The Carbon Bubble

https://www.climateone.org/audio/carbon-bubble
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Greg Dalton: I'm Greg Dalton and today on Climate One we're looking at the risks and opportunities of energy stocks. Severe weather partially driven by burning fossil fuels has chilled the profits of companies including FedEx, General Motors, Intel, McDonald's and Toyota. Those companies have bounced back since their earnings took a hit from the 2011 floods in Thailand and the polar vortex of 2014. But a slowly growing clique of investors are saying the climate disruption is hitting the overall economy and could punch fossil fuel companies in the face. If countries get serious about fighting climate change, oil and coal firms could see a decline in their revenues and share prices. That would hurt essentially every American with stocks in their retirement account. The governor of the Bank of England, Mark Carney, says that possibility should be studied, and some oil companies agree. Over the next hour we'll discuss investing during a time of economic transition. Joining our live audience of the Commonwealth Club in San Francisco, we're pleased to have with us three professional investors. Kurt Billick is chief investment officer of Bocage Capital, a hedge fund based in San Francisco and Anthony Hobley is CEO of Carbon Tracker Initiative, a London-based think tank; Anne Simpson is senior portfolio manager at CalPERS, California's 300 billion dollar pension fund giant. Please welcome them to Climate One.

Kurt Billick are you bullish on fossil fuels?

Kurt Billick: No, I'm not particularly bullish on fossil fuels at the moment.

Greg Dalton: Are you short, which is, are you betting that they're going to go down?

Kurt Billick: I would say that we have a very negative on coal both inside the U.S. and outside the U.S. and they're really two separate markets. I would think that we are closer to the bottom in oil and gas but I don't see that they're going to come rebounding back particularly fast.

Greg Dalton: Anthony Hobley, we've seen a reordering of the global energy system where consumers have become suppliers thinking about the United States being the new Saudi Arabia of oil. Suppliers are becoming consumers. Oil demand is growing in the Middle East, et cetera. So how is the global energy world being changed right now in a macro sense? (0:02:14)

Anthony Hobley: Well, in the macro sense I think fossil fuels are getting more expensive. I mean we've crunched numbers, we looked at the data and one of the things that has really jumped out at us is the cost, what people call the CAPEX cost of finding, developing and delivering particularly oil, but I think this applies to the other fossil fuels, is going up at an incredible rate. So, the last time the oil price was at the level it is now, '08, '09 the average cost per barrel of oil was half what it is now and we just see that trend going up. So fossil fuels are going to become more expensive at the same time as we see in renewables, things like wind and solar are becoming cheaper. And we call this climate swerve and we know which side we want to be on.

Greg Dalton: And Anne Simpson a lot of people look to CalPERS to be at the cutting edge of investment trends. What is CalPERS doing on fossil fuels? Is it gonna hold on a little longer and get out before the crash comes?

Anne Simpson: I don't think that's realistic. Our view is that we need two things; first of all we need carbon to be given a price. At the moment, fossil fuel companies get a free ride. They can dump their emissions into the atmosphere; that can cause environmental impact and ultimately financing impact. So we need governments to step up and put a price so that the market works properly. That's one thing, we have a distortion in market pricing because we don't have a price on carbon. And the second thing that we're doing with a very large group of other investors is challenging the energy companies on their basic strategy. You know, CalPERS has that 300 billion dollars in trust for the next -- well, best part of the a hundred years we need to still be paying pensions. And if you look ahead with that time horizon in mind you need to thinking about sustainability.

So for these companies still to be in business they need to be able to address these new risks like climate change and understand where the opportunities lie. Because just crashing through in the hope that it will all work out is simply not viable.

Greg Dalton: And what are you doing to pressure oil companies to be more responsive to your time horizons? Because the CEO of any large American company they're going to be in there for 3 to 5 years. They're incented to juice the stock as much as possible during that time and then they'll be gone. Their time horizon and interest are very different than yours.

Anne Simpson: Yeah. Well, they should be agents of the owners. I mean we have a time horizon, as I said, of almost a century. I mean, if you shut the door tomorrow morning at CalPERS we'd still have to be paying pensions for about 75 years. So, for a manager needs to think of themselves as a steward of assets, not somebody there to fix performance targets to fit in with their own compensation plan. That's a real issue. But the simple fact here is that companies are owned by pension funds and people with 401(k)s and mutual funds and if we think like owners we turn to these boards and say well, your boards of directors are there to act on our behalf. And that means you need to tackle these risks and make sure that your strategy is not, I suppose, in this swerve but you have to understand how to navigate these complex and profound changes in the energy market. You can't just shut your eyes, cling tight and hope for the best. So, we're really focusing on the theme of board accountability. That we need people in boardrooms who get this, who can think long term and who can understand complex challenges.

Anthony Hobley: I should pick up one point you said there --

Greg Dalton: Anthony Hobley.

Anthony Hobley: You mentioned that they're incentivized to achieve the best stock. Actually what we found out when we looked at some of these remuneration plans is one the key factors that they're actually incentivized to replace reserves and resources. And this one of the key drivers in these companies regardless what that does to the share value or the dividend.

So when we did our oil analysis last May, incidentally when the price was $115, $120 a barrel, we produced a cost curve for all of the oil project in with world and we found a huge chunk of projects that were going ahead about $90, $95 up to $200 a barrel; i.e., we needed a price from $90 to $200 for these products to ever make money. One thing our analyst said that back in May was based on the demand fundamentals we think the oil price at the moment is too high and secondly we cannot understand how these companies -- how the shareholders of these companies are allowing them to put billions into these high-cost projects, also high-carbon projects, because by doing so they destroy in shareholder value.

Greg Dalton: Kurt Billick, yeah, I want to get you in here because hedge funds are often thought of being very short-term minded, in and out quickly.

Kurt Billick: Well, you know, I think that there are 5,000 hedge funds approximately in the world and so, you know, to use any one description to encompass the universe of 5,000 I think some hedge funds are very long term thinking and I think some hedge funds are thinking about what's gonna happen in the next 24 hours.

