



## **Appendix E. Corporate Interview Questions and Transcripts**

After conducting the bulk of our research, we invited companies to respond to questions and discuss their climate positions in interviews with executives. To do this we hired an independent, professional interviewer and drafted a set of standardized questions. We sent letters to executives and public affairs representatives at each of our sample companies, introducing our project and asking if executives would be willing to share their thoughts regarding their company's positions on issues surrounding climate change. Most companies in our sample declined or did not respond to our invitation, but six companies (ConocoPhillips, Denbury Resources Inc., Exxon Mobil Corporation, NRG Energy, Inc., TECO Energy, Inc., and Waste Management, Inc.) accepted our interview request, and we interviewed executives at each of those companies.

This appendix includes the list of questions used in the interviews and the transcripts of the interviews conducted with Denbury Resources Inc., Exxon Mobil Corporation, NRG Energy, Inc., TECO Energy Inc., and Waste Management, Inc. ConocoPhillips granted an interview but declined to be quoted.



## Interview Questions

1. Do you believe that climate change is occurring?
2. Do you agree with the scientific consensus that it is caused largely by human activities and poses significant risks for public health and welfare in the US and around the globe?
3. What about your company? Does it have an official position on climate change? Where is it stated?
4. Do you believe your company has a responsibility to help address important national issues like climate change? Why or why not?

What kinds of things might that include?

[PROBE]:

- supporting the best available science on climate change;
- adjusting your business operations to help reduce their impact on climate change
- contradicting misinformation about climate change and its impacts that are spread by think tanks, trade groups, or politicians you support ?

Has your company done any of these? Any plans to do so?

5. Are the impacts of a changing climate affecting your business operations? How?
6. Do you think the physical impacts of a changing climate will materially affect your business in the future? How soon?  
[PROBE]: Next year? In ten years? In 20 years? How?
7. Has your company taken proactive steps to prepare for the effects of climate change on its business operations?  
[IF YES] What are they?  
[IF NO] Do you expect to take any such actions in the future? What kinds of actions?

8. [PROBE]:

- Moved company facilities from vulnerable locations,
- Protected valuable facilities with infrastructure improvements (seawalls, levees, building reinforcements)
- Arranged provisional supplies of input materials (alternative water sources for droughts, additional sourcing routes for inputs that could be impeded—washed out roads, damaged pipelines, damaged ports...)

When do you anticipate implementing them?

9. Has your company taken proactive steps to help mitigate the impacts of climate change, such as reducing the greenhouse gas emissions of your facilities or products or adjusting your business operations? What are they?

What impacts - costs or benefits - have you seen from those actions?

What impacts - costs or benefits - do you expect to see from those actions in the future?

10. Does your company belong to the US Chamber of Commerce? the National Association of Manufacturers? The American Wind Energy Association?



**Union of Concerned Scientists**

Citizens and Scientists for Environmental Solutions

In the past decade has your company, its foundation, or its executives given money, time or guidance to any of the following organizations:

The Competitive Enterprise Institute

the Heritage Foundation

The Cato Institute

the Heartland Institute

Accuracy in Media

the Institute for Energy Research

the Science and Public Policy Institute

the Committee for a Constructive Tomorrow

the Nongovernmental International Panel on Climate Change

the George C. Marshall Institute

11. Did your company lobby for or against the Waxman-Markey ACES Act? (which)

12. Does your company support laws requiring increased transparency regarding corporate funding of outside groups, political activities or lobbying?



## Denbury Resources, Inc. Interview

### Moderator - Nicole

Respondent: Tracy Evans – President & COO, Denbury Resources, Inc.

**Real quick – your personal feelings about climate change and then we'll get into the corporate positions – but do you believe that climate change is occurring?**

Yes, I believe that climate change does occur. Yes.

**And do you agree with the scientific consensus that it's largely caused by human activities?**

No, I wouldn't be as strong as that, now.

**Okay, so what is your feeling on it?**

Well, I do believe that humans contribute to it, yes, but I don't know that we're the largest contributing factor.

**Good. Got it. And do you feel that it poses significant risks for public health and welfare in the U.S. and around the globe? What are your feelings about that?**

No, I don't believe that.

**Don't believe it? Do it's not a significant risk, you think?**

No. It may have some impact but I don't know that it is significant.

**Got it. So how about the company position? Do you have an official position at Denbury on climate change?**

No, Denbury doesn't have an official position. If we have a position, our position is that our business model can assist people that are concerned with climate change in the fact that we can take man-made or anthropogenic supplies of CO<sub>2</sub> that would be vented into the atmosphere and use that to inject into the ground and create more domestic energy, which is our deal here in the U.S. since we don't work internationally. So we think we have a business model that works with people concerned with that and we think it creates additional economic activity. Even in the way we do our CO<sub>2</sub> EOR, we actually inject more CO<sub>2</sub> to produce the barrel than the barrel actually gives up, once it's consumed.

**So why not have an official position?**

Well, I think the problem with having an official position is that we see this as a much larger issue from an energy standpoint and others. We're really concerned sometimes with some of the underlying, I'll say, pursuits of some of the climate folks. We're just big believers that, unless you get everybody on board, one guy trying to make a significant impact is going to be very, very difficult.

**So do you have any corporate responsibility in terms of addressing the issue?**

Well, we do look at what our emissions are and we try to minimize those as best we can. But to say that we're going to lower our emissions by ten percent, you have to measure that on some sort of production measure because, obviously, as a growing company, our emissions are going



to grow as we continue to put more and more CO<sub>2</sub> floods in. It is a mechanically intensive business model so absolute emissions from us are going to grow, now on a per BPD basis or a per barrel of oil produced or something like that, we strive to limit it as best we can. But, at the end of the day, our business model is to grow oil production and to create value for our shareholders.

**Are the impacts of a changing climate affecting your business operations in any way in terms of, you know, do your operations or facilities need long term planning in order to deal with possible effects of climate change – vulnerable locations or anything to that effect?**

Well, not directly. I mean, the biggest one for us – and I know most people think it's water. Actually, in CO<sub>2</sub> EOR, there is very little water used and most of the water that is used is actually produced with the oil, so it is recycled back into the ground. So it's not that big of an issue for us. We actually see that this actually could benefit our business model in terms of making more CO<sub>2</sub> supplies available. The reason that more CO<sub>2</sub> enhanced oil recovery is not occurring is because of the lack of available supplies of CO<sub>2</sub>. So, depending on how this progresses, there could be significant sources of CO<sub>2</sub> that are generated that we could use for enhanced oil recovery.

**Very interesting. So no negative effects that you foresee down the road?**

Well, it depends on how stuff is implemented. One of the negative effects could be, depending on what essentially transpires as far as emissions, is increased power cost. We are a large power consumer. 25% of our operating cost is power. So from a long-term perspective, whether it's capturing the CO<sub>2</sub> from a coal-fired power plant or changing to more expensive sources of energy, we could see an increase from that. But we do think net/net that is probably going to be balanced off by a more positive effect by having more supplies of CO<sub>2</sub> available. CO<sub>2</sub> supplies are also, coincidentally, about 25, to maybe a little bit higher than that, percent of our operating cost, too. You can imagine a world where, if all the CO<sub>2</sub> that went in the atmosphere was available for CO<sub>2</sub> EOR, one, it would swap the needs of CO<sub>2</sub> EOR and therefore, you would actually drive the cost of CO<sub>2</sub> down to us. The capture cost may stay the same, but the actual cost of CO<sub>2</sub> to us could actually drop, which again, could not only have more excess supplies of CO<sub>2</sub> but also it could, in fact, lower our cost of CO<sub>2</sub>. So we think net/net, it is a positive for our business model if more CO<sub>2</sub> is captured.

**You had mentioned trying to reduce greenhouse gas emissions but not setting a goal necessarily. What costs or benefits do you see from doing that or not doing that?**

Well, again, we have a relatively simple business model in terms of using CO<sub>2</sub> to produce more oil. Anything that we can do to improve the economic position of that, we're interested in doing. So if there are methods of reducing emissions or reducing power usage or something along that line that reduces our costs or improves our recovery efficiencies, we're more than willing to look at that. To do it strictly for the purpose of climate mitigation, we still struggle with that.

**Now some companies I have talked to are starting to do this purely because they see regulations coming and they see that, down the road, they think they're going to be forced to do it, so they are jumping on it now. What do you think about that idea?**



Well, I think – I agree with you. I think there are people that are doing that. We have not created our business model because of this potential vast supply of CO<sub>2</sub>. We embarked on this business back in the 2000 time frame and we've kind of just found ourselves in this – I won't say crossroads – but intersection of our technology with the potential to be able to provide a source of injection for other folks. So we obviously look at regulations, but we think that whatever regulation comes down needs to be an incentive-based regulation rather than a stick or a hammer. But we do think that, if we're not careful, some of this stuff could actually have a pretty dramatic effect on the economy, depending on how it is implemented. We just believe that incentives are better placed than sticks.

