

Board of Regents <bor@hawaii.edu>

Bevis Longstreth's Testimony on Fossil Fuel Divestment at UH

Stuart Scott <stuart.h.scott@gmail.com>

Tue, Jan 6, 2015 at 9:05 PM To: "Randolph G. Moore UH Board of Regents" <rgmoore@hawaii.edu>, UH Board of Regents <bor@hawaii.edu> Cc: Bevis Longstreth <blongstreth@mindspring.com>

Dear Chairman Moore and Members of the UH Board of Regents,

I will be forwarding my own testimony shortly this evening, but first I am forwarding to you the attached files which constitute the testimony of **Bevis Longstreth**, former SEC Commissioner and one of today's most astute advocates of fossil fuel divestment. Mr. Longstreth is also copied on this submission so that you will have a means of direct contact if you choose to further avail yourselves of his experience and counsel on this very serious matter.

The 'Testimony Cover' file attached, states his basic qualifications to have standing in this matter, and summarizes his concerns. In the 3 subsequent attached articles, as published online in the Huffington Post and organized by date of publication, he has essentially presented testimony to ALL of the fiduciaries that are currently considering fossil fuel divestment. This was the most efficient and effective way for him to reach many Boards at once.

Since the Huffington Post does not make it easy to neatly print their articles to PDF files, I have assisted Mr. Lonsgtreth by performing that multistep task for him. We decided that I would also make the submission to you on his behalf since it was by my initiative that he became aware of your current consideration of fossil fuel divestment.

Note that the articles from 7/11/14 (3 pages, large font) and 9/30/14 (5 pages) have a significant amount of overlap. But Mr. Longstreth thought that both were valuable, and that there were important points made in the longer one from 9/30/14, so I have attached both.

There will be many items of testimony for you to consider in your deliberations, but I urge you to spend the time to digest this material and give it due weight.

Sincere thanks, Stuart

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Stuart Scott **IESCO, Deputy Director General** for the North American Region and Climate Change Issues www.iesco-iesco.org





Rethinking Economics in the Age of Climate Change https://www.youtube.com/watch?v=GCkCVFI3934

"You never change things by fighting the existing reality. To change things, build a new model that makes the existing model obsolete" - R. Buckminster Fuller

4 attachments

- Bevis Longstreth Testimony Cover.pdf
- 2014-07-11 Bevis Longstreth The Case for Fossil Fuel Divestment.pdf 131K
- 2014-09-30 Bevis Longstreth Homer Describing Big Oil.pdf 149K
- 2014-12-09 Bevis Longstreth Engagement Won't Work.pdf 97K

Bevis Longstreth 322 Central Park West New York, N.Y. 10025 blongstreth@mindspring.com

January 4, 2015

Board of Regents of the University of Hawaii 2444 Dole Street, Bachman Hall, Room 209 Honolulu, HI 96822

Dear Ladies and Gentlemen:

I wish to submit the attached articles as testimony for your consideration in the matter of fossil fuel divestment of the University of Hawaii endowment. Having been a Commissioner of the Securities and Exchange Commission of the United States for 3 years during the Presidential Administration of Ronald Reagan (and twice confirmed by the Senate), and having served for many years on the boards of directors of three major investment management firms (CREF, GMO and AMVESCAP), I believe I am in a good position to assess the risk involved in financial markets as a whole and various market sectors.

In recent years I have become extremely concerned about the prospects of catastrophic climate change and the part that our economic system is playing both in the observed and predicted destabilization of the global climate system. I have over that time become a staunch supporter of the divestment of fiduciaries from investments in the fossil fuel industry. I have spelled out my concerns in numerous speeches and testimony given, and articles written. The attachments capture the main points I have been advancing.

I hope you will take the time to read the attached articles. In doing so, you should find ample support for voting on behalf of University of Hawaii to have it join the ranks of fiduciaries around the world that have announced fossil fuel divestment, as both the <u>prudent course to follow</u> and ethical thing to do.

Please feel free to contact me by email to <u>blongstreth@mindspring.com</u> if you wish to discuss this urgent matter further.