Anne Simpson: Do you have an example of a long-term hedge fund?

Kurt Billick: Sure, Baupost.

Anne Simpson: But how long is long?

Kurt Billick: Years.

Anne Simpson: Decades?

Kurt Billick: Years, not decades.

Anne Simpson: No, that's not a long time then I'm afraid.

Kurt Billick: So, you know, I just pulled that name and I probably could've pulled a few others.

But I think, you know, and I think there's some dangers in thinking too long term but that's another conversation. I think historically the oil industry has done a pretty terrible job of allocating capital. And I think that actually one of things that they're most incentivized for is for growth and it's to demonstrate growth in production. And I think that it's really interesting that like, we also thought the price of oil is overvalued. For actually most the last three years we thought the price of oil has been above where it should be, but we came at it from a supply angle. Which is that when the price of oil was up at $100 to $220 you were creating a price umbrella in which this new technology was allowing very rapid growth in production from new resources. It wasn't really a demand phenomenon we think that crushed the price of oil and we think it was much more a supply-based phenomenon. And the big oil companies were allocating to projects that are sort of in the $100 to $120 or higher range because they actually lacked, we think, the nimbleness and the flexibility of mind in order to go after the new opportunity that was emerging. We actually don't believe that the big oil companies can effectively function in the shale oil resources, which is what undercut the projects that they're developing.

Greg Dalton: Let's hear clip from John Hofmeister, former president of Shell Oil. Here's what he had to say about the future of oil companies.

[Clip]

John Hofmeister: The oil industry will stop growing. In other words the two and half billion that are coming in to the middle class will soak up a lot of what would otherwise be excess capacity which would be shut down.

[End Clip]

Greg Dalton: So, Kurt Billick, there's the former president of an oil company saying oil industries will stop growing. A lot of times they point to well there might be declining demand in industrialized democracies but this growing hunger for energy in China and India will propelled the industry forward. I would like to have your comment to that.

Kurt Billick: I think that there's truth to both statements. I think that as economies mature they become more energy efficient. And there is pretty strong evidence, if you look over the last 40 years, OECD demand for oil has actually been in the declining trend for 40 years going back to the late ‘70s.

And it's true that as new economies start climbing that industrialization curve, they started demanding more oil. But the technology and the innovation that allowed for the energy innovation in the OECD over the last 40 years, the energy efficiency in the OECD, is out there and so I think will get transferred much more quickly to these emergent economies. You know, our view is that at least and in the foreseeable future the demand for oil is going to grow about 1% a year, which isn’t a particularly fast growth rate. It‘s certainly far below trend GDP growth in the world.

Greg Dalton: Anne Simpson, I would like to have you on will oil industries companies grow, will they adapt or they become dinosaurs like Kodak and some other companies that didn’t transition when technology or the world changed?

Anne Simpson: Yeah, isn’t it interesting how oil executives see the light once they’ve retired? John Brown, former CEO of BP is also speaking great wisdom on the virtues of addressing climate change.

Greg Dalton: Just like generals who retired during the Cold War and said “all those nuclear weapons that I spent my career building we ought to take them down now that I'm no longer in the military.”

Anne Simpson: Yeah. So, I think this idea that you can think of a company as there just to do one thing is very unhelpful. I mean, a company is a creature of statute, not a creature of nature. This invention is there to enable --

Greg Dalton: I thought they were individuals? I thought companies were individuals?

Anne Simpson: Well, this is a point on political donations that we’re not going to discuss today, about whether they have rights or political voice. But the whole purpose of the corporate form is to allow the aggregation of capital, financial capital. It's also to allow a continuation of activity beyond the lifespan of the founders. It’s also to allow for transfer of ownership and limited liabilities.

So, this vehicle has been designed to do things, you know, to ultimately will be economically successful to the extent it can meet demand or human needs and wants. So, as the shift in energy supply and needs unfolds over the next few years, and we’re seeing it happening already, these companies need to adapt. So the question is, who’s on the boards of these companies? What sort of reporting are we requiring them to make? As Anthony said, what are we incentivizing them to do? We pay them to jump out the window and scream hello. They might do that too, but the point about incentives is we must get them aligned over the long term with the needs of the corporation not the, you know, ambition of the individual manager. So there's a pay issue. But the reporting piece is really very important. How companies’ financial performance is made up of a lot of activity is a really complex process as, you know, otherwise Anthony’s think tank wouldn't have been invented to help us navigate all of that. But we don’t the moment have financial reporting which captures these risks and these issues.

So, I think climate change is making the big investors and the big investor community rethink the notion of who’s on boards, but it’s also making us rethink what sort of financial reporting are we getting and what's being missed. We’ve got risks that aren’t being exposed and then they’re not being managed.

Anthony Hobley: This point about financial reporting is critical. We worked with a number of other groups, Sirius and CDP, who work with sort of investors on the climate change to develop a letter that shareholders put to 40 oil gas coal companies asking them how are they going to deal with climate change.

Anne Simpson: CalPERS as well as an example.

Anthony Hobley: Exactly, exactly.

Anne Simpson: Yes, yeah.

Anthony Hobley: And there's two very famous letters and I would encourage, you know, viewers and listeners and those here to read the letters from Shell and Exxon and then read the Carbon Tracker responses. Now the key thing about, I think, these responses from the oil and gas companies, and they all do it, is they pick the most optimistic demand scenarios and it's the International Energy Agency based in Paris, IEA, that produces these scenarios but they produce a range of scenarios. And what you find is the oil and gas companies always pick the most optimistic ones and they mention in a byline the sort of the less optimistic ones, which look at what happens if we deal with climate change. Now, what we're saying is you should not cherry pick those scenarios, you need to tell your shareholders and investors what your business model would do in relation to each of those. If you're going to use one of them use them all. Do not cherry pick.