**So you had mentioned that you don't have an official position in the company and it doesn't seem like getting involved in the debate on this is really your thing. Do you then also avoid groups that are sort of fighting that fight in the public arena?**

No, we don't avoid them. What we do – we lobby in Washington. We lobby in the states. We participate in the process about helping people to understand what we do and if, at the end of the day, people will capture CO<sub>2</sub>, we are a place that could use that beneficially. Some of it – I'll be honest with you – is somewhat protectant of the CO<sub>2</sub> enhanced oil recovery business. But we're one of the few oil and gas companies, especially EOR companies, that will go out there and explain what we do and are actually looking for these man-made supplies of CO<sub>2</sub>.

**Did your company lobby for or against the Waxman-Markey ACES Act?**

Neither one.

**You just stayed out of it?**

We did not take a stand on the Waxman-Markey bill in its entirety. We did lobby for certain things within Waxman-Markey that potentially could supply more CO<sub>2</sub> and made sure people understood that if the CO<sub>2</sub> was captured, that there was a safe and economic benefit of doing that within EOR. Now most of the rest of the stuff in Waxman-Markey – honestly, if we would have taken a position, we probably would have been opposed to the entire bill but there were some things in there from an EOR prospective and from a CO<sub>2</sub> mitigation thing that could actually have been fairly beneficial.

**Okay. So you did not take a stand on the whole thing but lobbied for certain parts of it but you think, as a whole, if you would have had to take a position, you would have been opposed to it?**

Right.

**And does the company support laws or regulations requiring transparency regarding corporate funding of outside groups? How do you feel about funding outside groups and laws to that effect for transparency?**

I don't know that we have an official position on that. Like I said, I personally don't have any problem with letting people know what Denbury's position is. That doesn't bother me. We don't participate with a lot of outside groups because, honestly, CO<sub>2</sub> EOR is such a small component of the oil and gas industry, that the oil and gas industry groups really don't even – it doesn't rise



to the level of something they'll lobby for. They won't lobby against it, obviously, but it doesn't rise to that effect.

**So how about the U.S. Chamber of Commerce? Are you a member there?**

No.

**And the National Association of Manufacturers?**

No.

**How about the American Wind Association?**

No.

**Let me ask you about a couple of others. These are groups that all have positions on climate change and are out there lobbying either for or against it. The Competitive Enterprise Institute?**

No.

**The Heritage Foundation?**

No.

**The Cato Institute?**

No.

**None of these, huh? The Heartland Institute?**

No.

**Accuracy in Media?**

No.

**The Institute for Energy Research?**

No.

**How about the Science and Public Policy Institute?**

No.

**The Committee for a Constructive Tomorrow?**

No.

**Two more – The Non-Governmental International Panel on Climate Change?**

No.

**How about the George C. Marshall Institute?**

No.

**So are you involved in any groups that have a position on climate change?**



IPAA probably does – Independent Producers of America Association, I think is what it stands for. That’s an oil and gas industry group. I think they have one. I don’t know if they do or not but again, that’s never been our focus. Our focus has always been to work with folks and to, honestly, educate what CO2 enhanced oil recovery is and how it could be used as a beneficial use of CO2 both from a climate perspective, if that’s the potential persuasion, or from a domestic energy perspective. Obviously, we’re probably more on the domestic energy approach than we are the climate, but we visit with a lot of the environmental groups on it.

**Great. Tracy, those are all of my questions. Thank you. This is so wonderful. So I just need to make sure – I want to send you a thank you when we make our donation to the Japanese Earthquake and Tsunami Relief Fund. I want to be able to send you that, so it is Tracy Evans and what address should I use? Denbury Resources . . .**

Do you want an address or email address?

**Probably a snail mail address.**

Okay. 5320 Legacy Drive in Plano, Texas, 75024.

**Great. Thank you so much. Really appreciate it. Have a great day.**

All right.

*(End of recording.)*

*Recording time: 15 minutes.*





## Exxon Mobil Corporation Interview

**Moderator - Nicole**

Respondent: David Bailey – Manager, Climate Policy, Exxon Mobil Corporation

**Let me start and ask you about the current official position of ExxonMobil on climate change.**

In what aspect?

**Just in general. What does the company say about climate change? Does the company agree with the scientific consensus that it's happening; that it's caused by human activities; that it poses a risk for people – for public health? Tell me what you think.**

All right. It is clear that the global temperature has increased since pre-industrial times. It is clear that global greenhouse gas emissions have gone up in that period and, while there is some range of uncertainties on the linkages between those two things, it is quite clear that rising greenhouse emissions pose risks and some of those risks could be very serious. In a nutshell, there are uncertainties but the bottom line is that the risks warrant action.

**Okay. And from what I can see, that is on your website. Is that correct – that you would say that?**

I don't know whether it's exactly those words, but yes, words to that effect should be on our website.

**Okay. Are there any other places where it is stated or where you make those?**

Our Corporate Citizenship Report every year. Now I have to say I haven't checked the exact words of this year's but it'll be in there.

**Okay.**

And, frankly, it's also just about every time we talk about it.

**Right. So tell me about this because I've noticed, over the past few years, that ExxonMobil has been kind of called out on this in terms of publicly addressing the issue of climate change and the risk of long-term climate change. Do you feel like the company agrees that there is a responsibility to do that?**

We have said, regularly and repeatedly and the phrase is stuck in my mind, that action by government, companies, individuals is appropriate, given the risks.

**And does that include supporting the best available science on climate change?**

Absolutely.

**And one of the things that I've noticed just from my quick research of what's out there in the press, is there has been some misinformation out there and ExxonMobil has been called out for supporting some groups that are kind of (trying to) debunk climate science. Tell me where ExxonMobil is on that right now and are you still supporting those kinds of groups?**

Well, let me take issue with the hypothesis, to start with.



**Okay.**

We support a whole range of groups across the political spectrum and across the spectrum of views on climate change. If you look at our website, you'll find a list of all the 501c3's that we support and you will see that there are people whose views on climate change are almost, I would say, the majority of the spectrum. We have, in recent years, taken a hard look at some of the people who we used to support and we have stopped supporting some groups, in part because of their attitudes toward climate change. But we don't apply a climate change litmus test. We don't support people because of their views on climate change. We support them because they do a variety of work in the area of public policy. So, for example, we are members of a group called The Center for Clean Air Policy, which has a very, I would say, sort of pro-climate action position and we also are financial contributors to people like – I'm trying to think of somebody on the other end of the spectrum. There really isn't. But we have others who – let's take American Enterprise Institute, for example, some of whom have been accused in the past of being very negative on climate action. You know, we don't support either of them because of their positions on climate change. We support them because we believe they play a useful role in the public policy debate, in some cases, much wider than climate.

**Okay. But if a group that you did support came out with something that you disagree with, at this point, would that be something that you would call them out on? Or would you stop supporting them?**

We don't call people out. And frankly, it's a hypothetical question. I'd have to look at the precise circumstances and the nature of the relationship with the group.

**Well, I want to get back into that a little bit more later but I want to move on and ask you a couple of other things. In terms of now, are the impacts of climate change affecting your business operations? And have you actually seen evidence of climate change and has it affected your facilities or your planning or anything along those lines?**

No. I'd have to say no.

**Okay. And do you think that the physical impacts of climate change will materially affect your business in the future? If so, how far in the future do you anticipate?**

It's very hard to get from global assessment of impacts that IPCC does down to even the regional level of impacts. So for us to try to figure out where precise impacts might be that would affect our businesses is very hard for us to do. So I'd have to say no, but I think it's because it's a little too complicated and imprecise for us to make that kind of analysis.

**Okay. So you haven't taken any proactive steps so far that you know of to prepare for climate change on business operations?**

For exactly the reasons I just said.

**Okay. I just wanted to confirm that that is true – that, as far as you know, no proactive steps have been taken.**



I'm sorry. I consider that a very loaded question. I mean, if we were able to identify a particular effect from a particular facility, then I'm sure we would, in keeping to our normal approach to management of these kinds of issues, we would do it. But it's simply impossible to do it.