Sincerely,

Bevis Longstreth

Bevis Longstreth

Bevis Longstreth Former SEC Commissioner

The Case for Fossil Fuel Divestment

Posted: 07/11/2014 8:45 am EDT Updated: 09/10/2014 5:59 am EDT



This post is adapted from my talk to SF Pension Trustees

In 2010, at Cancun, the world's nations set 3.5 degrees F as the permissible increase in global temperature to 2050. Beyond that was catastrophe. Since Cancun, the dangers of climate change have grown and become palpable in myriad ways with which you are all familiar. And, yet, nations have made little progress. In fact, having put the car in reverse, they are accelerating in the wrong direction. Thus, the IEA reports our current trend-line will take the planet by 2050 to 7 degrees F, twice the level set in Cancun. Carbon emissions increased by 1.5 percent per year from 1980 to 2000. But, then, that rate doubled to 3 percent per year through 2012. The IEA just reported that the cost to de-carbonize by 2050 was \$44 trillion, up from \$36 trillion just two years ago, and climbing. The cause is an increase in coal usage that exceeds the increase in renewables.

So, the planet has a big problem. I'm here to suggest divestment from fossil fuel companies as an important strategy for the Trustees of the SF public pension plan to pursue. Here's why.

Purpose of Divestment

Financial Reasons -- Risk reduction. Risk from Stranded assets ("unburnable carbon"). Let me explain. To hold to the 3.5 degree goal, there is a limit on how much carbon can be emitted to 2050. It's called the Carbon Budget and its reckoned through science.

The level is 886 Gigatons of CO2 from 2000-2050. Subtracting what's been emitted to date since 2000 (121 Gt) leaves 565 Gt left to emit. But just reserves proven on the books of public and private companies equal 2795 Gt of potential emissions, meaning that proven reserves are about five times what nations can allow to be emitted to 2050, if we are to avoid planetary catastrophe. So the rest is at risk of being stranded -- unburnable -- if nations, as they must, have a Darwinian moment and act. If this happens, of course, it means current market prices for fossil fuel companies are hugely overvalued.

And consider the risk to the \$21 trillion of CAPEX by Big Oil that is planned for expenditure in the near term to develop unconventional oil projects. And, the risks from rising prices (need \$95/bbl or more to break even) for oil and limits on consumer price tolerance.

And, overall, the risks from multiple problems facing the fossil fuels complex, including faltering productivity, falling profits, poor economics, environmental disasters and increasing competition from power plants and automobiles running on free fuel.

There are growing risks of stranding in the grid power sector. Barclays recently down-graded high-grade corp. bonds across the entire US utility sector, citing the energy threat of solar power and storage. Base load power sources like coal and nuclear are being replaced by renewables, and in time the grid will become obsolete. In Europe, growth in renewables was the primary reason the top 20 utilities lost \$600 billion in market value over the past five years.

And I'm sure you know the losses in market value experienced by the coal industry over the past three years, down 61 percent against the S&P 500, up 47 percent. By the way, coal is the canary in the oil well, to coin a phrase.

Conventional oil peaked in 2005. Oil and gas production by Chevron, Exxon-Mobil and Shell declined over the past 5 years, even as they spent \$500 billion in CAPEX on new projects. Despite the recent surging flows of tight oil and shale gas in the US, the country is waking up to the fact of the huge decline rates of the sources for these products.

Renewable energy supplies 23 percent of global electricity generation today. Its capacity doubled from 2000-2012. Solar is now growing at a 30 percent rate/year. And is rapidly becoming cost competitive with fossil fuels.

There's an old saw: How did you go bankrupt? "Two ways: slowly at first; then all at once." In financial markets today, too few consider climate change an investment risk at all. Too many of those who do imagine it to be merely a remote tail risk, barely worth noting. But change in energy is coming at a gallop. It's happened before. Consider, not long ago, when we used whales for light; horses for power; coal for steam for locomotion; now coal again for electricity. We need to disenthrall ourselves from old business models. And listen to the wise and well-informed. Like Sheikh Yamani, Saudi Arabia's powerful Minister of Oil from 1962 to 1986. He famously said: "The Stone Age didn't end because we ran out of stones, and the age of oil won't end because we run out of oil."

Moral Imperative -- particularly pertinent for a pension fund like yours, so importantly affected with the public interest.

This pension fund can't avoid having a large leadership role, and not just for the city and state, but for the country and, indeed, for the world. Given the Gargantuan existential risk of climate change to the planet, those in positions of leadership who fail to take reasonable steps to stop carbon emissions from rising become the moral equivalent of those seeking to deny the science and brush away the problem. As Galileo did by recanting to save his life. Divestment is a reasonable step for pension trustees to take.

