Executive Summary

In recent decades, there has been substantial growth in the so-called “sustainable” investments movement, which encourages portfolio managers to invest their clients’ funds in assets that are perceived to promote social benefits, especially assets believed to benefit the environment.¹ According to a recent report by the U.S. Forum for Sustainable and Responsible Investment, the total U.S.-domiciled assets invested “sustainably”—a term broadly defined to include socially targeted investments—is $12 trillion.²

A significant catalyst behind environmentally targeted investments is the belief that humans, through our use of fossil fuels, are primarily responsible for causing global warming and other environmental harms. A growing number of activists and investors believe fossil fuels cause serious harm to life on Earth and that the problems allegedly associated with fossil fuels will only get worse if levels of carbon-

---


© 2018 The Heartland Institute. Nothing in this report should be construed as supporting or opposing any proposed or pending legislation, or as necessarily reflecting the views of The Heartland Institute.
dioxide (CO2) emissions are not reduced. This view is severely flawed and has caused numerous investors to improperly manage investments.

The recent riots in the streets of Paris against motor-vehicle fuel tax hikes make clear the public is catching on to the serious harm done by “green” policies, including many of those supported by sustainable investments. Portfolio managers can no longer accept without serious doubts the claim that anti-fossil-fuel investments benefit society.

This Policy Brief critically examines—from the point of view of a fiduciary or any other investor whose primary duty or goal is to maximize returns—the arguments made in favor of investing in so-called “sustenables.” This paper shows that fiduciaries have a moral obligation—and, in some cases, a legal obligation—to avoid sustainable investment practices. Such investments usually involve government subsidies and are made as a result of pressure from governments, meaning they are not promising on their own merits. Rather than embrace sustainable investment practices, fiduciaries should focus on sound science and investment practices that maximize risk-adjusted returns.

The paper will consider the following:

1. The Aims and Claims of Sustainable Investments

Calls for sustainable investments are often directly or indirectly related to “Environmental, Social and Governance” criteria, which were defined in a 2005 report by the firm Freshfields Bruckhaus Deringer on behalf of the United Nations. While often well-meaning and helpful, the environmental criteria pose a danger to portfolios and society.

2. Fiduciary Duties

The environmental element of sustainable investment guidelines run counter to the goals of fiduciaries and other investors whose primary duty or goal is to maximize returns on an investment portfolio.

3. Institutional Biases

Sustainable investment materials from the United Nations and other organizations devoted to climate alarmism are extremely biased and ignore strong research findings that disprove many of their primary arguments.

4. Pressures to Invest and Virtue Signaling

Sustainable investments are often a form of “virtue signaling” made in reaction to pressure from governments and special-interest groups.
They are typically not compatible with fiduciary obligations.

5. Risks Associated with Relying on Government Subsidies

Many sustainable investments are made much more attractive by government subsidies. On their own merits, such investments are typically risky.

6. Promoting Cronyism and Corruption

Investors who succumb to the temptation to invest their client’s funds in sustainable investments are an integral part of a corrupt, crony system. This is contrary to the letter and spirit of the “Environmental, Social and Governance” criteria.

7. Global Effects and Risks of Sustainable Investments

Investors in sustainable assets promoted or mandated by government are complicit in the serious economic damage they have and will continue to cause, and they are undermining the markets upon which a sound economy depend.

This paper further argues portfolio managers should seize the moral high ground by resisting the pressure to invest clients’ funds in risky sustainable investments. Instead, they should educate their clients about the fallacies involved in such investments.

1. The Aims and Claims of Sustainable Investments

In recent years, those who believe humans are responsible for creating catastrophic global warming and other environmental problems have developed an alternative strategy for destroying fossil-fuel industries worldwide: They pressure portfolio managers and others to make investments based on the now-fashionable “Environmental, Social and Governance” (ESG) criteria, which were defined in a 2005 report by the firm Freshfields Bruckhaus Deringer at the behest of the United Nations. Today, the sustainable investments made in accordance with these criteria total about $12 trillion, up from $639 billion in 1995. Of that total, nearly $2 trillion are invested primarily with environmental goals in mind.

The focus of climate alarmists is on the “environmental” element of ESG. More specifically, they want investors to promote so-called

---


4 Crystal Kim, supra note 2.
“sustainable” ways of generating energy and manufacturing.

When judging whether to invest in a company, a portfolio manager looks carefully at a number of social factors, some of which are not related directly to risk or short-term returns on investments. Investing based on social factors is a strategy that emerged about 50 years ago, largely because some American investors wanted to avoid what they viewed as the moral taint of being connected in any way to companies producing weapons for the Vietnam War. Today, some investors might take account of non-discrimination practices or other concerns before agreeing to invest.

Governance criteria include factors such as the composition of a company’s board of directors, the strength of the business’s audit committee, and policies governing corruption, all of which are criteria that protect investors’ interests as well as uphold sound social standards.

The international push for so-called “sustainable” investment standards emerged following the United Nations’ 1987 Brundtland Commission report, titled “Our Common Future.”

This led to the creation of the ESG criteria, which have evolved over time. ESG’s environment section should be considered controversial, but, unfortunately, it is often accepted with little critical analysis from portfolio and other investors.

In the past, the ESG criteria might take account, for example, of whether a company’s operations mitigate global water scarcity. However, the primary environmental focus today is on whether a company’s operations contribute adversely to the perceived problem of global warming. The assumption made by the climate alarmists who define much of the environmental aspect of the ESG criteria is that increased amounts of atmospheric CO2 produced by human activities are driving up global temperature. Eventually, they argue, these temperature increases will harm humans by causing more severe weather events such as hurricanes and tornadoes, killer heatwaves, and droughts. Additionally, they say global warming will create sea-level rise that could flood coastal cities. In his 2008 film An Inconvenient Truth, Al Gore predicted a 20-foot sea-level rise, which he said would occur in the near future.