Greg Dalton: An investor who has a 401(k), maybe they manage some funds, what choices does an individual investor have, Anthony Hobley, if they're concerned about carbon risk, if you buy the S&P 500 index, a smart thing to do? A couple of the top companies in there are going to Chevron, Exxon, et cetera. It's hard to avoid these fossil fuel stocks. What can an investor do?

Anthony Hobley: It is very difficult. I mean, there's one example, which is you there are some fossil free indices and funds that now exist, so you could invest in those. Or you could write to your money manager, your asset manager. I was speaking to a manager last year of one of the big UK pension funds and we were talking about this issue. And he said I managed probably money within my fund for probably thousands of people and do you know how many letters I get from them a year? And I said no. He said I got six letters last year. So, he said you know if I got 20, or 50 or even 100 letters from people asking how am I addressing and dealing with climate risk and how am I assessing that within the companies who shares I'm buying in your behalf, I would take that seriously. (0:16:03)

He said I'd probably take it seriously if I got five letters. So, I think you can engage with them, it's your money and they manage in your behalf.

Anne Simpson: And also you have something important which is the vote.

Anthony Hobley: Yes.

Anne Simpson: So even this coming weeks there are going to be annual general meetings. This is the general election for the company and at Shell and at BP, both those companies have got proposals which shareholders put forward to say we want risk reporting along the lines that we've just been talking about. We want stress tested scenarios. We want to see how your business could possibly function within the target set by the international community for a 2-degree rise. At major energy companies in the United States are going to be proposals allowing shareholders to be in a position to put forth candidates for the board. In the U.S. that's called proxy access to allow the shareholders to use the proxy that's ballot that gets circulated to those who are not able to attend the meeting. So, by holding these boards accountable we see this is a route to better risk management but also to putting in place directors who are going to have the to the skill sets and ultimately the incentives to start talking this issue.

Greg Dalton: Kurt Billick, is this going to have any impact on these big companies are is this going to be a little nuisance that they swat away?

Kurt Billick: I think it's a nuisance that they swat away quite frankly. I think that you gotta look at -- I think Anthony’s point about incentives is a terribly important one.

You got to look at the incentives that the managers have and you’ve got to take it up to the next level. Going to back to what you said about the portfolio manager, you have to look at his incentive as well and that he's going to be judged on maybe if he has really good investors, he's going to be judged on annual performance, but generally our investors judge us on weekly and monthly performance. And so the incentives are just not there along the entire chain to be thinking in this fashion. And I think that this gets back to him to the other point that really in order to get to make the system work I think you need to address it more from the demand side. So the price on carbon is probably, you know, the way that you're really going to change things is by creating a market environment where people can actually react to the incentives that they’re seeing.

I just want to throw out one other thing: we’re talking about oil and gas companies and I think we’re actually missing another huge segment of the market that’s deeply affected by this, and that’s the utility industry. And that, you know, the utilities if you want to know who the real carbon villains are it's the coal burner which is the power generation sector, is probably one of the bigger participants. And ultimately I think, you know, the other thing is expected carbon pricing when I talk about demand. We’re not talking about the people still want the lifestyle that's afforded to them by low-cost hydrocarbons.

Anne Simpson: I can’t let this point about --

Greg Dalton: Anne Simpson, take a swing.

Anne Simpson: Well it’s -- maybe it’s good manners. I would just think about the company considering that the owners are a nuisance to be swatted away. This would be a bit like politicians saying the people who elect me are a complete pain in the neck because they have opinions and they want to express them.

Greg Dalton: But American companies are not democracies. Many shareholders don't vote their proxies. It's a pain --

Anne Simpson: Well, that’s also true in the political process, but do we then suggests that the electorate is a nuisance? No, quite the reverse.

I think what we’re seeing is a wider group of investors starting to communicate with each other. I mean let’s just take these energy companies, these very important votes that are coming up. There is an alignment of thinking between, I’ve never seen this before, a very broad array of investors: T. Rowe Price, Blackrock, Norges, ironically a petroleum fund with the largest pool of money in the world, CalPERS, New York City, TIAA-CREF. You're seeing very different investors agreeing on this concept of proxy access, of board accountability. And what’s coming through are these significant numbers of company; Citibank, Apple, a wide companies beginning to accept that not only is voting a good thing but the owners need to have a voice in the process of who nominates candidates to be elected to the board. I think that’s a profound shift in the governance dynamics in the U.S.

Greg Dalton: Anne Simpson is a senior portfolio manager at CalPERS, we're talking about carbon investments and climate change at Climate One. Our other guests are Anthony Hobley from the Carbon Tracker Initiative, a think tank in London, and Kurt Billick from Bocage Capital. Anthony Hobley.

Anthony Hobley: And I want to come in on that. I'm sorry, I hate to correct you a second time on your question, but companies are democracies; it's just that the voters do not exercise the right to vote. But I think that is changing both here and in Europe. I mean, for the first time ever board resolutions on climate have been launched against BP and Shell in Europe. And BP and Shell were so worried that they were going to lose those sizeable portions of their shareholders were going to vote for them they have now recommended their shareholders to vote for those climate change resolutions. That's big. Now, those resolutions, perhaps not specific enough but it's the first very important step.

There's another issue I want to respond on here. Carbon Tracker is known as the carbon bubble people. We created this idea that you cannot burn it all because if you burn it all we're going to 6 degrees many times over. You simply cannot burn all the fossil fuels in the ground and stay below 2 degrees or 3 or 4 degrees for that matter. But this is a carbon bubble. It's not an energy bubble. Yes, you're absolutely right. Demand for energy is going to go up, but fossil fuels are increasingly not the only way of delivery that energy. For one efficiency --and we've been getting much better at efficiencies as you pointed out -- but if you just look of the cost of renewables and the ways to deliver renewable, we would have to do a piece of work in response to the notion that was getting put out by the coal industry.

The coal industry suddenly, I don't know if you've noticed, they gotten very concerned about poor people and providing energy to poor people in the last year or two. And particular to the energy poor. And they want, you know, in a charitable way I'm sure, bring energy to the world's poor, which is quite touching. But we did analysis to look at the financials of delivering energy to the world's energy poor via coal or via solar. And it's clearly cheaper to provide energy and electricity to the world's poor via solar for a whole range of reasons.