What does divestment accomplish? It avoids the ugly picture of trustees seeking to profit from emissions of carbon through the sale and burning of fossil fuel reserves and from the massive use of shareholder funds to search for more fossil fuels to sell and burn. Such behavior violates the most basic norms of a civilized society.

Divestment by any group, but particularly by thought leaders such as those responsible for this pension fund, helps to stigmatize the oil, gas and coal giants as repugnant social pariahs and rogue political forces bent on profit at whatever cost to the planet and its people. Don't underestimate the power of being able to create pariahs. These companies fear stigmatization. It hurts in hiring, employee morale and motivation, shareholder satisfaction and equity valuations. And it hurts when leaders of these companies go home to face their children and grandchildren.

Do these companies deserve stigmatization? Consider, e.g., Exxon-Mobil and Shell reports to shareholders on stranding. Despite each company's acceptance of the science, they smack their gauntlets across the collective face of humanity by asserting that no government restrictions will restrain them. Here, e.g., is E-M's statement:

"We are confident that none of our hydrocarbon reserves are now or will become stranded. ... Further, the company does not believe current investments in new reserves [which it intends to discover and develop in quantities at least equal to current proven reserves] are exposed to the risk of stranded assets, given the rising global need for energy..."

Divestment by leaders like you will help awaken us to the peril of inaction. Collectively, we are like the frog resting comfortably in a pot of cold water being heated to boiling. The SF Pension Trustees can be among the first in the nation to shake this frog from the deadly comfort zone in which it rests.

Your Fiduciary Duty

As Trustees, you are fiduciaries charged with the duty of care. Here's how the American Law Institute's Restatement of Trusts describes that duty (in section 227):

"This standard requires the exercise of reasonable care, skill and caution, and is applied to investments not in isolation but in the context of the ... portfolio and as a part of an overall investment strategy, which should incorporate risk and return objectives reasonably suitable to the [purposes of the pension]."

Based on an informed view of all climate change factors, including those I've just outlined, it is easy to conclude divestment on the basis of financial considerations alone is a permissible option. And the moral dimension makes this conclusion even more powerful.

Whether divestment is compelled by the duty of care is, at this time, a more difficult question to answer. Anticipatory divestment in recognition that at some unknown and unknowable point down the road, markets will suddenly adjust equity prices downward to reflect swiftly changing prospects for fossil fuel companies, however wise today, is probably not yet compelled in the exercise of due care.

Whether your portfolio will under or outperform after divestment is unknowable. Looking back in time, results vary depending on the measuring period and assumptions about how proceeds are reinvested. But past is not prologue here. And, in any case, fiduciaries need not worry about short-term results. Anticipatory investment should be viewed as having unknown short-term consequences. In the long run, those results are unimportant. A decision to divest rests on the claim that fossil fuel companies will prove to be bad investments over the long-term and, therefore, with foresight that anticipates this result, should be removed from the pension fund before the strengthening and foreseeable likelihood of this result becomes commonplace in the market. I hope that, very soon, you will make that decision.

Bevis Longstreth Former SEC Commissioner

Homer Describing Big Oil: "Lung-Choking, Ocean-Poisoning, Species-Sickening Pitiless Scourge of Humanity"

Posted: 09/30/2014 4:55 pm EDT Updated: 11/30/2014 5:59 am EST



This post is a reprint of a speech to fiduciaries on fossil fuel divestment at the Boston Carbon Risk Forum, Harvard Law School, September 29, 2014

Preface

In 2010, at Cancun, nations of the world set 3.6 degrees F as the permissible increase in global temperature over the pre-industrial level. Beyond that was catastrophe. Since Cancun, the dangers of climate change have grown and become palpable in myriad ways with which you all are familiar. And, yet, nations have made little progress. In fact, having put the car in reverse, they are accelerating in the wrong direction. Thus, the IEA reports our current trend-line will take the planet by 2050 to 7 degrees F, twice the level set in Cancun. Carbon emissions increased by 1.5% per year from 1980 to 2000. But, then, that rate almost doubled to 2.5 % per year through 2012. And in 2013, emissions jumped 2.3% to record levels. The IEA recently reported that the cost to de-carbonize by 2050 was \$44 trillion, up from \$36 trillion just two years ago, and climbing. The cause? An increase in coal usage that exceeds the increase in renewables.

The planet has already warmed by 1.5 degrees F since the pre-industrial era. On our present trajectory, we will blow by the 3.6 degree F level, reaching as much as 10 degrees F above the pre-industrial era by 2100. By then, civilization and its current residence will have become unrecognizable.