---


It is assumed that the most effective way to stop such alleged global warming is to eliminate fossil fuels from energy generation, especially coal, and to instead utilize so-called “renewable” energy resources, including wind, solar, hydroelectric, geothermal, and, for some, nuclear.

We might define the sustainable asset class as investments chosen to have an environmentally beneficial impact compared with all other investments or to other investments of a similar type. For example, an investment in a natural gas power plant would be considered sustainable if the plant were intended to replace power generated using coal, even though a gas plant does emit some CO2, because coal plants generally emit more CO2 than natural gas generation. An investment in a natural gas power plant chosen in preference to a solar power plant, on the other hand, would not be considered a sustainable investment, since solar panels do not produce much CO2 directly. But here we see a major problem with the ESG obsession with CO2. A recent study by Environmental Progress, for example, warns toxic waste from used solar panels poses a global environmental threat, creating 300 times more toxic waste per unit of energy than do nuclear power plants. Those who would define ESG compliance principally in terms of CO2 reduction ignore this and other damage done by so-called renewables.\(^7\)

As an alternative to investing in substitute energy sources, sustainable investors have contributed money to carbon-saving technologies, which reduce power use or carbon-dioxide emissions directly, thereby lowering the amount of CO2 in the atmosphere. Some of these investments, from extra loft insulation to power-saving light bulbs, reduce costs and might be good practices in any case, but many are not.

2. Fiduciary Duties

Some argue if individuals wish to invest in assets that promote their personal value preferences, even if returns are lower than they would be with alternative investments, that is their prerogative. Such investments might be considered acts of charity. While companies can certainly engage in charitable activities if they desire, in many cases, there are virtually no social benefits provided by making sustainable investments. In fact, in some cases, they create additional harm.

A recent Financial Times story heralded “money managers” as “the new warriors of climate

---

change.”

That story documents the efforts of activists to pressure managers of large portfolios to influence the policies of fossil-fuel companies, invest in alternatives to fossil fuels, and even divest all fossil-fuel-related assets. Despite the fact such demands have become widespread, complying with these radical requests could violate the fiduciary duties of fund managers.

Professional investors managing institutional portfolios for others, especially large retirement funds, have a legal and moral obligation to look first and foremost to their fiduciary duties to their clients. They are “playing with other peoples’ money,” not engaging in an exercise to promote their personal values. When it comes to sustainable investments, professional investors’ duties often come into conflict with the environmental element of the ESG principles.

The CFA Institute Research Foundation recently published its Handbook on Sustainable Investments as a guide to portfolio managers looking to balance their fiduciary duties with the perceived need to consider environmental concerns. It states, “In the institutional investment context, trustees of pension funds owe fiduciary duties to beneficiaries to exercise reasonable care, skill, and caution in pursuing an overall investment strategy suitable to the purpose of the trust and to act prudently and for a proper purpose.” The report acknowledges the legal definition of these duties vary from country to country.

While the CFA Institute Research Foundation Handbook offers much technical detail about investment options and strategies, it fails to follow its own guidance “to exercise reasonable care, skill, and caution” by refusing to take such an approach when considering environmental issues, especially when evaluating its assumptions about CO2. For instance, it doesn’t acknowledge the existence of well-crafted research conducted during the past two decades that challenges global warming orthodoxy, and it fails to appreciate the risky nature of sustainable investments that are based on heavy-handed government mandates or often-ephemeral government subsidies.

Additionally, the Handbook ignores the evidence demonstrating many sustainable technologies fail to produce positive economic results, and it doesn’t acknowledge the scientific reality that many allegedly “sustainable” energy alternatives are not, in fact, sustainable and do virtually nothing to mitigate environmental harm.

---


9 Sabine Döbeli and Christian Dreyer, supra note 1.

10 Ibid., p. 181.
3. Institutional Biases

To properly fulfill their fiduciary duties, portfolio managers are obliged to do their research and understand the material supporting sustainable investments is often biased. Many reports are produced by organizations with a vested financial interest in the topic, including large banks, utilities, renewable energy producers, and insurers. In other cases, political ideology taints sustainable investment reports. Many socialists, environmental advocacy groups, and left-wing foundations have had a substantial effect on the literature surrounding sustainable investments.

A primary source of much of the bias surrounding sustainable investments is the reports of the U.N. Intergovernmental Panel on Climate Change (IPCC), which supports the contention CO2 is a dire problem in need of a government solution. IPCC was established in 1988 to assess the science related to climate change. It has issued a series of reports purporting to offer an objective review of the latest thinking and research on climate. Its staff works with hundreds of scientists and other organizations, most of which are associated with governments.

Although IPCC claims it’s an objective organization, its work is predicated on the assumption there is a serious man-caused global warming threat. If IPCC were to report there is “no real problem here,” there would be virtually no need for the agency or the work produced by individuals and other government organizations around the world making contributions to IPCC’s reports.

This is not to say that all scientists whose research is referenced by the IPCC are dishonest. This IPCC bias, however, can be seen in its failure to include, or even acknowledge a mountain of materials that question the climate change orthodoxy. For example, the Nongovernmental International Panel on Climate Change and The Heartland Institute are now publishing the fourth volume of its Climate Change Reconsidered series. All four volumes include well-documented, in-depth articles by hundreds of reputable and highly credentialed scientists, scholars, and economists from around the world who offer a more realistic and skeptical assessment of climate issues. Despite the fact The Heartland Institute and other organizations have offered thousands upon thousands of pages of scientific evidence showing humans are likely not causing catastrophic climate change, IPCC refuses to include skeptics’ scientific work in their materials.

The scientific method requires the opportunity for scientists to offer their evidence and

---


for other scientists to carefully consider new findings that challenge existing beliefs. This is not what occurs at the IPCC. If IPCC were not biased, it would be an open forum that permits scientists to submit literature questioning the causes and consequences of climate change and whether CO2 negatively affects the environment, a claim upon which many sustainable investments are based.

