The Exit Interview Counterpoint: Climate Change

A Conversation with
Jim Connaughton, Former Chairman, White House Council on Environmental Quality

Moderated by Chris Mooney
Environment Reporter, The Washington Post

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Harrison Nugent: Good afternoon ladies and gentlemen and welcome to the Exit Interview: the Counterpoint on Climate Change. My name is Harrison Nugent, and I am a freshman in the School of Foreign Service. Before we begin I want to offer special thanks to the Institute of Politics and Public Service for hosting this wonderful event and to Mr. Chris Mooney and Mr. Jim Connaughton for taking time out of their busy schedules to speak with us today.

We have an excellent speaker for you this afternoon. James L. Connaughton is a nationally distinguished energy, environment and technology expert, is both a corporate leader and a prominent White House policy maker. He has creatively developed market based solutions to some of the world's most significant environmental challenges, deploying innovative technology that saves money and reduces environmental impact. In 2001, Mr. Connaughton was unanimously confirmed but the U.S. Senate to serve as chairman of the White House Council on Environmental Quality. From 2001 to 2009, he served as President George W. Bush's Senior Advisor on Energy, Environment and Natural Resources and as Director of the White House Office of Environmental Policy. During his service with the federal government, Connaughton worked closely with the president, the cabinet and the Congress to develop and implement environment, natural resource, and climate change policies. From 2009 to 2013, Mr. Connaughton was Executive Vice President and Senior Policy Advisor at Exelon and Constellation Energy. From 2013 to 2016, Mr. Connaughton served as Executive Vice President of C3 energy and in March of 2016, was appointed President and CEO of Nautilus Tata Technologies. Mr. Connaughton has played a leading role in major initiatives that expanded energy and infrastructure projects, improved management of public forests, protected and restored millions of acres of wetlands, implemented new national air quality standards, reduced air pollution from power plants and diesel vehicles, improved conservation partnerships with farmers, and developed international environmental cooperation agreements.

Now I would also like to introduce our superb moderator for this event today. Chris Mooney writes about energy and the environment at the Washington Post, he previously worked at Mother Jones where he wrote about science and the environment and hosted a weekly podcast. Chris spent a decade prior to that as a freelance writer, podcaster and speaker with his work appearing in Wired, Harper's, Slate, Legal Affairs, the Los Angeles Times, the Post and the Boston Globe -- to name a few. Chris has also published four books about science and climate change. So, without further ado, I’d like to hand the program over to Mr. Mooney and Mr. Connaughton so that we can begin this interesting interview on climate and energy.

Chris Mooney: Thank you, and it’s good to be here. I guess everyone knows this is taking the form, at least partially, of an Exit Interview response. Everyone knows what that means? Ok so, what that means is that we are going to sort of start by rehashing a little bit what was said by officials from the Obama Administration and what your reaction is to their take on what they’ve accomplished on climate change. What they’ve said here is I believe two days ago was basically that they had put addressing climate change at the center of many of the things that they did and they accomplished a great deal sort of trying to advance clean energy, fuel economy standards. The biggies are of course the Clean Power Plan and the Paris Climate Deal. I’ll just give you one quote from Brian Deese, President Obama’s senior advisor. He said, “one thing that has remained consistent over the last several years is that this issue [referring to climate change] is at the top of our priority list.” So I guess the first question I would ask is, do you agree they’ve taken a huge swing at the climate change problem and how would you assess what they have managed to do success/failure? And we’ll have to probably take that in pieces [inaudible] but you could start.

Jim Connaughton: So first, just at the high end for all of you. Much of the work on climate change, nationally, at the state level and the local level, has carried forward as a team sport. Democrats and Republicans, federal governments, state government localities, and just as important, the private sector. Okay so because climate change, action on climate change requires a massive amount of movement across all the major energy producing, energy using and land use sectors. It’s an enormous public policy undertaking, but equally important it’s an enormous private sector and technology and investment undertaking. And so, at a top level, over the arch of the last eight years, there’s actually been a pretty amazing, inconsequential action on carbon abatement. In addition, the abatement of other greenhouse gases, whether its methane or these chemical refrigerants called HFCs, there’s other climate change constituencies, and so there has been an enormous progress and any president who presides over that level of progress, whether accomplished directly by his administration, whether accomplished in partnership with the feds, or allowing the states to do what they do, earn credit for their activity -- so that’s the top line. The second line on that is, a big piece of the action occurred actually purely driven by the private sector and private sector innovation and you want that, that’s a good thing. There’s a certain, the majority have been done as a team sport as I described, and then there’s some big disappointments but I’ll get into those I think, but like any administration, you’ve got the big wins, some partial wins, and some big disappointments and I think that is what we will talk about.