So, the planet has a big problem. I'm here to argue that divestment from fossil fuel companies is an important strategy for fiduciaries of all types to pursue. Here's why.

Purpose of Divestment

The argument for divestment clusters around two ideas: financial and moral. Financial Reasons - Here the argument is reduction of risk to your portfolio. The risks are many and growing. Consider a few:

The very serious, yet hardly recognized, risk from "stranded assets", in particular "unburnable carbon". Let me explain. To hold to the 3.5 degree goal, there is a limit on how much carbon can be emitted to 2050. It's called the Carbon Budget and its reckoned through science.

The level is 886 Gigatons of CO2 from 2000-2050. Subtracting what's been emitted to date since 2000 (121 Gt) leaves 565 Gt left to emit. But just reserves proven on the books of public and private companies equal 2795 Gt of potential emissions, meaning that proven reserves are about five times what nations can allow to be emitted to 2050, if we are to avoid planetary catastrophe. So the rest is at risk of being stranded -- unburnable - if nations have a Darwinian moment and act. As they must. If this happens, of course, it means current market prices for fossil fuel companies are hugely overvalued.

And consider the risk to the \$21 trillion of CAPEX by Big Oil that is planned for expenditure in the near term to develop unconventional oil projects.

And, the risk that, given the plummeting prices for solar and wind energy, oil prices will not remain high enough to profit from the sale of newly discovered reserves, which generally need at least \$95 per barrel to break even.

And, overall, the risks from multiple problems facing the fossil fuels complex, including faltering productivity, falling profits, poor economics, environmental disasters and increasing competition from power plants and automobiles running on free fuel.

There are growing risks of stranding in the grid power sector. Barclays recently down-graded high-grade corp. bonds across the entire US utility sector, citing the energy threat of solar power and storage. Baseload power sources like coal and nuclear are being replaced by renewables, and in time the grid will become obsolete. In Europe, growth in renewables was the primary reason that the top 20 utilities lost \$600 billion in market value over the past five years.

And I'm sure you know the losses in market value experienced by the coal industry over the past three years, down 61% against the S&P 500, up 47%. By the way, coal is the canary in the oil well, to coin a phrase.

Conventional oil peaked in 2005. Oil and gas production by Chevron, Exxon-Mobil and Shell declined over the past 5 years, even as they spent \$500 billion in CAPEX on new projects - that's shareholder wealth that will potentially vanish down very expensive holes drilled in the earth.

Despite the recent surging flows of tight oil and shale gas in the US, the country is waking up to the fact of the huge decline rates of the sources for these products.

Renewable energy supplies at least 23% of global electricity generation today. Its capacity doubled from 2000-2012. Solar is now growing at a 30% rate/year. And is rapidly becoming cost competitive with fossil fuels.

Finally, consider that government subsidies for fossil fuels are some \$600 billion per year, compared to just \$90 billion for clean energy -- a public perfidy whose days are numbered -- a global outrage that soon will end. As it must.

There's an old saw: How did you go bankrupt? "Two ways: slowly at first; then all at once." In financial markets today, too few consider climate change an investment risk at all. Too many of those who do imagine it to be merely a tail risk, remote and barely worth noting. But change in energy is coming at a gallop. It's happened before. Consider, not long ago, when we used whales for light; horses for power; coal for steam to drive locomotion; now coal again for electricity. We need to disenthrall ourselves from old business models. And listen to the wise and well informed. Like Sheikh Yamani, Saudi Arabia's powerful Minister of Oil from 1962 to 1986. He famously said: "The Stone Age didn't end because we ran out of stones, and the age of oil won't end because we run out of oil."

Moral Imperative -this argument is particularly pertinent for public pension funds, so importantly affected with the public interest.

Given the Gargantuan existential risk of climate change to the planet, those in positions of leadership who fail to take reasonable steps to stop carbon emissions from rising become the moral equivalent of those seeking to deny the science and brush away the problem. As Galileo did by recanting to save his life. Divestment is a reasonable step for pension trustees to take.

What does divestment accomplish? It avoids the ugly picture of trustees seeking to profit from emissions of carbon through the sale and burning of fossil fuel reserves and especially through the massive use of shareholder funds to search for more fossil fuels to sell and burn. Such behavior violates the most basic norms of a civilized society.