This concern about bias applies to the work produced by the U.S. Environmental Protection Agency during the Obama years and applies today to other, similar government agencies in countries around the world, as well with numerous large media outlets, many of which proudly state their intention to silence honest discussions about climate change. For instance, BBC recently advised its journalists, “To achieve impartiality you do not need to include outright deniers of climate change in BBC coverage.”

4. Pressures to Invest and Virtue Signaling

Portfolio managers and institutional investors are subjected to pressures from many sources who believe they should make sustainable investments, even when they neglect the portfolio managers’ fiduciary duties to secure maximum returns at the risk levels desired by their clients.

Two of the most powerful pressures are virtue signaling, actions that produce few positive outcomes but are deemed desirable by society, and eco-shaming, the use of fear and intimidation to compel people and businesses to adopt a radical environmental agenda. These two strategies work well in the United States, in large part because of far-reaching campaigns by leftists in politics, tenured professors in colleges and universities, and large media outlets that routinely advance the premise that the use of fossil fuels presents a grave danger to the world.

One example of this strategy is that news outlets and left-wing politicians tend to treat any serious weather event as an example of the adverse impact of global warming, even when the available evidence completely disproves such claims. California Gov. Jerry Brown blamed the devastating wildfires that occurred in his state in 2018 on climate change. Similarly, movies such as Al Gore’s An Inconvenient

---


Truth and the PBS documentary From the Ashes offer distorted views of climate change and are often accepted as gospel truth.\(^\text{15}\)

Many portfolio managers make unsound investment decisions to demonstrate to their clients or others they are socially responsible. There is no virtue, however, in failing to inform clients about the questionable premises on which portfolio managers’ investment decisions are based, the risk of lower returns, or the economic damage that those investments might cause.

Pressure on portfolio managers to put client funds into sustainable investments come from a number of sources, including the following:

**Government**

Governments at the national, state, and local levels pressure financial managers to invest clients’ money in sustainable investments. If these were promising investments, no government pressure would be necessary. In this respect, CFA’s *Handbook on Sustainable Investments* is particularly revealing. While it is meant to guide managers toward making sound investments, it also documents the extent of government arm-twisting and eco-shaming. Europe has led the way. For example, in France, 2005/2008 legislation targeting pension funds and investment companies requires the “introduction of a sustainable investment strategy and mandatory inclusion of at least one fond solidaire.”\(^\text{16}\)

In the Netherlands, the 2008/2013 Pension Fund Act sought to enhance “the overall governance of pension funds; for example, the pension fund must publicly disclose details of its sustainable investment strategy.”\(^\text{17}\) This followed a 1995 act that offered tax reductions for green investments.\(^\text{18}\)

The Swiss regions of Geneva (in 2014) and Vaud (in 2015) changed their laws so that they “now oblige their respective pension funds to comply with sustainable development and responsible investment objectives.”\(^\text{19}\)

In May 2018, the European Commission presented three proposals aimed at establishing a

---


unified European Union classification system for sustainable economic activities, improving disclosure requirements on how institutional investors integrate ESG factors in their risk processes and creating a new category of benchmarks that will supposedly help investors compare the carbon footprint of their investments.\textsuperscript{20}

It is likely the international regulatory requirements imposed on investee companies and regulated investors will tighten over time. According to the “Global Guide to Responsible Investment Regulation,” in the world’s 50 largest economies there are more than 300 government policy instruments that encourage investors to consider what those governments allege are long-term value drivers, including ESG factors. More than half these instruments were created from 2013 to 2018.\textsuperscript{21}

Legislation in California serves as one of the worst examples of forcing pension funds into politically motivated sustainable investments. In September 2018, California’s legislature passed Senate Bill 964, which mandates that the state’s two largest pension funds, California Public Employees’ Retirement System and the California State Teachers’ Retirement System, take climate change into account and report on meeting the anti-CO2 goals of the Paris Climate Agreement.\textsuperscript{22} In June 2017, the Trump administration announced the United States will pull out of the Paris Agreement.

Governments also provide huge incentives to businesses to pursue the anti-CO2 goals established by lawmakers and special-interest groups. To the extent governments can further those goals by persuading funds to invest sustainably, they achieve the same end without the taxpayer burden that subsidies directly impose. However, when tax credits are the inducement, there is a loss of revenue.

Investors are tempted by a range of government incentives for sustainable investment, both directly and through government handouts given to companies or projects in which people might invest. Examples of government subsidies given directly to sustainable investors include the following:

- According to the Congressional Budget Office, in 2016, “An estimated $10.9 billion … of the energy-related


tax preferences, was directed toward renewable energy.”

- Several U.S. states, notably Connecticut, Hawaii, New York, and Rhode Island, have set up “green banks” that lend to sustainable investment projects.

- In June 2016, the Overseas Private Investment Corporation provided $20 million in grants to leverage $400 million in investments in renewable energy resources in India.

- The Small Business Administration’s Small Business Investment Company program provides government investments in private equity funds that have made at least 50 percent of their investments in economically distressed areas or in priority areas such as clean energy and education.

- A policy circular issued in late 2016 by China’s National Development and Reform Commission instructed local governments to “actively participate in green project construction through investment subsidies, subsidy guarantees, bond discounts and other means.”

**Vocal Shareholders**

A vocal minority of shareholders, policyholders, and beneficiaries that believe humans are causing catastrophic global warming sometimes exert oversized pressure on fiduciary fund management, directors, or trustees to make sustainable investments, often while expecting them to juggle the company’s portfolio to maintain optimum returns. Most individuals whose funds are being invested are ignorant these pressures are being exerted by other investors, and they often have no idea their pensions or endowments are put at risk or yielding lower returns as a result.


being put at risk or yielding lower returns as a result.