**Okay. How about – and I know you have done things like this – but I'd like you to lay them out for me. How about proactive steps to help mitigate the impacts of climate change such as reducing greenhouse gas emissions? I know that you've done that so talk to me about how and what the impact has been.**

We look at it as in three particular buckets. We start with what goes on inside our own fence. So we have, over probably the last decade, put a real emphasis on improving the energy efficiency of our operations and we have more cogeneration, for example, of combined heat and power in lay speak facilities than almost anybody else, and certainly anybody in our industry. We've got goals to reduce energy use in our refineries which we are well on the way to achieving. We have reduced flaring substantially – and all of this is in our Corporate Citizenship Report, if you want to read the details and the precise numbers. So that's sort of one facet. That's activities within our direct control. Secondly, we've been working with auto makers, in particular, to increase the efficiency with which our customers use our products because 90% of the emissions on the IEA's calculations associated with our products are from customers' end use of our products so they're not directly what we do. It's what our customers do when they put gas in their cars – that kind of thing. That involves research on engine efficiency; on things that go further beyond into potential hydrogen fuel and that kind of stuff, all of which is aimed at improving that end user efficiency. There are also direct things we do which – I guess they're probably better described as indirect things – which are things to light weight cars, lubricants, all of which improve the efficiency with which the engines run. So that's the second bucket – improving the end use of the vehicle. The third bucket is long term research into things that are not remotely viable today but we believe one day might be. There are a number of programs there but two to highlight: first would be the climate energy program at Stanford and then the recent investment we made into algae-based biofuels. Our philosophy on this stuff is that we don't build businesses around things that require mandates and subsidies because what the government gives, the government can take away. That's not the basis on which we can make business decisions. So we have to convince ourselves that a business is going to be viable for the long term without subsidies, without mandates, before we will put material investment into it. So the goal of our investment in this renewable and alternatives area is what can we build a viable business out of? And that's often a pretty exhaustive analysis. That's where we landed on the algae biofuels.

**Good. So, to measure the impacts of what you've been doing to reduce greenhouse gases and improve efficiency, what costs or benefits have you seen from the actions you've taken so far and what do you expect to see in the future in terms of costs or benefits?**

Again, I'll refer to the Corporate Citizenship Report for the numbers on the effects of both the flaring and the global energy management system, which is the program for increasing energy efficiency inside the company. But in the case of the global energy management system, it's in the billions of dollars - and significant reductions in CO2 as well. So you'll see that in the Corporate Citizenship Report. We generally don't predict future things because of the stock exchange sensitivity, so I'm afraid I can't answer that one.



**That's okay. I understand. So I want to get back briefly to the idea of groups and where you are in the public policy debate and other groups that are out there talking about this. Does your company support any laws requiring increased transparency about corporate funding of outside groups or political lobbying or activities?**

I'd have to say I don't think we've taken a position on that.

**And since all that has happened - obviously, you're one of the biggest companies; you're a target when people are talking about this issue. What have you done internally to make sure that the groups that you're supporting and what they're saying jives with what the company is saying?**

Well, as I said, that's not the litmus test we apply. For example, we support Brookings. There are many different views expressed by people who work at the Brookings Institution, some of which the UCS may agree with and some of which I'm sure they would disagree with. In either case, do they speak for us?

**You had mentioned that there were a couple of groups that you had stopped funding. Can you tell me which ones they were?**

No, I'm afraid not. It would be invidious to identify particular groups.

**Okay. Well, if I gave you some names of groups, could you tell me whether you are supporting them?**

Whether we are supporting them now?

**Right. Whether you're supporting them now or whether you are members of them. For instance, the first one is the U.S. Chamber of Commerce.**

We are a member of the U.S. Chamber of Commerce.

**Okay. How about the National Association of Manufacturers?**

Yes.

**And the American Wind Energy Association?**

No.

**The Competitive Enterprise Institute?**

No.

**How about the Heritage Foundation?**

I believe we're still part of the Heritage – yes.

**Okay. And how about Cato Institute?**

That one I just don't know. I think not, but I'd need to check that.

**Okay. Is that possibly one that you were and are not any longer or you're just not sure?**

Actually, I just don't know.



**Okay. How about the Heartland Institute?**

No.

**Accuracy in Media?**

I don't know that group so I'm hesitant to say.

**Okay. That's fine. Institute for Energy Research?**

Again, I know of them but I don't know whether we support them.

**Okay. That's fine. The Science and Public Policy Institute.**

Now is this the group at Georgetown University?

**I'm not sure. Do you think it might be?**

There is a group but it's part of Georgetown and I'm not sure whether we're talking about the same thing.

**Okay. But if it is the Georgetown one, you would say yes?**

Yes.

**And if not . . .**

I think it's something like that which is why I'm . . .

**Okay. Some of the names are similar. I understand. The Committee for a Constructive Tomorrow?**

No.

**How about the Non-Governmental International Panel on Climate Change?**

No.

**Okay. And the last one is the George C. Marshall Institute.**

I don't – again, I'm not sure of the precise status of that. That's one we've been in and out of but I think we're not supporting it at the moment.

**Okay. And is there any place that I could . . .**

Yeah, it's on our website. It's published every year.

**Okay. As long as they are a 501c3. Correct? If they weren't, then they wouldn't be there?**

You'll see it's for last year and the reason we don't do it during the year is that, frankly, it's a moving target.

**So my last question is about the Waxman Markey ACES Act. Did your company lobby for or against it or any part of it?**

We opposed Waxman Markey but we were actually much more nuanced about Kerry-Lieberman. We thought it was a much better bill although we still have problems with it.



**Union of Concerned Scientists**  
Citizens and Scientists for Environmental Solutions

**Okay. But Waxman Markey you opposed?**

Waxman Markey we opposed but we opposed it because we felt it treated the industry unfairly.

**Can you elaborate?**

Yeah. There was essentially a significant impact, particularly on the refining industry and on the transportation sector in general which is being used to cross subsidize to the power sector.

**Okay. Great. Thank you so much. All I have to do now, David, is get an address from you so I can send you a thank you and let you know when we have made our donation to the Japanese Earthquake and Tsunami Relief. So what address should I use?**

It's 2000 K Street NW, Suite 710, Washington D.C. 20006.

**Great. Thank you so much. I really appreciate it. Have a great day.**

Thank you.

**Bye.**

*(End of recording.)*

*Recording time: 17 minutes.*



## NRG Energy, Inc. Interview

### Moderator - Nicole

Respondent: Steve Corneli – Senior VP, Sustainability, Policy and Strategy, NRG Energy, Inc.

#### *(Moderator's Opening Remarks)*

**Just very quickly I want to start out with just your personal opinions about climate change, and then we will move into the company, but do you believe climate change is occurring?**

Yes.

**And do you think that- do you agree with the scientific consensus that it's largely caused by human activities?**

Yeah. I mean yes. I'm pretty aware of the background effect...We are kind of in the middle of this long series of ice ages, and there is a lot of sort of natural variability in the climate. But on top of that, there- there's this clear scientific consensus that a lot of additional change that is happening is almost certainly anthropogenic.

**Okay. And how about your company? Is there an official position on climate change for your company?**

Yeah. Yeah. There is. It's essentially that we think climate change is real and is one of the most pressing issues that- from a sort of policy and societal perspective that we need to deal with.

**In what ways would you say that you- the company is planning on addressing or they are addressing climate change?**

Well we've had two big initiatives. One has been a concerted participation in the effort to get effective climate policy passed by Congress. Notice I used the past tense about that because you know that's kind of over for now in terms of Congress being willing to consider it.

**Did you lobby for Waxman/Markey?**

Yes. We did. We were members of USCAP, and we're very actively involved in supporting Waxman/Markey and a number of other bills before it that would have put a price on carbon and done that kind of thing. And then the other parallel initiative which is going stronger than ever is a company-wide initiative to develop and deploy clean energy sources; and not just clean energy sources, but increasingly clean energy services for businesses and consumers as well. So we're in- and while our policy effort is turned down a bit in the current climate, our commercial efforts have turned way, way up.

**In what way? Tell me about that.**

Well we- I will tell you what we're doing right now and then a few of the other things we have done until recently. Right now we are one of the largest and perhaps- well let's just say one of the very largest developers of solar power in the U.S. We have some two thousand megawatts of solar projects either up and running or in late stages of development or in early stages of development. This includes several "largest of" like- I think when they are finished, we will be the largest PV installation in the U.S. or the largest solar thermal installation in the U.S. at least





until somebody builds a bigger one. And it includes concentrating solar thermal power and PV and everything from distributed PV in school parking lots in Arizona to three-thousand-acre solar development installations in the Mojave Desert.

**So a lot on the renewable side. What about in terms of reducing greenhouse emissions from current facilities? Anything along those lines?**

Yes. We have several initiatives that are aimed in that direction. One is a fairly aggressive repowering program where our older less efficient facilities we're repowering with state-of-the-art new combined cycle gas technology which will not only increase their energy efficiency somewhere from thirty to more than a hundred percent, but also reduce their emissions even more than that because of the state-of-the-art combustion technology and pollution control equipment. Then a big carbon capture and sequestration project that funnily enough was not mentioned in the New York Times front page story today, but...

**That's too bad.**

We may be the last- the last man standing in the large-scale carbon capture and sequestration.