So, I think we're seeing a massive transition. And I think the problem for the incumbents is that when you look back on all of the big technological shifts from steam to automobiles, from traditional cameras and film to digital cameras and you could go on, the incumbents almost never make that transition and they go out of business.

Greg Dalton: Anthony Hobley, you mentioned warming of 2 degrees Celsius, that the level at which the world community said should not go beyond 4, 6 et cetera.

Tell how the business model of Apple and a lot of corporations would be challenged? How that environment would be for business and how the business model of the oil companies is at odds with other companies?

Anthony Hobley: Well, Exxon in their response acknowledged climate change is an issue, but they said the governments and we as people were never going to stop them burning all of the oil, gas and coals. They're going to burn it. So, effectively what they're saying is we're going to take the world to 6 degrees, well and beyond actually, because there's enough fossil fuel out there enough to take to us to 6 degrees once, not twice but quite a few times over. It's like when they first counted all the nuclear warheads and realized we actually had enough nuclear warheads to fry the planet 10 times over. We have enough fossil fuel resources and reserves, you know, not to fry the planet once but multiple times. So, even physically that's going to be impossible. But it's effectively -- what Exxon was doing is they were laying down a challenge to all -- to retail and to food and to high-tech and to information technology and saying to hell with your business models, we're just going to burn and make as much money while we can and we don't care what that does to all of your business models. Because most of those business models would struggle to survive in a world of 3 degrees, let alone 6 degrees.

Greg Dalton: Kurt Billick, the conventional view on Wall Street is that technology will change, that this doomsday scenario won't come to fruition, that its environmentalists are exaggerating it, what is the view? Is that a correct characterization?

Kurt Billick: No, I think you're ascribing too much forethought to Wall Street. I think that Wall Street, you know, I think if you're investing as most investors do in most financial industry that we think of as Wall Street are incentivized on much shorter time cycles. And so therefore you're going to be much more reactive and you're going to react to the situation as it evolves. And while it's nice to think in 10 and 20, and maybe there are some people and institutions that that need to think in 10 and 20 year cycles, I would think that that's just not kind of how the financial markets work.

And so I don't think that anybody actually even has thought to say, oh technology will solve this problem. I think they're saying we'll deal with this problem tomorrow.

Greg Dalton: Get rich today, we'll be in a better position to deal with it tomorrow. Paul Gilding is an author who wrote a book called "The Great Disruption," talks about a Pearl Harbor moment. You know, Japan attacks Pearl Harbor. Washington says Detroit you're no longer making cars you're making airplanes, dramatic government intervention. Is that what it's going to take because Wall Street won't look for the right --

Anne Simpson: No, no. Oh sorry.

Anthony Hobley: Could I -- could I --

Greg Dalton: Anthony Hobley.

Anne Simpson: No, no. You had several no's, so here you go, you can always ask a question.

Greg Dalton: Anthony Hobley.

Anthony Hobley: What you are describing is the disorderly, chaotic transition versus the orderly transition, you know. The reason we're doing this sort of financial analysis and mapping this out is we don't want that chaotic, that disorderly, that Pearl Harbor moment because that is when you get disruption. When governments have to step in to that scale, that's when you get financial dislocation. At that stage if governments step in in that scenario they're not gonna care about the economic fallout and the stranded assets. They're going to care about dealing with the problem.

But we have still got time, with Paris coming up and so on, to send a clear signal that allows a transition over the next 2 to 3 decades. And even within the carbon budget you'll still burn a lot of oil and gas and in some coal within 2 degrees but you need the industry to recognize and realize it's got to shrink as alternatives come up and take its place. If you kick the can down the road yet again you raise the risk and the probability of that panic, that you know, I was going to swear but I won't, that moment --

Anne Simpson: Bloody awful.

Anthony Hobley: -- when you go, oh my God!

Anne Simpson: You were going to say that.

Greg Dalton: You can say that -- you can say that on American radio. Anne Simpson, former

Anne Simpson: I was swearing for Anthony to spare him, spare his blushes.

Greg Dalton: I was expecting the Brits to be well behaved.

[Crosstalk]

Anne Simpson: Can I say something about this transition? So here's good old CalPERS, we're thinking in 70-year cycles because we're a pension fund. There is a plan. We don't need this, you know, bombing of Pearl Harbor. There is a plan which has been broadly agreed through the creative chaos of the intergovernmental meetings. And there's an important one which was mentioned coming up in Paris in December. So in the run-up to Paris there is this plan for what needs to be done by each government, number one, and what needs to happen by sector. And if you look there's some, you know, rather attractive and easy to understand charts that the World Development Report just put together which show in a sort of colorful way what would happen to world temperature if you just have business as usual, then we go 4 degrees, 6, 8, 10. That's not, you said a threat to the business model. Well, I don't think of myself and my children as a business model, but it's more or less a threat to human survival, certainly humans thriving.

But what this maps out very nice in the World Development Report and they did this work a while back in 2010 is how do we get to that 2 degrees temperature and maintain it over this 30 year period? And they chunk it out as follows. Okay, well one chunk will be dealt with through energy efficiency and that's very nice for companies because it's typically a way that you cut costs. Another chunk is going to be tackled through the continuing development of renewables, which are getting cheaper, more available, and that's another bit. Another chunk is carbon capture. Another chunk is carbon sequestration. Nuclear has a little role in their vision of the future. And fossil fuels dwindle out, dribble out their reserves over quite a long period because the ecosystem globally has the capacity to absorb an amount of carbon.

It's not that suddenly photosynthesis grinds to a halt or oceans can't absorb anything at all. It's just the quantity and the pacing of that carbon emission that needs to be controlled. So that plan's there.