The campaign to force Harvard University’s endowment to divest from fossil fuels is an example of this tactic. The campaign started in 2012 and gathered 70,000 signatures on a divestiture petition. It also showed in a referendum among students that 72 percent were in favor of divestment. However, most of the individuals who made donations, both large and small, to the endowment fund never expressed an opinion about the campaign.

In April 2017, the Harvard Management Company announced it was “pausing” investment in fossil fuels. Kat Taylor, a member of the Harvard Board of Overseers and wife of anti-fossil-fuel environmentalist billionaire Tom Steyer, is continuing to campaign for full divestment.28 Interestingly, a large part of the Steyer family fortune came from investments in fossil fuels made by Steyer through his company, Farallon Capital Management.29

Harvard University not only removed fossil-fuel investments from its endowment—the largest college endowment in the world—it also added a long list of “green” investments to its portfolio. Harvard’s aggressive investments made before the global financial crisis contributed to the problems its fund has experienced in recent years, but those “green” decisions undoubtedly led to some remarkably poor results that should serve as a stern warning to all portfolio managers considering sustainable investments.

In 2011, Harvard expanded its natural resource investments worldwide, in forests, vineyards, a cotton farm, a eucalyptus plantation, and a sustainable agricultural project in Brazil. In 2017, it was forced to write down the value of these investments, from $4 billion to $2.9 billion. This $1.1 billion loss occurred at a time when the global economy and markets experienced steady expansion. The Standard and Poor’s 500 Index rose 85.2 percent from 2011 to 2017, which means had Harvard invested $4 billion in the Standard and Poor’s 500 Index, it would have increased its endowment to $7.4 billion.30


Academia

Because huge sums of money from government, international institutions, and nonprofits flow to academics, they have become experts in devising rationales for sustainable investments and new arguments for the existence of man-caused climate change, even when data disprove their assertions.

On numerous occasions, academics have pressured university endowment funds to divest from fossil fuels. For example, four managers at Cambridge University’s endowment fund, including the chief investment officer, resigned in September 2018 because they believed pressure from Cambridge faculty, students, and administrators to divest the fund from fossil-fuel investments was making it impossible to fulfil their duty to maximize the endowment’s value.\footnote{Michael Skapinker, "Cambridge endowment protesters must be ready to take a loss," Financial Times, Sept 18, 2018, https://www.ft.com/content/d2fb4a68-ba66-11e8-94b2-17176fbf93f5}

International Institutions

In addition to its biased climate reports, one of the United Nations’ most insidious efforts to pressure portfolio managers to make sustainable investments has been to change the accepted definition of “fiduciary duty” so that it mandates the purchase of sustainable investments. The attempt, contrary to other actions by the United Nations, appears to be an acknowledgement that such investments now often conflict with existing fiduciary rules, because if they don’t conflict with these rules, why would a change be necessary?

Along attempts to change the definition of “fiduciary duty,” the United Nations has also worked tirelessly to convince others that such a change is not necessary. For example, in 2005, the United Nations commissioned the European law firm Freshfields Bruckhaus Deringer to produce a report on the issue of sustainable investment. It concluded fiduciary duty should not be considered an impediment to sustainable investment.\footnote{Freshfields Bruckhaus Deringer, supra note 3.}

The United Nations commissioned another report in 2015 that purported to “end the debate on whether fiduciary duty is a legitimate barrier to the integration of ESG issues in investment decision-making.”\footnote{See “Fiduciary duty in the 21st Century,” Fiduciary Duty in the 21st Century program, accessed November 20, 2018, https://www.fiduciaryduty21.org/index.html} The report further recommends that “policymakers and regulators” should “clarify that fiduciary duty requires investors to take account of ESG issues...
in their investment processes, in their active ownership activities and in their public policy engagement.”

The United Nations also advised policymakers to support the development of “guidance” for trustees to use when crafting investor implementation processes and shaping investor beliefs. Investors can expect many regulators, both national and supranational, to adopt similar findings in their future determinations.

These efforts show the United Nations is committed to changing the definition of “fiduciary duty” through legislation and regulation so that it conforms with its own left-wing environmental goals, regardless of whether those goals are in the best interests of investors. Evidence shows this pressure strategy could be working. Many investment managers have already said they believe “sustainable investments” are part of their fiduciary duty. In one survey, published in October 2018, 82 of 141 investment managers said they hold such a view.34

Yet Max Schanzenbach, a professor at Northwestern University’s Pritzker School of Law, and Robert Sitkoff, a professor at Harvard Law School, pull no punches in countering attempts to force investment professionals to act against their fiduciary duties and their clients’ best interests. They observed in a Wall Street Journal article that “the zealous push for fiduciaries to embrace ESG faces barriers under longstanding American law.”35 They argue that “a trustee must abide by fiduciary duties of loyalty and prudence, and therefore act for the ‘exclusive’ benefit of the beneficiaries, considering ‘solely’ their interests, without regard for collateral benefits, such as advancing social or environmental causes.”

Portfolio managers who pursue the alleged environmental benefits offered by ESG investments could lose clients’ money and violate their fiduciary duty in the process. Schanzenbach and Sitkoff wrote, “If a fiduciary reasonably concludes that ESG factors have become overvalued … the fiduciary could [prefer] … fossil fuels, tobacco and other such ‘sin stocks.’ To mandate a fiduciary investment strategy on the theory that companies with high ESG scores will be perpetually undervalued runs contrary to everything we know about capital markets.”

Schanzenbach and Sitkoff also state, “ESG factors are highly subjective. ESG ratings services disagree, for example, about whether Tesla or Exxon is a better bet.”


A recent report by investment bank CLSA and the Asian Corporate Governance Association highlights this problem. The report’s authors analyzed the ESG performances of a number of companies using the different methodologies created by MSCI and FTSE Russell, which provide ESG evaluations. In response to the report’s observation of “the lack of consistency between scoring methods,” a Financial Times analysis states “it should be obvious that trying to roll a bunch of very different factors across three distinct subjects [ESG] into one overall score is going to involve some oversimplification.”