**Will you stay with it given that- given what's happened and the sort of trend?**

Well we're not dependent on- we don't have the same problem that AEP had because they- our plants aren't regulated by the state PUC. We are an independent power producer or a competitive power producer, and we sell almost all of our output into competitive wholesale markets. So our problem is if something costs too much, we can't make the money back in market prices; not that our regulator won't let us charge captive customers for it, which is AEP's problem. So that's where things like the solar- that's dependent on both. Like California having a renewable portfolio standard, an aggressive one which we like and support, and on there being federal programs like loan-guarantee programs or investment tax credit kind of programs to help deal with the fact that solar right now costs considerably more than power from an efficient natural gas like the ones we're also building in California. So it's really an out-of-market, above-market kind of technology, and it needs some various policy programs to make it profitable. Those are in place right now federally and state-wide, so we're taking advantage of them.

**So...**

It's the same with the CCS project. There's a- we're trying to minimize the cost of it of course, but we also have a large DOE cost-sharing grant for the purposes of- purpose of developing CCS, and we think that that will make it the combination of low cost; and DOE cost-sharing should make it possible for us to go ahead anyway.

**And so what's the benefit? What do you see as the near-term and long-term benefits? Why do this?**

Well there is a couple. One is just that the more clean technology we deploy in our fleet and the more we replace or retire the least efficient higher-emitting plants, the lower our overall economic vulnerability to any future carbon regulations or policies will be, and we anticipate that at some point there will be a price on carbon or a carbon tax or at some point, maybe not very distant future at all there will be a set of performance standards under the clean air act for carbon.





And we see that there's just going to be more and more of that kind of risk going forward and we'd like to be more and more immune to it as time goes by.

**Very interesting.**

And the second- and that's sort of a defensive reason, but really an even more I think compelling reason for us is that we see these technologies, especially the ones that we've mentioned - solar head and shoulders above the rest probably - and potentially the electric vehicles. Did I mention our electric vehicle charging networks that we're building? I didn't. The reason I was away I was on another...

**I know. I keep moving you off. I'm sorry. I have so many things I want to cover with you. It's great though.**

I just can't remember what I have told you and what I told the person I was talking to just before I hung up. I was talking to another researcher with a lot of the same sort of questions. But we're also developing electric car-charging networks and deploying them which are- it's not a clean energy technology. It's a clean energy technology enabling or support system, and we're developing smart home, smart business energy management systems that will essentially combine with smart meters and electronics and computers and smart-phone applications and stuff to help consumers considerable either cut their electricity uses or get a lot more value out of their electricity use or both. So the whole energy efficiency idea. We are doing all of this sort of stuff because we think that these are the technologies of tomorrow, and if we can get an early first-mover advantage in them, understand how they work, understand what customers like and don't like, and understand how to extract more cost savings and value out of the solar supply chain or the smart energy management systems or the electric vehicle charging networks, we will be well positioned to succeed as these technologies become more and more ubiquitous, which we think they will, because they are all coming down in cost.

**And how about in terms of addressing the issue? Obviously on some levels it's controversial. What responsibility do you think the company has to do things like supporting the best available science or contradicting mis-information about climate change?**

Well that's a great question. It's- we have- we have not- how should I put this? We have not changed our story at all. However we have been somewhat selective about where we- you know our story on climate change. But we've- we've been careful of about not presenting it in a way that is destructive instead of constructive. There are certain audiences and environments where it's- it's just inflammatory to try. It's like picking a fight. And there are other audiences and environments where it's part of a constructive dialog even if there are different views; and we try to avoid picking fights wherever possible because that just doesn't seem to- you know that's not our job. That's not our business.

**Is there a conscious effort thought to either support or not support certain groups that may have positions on climate change?**

Well we don't support the Koch Brothers quite consciously, not that they've ever asked us to. We never joined- we in fact declined to join the Chamber because of their position on climate change. But we don't- again we don't go around sort of attacking people, and we have a very



large and active sort of philanthropic charitable-giving sort of program. And we really focus less on policy and debating kinds of things and more on doing kinds of things. For example one of our very significant charitable outlays has been for putting solar power on hospitals and other places in Haiti that don't have access to grid power and that can really benefit from some electricity. And that's because we care a lot about what's going on in Haiti and about disadvantaged people and economic development, and also because it's consistent with our view that solar is a tremendously promising technology. And it also is promising in not emitting any CO<sub>2</sub>, so I guess that's how I would answer that.

**Okay. And how about kind of going along those lines, does the company support increased transparency regarding corporate funding of outside groups? Because this is one of the things obviously- you know you can say one thing and then support a group on the other hand that's doing just the opposite. How does the company feel about that?**

Well we haven't thought much about that to be frank. We are trying to be more and more transparent about what we're doing because we think a lot of people look at us and say, "Well there's a great big CO<sub>2</sub> emitter, owns a bunch of old coal plants, a typical dinosaur power company." And we know that's not the whole story. We want people to see more about what we're doing, and we've been very active in disclosing our carbon emissions and our- all that kind of stuff for a number of years already. So we like transparency in that we want to be more- we are transparent, and we want to be more transparent ourselves in terms of sort of the- like who is contributing to what sort of political campaigns. Frankly we haven't thought about that as to whether there should be more or what media campaigns. We haven't thought about that issue. Ordinarily we favor transparency.

**You mentioned not joining the Chamber for the reason that- how they view the climate change. How about some other groups? The National Association of Manufacturers? Do you...?**

We're not members of them because we are not manufacturers.

**How about American Wind Energy Association?**

We are a member of AWEA. In fact one of our executives is on the AWEA board.

**Let me just ask you about a couple of other ones. George C. Marshall Institute? Any ideas?**

We are not a member.

**The Non-Governmental International Panel on Climate Change. How about that one?**

The- is that the IPCC? Is that...?

**It might be.**

No. Non-governmental.

**International Panel on Climate Change?**

I'm not sure that...

**If it's the same one?**



If it's- the IPCC is the International Panel on Climate Change, and it actually is governmental. So I don't know. I'm not aware of a non-governmental one.

**The Committee for a Constructive Tomorrow?**

No.

**Science and Public Policy Institute?**

No.

**Institute for Energy Research?**

No.

**How about Accuracy in Media?**

No.

**Heartland Institute?**

That's one we would not join. And maybe some of these other ones are too, but I had never heard of any of them.

**Okay. How about the Cato Institute or Heritage Foundation?**

We are not members of any think tanks, rightward leaning or otherwise.

**And the last one is the Competitive Enterprise Institute.**

Nope.

**Steve, let me ask you one more question. In terms of climate change affecting your business operations now- in terms of facilities or planning with input materials or anything like that. Has that- do you feel like there has been any impact yet or if not, when would you expect something like that to...?**

Well you know it's hard to tell what's what in terms of climate change and weather. I mean the sort of old rule of thumb is that the two things aren't related. I think the emerging sense is that some of the more extreme weather that we're seeing may in some ways be related to the fact that the atmosphere is warmer and can hold more water, and you know more water transfers more energy around and goes through the condensation energy cycles and all that kind of stuff more that drives thunderstorms and hurricanes and cold fronts and a lot of weather dynamics. But I guess the way I look at it is that the weather itself has been highly variable over the last fifteen years and over the last thirty years and over the last hundred years and over the last five-hundred years. And in the middle of that or on top of that or maybe underneath that weather variability we've had some climactic variability, a little ice age, hotter or drier times...all that kind of stuff, some of which seems to be related to anthropogenic CO<sub>2</sub> and some of which is clearly related to other things. And also when we think about climate change impacting our facilities, we think about things like sea level rise and on the order of twenty inches or more, in the twenty-inches to twenty-foot kind of stuff. And we tend to think in terms of very long term processes, and the rest of it we would tend to chalk up- for what it's worth, I would tend to chalk up to weather variabilities.



**So have you taken any proactive steps to prepare for that kind of long-term change or potential climate change issues?**

Not really, because the things that would be involved like with impacting our sites from sea level rise are probably a century away or more, and a lot of our assets may not have life span for that long, the ones that are coastal and stuff. So no. I think just from a pure sort of adaptation to climate change perspective, we don't see a lot of risk. We don't see any real quantifiable, pin-pointable risks for most of our assets, and the ones where we see some possibility, it seems like it's past the sort of planning horizon that we're dealing with. And if it- I guess that's it.

**So other changes like with input materials, provisional supplies, that kind of thing- those would be more- you would categorize those as more weather...?**

Well our biggest inputs are fuel and things like steel and glass and silicon and that kind of stuff, and you know weather changes some of those things, but it doesn't change them fundamentally. And a lot of- you know we've got these economics price systems and innovations of stuff. So I don't want to sound Pollyannaish, but I think that we don't- we don't look at climate change like turning our Texas electricity market into a depopulated dust bowl. It could conceivably make it hotter, dryer, and more prone to violent weather outbursts, but if that happens our responses to that will be more based on the latter list of things as we see them happening or being more likely to happen rather than just on climate change per se, even if climate change is sort of a driver- like here's an example. We- after Katrina and Rita, we realized there was a business opportunity in building and maintaining and operating emergency generators for waste water and drinking water, pumping facilities which are all around the gulf area, and a mandate- there's part of a sort of mandated emergency response networks that civil engineering and federal and state requirements all have come up with. So we've developed a business to do that. Now I don't know if that's a response to climate change or if it's a response to a fluke cycle for the last ten years or something else. But it's a business opportunity, and we're taking it; and whatever is causing it, it's there.