I've tried to imagine how Homer, the great story-teller, would have described Big Oil. You'll have your own answer. Here's mine: "The lung-choking, ocean-poisoning, species-sickening pitiless scourge of humanity."

Divestment by any group, but particularly by thought leaders such as those responsible for public pension funds, helps to stigmatize the oil, gas and coal giants as repugnant social pariahs and rogue political forces bent on profit at whatever cost to the planet and its people. That is, the pitiless scourges of humanity.

Don't underestimate the power of being able to create pariahs. These companies fear stigmatization. It hurts in hiring, employee morale and motivation, shareholder satisfaction and equity valuations. And it hurts when leaders of these companies go home to face their children and grandchildren.

Do these companies deserve stigmatization? Consider, e.g., the Exxon-Mobil and Shell reports to shareholders on stranding. Despite each company's acceptance of the science, they smack their gauntlets across the collective face of humanity by asserting that no government restrictions will restrain them. Here, e.g., is E-M's statement:

"We are confident that none of our hydrocarbon reserves are now or will become stranded. ... Further, the company does not believe current investments in new reserves [which it intends to discover and develop in quantities at least equal to current proven reserves] are exposed to the risk of stranded assets, given the rising global need for energy..." As the Carbon Tracker Initiative observes in its rebuttal to the Exxon-Mobil report, that company does not consider a low carbon scenario in its investment planning, which proceeds on a "business as usual" basis. Its projections are, without doubt, incompatible with meeting the 3.6 degree F goal. Studies show that the company's projections correspond with the IPCC's RCP 8.5 scenario, putting the planet on a pathway to about a 7 degree F increase from the pre-industrial era by 2050.

Divestment by leaders like you will help awaken us to the peril of inaction. Collectively, we are like the frog resting comfortably in a pot of cold water being heated to boiling. You can be among the first in the nation to shake this frog from the deadly comfort zone in which it rests.

Despite the success of the Peoples Climate March in New York City, even the most basic scientific arguments have not been settled. Consider, for example, in the NY Times of September 23, the comment of Freeman Dyson, distinguished and greatly admired theoretical physicist at the Institute for Advanced Study:

"What worries me is that many people, including scientists and politicians, believe a whole lot of dogmatic nonsense about climate change. The nonsense says that climate change is a terrible danger and that it is something we can do something about if we wanted to. The whole point is to scare people, and this has been done very successfully."

Dyson is wrong. Alas, not enough people have been scared. Too many are still slumbering frogs. Governments won't act until enough people -- call it a critical mass - have been scared by the foreseeability of the dire consequences that science tells us will follow inaction to demand their Governments to act, thereby driving down demand for fossil fuels and driving up demand for non-fossil fuel alternatives such as renewables, nuclear and efficiency. In fact, foreseeability is the key and every one of us holds that key in our hands. When a critical mass of people accept the foreseeability of dire consequences from inaction as being inescapably certain, nations will act to avert catastrophe. By educating ourselves and others as to this matter, each of us can help achieve the necessary level of certainty.

Consider the tragedy of the Titanic. It is a metaphor for the surpassing vanity of mankind and the indifferent brutality of nature. As such it can speak to us about the looming threat of climate change.

On that night in April, 1912, hundreds of human beings consciously, and with deliberation, chose to die as a matter of honor in order to save women and children. Men of privilege, such as Isidor Straus and Benjamin Guggenheim, refused places on the lifeboats, choosing to wait in deckchairs for death to come. Of course, the immediacy of death, the certain foreseeability of the ship sinking, is what makes that case different from the perils of doing nothing about carbon.

Although the sinking of the Titanic is high drama, I don't believe it is any more fraught than the planetary threat we face today. It's just far more compressed. Two and a half hours to sink instead of 35 or so years to reach 7 degrees and even more to experience the full catastrophe. Humans are simply not well designed to contemplate, fear and act in anticipation of events - however terrifying - that are way down the road.

Somehow, despite the time-line, the resting frog -- our collective self - must be awakened.

Your Fiduciary Duty

As Trustees, you are fiduciaries charged with the duty of care. Here's how the American Law Institute's Restatement of Trusts describes that duty (in section 227):

"This standard requires the exercise of reasonable care, skill and caution, and is applied to investments not in isolation but in the context of the ... portfolio and as a part of an overall investment strategy, which should incorporate risk and return objectives reasonably suitable to the [purposes of the pension]."