**International Consortia**

Interest groups can also organize in a toxic mix to pressure fund managers to invest in non-fossil-fuel energy sources. The international Financial Stability Board organized a Task Force on Climate-Related Financial Disclosures, headed by Michael Bloomberg. First announced January 21, 2016, its membership included banks, insurance companies, asset managers, pension funds, large non-financial companies, accounting and consulting firms, and credit-rating agencies. This task force made a series of disclosure recommendations in July 2017. It suggested financial institutions, including asset managers, (1) disclose their governance relating to climate-related risks and opportunities; (2) disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategies, and financial planning; (3) disclose the processes used by the organization to identify, assess, and manage climate-related risks; and (4) disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities.

Under these pressures, portfolio managers are unlikely to report they’ve studied climate change and found no serious global warming problem. Nor are they likely to say they have determined that adhering to these criteria is a waste of time and resources.

**5. Risks Associated with Relying on Government Subsidies**

Sustainable investments are often extremely risky. Such investments are usually made in technologies that governments and activ-

---


ists tout as alternatives to fossil fuels or as energy-saving. However, governments do a poor job of picking technologies that are economically viable. They tend to be expensive technologies and risky investments, which is why they often rely so heavily on government subsidies.

The following examples and information display why portfolio managers should be wary of risking their clients’ money on such projects:

### Solyndra and Not-So-Sunny Solar

The poster child for boondoggle sustainable energy projects is Solyndra. That company sought to manufacture its uniquely designed photovoltaic solar panels. It received a $535 million loan guarantee in 2009 from President Barack Obama’s U.S. Department of Energy. When the company went bankrupt in 2011, taxpayers had to cover that giant loss.

Any sustainable investments that would have been made in Solyndra would have been lost. After the company shut down, it was subject to investigations questioning whether taxpayer funds were used properly. When politics and investments mix, such arrangements are fraught with risks.

PayPal co-founder and investment guru Peter Thiel devoted a chapter of his book *Zero to One* on the failures of businesses like Solyndra. Thiel noted because of fears of environmental disaster and global warming at the beginning of the twenty-first century, “entrepreneurs started thousands of cleantech companies, and investors poured more than $50 billion into them. So began the quest to cleanse the world. But it didn’t work.

“We got a massive cleantech bubble,” Thiel wrote in his book. “Solyndra is the most famous green ghost, but most cleantech companies met similarly disastrous ends—more than 40 solar manufacturers went out of business or filed for bankruptcy in 2012 alone.”

Portfolio managers who succumb to the siren call of the sustainable investments movement and choose to invest in companies like Solyndra can lose huge amounts of their clients’ money. They should instead carefully consider the sober analyses of Thiel and others who warn investors and fund managers about the risks of such technologies.

### Dim Bulb Investments

In December 2007, the U.S. Congress passed the Energy Independence and Security Act, which set maximum wattage requirements that effectively outlawed most incandescent light-
bulbs above 60 watts. General Electric actively lobbied for this legislation, likely because it had manufacturing capabilities for compact fluorescent lamp (CFL) light bulbs and could take advantage of the much higher prices that could be charged for them.\footnote{Timothy P. Carney, “Industry, not environmentalists, killed incandescent bulbs,” \textit{Washington Examiner}, December 31, 2013, https://www.washingtonexaminer.com/industry-not-environmentalists-killed-incandescent-bulbs}

CFL bulbs, however, proved to be a complete market failure, largely because they emanate an unattractive yellow light and cannot be disposed of without violating many local toxic waste ordinances (because they contain mercury). Making matters worse, CFL bulbs often burn out long before their claimed lifespan, making them highly uneconomical.\footnote{“8 advantages and disadvantages of CFL lightbulbs,” \textit{ConnectUS}, https://connectusfund.org/8-advantages-and-disadvantages-of-cfl-light-bulbs}

Fortunately, technology and market capitalists came to the rescue by developing and producing much more attractive LED light bulbs. Although the LED bulbs were initially more expensive than CFL bulbs, they quickly gained acceptance because of their genuinely longer life and lack of toxicity. The price of LED bulbs eventually dropped, and General Electric decided to phase out CFL light bulb production in the United States in 2016.\footnote{Diane Cardwell, “GE to phase out CFL bulbs,” \textit{The New York Times}, February 1, 2016, https://www.nytimes.com/2016/02/02/business/energy-environment/ge-to-phase-out-cfl-light-bulbs.html}

\begin{wrapfigure}{r}{0.5\textwidth}
\centering
\includegraphics[width=0.9\textwidth]{wind_turbines.png}
\caption{Wind Turbines provide another example of a highly subsidized technology that has failed to meet expectations and has left investors with large losses.}
\end{wrapfigure}

\textbf{U.S. Wind Turbines}

Wind turbines provide another example of a highly subsidized technology that has failed to meet expectations and has left investors with large losses. Ironically, in some cases, environmental costs have caused these failures. In California, for example, the Altamont Pass Wind Farm shuts down for four months every year because the California Audubon Society obtained injunctions to prevent the slaughter of golden eagles, burrowing owls, red-tailed hawks, and American kestrels. These birds were being killed by the thousands by wind turbines during their migration seasons.

Some offshore wind farms have suffered rapid salt-induced erosion of their turbines, forcing them to shut down years before their expected end date. In total, the United States is estimated to have 14,000 abandoned wind turbines.\footnote{Tom Leonard, “Broken down and rusting, is this the future of Britain’s ‘wind rush’?,” \textit{The Daily Mail}, March 18, 2012, https://www.dailymail.co.uk/news/article-2116877/Is-future-Britains-wind-rush.html#ixzz1pbANJuGk}

Physicist John Droz, publisher of the “Energy and Environmental Newsletter,” outlines on his blog the underlying problems with wind
Fallacies of So-Called ‘Sustainable’ Investments

Power.
At the top of his list is the fact that wind energy is unreliable because wind blows intermittently. Droz reviews how wind power proponents offer one justification after another—it would significantly reduce CO2 emissions, make America energy independent, create net green jobs, is low cost and sustainable, etc.—and then he knocks each one down. His review should be required reading for portfolio managers who are considering putting their clients’ funds into “sustainable” investments or investors who believe they are helping the environment by investing large amounts of their money in risky renewable technologies.