**That's a great example. Thank you Steve. Okay. Great. Well that is all my questions. Thank you so much, Steve. I just wanted to confirm your title and find out what address I should send a confirmation once we send out our contribution to the Earthquake Relief.**

My title- well my name is spelled Corneli.

**Yep. Got that.**

And my title is Senior Vice President, Sustainability. There's more to it. Sustainability, Policy, and Strategy.

**Great. Thank you, and what address should I send a confirmation to?**

211 Carnegie Center, Princeton, New Jersey 08540.

**I can't thank you enough for taking the time. I really appreciate it, and I've definitely learned a lot. So I appreciate it.**

*(End of Recording)*

*(Recording Time: 23 Minutes)*



## TECO Energy, Inc. Interview

### Moderator - Nicole

Respondent: Byron Burrows – Manager, Air Program in the Environmental Health & Safety Department, TECO Energy, Inc.

### *(Moderator's Opening Remarks)*

**I usually start out when I'm talking to chief executives about their personal opinions on climate change, but let's just skip right to the company and tell me what is TECO's official position on climate change?**

Let me- actually let me refer to our- we've got an environmental report that I will make sure that I- I'm going to open that up so I can make sure that I express things in a manner that is consistent with that. I could send it to you too.

**Sure.**

Afterwards.

### **Is it on your website, or where do you...?**

Yes. Yeah. There's- we've had for quite a few years alternated years with an environmental report and a corporate social responsibility report, and so let me open that up here. We've got- we're rolling out very soon an online version of this year's corporate social responsibility or sustainability report I guess- I'm sorry- we're calling it now. Let me find that. Well in a nutshell, we're- we've made reductions since 1998 which is kind of a peak year for a lot of utilities, and we happen to have made an agreement with the Department of Justice and EPA at that- in that '98-'99 time frame committing to spend a billion dollars to reduce all emissions including CO<sub>2</sub>. And we just completed that agreement and emission reduction initiative in 2010, and that- so that completes our reduction. And with regard to CO<sub>2</sub>, we reduced over 20 percent, more like 25 percent depending on which metric you use. We are members of Chicago Climate Exchange, and memorialized reductions in that regard and so that 20 percent was beyond the goals that were set there, but...

### **So what about going forward? What are the...?**

We don't have any further commitments. We've- that are- we have not set a specific goal for further reductions. We actively participate in the Public Service Commission endorsed energy efficiency program. So we're doing some things like that. We've been approved to roll out various- and we are expanding our energy efficiency offerings. And we also just finished with a pretty substantial- I think it was- it was a multi-million-dollar initiative, or at least a million-dollar initiative to provide incentives for renewable energy for businesses and residential customers; and that was very quickly consumed, the offering there, so there was some interest in that. So we are doing things within the bounds of our ability that we can get approved by the Public Service Commission, and we've gotten- we've had some failed attempts to incorporate a large-scale solar energy facility that we had gone out for a request for proposal, gotten a good response, selected this Energy 5.0 project. But the Public Service Commission did not approve of that project to be recovered.



**So what impacts either costs or benefits have you seen from the actions so far that you have taken to mitigate the causes of climate change?**

Well I guess not any observable obviously climate impacts given that that would not- wouldn't see any local kind of benefits. So it's been- I'm just trying to think if we've gotten some modest accolades. I think in general there's a segment of our customers that expect pretty aggressive pursuit of reasonable forms of renewable energy and the types of the reductions that we've made. So the main- but- so it's been kind of a modest response in that regard, but the main benefit has been with the- I guess- I always say the co-benefit. Mainly the climate reductions were sort of a co-benefit. It was recognized that that would happen, but it was kind of as a whole. The impetus was making reductions in the other pollutants such as nitrogen oxides and sulfur dioxide. And so the effects of that have been a little more I guess measurable. We have seen in our- in part to TECO's efforts and in part to other enhancements or evolution technology in the automobile industry, emissions reduced from automobiles. Our area has seen a measured drop in emissions, ozone and SO<sub>2</sub>. With the tightening of the standards, we are going to be challenged again though. We will likely be- will not be an attainment of those standards in coming years, but we are on a downward track, and hopefully- so we have contributed to that and hopefully we will be able to continue to...

**I'm sorry. When you say you are on a downward track, tell me what you mean.**

Okay. Our emissions for SO<sub>2</sub> and Nox reduced ninety percent from 1998 levels, so substantial reductions. And the effects of that and our local ambient air monitoring system run by the State Department of Environmental Protection and our local Environmental Protection Commission, those are showing trending downward. So our emissions are definitely measurably trending ninety percent reducing...

**Okay. I see what you're saying.**

So the monitors that are out there are also seeing lower concentrations of criteria pollutants.

**Great. So getting back to the company's official position, does the company- is it stated anywhere in the policy that the company agrees that climate change is occurring?**

I had to stop looking while I was talking.

**I know. It's hard to do both at the same time.**

Yeah. That's good to- I did want to follow back up with it and make sure I answered the question here. Let's see- because I want to state it properly. I'd like to- we worked on it together and endorsed by our senior management. That's why I think it's important to say it right. Okay. Here we go. I think this is a- this is a recent- let's see if this has it on here because this is what we're working on now, so it's current. Okay, so there's some more data that I won't tell you- talk about our reductions. This one doesn't have it. Can you hang on one second? I will run get this hard copy and I will be right back in a couple of minutes.

**No problem.**

The old faithful hard copy.

**It's still good to have those around, isn't it?**





Yes. Okay. So...

**So I guess my questions are just as you're looking, does the company state anywhere that they- that they agree that climate change is occurring? Is it mainly caused by human activities, and is it a significant public health threat? So I guess those are the three questions that I would- see if they are addressed in your policy.**

Okay. Yeah, and those are things that we've had- I might look one other place after this if it's not in this book because I know that we've- we were as part of our being a publicly-traded company had to kind of devise the statement that covered our requirements to report and disclose our position as regards how we think it affects our decisions moving forward. So I've got the one statement here. I will just read it, and it doesn't directly answer your question; but I will lead to it. This is one of the- kind of the main statements. This is regarding policy. 'We support a realistic timeframe for addressing climate change. The policy addresses environment, economics, and energy, and encourages fuel diversity and advanced clean coal technology including integrated gasification combined cycle,' - which we have one of the flagship plants for that technology - '...while avoiding fuel-switching, coal, natural gas, renewables, and nuclear power will have a role in addressing greenhouse gas reduction.' So- I'm trying to think if...

**So it's more addressing the greenhouse reduction that it is the actual phenomena of climate change.**

Correct, and that's where- in general we've- our company has not come out with really strong statements in that regard, but...

**Well let me ask you this question. Does the company feel a responsibility to address the issue of climate change? Get involved in the public arena for instance? Support the best available science on climate change? What sorts of things are you doing or not doing on the public front?**

Yeah. I think that we do support- we always focus on getting the best science and understanding using that- the best information available and the best science available to help guide our decisions. And I think we have an opportunity to- or we've kind of put our money where our mouth is in that regard where we were the first utility in the United States to settle with the initiatives that the EPA and the Department of Justice pursued back in that- I mentioned that. Our consent decree. We were the first ones to agree to make substantial reductions and as I said a billion-dollar investment. Without- a lot of utilities decided to fight that because they didn't want to do anything more than what the law required, but we went above and beyond and did, because we thought in our area- we thought that to make an investment in the latest technology, natural gas, and have a good fuel diversity, kind of balancing that was the best for our customers. And I think that decision has kind of paid off. We're ahead of the curve with all the rules that are coming about that are impacting us. So it's the same- my sense is it's the same with climate. We are cautiously watching, and don't want to move as quickly as other companies might have towards a commitment that's expensive and our customers as a whole may not support. So we are- we've recognized the need for fuel diversity during that recent- I guess in January 2010 had a cold snap that we were very proud of our ability to supply power because we had this fuel diversity. If we were to find that some science or I guess some very I guess confident- I will use that word- science results that indicated that we need to do something different, then we- it



would embolden us to kind of move in that direction. Meanwhile we are taking advantage of every opportunity that we have to prepare for that, as the science becomes more sophisticated or more mature. I feel like we are well positioned, maybe more so than a lot of utilities, to be prepared for whichever direction the policy drives us. And to give you two examples, we're involved in a \$168 million-dollar carbon capture and sequestration demonstration project, technology has not been demonstrated in Florida and at our Polk Power Station, it's a unique opportunity to use what is looked at as the most economic- potentially most economic method of capturing the carbon before combustion, when it's a smaller stream, and then injecting it into a deep saline formation, geologic formation. So we're- we're in the throes- in the middle of permitting, and we're drilling a well now that would, given a successful outcome on all the permitting and Department of Justice environmental assessment outcome, we will move forward with that in a couple of years and be demonstrating that technology. So we'll be prepared if it's determined, to keep coal as a viable option domestic resource that we can use. So we're doing things like that, but we- I guess we've been relying on our advocacy groups such as Edison Electric Institute and some of our regulatory response groups. I guess Edison Electric Institute is kind of the primary one. Our Chief Executive Officer, John Ramil, is involved, is actively involved. And that pulls together I guess the best information, and as an organization we kind of advocate for that, for the position that is expressed by Edison Electric Institute.