I think what we want to do as a global investor who's part of all those sectors is make sure that the strategies of those companies and the people running those companies actually line up with that plan. Because there might be short-term opportunities for arbitrage and profit taking and all that great stuff. But over the long term for everyone the system won't survive. We need to be thinking in a, you know, joined up thinking between sectors and across time that is very doable. I'm not in a doom-and-gloom mode about this, but it does mean investors paying attention. So, everybody who's a saver through a pension, through 401(k), through a mutual fund, really hold your manager's feet to the fire. Because you ultimately are the owners of this system and if we wanted it to work for everyone, which we can make it work, we need far more accountability in the financial markets.

Greg Dalton: Anne Simpson is a senior portfolio manager with CalPERS. We're talking about carbon and climate risk at Climate One. We'll be right back after this break.

Announcer: *And now, here's a Climate One Minute.*

Just how comfortable is Wall Street with renewables? Josh Schein, CEO of Global Key Advisors, was our guest in 2014. He said that while he was encouraged by the growth of clean energy companies, he had reservations about the stability of solar stocks, versus fossil fuels.

[Clip]

Josh Schein: *I don't necessarily want to put 10% of the portfolio into solar. It's just -- it's too risky. And I feel like I want to do it but then I feel like --*

Greg Dalton: *You might get fired.*

Josh Schein: *Right. I mean, you know, I'm being paid to represent clients on Wall Street, not Washington. And that part of me says that, and part of me wants to do a better job. So I'll try to fit the solar into it, but it's a struggle. And I think we all, we all struggle with this.*

Greg Dalton: *And on this carbon risk, do you think that if there's stranded assets and boy, there's going to be a big crash coming…do you think you will see that coming in time to switch your clients out of oil and gas stuff?*

Josh Schein: *Not at all. Not at all. But I also look at it, that energy's 10% of the portfolio, if it went down 30%, you lose 3%. So these things happen. And I think that's just the prevailing view of Wall Street.*

Announcer: *That was Josh Schein, CEO of money management firm Global Key Advisors, speaking with Greg Dalton in 2014. This has been a Climate One Minute – now back to our live program at The Commonwealth Club.*

[End Clip]
Greg Dalton: We're back at Climate One, I'm Greg Dalton. We're talking with Anne Simpson from CalPERS; Anthony Hobley from the Carbon Tracker Initiative; and Kurt Billick, CIO of Bocage Capital. It's time for our lightning round where we're going to ask a series of quick yes or no questions.

Anne Simpson, the lessons of Cleantech are similar to the dot com era in terms of --

Anne Simpson: No, no it's very different.

Greg Dalton: Kurt Billick, coal will still be king of U.S. electricity in 5 years?

Kurt Billick: In decline. An aging king. An aging king.

Greg Dalton: Anthony Hobley, fossil fuels have served humanity well, lifted billions of people out of poverty. They are a cornerstone of modern civilization, yes or no?

Anthony Hobley: Yes, but their time's up.

[Laughter]

Greg Dalton: Anne Simpson, oil executives who delay action on climate change when they know it creates real human suffering are committing crimes against humanity as scientist James Hansen has said?

Anne Simpson: No. What they're doing is something venal and selfish, which humans have had the ability to do for, you know, since the beginning. We're all capable of being venal and selfish.

Greg Dalton: Okay, so that's a no.

[Laughter]

Anne Simpson: Is that a crime?

Greg Dalton: Anthony Hobley, let's pretend this scenario -- this is made up. In a boardroom coup, climate advocate Bill McKibben was just appointed CEO of a major oil company. He has directed the --

Anne Simpson: Proxy access won. So you can run Bill at Exxon.

Greg Dalton: This is an HBO thing. He has directed the company to stop investing in oil and put its money into biofuels and clean energy, investments that will generate lower profits. Shareholders will A, herald him as courageous hero and buy more stock or B, call for the company to fire his butt after the first quarter of disappointing earnings? A or B, any CEO who put a lot of money into renewables for a little less return would be heralded or fired? (0:34:11)

Anthony Hobley: Well, he'd be fired, but I don't believe that you would get those lower returns because he would stop investing in high-cost projects and probably run off and make a huge amount of profits out the low-cost reserves.

Kurt Billick: I'm going to second that. There's a lot to be said for stopping oil company executives from investing --

Anne Simpson: Squandering.

Kurt Billick: -- in oil projects. There's a lot of benefit from that.

Greg Dalton: Very interesting. Anne I think you may have suggested this earlier. Anne Simpson new nuclear power is necessary to stabilize the climate and maintain the economy?

Anne Simpson: It's not a one-shot solution.

Greg Dalton: So yes? So yes?

Anne Simpson: You got to tackle this through different sectors.

Greg Dalton: Including nuclear?

Anne Simpson: Nuclear has -- you know --

Greg Dalton: You're not very good at yes or no!

[Laughter]

Anne Simpson: That's probably why I'm in the world of investment, you know. You have to think things through.

Anthony Hobley: I'm happy to answer that. If it was a choice between runaway climate change or nuclear I'd choose nuclear, as much as I hate nuclear.

Greg Dalton: Anthony Hobley, if the economy moves away from fossil fuels demand for them will decline, prices will also decline. Fossil fuels will become cheaper and Americans will buy more SUVs.

Anthony Hobley: It's all about education isn't it? If you move away -- if demand moves away from fossil fuels --

Greg Dalton: Price -- price will drop.

Anthony Hobley: But so will the cost of alternative energys as people pile into them and you scale them up.

Greg Dalton: Okay.

Anthony Hobley: So you'll be driving a cheap electric SUV.

Anne Simpson: Or a Tesla.

Kurt Billick: There's actually a great example of a commodity industry that's been in decline for the last 15 years, newsprint. Newsprint consumption is down 70% in the last 15 years. I don't think the falling price of newsprint is driving more people back to reading newspapers.

Greg Dalton: Because the digital is so much better. Maybe solar is so much better, good point.