Germany’s Wind Turbine Fiasco

Germany has made approvals for new wind parks more difficult to obtain in recent years as the power grid has become more unstable and protests against the parks have grown. Today, 5,700 of the country’s 29,000 wind turbines with an inherited capacity of 45 MW are expected to be abandoned in 2020, when their subsidies run out and they become uneconomical. It is thus likely that after 2020, Germany’s wind power output will decline considerably.

Shutting the turbines down is only half the battle, however. Under German law, the entire turbine, including the massive concrete base, must be removed when the turbine ceases operating. Removing turbines is a mammoth task, because each German wind turbine weighs 3,000 tons, including its reinforced concrete base. Furthermore, it is very difficult to recycle large portions of the turbines; the fiberglass composite blades are impossible to separate from each other, and burning the blades is toxic and energy intensive.

Stranded Assets

The green lobby has pressured investors for many years to divest from fossil fuels on the grounds that those investments could become “stranded assets” if the world switches from using fossil fuels to some other form of energy. However, arguments about stranded assets work both ways. Many wind turbines in the United States, Germany, and elsewhere are now stranded because they are uneconomical without government support, and it’s entirely possible that technological developments will make these investments virtually worthless in the future.

Germany has made approvals for new wind parks more difficult to obtain in recent years as the power grid has become more unstable and protests against the parks have grown.

Stranded Assets

The green lobby has pressured investors for many years to divest from fossil fuels on the grounds that those investments could become “stranded assets” if the world switches from using fossil fuels to some other form of energy. However, arguments about stranded assets work both ways. Many wind turbines in the United States, Germany, and elsewhere are now stranded because they are uneconomical without government support, and it’s entirely possible that technological developments will make these investments virtually worthless in the future.


18 Fallacies of So-Called ‘Sustainable’ Investments
Political Cycles and Derivatives

Another risk facing sustainable investors is the fact that large renewable energy projects have long construction and operating lifespans. Many projects hope to earn a profit over periods spanning several decades. Investors should be wary of long periods such as these, because political cycles are considerably shorter, and policy changes can quickly put projects dependent on government subsidies and mandates at risk. As an example, President Donald Trump’s economic adviser Larry Kudlow said in December 2018 the administration plans to eliminate subsidies to electric vehicles, as well as other renewables, potentially jeopardizing hundreds of billions of government-induced investments.47

Investors normally turn to derivatives to manage risk, but sustainable investments make hedging very difficult. Their prices, among other things, are dependent on political support and cronyism, which are difficult to hedge. All investments involve a balance between risk and return, but the difficulty in hedging sustainable investments makes them unattractive as part of an optimal portfolio for an investor with fiduciary responsibilities.

6. Promoting Cronyism and Corruption

Those portfolio managers who are tempted to virtue signal or are being eco-shamed into making sustainable investments are an integral part of a corrupt, crony system—one that they are effectively endorsing by continuing to take part in it. They are handing over their clients’ funds to be used by businesses and special-interest groups that profit from government power and influence, rather than by producing goods and services to sell to willing customers.

The “governance” element of ESG states that investors must ensure there are strong anti-corruption practices in place, but many, if not most, sustainable investments can realize returns only because companies benefit from a toxic combination of government regulations and subsidies secured through political favors. It’s more than a little reasonable to call such arrangements “legal corruption.”

The ESG criteria are supposed to allow socially conscious investors to earn profits while making the world a better place. But unless one accepts the most extreme fears of climate alarmists—namely that without draconian government measures to restrict CO2 emissions, humanity’s future will be endangered.

and potentially millions of lives will be lost—it is unreasonable to say those participating in government-supported sustainable investments are improving the planet in a reasonable way. In reality, they are merely contributing to the expansion of this highly corrupt system.

7. Global Effects and Risks of Sustainable Investments

Government efforts to eliminate the use of fossil fuels, especially coal, and promote costlier forms of energy inflict serious damage on economies and individuals. The fall 2018 Paris riots against proposed fuel tax hikes—which were created to help prevent climate change—make clear the public is catching on to this fact. Investors who want to earn large profits while improving their communities should not support sustainable investments because they rarely accomplish either goal.

The following are just some of the many examples of how sustainable investments have created significant social or economic harm:

Electricity Prices in the Eurozone

So-called sustainable energy projects in Europe have unnecessarily driven up the cost of energy, harming millions of families across the continent. A 2016 Manhattan Institute report noted, “Between 2005, when the E.U. adopted its Emissions Trading Scheme, and 2014, residential electricity rates in the E.U. increased by 63 percent, on average. In Germany, those rates increased by 78 percent; in Spain, by 111 percent; and in the U.K., by 133 percent. Over the same period, residential rates in the U.S. rose by 32 percent.”

More specifically, Germany presents an important cautionary tale displaying why renewable energy investments often produce more harm than good. In May 2011, German Chancellor Angela Merkel’s government announced it planned to eliminate energy generated by fossil fuels and nuclear by 2022, despite the fact nuclear power is one of the most cost-effective ways to generate power ever created. These decisions caused massive economic damage.

A September 2013 article in Der Spiegel, one of Germany’s largest news magazines, explored “How Electricity Became a Luxury Good.” It reported a renewable energy surcharge increased electricity bills for Germans by 20 percent, which was an especially painful increase considering Germany already had the highest electricity prices in Europe at the time.