**And do you find as a company that you do any contradicting of any misinformation that's out there? There are lots of think tanks and trade groups and politicians that are out there basically trying to debunk climate science. Do you ever counter that?**

We have not been actively- Yeah, like I said, we have not been actively involved in either like you said advocating for aggressive- well aggressive might be a- we might move a little more aggressively than average, as aggressive as we can towards evaluating opportunities that would mitigate climate change. But we have not aggressively pursued any- or any efforts to debunk the science or- we generally at TECO don't get involved with as larger companies might the proactively doing research or supporting research that would drive the policy. Generally we will engage- get the best information we can, but as a medium-sized utility, we don't have the resources to expend like other utilities might on pursuing the research like the Electric Power Research Institute. We do some- they would be an organization that would be gathering information along the lines you're talking about. We do support some initiatives, but they are mainly very technical initiatives that are relating to operating the plants, gathering the best information on operating the plants themselves although we do follow some of their policy development and science evaluation projects.

**Do you belong to the U. S. Chamber of Commerce?**

Yes. I'm pretty sure we do because we used to have- and we have an active involvement as a company with the local Tampa Chamber of Commerce I think by default or...

**You're members there?**

Right. If I'm not mistaken.

**I want to ask you about a few other organizations, but let me ask you this first. How about lobbying? Did you lobby for or against the Waxman/Markey ACES Act?**





Let's see. I think we did provide information that- we were advocating for- we did engage in that. I don't- I think that our position was that we- we were satisfied with the credit for early action provision that was proposed, and that's what we were concerned about. We as I mentioned had acted early to reduce our emissions and CO<sub>2</sub>, and we've been- we engaged in Chicago Climate Exchange to kind of memorialize that. And the document that we were advocating for to make sure that we got credit for acting early and that our customers could benefit from paying for reductions earlier than others. So we were satisfied with that element of the...

**But didn't take a stand on the whole bill, or...?**

Let me see. I think- I can tell you that we were prepared for- well you didn't want to take on any more obligation for our customers. We were concerned about the cost, and I know that we evaluated that; and I think we would have been- we might- we were on the verge of probably supporting something like that. But I think when we modeled the cost to our customers that we were uncomfortable and skeptical whether that the cost was going to be commensurate with the benefits. So I don't think we fully endorsed it.

**Let me ask you another question, and we will get back to these groups because I do want to just touch on that briefly. But how about in terms of climate change impacting your actual business operations? Are the physical impacts of climate change affecting your business, affecting your facilities? Are you doing any planning along those lines?**

Let's see. We- we are- you know again trying to be- it's my role in particular is kind of looking out for, given that the regulations are in place that would cause us to take certain actions, should we trigger thresholds for the greenhouse- EPA's tailoring role. We do- we have been evaluating what the ramifications of those- if we do trigger those requirements and what we- we would try to position ourselves in a manner that would allow us to comply with that again in the most economical fashion. So we do, and mainly results at this point energy efficiency. Making sure that the plant is run more efficiently which is- which is aligned with our goal to provide power to...

**But I guess my question is coming at it from another way like is climate change affecting you now? Like your company facilities? Are they vulnerable in any way to the effects of climate change? Are you making plans for provisional supplies of input materials or anything that might happen as a result of rising sea levels or anything to that effect?**

Yeah, I did do a presentation for- The University of South Florida had a symposium or a conference on this topic. Adaptation and were you vulnerable and what are you doing to mitigate it? At this point we have not seen- we feel like we are prepared for the life- useful life of- expected useful life of the plants that we have. That we have measures for storm surge for when storms come. We do harden the power plant infrastructure to ensure that water- high water levels would not keep us from operating the plant. So we've done things like that that kind of are mainly geared- that they happen to be also necessary for hurricane preparedness. Some of the preparations are the same things you would do to prepare for routine water level increases because two of our power plants, our two primary- our main flagship plants, the natural gas and the coal plants are both on the water and use once through cooling as an integral part of the plant. So we're on the Tampa Bay. And we haven't- we've been aware and we have talked about



things, but we feel like we are prepared for what we understand to be incremental changes and impacts to us.

**So not looking ten years, twenty years or longer down the road at this point.**

Yeah. That's looking- because the useful life of the coal plant is- I don't know because we've added- we've invested substantial amounts of money and have extended the useful life beyond-most of the units beyond twenty years from today or in that range of twenty years. So from our observations and looking at the data that there are no impacts that are anticipated resulting from climate change that would cause us to change our course or conduct our business substantially different than what we are doing now.

**Okay. Good. All right. So getting back to these groups now. I'm almost done. A lot of companies fund outside groups on this issue. Does your company support any laws requiring increased transparency regarding that kind of support for outside groups or political activities?**

I'm not aware, and I probably- I could refer you- try to refer you to somebody else that could- that may be able to answer that question. I'm just not aware. We have a manager of energy policy that's a little more plugged into our regulatory area or governmental affairs group, and I would- I'm not aware of any, but that may be something that I would not be in the loop on.

**Okay. That's fine. And so the last thing is the groups that I was talking about. You mentioned the Chamber. You probably are a member. How about National Association of Manufacturers?**

I'm not- I don't think we have any membership. I'm not aware that we have a membership with them.

**How about The American Wind Energy Association?**

And I'm not- I'm pretty sure we do not have a membership with them. Wind opportunities in Florida are modest in our area, and I- so to my knowledge we are not a member of that.

**Okay. That's fine. So the rest of these. If you have any knowledge of any company involvement in any of these, just let me know. The George C. Marshall Institute?**

No. I'm not aware of involvement.

**The Non-Governmental International Panel on Climate Change.**

No.

**The Committee for a Constructive Tomorrow.**

No.

**The Science and Public Policy Institute.**

No.

**The Institute for Energy Research.**

No.



**How about Accuracy in Media?**

Not aware. Again our corp/com department may be aware, but as far as engaging in anything really, I would normally be involved if we engaged with these groups in any climate related...

**Okay. So it's possible that you could be funding them in some way but you haven't really engaged with them.**

I'm personally not aware that we funded- and I have a little more confidence that we haven't engaged them on any efforts related to climate.

**Okay. Let me just ask you a couple more. The Heartland Institute?**

No. Have not.

**How about the Cato Institute?**

No.

**The Heritage Foundation?**

No.

**And the last one is the Competitive Enterprise Institute.**

No. Again I'm not aware of us funding any or engaging in any climate-related activity. Some of the groups you mentioned we definitely have read and are aware of their work. And with some of our regulatory response groups, we've discussed these; and we have engaged other consultants to gather information maybe. But we haven't- we certainly- none of those organizations even through our regulatory response groups, I'm not aware of supporting or providing any engagement with them on it.

**All right Byron. That's all my questions. Thank you so much.**

*(Moderator's Closing Remarks)*

*(End of Recording.)*

*(Recording Time: 28 Minutes)*



## Waste Management, Inc. Interview

### Moderator - Nicole

Respondents: Kerry Kelly – Director of Federal Public Affairs, Waste Management, Inc. – and Leslie Wong – Director of Greenhouse Gas Program, Waste Management, Inc.

**Normally, I would start out, when I'm talking with CEOs, asking about their personal views on climate change so I'm just going to skip over that and go right to the company. If you would, tell me what the company's official position is on climate change?**

**Leslie:** I would say that we don't really address climate change. We address sustainability. All of our goals are sustainability goals. The difference would be that sustainability is a very comprehensive way to look at both environmental benefit and business optimization.

**Okay. So there isn't an official position specifically on climate change?**

**Kerry:** We have not taken an official position on the science of climate change but basically, as Leslie was saying, we've developed our own sustainability goals and a big part of our practice as a company is to help our customers meet their sustainability goals. A lot of that is around energy efficiency; reducing greenhouse gases, producing renewable energy – those kinds of things, all of which are, of course, very much tied to reducing greenhouse gases.

**So would you say then that, as a company, you agree with the scientific consensus that it is happening?**

**Kerry:** We have been very careful not to take a position on the science. To be honest, we feel that, rather than taking positions, taking action is more important.