Based on an informed view of all climate change factors, including those I've just outlined, it is easy to conclude on the basis of financial considerations alone that divestment of fossil fuel company holdings is a permissible option. And the moral dimension makes this conclusion even more powerful.

Whether, at this time, divestment is compelled by the duty of care is a more difficult question to answer. Anticipatory divestment in recognition that, at some unknown and unknowable point down the road, markets will suddenly adjust equity prices downward to reflect swiftly changing prospects for fossil fuel companies, however wise as a prudent option today, is probably not yet compelled in the exercise of due care.

But here's the most important point: Whether your portfolio will under or outperform after divestment is unknowable. Looking back in time, results vary depending on the measuring period and assumptions about how proceeds are reinvested. But past is not prologue here. And, in any case, fiduciaries need not worry about short-term results. Anticipatory investment should be viewed as having unknown short-term consequences. In the long run, those results are unimportant. A decision to divest rests on the claim that fossil fuel companies will prove to be bad investments over the long term and, therefore, with foresight that anticipates this result, should be removed from the pension fund before the strengthening and foreseeable likelihood of this result becomes commonplace in the market. As it did with coal. I hope that, very soon, you will make that decision.

Bevis Longstreth Former SEC Commissioner

Climate Change and Investment in Fossil Fuel Companies: The Strategy of Engagement Won't Work

Posted: 12/09/2014 12:07 pm EST Updated: 12/11/2014 12:59 am EST



Drew Faust, President of Harvard University, and other prominent leaders who have been pushed, pulled and prodded to cause the endowments they oversee to divest of fossil fuel companies directly engaged in extractive activities, reject this idea in favor of "shareholder engagement." Engagement, say, with Exxon-Mobil is possible only if one is a shareholder of that enterprise. Therefore, engagement is a distinct alternative to divestment, because one cannot do both at the same time with regard to the same company.

There are some SEG issues (i.e. social, environmental and governance issues) where shareholder engagement has been tried and been successful. However, the closer one comes to trying to affect core business issues or issues involving the safety, security and compensation of officers and directors, the less successful engagement becomes. In fact it's a bust. Thus, for example, trying to convince Phillip Morris to give up making cigarettes or Johnny Walker to abandon its distilleries will most certainly be a fool's errand. Likewise, trying to convince GM or Microsoft to abandon stock options or to institute a nominating system that allows shareholders to nominate and elect directors from a slate larger than the number to be elected will prove to be an equally useless effort.

It is for this reason that divestment became the tool of choice in addressing tobacco companies. And companies heavily engaged in profitable businesses in South Africa under apartheid. In regard to fossil fuel companies directly engaged in extractive activities, it is unrealistic to imagine them being swayed by shareholder arguments to get out of their core business of exploring for, extracting and selling carbon-emitting fuel. The problem goes beyond just the high likelihood of spinning wheels and accomplishing nothing in addressing the urgent need for global action. Indeed, engagement is likely to assist Big Oil and Big Coal in postponing the day when governments limit the burning of fossil fuels. The International Energy Agency reckons that, if governments act to compel adherence to the "carbon budget" necessary to have a chance of holding the planet to only a 3.6 F rise in temperature from pre-industrial levels, it will cause Big Oil and Big Coal to lose about \$1 trillion a year. Engagement with institutional investors like Harvard gives the fossil fuel giants the protective cover they need to stretch out the transition process to renewables for as long as they can. It legitimizes talk over action. In truth, if the engagement crowd didn't exist, the fossil fuel giants would by now have invented them. (And, in light of the parallels to tobacco and lead, who knows the extent to which they did.)

Nonetheless, if, despite these problems, one wants to try engagement, perhaps as a step taken in fairness to a targeted company before divesting, here are three demands that would, if accepted, turn the company from a global pariah into a responsible corporate citizen:

- 1. Publicly accept the science of climate change, including recognition of the scientifically rooted predictions of damage to the planet and its people if we fail to halt carbon emissions.
- 2. Cease Capex (capital expenditures) in search of more fossil fuel.
- 3. Use the company's lobbying forces wherever active to lobby for (a) elimination of all fossil fuel subsidies, which globally today total some \$600 billion a year, (b) imposition of carbon taxes or other means to internalize the costs to the planet of burning fossil fuels, and (c) legislation to reduce carbon emissions to a level, globally, that will not harm the planet.

Link to video "Rethinking Economics in the Age of Climate Change" referenced in Longstreth and Scott testimony

https://www.youtube.com/watch?v=JLsFaXtRM8U