carbon-Free Equity Portfolio," Aperio Group.

HIP Investor. May 2013. "Resilient Portfolios and Fossil-Free Pensions"

HSBC Global Research. April 2015. "Stranded Assets: What next?"

International Energy Agency (OECD). 2014. "2014 Renewable Energy: Medium-Term Market."

IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

McCall, Christopher. 2015. "Opinion of Christopher McCall QC on Ethically Questionable Investments: A Summary for Trustees"

Mercer Consulting. June 2015. "Investing in a Time of Climate Change: What Every Investor Needs to Know."

Richardson, David. July 2014. "Beyond Fossil Fuels: The Investment Case for Fossil Fuel Divestment." Impax Asset Management.

Dr. Jonathon Rowson. December 2015. "Money Talks: Divest Invest and the Battle for Climate Realism". Royal Society of Arts.

Threshold Group and Trucost. 2015. "How to Account for Greenhouse Gas Emissions of Derivatives."

Trillium Asset Management. 2014. "Extracting Fossil Fuels from Your Portfolio: A Guide to Personal Divestment and Reinvestment."