**Leslie:** Absolutely. And to take a position on the science would be in terms of you believe it or don't believe it, which is more of a personal standpoint than a corporate standpoint. That's why we focus on sustainability in using every resource as wisely as possible – reducing waste; reducing emissions; maximizing beneficial reuse. Anytime you conserve resources or anytime you recycle something you would have wasted, as Kerry said, you reduce emissions. But you also have other benefits. It's not isolated to greenhouse gas emission reduction. It's all air emissions reduction and it's preservation of limited resources.

**So by not taking a position . . .**

**Kerry:** You know why we haven't, really, to be perfectly honest . . .

**Please.**

**Kerry:** We're a company with a lot of engineers and a lot of good scientists but we're not climate experts and we've never felt comfortable going out on a limb on a policy or science matter that is not at the heart of our own expertise. So that's really why we have not taken a position on whether or not climate change is happening. But we feel very strongly that it is not only part of the services we provide; it's really a part of what we're about – to strive to reduce our own carbon footprint and our own environmental footprint and to help our customers do the same thing.



**But you don't think that, as a company, you could play an important role in addressing the issue if you did take a stand on it?**

**Kerry:** That's exactly why we're doing what we're doing. We do feel that our services and the investments that we're making in new technologies to better manage waste and extract value from waste, and investments that we're making in renewable energy are all about really sustaining and improving our environment. But by just taking a position, no, we don't think so.

**Leslie:** It could be a distraction. Taking a position would be a distraction because that immediately polarizes people as being for you or against you because it's a very – it is a scientific issue but it has become very politicized and very emotional. By leaving that out of it, we've put our practices out front. Our demonstration . . .

**Well, let me ask you this question. There is the scientific consensus and yes, there are people out there who would dispute it but it is basically a scientific consensus. But what about all the misinformation that is out there about climate change? Do you feel, as a company, that you try to contradict that or to avoid groups or organizations that might be espousing those kinds of ideas?**

**Leslie:** Well, as a renewable resources company, we're not a PR company. You know, we are out there to provide services in the best way we can to as many customers as we can and to drive environmental benefits from that. By being confrontational, again, that creates a distraction. What we do is we describe the benefits of our sustainability efforts and that frequently includes greenhouse gas reduction. When we give presentations on greenhouse gas, we describe things like the carbon cycle but we don't get into belief systems.

**Well, I'll get into the groups a little bit later but I do want to ask you – do you feel that the impacts of a changing climate are affecting your business operations, specifically things that you do as a company? Are you changing anything because of climate change?**

**Leslie:** We have some responses in our carbon disclosure project report which I can supply to you after this. It does list some elements where we have seen some impact but they're not significant.

**Okay. And do you expect, down the road in the next few years – ten years; 20 years or farther – do you expect they will be significant or . . .?**

**Leslie:** I have no way of knowing. I'm not a climate expert.

**Kerry:** In other words, I guess you can maybe separate impacts. If you're talking about actual climate impacts affecting the physical resources of our company like landfills or energy plants or recycling plants or collection vehicles or places where we're converting waste materials into fuels – that kind of thing – we have not seen a lot in terms of direct, physical impact. But if you talk about more how we're orienting the services we provide, even new services that we're providing customers; changes in the way that we view our business to try and continually improve our energy efficiency - for instance, we've got a major goal in reducing greenhouse gas emissions associated with our collection fleet. Things like that, yes, absolutely. We see that climate change and sustainability goals of cities, local governments, individual companies, even residential customers are all affecting the way we do our business. So from that standpoint, yes. The kinds of services we're being asked to provide; the focus on the part of many of our



municipal customers to increase recycling; the focus of many of our both private and municipal customers to receive help from us for things like energy efficiency audits or looking at the way they manage their own waste from generation to recycling to how it's finally managed when it's going to be disposed of – all of those kinds of activities are very much being affected by, I would say, our nation, our continuing focus on greater sustainability and reducing greenhouse gas emissions.

**So what impacts – costs or benefits – have you seen from those actions that you've taken as a result of what the customers have wanted?**

**Kerry:** Well, for one thing, one aspect of our business that used to be relatively small but is now really growing is what we now call sustainability services. We used to call it upstream and upstream meant going into generators of a lot of waste, for instance, General Motors or Ford or Dow Chemical – somebody like that that generates waste, both municipal kinds of waste; industrial waste; even hazardous waste. And they wanted experts to come into their plants and help them better manage their waste and we offered that kind of service. We also offered consulting services to help them figure out ways that waste that was being generated that they were disposing of could actually be reused in some way. And we are now starting to get a lot of focus from institutions like colleges and universities and smaller commercial businesses. So we're offering more services to actually reduce waste generation at the outset as well as better manage waste that is being generated such that more recycling is taking place where the materials are recyclable or different options for how the waste is disposed of are being explored because a lot of companies are looking at ways that they can reduce their own environmental footprint and even greenhouse gas footprint by better managing their waste. They see a real nexus between waste management and reducing greenhouse gases.

**Leslie:** Frequently, a customer will come to us because they have an interest in greenhouse gas reduction specifically, like “My only goal right now is to reduce my carbon footprint,” for whatever reason. And after they go through one of these audits and implement some of the procedures, they frequently find that what they did to reduce greenhouse gas emissions also had corollary benefits – reduction of other emissions; reduction of waste disposal cost; perhaps an increase in revenue if they were able to sell some recyclable materials; or maybe it's as simple as saving the cost of buying more fuel because you've reduced your fuel consumption. Greenhouse gas reduction is rarely a unique benefit. There are usually other benefits that correspond to it.

**So, as a company, do you expect, as you look to the future, it to be more of a cost or more of a benefit? How does it measure up for you as a company to deal with greenhouse gases?**

**Kerry:** To be honest, I think it is greatest as an opportunity for us – an opportunity to provide more services and an opportunity to evolve our business into one where – really, we're already undergoing transformational change within our business to kind of remove ourselves from the old paradigm of “you collect municipal solid waste and you put it in a landfill.” It's going to be an evolutionary process because that's kind of the way major changes in infrastructure occur. You know, it doesn't happen overnight. But we are investing heavily in new technologies that actually try and recover as much value from the waste material as we can, whether it's energy value or whether it is better, more streamlined, more efficient processes for recycling so that we can continue to do it more and more efficiently and drive costs down so that we can literally do more. I'll give you an example. We're kind of one of the leaders in a technology that we refer to





as single stream for recycling. Basically, a single stream recycling facility is set up such that a homeowner can deposit all of their recycled stuff – their paper, their cardboard, their metal containers, their glass, their various types of plastic – in one bin. It's collected in one truck and it goes to one facility. Our sorting capabilities are getting more and more sophisticated and continually, we've got generations now of single stream sorting. That has been a real boon because, by making it easier for the homeowners to actually do recycling and less work for them to separate and to carry various bins out to the curb, it has really increased the amount of recyclable materials in the marketplace.

**Kerry, can I ask you specifically about reducing greenhouse gas emissions, like what you've done in terms of your facilities or – you did mention, I think, the vehicles. Are there other examples you can give of reducing greenhouse gases in terms of your facilities or your products and services?**

**Kerry:** I would say probably fleet is one of the biggest areas but we've got a goal of reducing both our criteria pollutant emissions and our carbon emissions from our fleet by 15% by 2020. And the big push there is essentially as we get rid of old vehicles and buy new vehicles, we are really looking more and more toward natural gas fueled vehicles. In fact, I think we've got one of the largest natural gas fleets in the country.

**Leslie:** And we just bought our 1,000th vehicle and we're also establishing a network of CNG refueling stations.

**You had mentioned that you didn't really see a lot of ways that climate change is specifically affecting your facilities or your locations.**

**Kerry:** Right. Not from like a sea level rise or increased storms or . . .

**It has not been, you don't think?**

**Kerry:** Well, you know, I think right now there is so much scientific uncertainty around tying weather to climate. I mean as much consensus as there is around climate change – the science of climate change - I think there is less certainty with regard to year over year changes or fluctuations you see in weather patterns. To what extent is that climate related? To what extent is that sort of natural flows within our global system?

**Leslie:** But also I don't know that it matters to our sustainability goals that we're being forced by outside forces. We've made the sustainability goals. We're going to improve efficiency. We are going to reduce emissions. We are going to increase recycling.

**Right. But in terms of protecting your facilities that may be vulnerable from sea water rise or storms or damage... .**

**Kerry:** We don't have a whole lot of facilities that are near the ocean. I think we have one – help me, Leslie – I know of one landfill in California where we did an impact analysis that is part of the state requirements for doing . . .

**Leslie:** Right, because they were close enough to shore.

**Kerry:** Right. So we did do an evaluation of if the sea level rose X amount, what might happen?

**What about washed-out roads – things like that? That could potentially . . .**



**Leslie:** Well, you have to remember that we are a very safety-focused company as well as a very environmental benefit-focused company. So we have very strict and comprehensive safety rules in place for how to deal with adverse circumstances. So those are already in place and when an adverse circumstance occurs . . .