Anthony Hobley: I mean, have you seen BMW's new i8? Have you seen Jeremy Clarkson, probably one of the most conservative petrol heads in the U.K. who hates electric cars, test drove this car on of the recent programs. And the test was he drove it all the way to Newcastle, one end of the U.K. to the other, and he had the top of the range BMW, petrol BMW, waiting for him. And his decision was whether he drove home in the i8 electric BMW or the top of the range BMW. He chose and as much -- and he was as surprised, he chose the electric i8, you know. And his analogy was, well I think it's a bit when we switched from, you know, here's the typewriter and here's the laptop, and we're in one of those moments.

Greg Dalton: Very cool. Anne Simpson, the Keystone pipeline will advance American energy independence, yes or no?

Anne Simpson: I'm British.

[Laughter]

Greg Dalton: Ooh, well we got our independence from you. Okay, all right.

Kurt Billick: I'll actually give an opinion on Keystone if Anne won't.

Greg Dalton: Sure.

Kurt Billick: I think Keystone -- whenever I hear about Keystone I'm reminded of a great quote from Alexander Haig and he was talking about -- the Secretary of State in the early 1980's -- talking about the Falkland Islands War. And he said it was two bald men fighting over a comb. The Keystone pipeline is so irrelevant to the U.S. energy infrastructure. It was conceived 10 years ago before the shale boom emerged and it has become largely irrelevant to the transportation of oil and just the actual physical oil economy. And it has been seized by people as a political football and they're arguing over something that's kind of a non-issue.

Greg Dalton: Kurt Billick, Europe is all for pricing carbon as long as no Frenchman loses their job, yes or no?

Kurt Billick: Yes.

Greg Dalton: Anthony Hobley, divesting from fossil fuel stocks is a feel-good action that has no economic impact. It simply makes the companies cheaper for others to buy.

Anthony Hobley: Divestment is important but it's not the solution. Divestment makes this real, puts pressure on companies, but I think you get more if you actually engage with the companies as a shareholder. But engagement without divestment is like having a criminal law without a justice system to enforce it.

Greg Dalton: Just so it lasts, I want to end our lightning round by asking each of you, starting with Kurt Billick, climate change is a moral issue?

Kurt Billick: Yes, absolutely.

Greg Dalton: Anne Simpson?

Anne Simpson: Yes. But it's also an economic issue.

Anthony Hobley: No, it's a financial risk issue. And this debate is happening in London at the moment. The green MP, Caroline Lucas, has written to the chairman of the trustees of the parliamentary pension fund and asked how they're assessing the impact on returns of climate risk. He wrote back basically saying we talked to our advisors and we don't consider ethical and moral issues. She's gone back and said, no I'm sorry I'm asking you about a financial risk that impacts the returns of this pension fund. So, yes it's a moral issue, yes it's an ethical issue, but it is very much a financial risk issue as well.

Greg Dalton: Let's talk about the upside -- cleantech, Tesla has a market capitalization of 25 billion dollars. Last year they delivered about 22,000 cars. I don't know, but there's a lot of zeros in there for each car. Kurt Billick, what do you see as some of the most promising cleantech areas.

Kurt Billick: Well, I think to Anthony's point, solar is getting to a point where it is becoming a very viable part of the power mix from a purely economic standpoint, you know. There's two things people talk about. They talk about socket parity and they talk about grid parity. Socket parity is where the price of solar's equivalent to what you pay for it and grid parity is where it's equivalent to the price at which a coal-fired plant can deliver it.

We've definitely achieved socket parity in a lot of parts of the world and are well in our way to achieving grid parity in many parts of the world. So I think that, you know, so I think that that's really one of the exciting parts of it.

I think you've got to look at battery technology. I think that one of the issues with renewables is that they're unreliable and unstable sources. Battery technology, improving battery technology, will allow for time shifting of power so that you can generate power at the height of the -- at the sunny day or on a windy day and store it for a calm day or for the middle of the night. So, I think those are some of the more exciting dimensions to the cleantech story.

Greg Dalton: Anne Simpson, exciting cleantech opportunities?

Anne Simpson: Yeah, but it goes back to the, you know, boring old reality that cleantech's one part of this solution; energy efficiency, carbon capture, carbon sequestration. We need to be able to do more than one thing at the same time and treating the cleantech agenda as some simple fix is not going to get us there.

Kurt Billick: I'd add smart grid technology, improving the efficiency of the electricity grid.

Anne Simpson: Yeah, yeah. And non-grid, off the grid developments, which is, you know, the opportunity for a lot of countries that haven't invested -- sunk lots of money into physical infrastructure.

Greg Dalton: Speaking of physical infrastructure, I want to talk a little bit about another risk, some former secretaries of the treasury -- George Shultz, Hank Paulson, Mayor Bloomberg -- came out with a report on risky business and they said not just fossil fuel stocks but there's risk to roads and infrastructure property. So Anne Simpson, tell us about that risk, and maybe, I'm not sure if that's for CalPERS or not, but there's risk to other assets; people who have waterfront homes for example.

Anne Simpson: Yeah, absolutely or no water. I think that there are different elements to thinking about risk and what's tended to happen in the investment world is thinking it's something you can measure.

CalPERS has this set of investment beliefs and one of the most elegant statements is that risk is multifaceted and not captured through the traditional measures like volatility or tracking error, in other words am I doing the same as everyone else or is this thing going up and down and I can measure that.

If we start to think about risk in this multifaceted way and we call out climate change as an example, natural resource scarcity, then we're into a world where we need new tools, new information, new reporting and ultimately new models. And we've taken the first step in that by deciding that we want to map our carbon footprint in the CalPERS portfolio. This is no mean task. We signed with other funds up to something called the Montréal Pledge to coincide with the U.N. summit on climate in September last year. And that means looking at each sector and each company, not just fossil fuels, you know, think about your hamburger, think about the methane that comes out the rear end of a cow. Don't just be thinking about --

Anthony Hobley: Do I have to?

Anne Simpson: -- or a heifer, did you say?

Anthony Hobley: Do I have to?

Anne Simpson: Oh, sorry.