---


time of the surcharge. Germans spend about $11 billion to generate $1.7 billion worth of electricity.\textsuperscript{50} In 2016, households in Germany paid about 40 cents per kilowatt-hour for electricity, compared to the American average of about 12.5 cents.\textsuperscript{51} (From 2008 to 2014, the German government provided $27.3 billion in energy subsidies.)\textsuperscript{52}

Not only are German electricity prices high, reliability is also very spotty. As one headline from \textit{The Daily Caller} put it, “Germany [is] facing mass blackouts because the wind and sun won’t cooperate.”\textsuperscript{53} The story’s author reported Germany experienced a near-blackout in January 2017 because of its dependence on unreliable renewable energy sources, especially wind and solar. \textit{The Daily Caller} also quoted in its story Michael Vassiliadis, the head of a union representing workers in the power industry. Vassiliadis reportedly said, “The renewables could not even offer five percent [of total power demand.] Coal, gas and nuclear power kept the country almost in the first place under the electric current.”

\textbf{Not only are German electricity prices high, reliability is also very spotty.}

German industry has suffered or been forced to seek energy elsewhere because of Germany’s rejection of fossil fuels. For example, the German chemical company BASF has been engaged in a multi-billion-dollar expansion in the United States because American natural gas prices, thanks to U.S. shale operators and the recent fracking boom, are about one-quarter of the cost of energy in Germany.\textsuperscript{54}

In 2013, car manufacturer BMW decided to build a new $100 million plant to manufacture carbon fibers for its vehicles in Moses Lake, Washington. A major reason it chose not to build this factory in Germany is that German electricity costs six times more than the hydro-electric power available in Washington State.\textsuperscript{55}

Due to the problems mentioned above, there has been some pushback in Germany in recent years. An August 2018 report in \textit{IPE} noted, “German pensions association [ABA] has strongly rejected the European Commission’s proposal to introduce new rules regarding pension funds’ integration of environmental, social and corporate

\begin{itemize}
  \item \textsuperscript{50} \textit{Ibid.}
  \item \textsuperscript{51} Robert Bryce, \textit{supra} note 48, p. 2.
  \item \textsuperscript{52} \textit{Ibid.}, p. 11.
  \item \textsuperscript{54} Michael Birnbaum, “European industry flocks to U.S. to take advantage of cheaper gas,” \textit{The Washington Post}, April 1, 2013, https://www.washingtonpost.com/world/europe/european-industry-flocks-to-cheap-us-gas/2013/04/01/454d06ea-8a2c-11e2-98d9-3012c1cd8d1e_story.html
  \item \textsuperscript{55} Chris Byrant, “High European energy prices drive BMW to US,” \textit{Financial Times}, May 27, 2013, https://www.ft.com/content/be69a732-ab5a-11e2-8c63-00144feabdc0
\end{itemize}
governance (ESG) criteria in investment decision-making.”

The concerns expressed by ABA range from the companies’ limited ability to provide input for the regulations governing pension investments to concerns over whether ESG investments will be mandated.

Damage ‘Down Under’

Australia has been blessed with substantial energy resources, including having the fourth-largest reserves of coal. Until recently, coal provided 80 percent of the country’s power, and 90 percent of the coal produced in Australia in 2012 was sold in lucrative export deals. As a result of the country’s large coal power generation, for years Australians enjoyed some of the world’s lowest electricity prices. However, all that changed when Australian policymakers decided to promote renewables and phase out the use of many fossil fuels. Similar to what occurred in Germany, these policies caused prices to rise substantially. As a result, from February 2016 to February 2017, electricity rates were as much as three times higher in Australia than in the United States.

In Australia, both the state and national governments set energy policy. The state of South Australia committed to transitioning to a system relying almost entirely on renewable energy faster than other states. As a result, a September 2016 blackout in that state left 1.7 million people, approximately 7 percent of Australia’s total population, in the dark. It was 12 days before power would be fully restored. A similar blackout hit the region in February 2017.

The cause of the blackouts and the reason the government was unable to quickly restore power is because of the state’s dependence on renewable energy. Wind and solar are intermittent. Fluctuations in generation and the need to import coal-generated power from the neighboring state of Victoria added to the crisis.

Australia’s energy policies have been so harmful, Australia’s ruling Liberal Party chose in August 2018 to oust its own leader and the country’s prime minister, Malcolm Turnbull.

---


a proponent of destructive renewable energy policies.\textsuperscript{59} Scott Morrison, who replaced Turnbull, won his election in part by pledging to promote affordable energy by lifting a moratorium on the exploration of coal and natural gas and by stopping additional closures of coal power plants.

**California Scheming**

The California Energy Commission ruled in May 2018 all new homes in the state must have solar power, adding thousands of dollars to the cost of constructing a new home. This policy will eventually price some lower- and middle-income families out of their preferred houses.

**Kenya’s Courage**

Renewable energy investments in emerging markets are often completely uneconomical and typically the result of bullying from Western powers. In Kenya, for example, international aid agencies have been very active in promoting the use of Kenya’s native geothermal deposits, as well as a 300 MW wind power plant on Lake Turkana. However, the Kenyan government proposed to build two 1,000 MW coal-fired power stations after discovering substantial resources of domestic coal. Kenyan officials explained that using coal is a highly attractive option because in many cases it’s more reliable and more affordable than renewable alternatives and because the country needs to provide additional energy to keep pace with its rapidly growing population.\textsuperscript{60}

**Conclusion**

Investment managers are often asked to balance their fiduciary responsibilities with pressure from constituencies who want them to make sustainable investments. But as has been made clear in this paper, many sustainable investments are based on highly questionable scientific assumptions from biased sources. Further, such investments are risky and often only sustained by government financial support, mandates, or threats. These investments also entangle clients’ funds in a crony system that is contrary to the spirit—and possibly the letter—of the ESG criteria and some countries’ laws.