**Okay, but is there anyone kind of looking down the road to say, “Well, if this stuff they’re talking about happens, how might it affect us?” Is there anyone tasked with that in the company?**

**Kerry:** Not specifically and I think that, where we do have people tasked is more on the response side. It might not dawn on you – it certainly didn’t dawn on me when I joined Waste Management about six years ago, but we get very involved in responding to natural disasters. For instance, we have response teams at the ready to be able to help in the event of hurricanes, tornadoes, flooding. You know the awful flooding that occurred last year in Tennessee? We were heavily involved in the response to the Nashville flooding and storms of that nature. Hurricane Katrina, the two storms whose names I cannot remember now that whacked Florida almost like two or three weeks apart. We do an awful lot of response to natural disasters and the reason is that when buildings get knocked down, a lot of trash gets generated and they need people to be able to come in and help. From that standpoint, we definitely do have a lot of focus on being primed to be able to respond to natural disasters. You know, the oil spill in the Gulf was another instance where we were very much a part of the response effort in the panhandle of Florida all the way over to parts of Louisiana.

**So you do kind of think about it from a response perspective but perhaps not from kind of down the road like, “Hey, what if this happens more often? What does this mean for us as a company?”**

**Leslie:** That would grow organically. As more events occur, we are going to have more equipment at the ready and have more staff at the ready. But, with any of our processes, you can only look so far down the road and predict. We’re not going to hire staff now for a need that is 20 years down the road.

**Kerry:** I think you’ll find that with almost any company, five years . . .

**Right. The magic number. Right?**

**Kerry:** Five years is as much planning as you’ll see any company really robustly trying to plan for.

**Let me ask you this question, kind of going back to where we were talking about not taking a position. Did your company lobby for or against the Waxman-Markey ACES Act?**

**Kerry:** No. Neither. We didn’t lobby for or against it.

**So you just stayed out of it?**

**Kerry:** We didn’t completely stay out of it. We did interact with both Democratic and Republican staff on the committee as they were putting together their ideas for a federal renewable portfolio standard. We did interact with them on that. We also got some questions from them with regard to how greenhouse gas offsets were set up because you may know that





one of the types of projects that is really most prevalent worldwide right now is landfill gas destruction offset, basically offsets associated with capturing landfill gas and flaring it to destroy the methane. And so we did get some questions about that but, other than that, we stayed out of the lobbying on that bill.

**And how does your company feel about laws requiring transparency regarding corporate funding of outside groups or lobbying? Do you have a position on that?**

**Kerry:** Boy! If we do, I'm not sure . . .

**Leslie:** I'm not aware of it.

**Kerry:** I'm not aware of it, either. We certainly are fully compliant with all of the FEC requirements to divulge our own political contributions. We, as a company, are not major funders of groups that do a lot of special interest lobbying, if you will.

**And is that a company policy or . . . ?**

**Kerry:** I think it has just been kind of an evolving company practice. We do have a political action committee and, of course, all of our contributions are out there for the public's view. Anybody can go on the FEC website and see who we contributed to and how much.

**In terms of political candidates but what about other groups? For instance . . .**

**Kerry:** You know, to be honest, our major funding for other groups is probably Keep America Beautiful and Habitat for Humanity.

**Are you a member of the U.S. Chamber of Commerce?**

**Kerry:** We are. We are members of the U.S. Chamber of Commerce and also the National Association of Manufacturers.

**Okay. That was my next one I was going to ask. How about the American Wind Energy Association?**

**Kerry:** No. We host some wind farms at our landfills.

**So I'm kind of surprised you're not a member. How come?**

**Kerry:** Well, I think it's because we're not the owner of some – we are actually leasing our barrier. We have a lot of land around landfills that is basically a protective barrier, if you will. A lot of times we actually create wildlife habitats on those acres. That's one of our major sustainability goals – to get certified through the Wildlife Habitat Council a large number of acreage for habitat conservation.

**You've definitely done a lot of things I've found on your website, but there's not a lot about climate change specifically, so that's interesting that it's kind of one of those issues that you haven't taken a position on. Let me just quickly run through some other groups and let me know if anyone in your company, your foundation, your PAC, if you know it, or if your executives have given any time or money to these groups. The Competitive Enterprise Institute.**

**Kerry:** I'm not – I don't know.



**That's fine. That's totally fine. How about the George C. Marshall Institute?**

**Kerry:** Not that I'm aware of.

**Okay. The Non-Governmental International Panel on Climate Change?**

**Kerry:** Never even heard of it.

**Okay. The Committee for a Constructive Tomorrow?**

**Kerry:** No.

**Okay. So none of these are ringing a bell?**

**Kerry:** None of those are ringing a bell.

**Okay. How about this? The Science and Public Policy Institute?**

**Leslie:** Not ringing a bell.

**Kerry:** I'm not aware of any.

**Okay. The Institute for Energy Research?**

**Kerry:** IER. No.

**Okay. How about Accuracy in Media?**

**Kerry:** Not that I'm aware of.

**So you're just not sure whether or not the company is involved with those. How about the Cato Institute?**

**Kerry:** I've certainly heard of the Cato Institute but I don't . . .

**Leslie:** I've never seen a reference around here of . . .

**Kerry:** Who do we give money to? Columbia University. Sustainable Use of Resources Institute.

**Leslie:** There is always the possibility that there could be small donations but that's not our department.

**Kerry:** As a company, no, we don't, but if individuals in the company donate, we'd have no way of knowing that.

**Leslie:** I think the focus has been more on doing beneficial projects than outside influence.

**But it is possible that some executives may have given or that they support through the company in some other way? You're not sure about some of these?**

**Kerry:** I sure haven't heard of anybody interacting with those groups that you mentioned. If someone here has as a personal involvement or a personal contribution, that's certainly a possibility but it's not a question that we would ask of anybody.

**Leslie:** Right. And they wouldn't necessarily tell us. It would be a personal activity.



**Okay. Let me just ask you about two other ones that I haven't gotten to – The Heritage Foundation?**

**Kerry:** I certainly know who they are. I'm not aware of any corporate involvement with them.

**And the last one is the Heartland Institute.**

**Kerry:** I've heard of them, too. It's been a while. No, I'm not aware of any corporate interaction with them.

**So is there a corporate policy in terms of participating with groups or giving to groups like that? How would that happen as a company?**

**Kerry:** You know, it would actually come probably to my boss, who is the senior vice president for government affairs, communications and community relations. I know that any such corporate involvement would be very carefully looked at. We're kind of a, I would say, middle of the road to progressive company and I think that we would be very careful about who we would want to associate our name with. It would need to be clearly a group that is in sync with our own sustainability goals and our own corporate philosophy. So we would be very, very careful about who we would provide any kind of funding of that sort to. Where we tend to give funding tends to be something more along the lines of a group that is doing good in a community like Habitat for Humanity. Or I know that my boss that I mentioned is on the board of Keep America Beautiful, which is very much focused on community-based environment programs – very strong on recycling. You know, we're looking for groups who are tied into the kinds of business services that we provide.

**But you don't know whether the company would support laws requiring increased transparency which is something you have already adopted as a company?**

**Leslie:** Kerry, what is the name of the ethics award that Dave Steiner has gotten for three years running?

**What's the award?**

**Leslie:** I cannot remember the name of it.

**Kerry:** I'll look at the sustainability report and see if I can find it.

**Leslie:** Okay.

**What's the award about?**

**Leslie:** We have a huge commitment in this company to corporate ethics not only at upper management level but going all the way down - being a good citizen, participating in the way you see fit and encouraging that participation without swaying it. But we also have very strict limits on, of course, using the Waste Management name. If you want to do something on your own, you are encouraged but it's only endorsed by Waste Management if you go through the proper channels to get it endorsed by Waste Management.

**Well, those are all of my questions. I just need to get an address so I can send you guys a thank you and let you know once we've made our donation. You know, we're going to be donating to help with earthquake/tsunami relief in Japan.**



**Leslie:** Great.

**So what address should I send that to?**

**Kerry:** Why don't I give you my address? We're at 701 Pennsylvania Avenue, NW, Suite 590 and that's in Washington D.C. 20004.

**Great. Wonderful.**

**Leslie:** And are you interested in our carbon disclosure report?

**Sure, if you would forward it to me. My guess is that UCS already has it – has already seen what your entries have been but it certainly would help if I got that from you and can forward that on to them.**

**Leslie:** Of course, it's publicly available but I can send you one. I don't think they've published this year's yet so I can send you the latest one.

**That would be wonderful. I thank you, Leslie. Thank you guys so much. I really, really appreciate it. This was terrific and I can't thank you enough for your time. I'll let you know when I make that donation. It should be in about two weeks, I think, by the time we are finished with all the interviews, so pretty soon. Thanks and have a great day.**

*(End of recording.)*

*Recording time: 37 minutes.*