[Laughter]

Anne Simpson: Well, only when you're angry.

Greg Dalton: A lot of the methane that comes out of cows they actually burp, it comes out the other -- yeah.

Anne Simpson: Yeah, sorry about that. There is the rear end situation. But things to do with agricultural land -- but the issue of water use and this is very poignant and urgent here in California. We're in the midst of a drought, you have this agricultural abundance in the State and yet the management of this scarce precious resource called water is making climate risk something that's on the political agenda as well as the economic agenda and something that everyone who lives here is very aware of.

Greg Dalton: Kurt Billick.

Kurt Billick: And I think there's actually a lot of complexity around this. I like -- for instance, I sometimes sit behind a bus and bus says "powered by biodiesel" and that sounds really wonderful, but most of the biodiesel in California powering that bus comes from a plant in Singapore that is using palm oil where they've chopped down the rainforest in order to build the palm plantations that ultimately is firing that bus.

And so I think that you really do have to think through the entire lifecycle. You know, there a lot of things that sound really nice and really comfortable. But actually when you think through the lifecycle, that electric car gets its electricity from somewhere. Is it ultimately as carbon neutral as it feels? The answer may be yes but the answer may be no as well.

Greg Dalton: Depends on the state. We're talking about clean energy and climate change at Climate One. I'm Greg Dalton and our guests are Kurt Billick from Bocage Capital, a hedge fund; Anthony Hobley, CEO Carbon Tracker Initiative, a financial think tank and Anne Simpson, a senior portfolio manager with CalPERS, the California Pension Fund. Let's have our first question. Welcome.

Male Participant: Hi, Stephen Scofield from South Pole Carbon, my question is for Anne. Anne you mentioned that CalPERS had taken the decision to become signatory to Montréal Pledge, which is an initiative that's organizing institutional investors who are willing to measure, calculate and perhaps disclose the carbon intensity of their assets under management. Could you please elaborate a bit about some of the considerations that went into taking that consideration -- that decision?

Anne Simpson: Yeah, that came directly out of CalPERS developing and adopting a set of 10 investment beliefs. If we go back to the financial crisis, this was really when anybody dealing with and accepting received wisdom really was dealt a severe blow. The blow to CalPERS was 70 billion dollars. That was the reduction of the value of our assets due to the financial crisis. Now the rethink I think in the investment community since then has been profound because we've been thinking about the notion of being owners not traders.

We've been thinking about how can financial markets serve and be connected and integrated with the real economy. We've been thinking about alignment of interest. We've also been thinking about costs, about new ways of approaching risk and also understanding where value comes from. It's not just that the stock market does something magical, it's the fact that companies create value through their financial capital, their human capital and also the physical capital that they deploy. So if you go to our website you can read these beliefs. But we call out climate change in two places: one in the stewardship of physical capital for which we ultimately responsible as owners, and two as a risk in the portfolio which has a potential to affect all the asset classes and all sectors. So then the next question is well how are we going to manage that risk. So, the thing is going to be to understand our carbon footprint, also understand I think when we get to the next stage we want to start looking at other factors, the question of water scarcity. We held an internal seminar and the investment team around water risk because that has not been modelled across portfolios, and I think sensitivity to changes in the physical climate, extreme weather events, sea rise levels. Again, this has not been modelled in the traditional way that our financial assets have been managed but it's the next stage and we've made a start.

Greg Dalton: Next question, welcome.

Male Participant: Yes. Billions are being invested through exchange traded funds, ETFs. A couple of years ago major providers announced they would offer, excluding fossil fuel broadly diversified ETFs. We now have MSCI and others who have developed the indexes but I can't find any of these ETFs. Why the big lag and what are the challenges there?

Greg Dalton: I've wondered exactly the same thing. Where are the products?

Kurt Billick: I have no idea.

Greg Dalton: Anthony Hobley, NRDC and Blackrock announced an index but there's no product behind it yet.

Anthony Hobley: Yeah, I mean, I think it's early days. They're coming. There are some products out there based on earlier Carbon Tracker reports that are sort of fossil free indices but I think what you're going to see in the next couple of years, if you're patient is much more sophisticated products. We're working on something called CAPEX tracker which will track all of the capital flows in all of the world's oil, gas and coal projects. That would be a basis for some very interesting sort of products that are climate weighted and climate tilted, and look at the transition for fossil fuel companies which I think is critical.

Greg Dalton: There is a firm called Aperio in Sausalito that managed funds for, I think, some foundations that have divested, but it costs quite a lot to get in there. Let's have our next question. Welcome.

Male Participant: Hi, my name is Wayne and I'm a member of 350.org. Mostly for you Anne, you seem to be willing to try as an owner, you think of yourself as an owner of the companies that CalPERS invests in. But I wonder if you would be willing to think of divesting from oil and gas companies and particularly coal companies because there is so little time left for us to get off fossil fuels and switch over to solar, wind, geothermal, whatever. James Hansen, Paul Gilding, Tom Steyer, yesterday or a couple of days ago I heard him at Stanford, said we don't have 25 years. So what would it take you to divest from coal and how much does CalPERS invest in coal, oil and gas? What percentage of your portfolio is in there?

Greg Dalton: Anne Simpson.

Anne Simpson: We have a very tiny exposure to coal and we've been looking at this because there is a proposed bill from Senator De Leon in California. The way that we approached divestment is that we see it as a last resort. CalPERS has divested in certain situations but we don't think we're anywhere near that. The problem when you divest is you lose your seat at the table. You sell your shares to someone else. We have no confidence that the person on the other side of that trade gives, you know, two figs about what happens to the energy companies. The bigger and probably more difficult question is how do we organize the owners, the shareholders of these companies, to get the strategies and the allocation of capital and the reporting in line with these needs in the economy and wider society. That's a much tougher job, but I think the very biggest like CalPERS and Norges and the others that we work closely with, that's the challenge, you know --

Greg Dalton: You lose your seat at the table. Kurt Billick on divestment.