Additionally, sustainable investments can yield lower returns than those enjoyed by investors and fund managers who do not consider envi-


Some investors might try to meet fiduciary obligations while adhering to ESG criteria, but many of these strategies suffer from substantial flaws. For example, under an exclusion approach, an investor might choose to exclude fossil-fuel companies from a portfolio to avoid investments considered to be against sustainable principles. However, a number of studies have shown these “bad” companies tend over time to have higher risk-adjusted returns than “sustainable” portfolios. Thus, such an approach fails the return-maximum objective of a fiduciary investor.61

Other investors might try to implement a best-in-class approach. This is when an investor keeps the overall portfolio balanced, but within each sector, he or she chooses the companies considered to be the most sustainable. This, too, is an imperfect approach, because in a large universe of investors chasing a few good sustainable investments, the prices of the investments considered to be the “best” will be significantly higher than they would ordinarily be, reducing potential future returns and violating fiduciary duties.

An impact investment approach attempts to adopt twin goals, a financial return objective and an objective of having a positive environmental impact. In other words, it tries to have it both ways by seeking to make investments that will yield returns as high as those made in funds that don’t include sustainable investments by carefully picking the sustainable investments likely to be the most profitable. (These investments are usually low-risk and subsidized by government.) However, unless the environmental impact objective is set very loosely, this approach often has a large negative impact on returns. If individuals want to use their funds in this way as a matter of personal charity, it is entirely within their power to do so. But when a portfolio manager invests other people’s money using this strategy, it clearly flies in the face of the portfolio manager’s fiduciary obligations.

At minimum, institutional investors should obtain from their trustees (or an equivalent governing body) a written mandate, publicly disclosed to the investments’ beneficiaries, defining a minimum fixed percentage of the portfolio that may be devoted to sustainable investments and the acceptable reduced rate of return (or loss) that accompanies such a strat-

---

egy. Informing clients, investors, and portfolio managers would, at the very least, immunize fund managers against charges of mishandling funds. This solution, however, does not offer the best course of action.

The best approach for socially conscious investment managers would be to educate their clients about the fallacies of sustainable investments. Why passively follow an investment strategy that is likely to harm a client’s interests? True virtue and allegiance to fiduciary duty does not come from signaling adherence to false beliefs, but rather by standing up for proven principles, regardless of the external pressures placed on investment managers.

Perhaps most importantly, those portfolio managers concerned with the health of the U.S. economy should urge clients to avoid sustainable investment practices, which will inevitably harm the American economy—and all the families that depend on it—by unnecessarily relying on risky investments. It’s better to protect prosperity and portfolios by engaging in responsible investment practices that properly balance the real risks and rewards of investing than to depend on the fantasies of “green” extremists.

###
About the Author

Martin Hutchinson is a former merchant banker with more than 25 years of experience working for some of the world’s most prominent financial institutions, including banks in his native Britain, United States, and Europe.

After spells at the London merchant bank Hill Samuel, Citigroup, and the Swedish investment bank Enskilda Securities, Hutchinson became senior vice president in charge of Creditanstalt-Bankverein’s derivative operations. He later served as a director of Gestion Integral de Negocios, a Spanish private-equity firm, and as an advisor to the Korean conglomerate Sunkyong Corp.

As the U.S. Treasury advisor to Croatia in 1996, Hutchinson helped the country establish its own T-bill program, launch its first government bond issue, and start a forward currency market. He then set up the Corporate Finance Division for the Croatian bank Privredna banka Zagreb.


Hutchinson has appeared on television on BBC, Fox News, Fox Business, TFN, and RTV Slovenija, and he has lectured at the Cato Institute, Texas Workforce Conference, Institute of Economic Affairs, National Economists Club, and at Princeton University.

Hutchinson is the author of the book Great Conservatives (2004) and the coauthor, with Kevin Dowd, of Alchemists of Loss (2010).

Hutchinson earned his undergraduate degree in mathematics from Trinity College in Cambridge and an MBA from Harvard University.
About The Heartland Institute

The Heartland Institute is an independent national nonprofit research organization founded in Chicago in 1984. It is a tax-exempt charity under Section 501(c)(3).

The mission of The Heartland Institute is to discover, develop, and promote free-market solutions to social and economic problems. Three things make Heartland unique among free-market think tanks:

- We communicate with more national and state elected officials, more often, than any other think tank in the U.S. In 2017, we recorded nearly a million contacts with elected officials.

- We produce four monthly public policy newspapers – Budget & Tax News, Environment & Climate News, Health Care News, and School Reform News – which present free-market ideas as news rather than research or opinion.

- We promote the work of other free-market think tanks on our websites, in our newspapers, at our events, and through our extensive government relations and media relations efforts. Nobody else does more to promote the work of other think tanks than we do.

In 2018, a telephone survey of 500 randomly selected state elected officials (no staff) found 78 percent of state legislators read at least one of our publications. Forty-five reported a Heartland publication “influenced my opinion or led to a change in public policy.”

In 2017, we appeared in print and online, and on television or radio, nearly 4,700 times and our podcasts were downloaded 2.4 million times. Our Facebook page has more than 100,000 fans. Heartland uses Twitter to promote its events and free-market mission to more than 75,000 followers every day.

Heartland’s annual budget of nearly $6 million supports a full-time staff of 39. Approximately 500 academics and professional economists participate in our peer-review process, and more than 275 elected officials serve on our Legislative Forum. We are supported by the voluntary contributions of approximately 5,500 supporters. We do not accept government funding.

Heartland is rigorously nonpartisan, working closely with Democrats and Republicans alike to solve public policy problems. While our focus is on market-based solutions, 77 percent of state Democratic legislators said they read at least one Heartland publication “sometimes” or “always” and 33 percent said a Heartland publication influenced their opinions or led to a change in public policy.

For more information, please visit our website at www.heartland.org or call 312-377-4000.