Kurt Billick: Yeah, I actually think that talking about divesting from coal is kind of a cheap high in that the coal sector is trivial in its size --

Anne Simpson: Yes.

Kurt Billick: -- and largely bankrupt. In North America the coal industry is largely bankrupt and if you aggregated all of the pure coal mining companies listed around the world it would not amount to a midsize oil company.

Anne Simpson: Yeah, we have more in renewables.

Kurt Billick: It's the oil industry is where I think you really have to go, or you have to go after, as I mentioned earlier, the utilities that burn coal. And that's actually quite a meaningful sector but that's not what people are talking about. They're basically talking about divesting from an industry that isn't really that important.

Anne Simpson: And I agree with you, and the critical issue there is emissions regulation. So investors we've written and others, but not enough, have written to back the EPA on their emissions regulation of the existing stock of utilities but also bold new important plans to not just deal with new plants but existing plants. We must understand that this is a partnership between civil society of course but between the private and the public sector. We need both hands on this.

Greg Dalton: Let's go to our next question at Climate One. Welcome.

Male Participant: Thank you. Simon Williams with Natural Resources Defense Council. Thank you so much for this very intriguing discussion. You know, it seems like there's this divestment toolkit. There's the policy toolkit to really drive down investments in fossil fuels. I'm wondering about the connection between the two because here in California our toolkit has essentially been government policies, technology forcing policies, whether it's requiring automakers to double - halve their GHE emissions, whether it's oil companies to invest in cleaner fuels. Where does the divestment movement intersect with government requirements and policies?

Greg Dalton: We have two minutes left. Anything quickly on that? Kurt Billick.

Kurt Billick: You know, I think we really actually touched on it because I think ultimately these actually are political questions and moral questions, and policy questions. And the problem with divestment as it's been observed is that it actually takes you out of the conversation just walking away. And I think in order to get a widespread enough divestment movement you actually have to change the political in the policy conversation.

Anthony Hobley: Could I come on it, because I slightly disagree. The policy and the politics is incredibly important. We have a team of world class, you know, investment-grade analysts working on this. And when we've done our demand scenarios for oil and coal and we're working on gas as the moment we found it isn't just about policy. Policy is important but is about the new emerging technologies. Because there's yet another big technological transition that's going to can catch these guys completely unaware I suspect.

It's about the rising costs of oil and gas and coal which is going up, whereas, you know, the cleaner tech is going down. And it's about efficiency and changing practices. There's a whole bunch of, you know, things that are coming down the line to impact their business models. It's not just about --

Anne Simpson: And that's why it's about who's on the board. Who's on the board that can actually capture that whole agenda.

Anthony Hobley: This is a financial issue. This is no longer just a moral and ethical issue and it never was. It's a financial risk issue, pure and simple.

Greg Dalton: Welcome to Climate One.

Greg Dalton: Dennis Murphy. I've got a question. Something's fishy here, okay. It seems to me that, I mean you said we don't have much time. You said it's about policy and politics. You've got people in congress who were bringing snowballs into the chamber. You've got idiots who are saying I'm no scientist but, you know -- this isn't really going to happen. It's not real and I don't believe the 98% or the 99% of scientists saying this. It seems to me that there's some money behind that somehow and I'm wondering if you think the corporate CEOs of big the big fossil fuel companies are paying for some of this or others.

Greg Dalton: Anne Simpson, Bloomberg Businessweek did a story in which they called Shell oil company Jekyll and Hyde because they say things in public and they play -- they act differently in private to stop the progress that they talk about in public which is related to what I think he's talking about is money and politics.

Anne Simpson: Yeah, I mean it's a classic situation of the transition isn't it, yes we are, no we aren't, yes we are, no we aren't. . On the one hand Shell --

Greg Dalton: He called them crazy mixed up kids.

Anne Simpson: Well, it's like a teenager, hey you're just sort of coming to grips with it all. I think it is coming to grips with it all, it's a new environment and there's lots of challenges but, you know, we want to hold Shell's board to what they've done which is support this shareholder proposal that will require a step in the direction towards giving us the information that we need.

The stress testing on the risk assumption. Right now, we have Sweet Fanny Adams. And if we start getting the stress testing on these risk assumption, understand where our money's being put to work or not or is being squandered, that is going to bring together these financial issues with the policy agenda. Right now the reporting is just not there.

Anthony Hobley: This is all about transparency and this is one of the issues of transparency and this is one of the issues of transparency is what you need to is require these guys to disclose how they're lobbying, what they're lobbying. We've seen it before. I mean, the rail industry lobbied to prevent the car. In the U.K. and in many U.S. States you had to employ someone. I think in the U.K. this was in the statute books for 12 years. If you were in an automobile you have someone walk in front of you with a red flag shouting danger, danger. And the railroad lobby managed to get one U.S. State to pass a law that if you were driving your car down the road and you had livestock you had to stop, turn it off, dismantle your car, hide the components behind local shrubbery, wait until the livestock passed and then you could reassemble your car and continue on the journey. I mean, unsurprisingly the governor of that State refused to sign that into law. So we've been here before and we'll be here again and it's what, you know, industries who see the writing on the wall, it's what they do. It's their last desperate cling to position but it won't help them.

Kurt Billick: Yeah, I mean, I think people will defend their financial interest and that's what the energy industry perceives it doing. You know, there's been an argument made here tonight that maybe what they think is their financial interest isn't. And I certainly agree that these are not management teams that have shown themselves to be that good at allocating capital over the last 30 or 40 years. But I think to think there's something fishy is may be overstating the case. I think people pursue their own narrow self-interest.

Greg Dalton: We are out of time. Our thanks to Kurt Billick, CIO of Bocage Capital; Anthony Hobley from the Carbon Tracker Initiative and Anne Simpson from CalPERS. I'm Greg Dalton. You can listen to this and other Climate One podcast on the Climate One website climateone.org and you can also follow us on Twitter. Thanks to our audience here in San Francisco online. Thanks for coming.

[Applause]

[END]