Chris Mooney: Well let’s talk about that private sector innovation, actually. That I think leads into talking about the Clean Power Plan, which is one of the principal policies that has been attempted although it is now being litigated and we don’t know what it’s future fate will
be. You know I did a little research. The Clean Power Plan is the major regulation proposed by the Environmental Protection Agency to do something about climate change from power plants and they say in their final rule that coal, in the year 2030, will be projected to provide 27% of U.S. electricity, and natural gas will be projected to provide 33%, but the energy administration, that is the Department of Energy think tank that looks at this says that we are basically already there. Natural gas this year will be 34%, coal will be 30%. So national gas will be more this year than they’re projecting for 2030, so that’s the market change that happened right. And the Clean Power Plan, what is your take on it when this has already happened?

**Jim Connaughton:** Well so first, let’s put the Clean Power Plan in context. The Clean Power Plan is a regulation put in place last year, just a year ago. So seven years into the Obama Administration. The first big and unfortunate way that we abated greenhouse gas emissions was the economic slowdown, and by the way no president wants to take credit for environmental outcomes that result of people not having jobs. You don’t hear a lot about that, but some of our successes are due to that occurring. Alright, so you don’t want to count that. That’s not the best way to get carbon emissions. The second biggest, and the lion’s share of emissions was this big fracking boom that you’ve all heard about. The displacement of coal with natural gas in electricity generation. It was enabled by the fact that the overbuilding of gas plants in the 90s that were able to absorb all this gas when it became available, so as a result we had a big shift from being more than 50% coal and less than 20% gas to the numbers you’ve seen. This big shift to gas, huge reduction in carbon emissions and just as importantly, air pollution -- conventional air pollution. So, that’s been the lion’s share.

Policy-wise, before you get to Clean Power Plan there is a bipartisan bill in 2007-George W. Bush and Nancy Pelosi on the stage with legislation that passed 87 votes in the Senate that put in place the policies that are responsible for most of the rest of the abatement. Vehicle fuel economy, renewable fuels, lighting efficiency standards, building appliance efficiency standards and then finally the states -- 37 of them have renewable power mandates. There’s about 100 mandates all of which were put in place before President Obama came into office legislatively, and then President Obama and his team have implemented them very effectively with the regulations called for, so that’s why I say it’s a team sport. There’s some challenges in how that was done. Clean Power Plan comes outcomes along seven years later and most of the effort to do what the Clean Power Plan would now try to do is already locked in as policy, already locked in as private investment, and already locked in as technology advancement. The world has a way of overtaking regulatory events.

**Chris Mooney:** So what does that mean for the administration’s success/failures -- what have you? It’s, they can claim some credit for it but it was really set in motion and the Clean Power Plan is just maybe not even that relevant to the numbers that I’ve outlined.

**Jim Connaughton:** So, it is my view that the Clean Power Plan comes way late in the game -- 2007 -- after two failed efforts at legislation on power generation and so very well intentioned, but now being overtaken by events. That said, there’s a very important action that needs be taken to provide sort of a stable signal to power plant investors. I used to be a power company executive and there’s a gap that has to be addressed there that will be left for the next administration and the governors and the Congress. And so that will not be resolved, we could not resolve it at the end of the Bush Administration and actually oddly as it happens President Obama has not been able to bring that to full resolution either, so there’s work to be done in the years ahead.

**Chris Mooney:** What is your take on perhaps the most famous thing this administration has done, which is internationally joined the Paris Climate Agreement -- which is really the first thing that unified the whole world with the United States on taking some kind of action and the analysis says that it isn’t enough, but on the other hand it is this big moment where everyone signs and rapidly ratifies something that puts them all on the same page.

**Jim Connaughton:** So there’s both more than meets the eye in the Paris Agreement and less than meets the eye. So, the Paris agreement is the culmination of a roadmap that was actually put in place when I was in my job in 2007 -- it is called the Bali Road Map which set all the negotiating terms for the Paris Agreement which happened eight years later -- so think about that. That’s a long time to get something agreed.

**Chris Mooney:** Well it’s the 22nd meeting that they’ve had right?

**Jim Connaughton:** If you look at the Bali Road Map, in the five or six pages that it was, and you look at the Paris agreement, the forty some-odd pages that it is...you are all students -- read them both you will see that one spells out in more detail what was in the earlier one which was a very important step forward in this respect. After a lot of strong opposition and relentless no-saying, the major developing world economies that have the growing amount of greenhouse gases -- China, India, Brazil, South Africa and a handful of others -- agreed that they need to be part of a more tangible regime going forward -- that is what they had been resisting for 25 years. The longstanding U.S.
opposition to a treaty on climate change, the new one, we have the original one in 1992, was really predicated on these big emerging
economies having to play a critical role as well. I give president Obama and his team credit for keeping them at the table and getting the
Paris Agreement and getting rid of an old provision that said the big developing countries do all the work and the developing countries
don’t do any of the work. That’s a big deal.

However, that said, Paris does not have binding requirements. Paris does not put especially put China on a trajectory of any consequence.
China is actually free to admit to whatever level it wants and peak out at a theoretical point in the future and as that occurs we are going to
see global greenhouse gas loads -- anthropomorphinc ones, generated by man. We are going to see them double and then triple, okay largely
in China and supported by other countries and that is locked into Paris. So, there’s a lot of work for those who want to see really aggressive
action on climate change and meet this 50% global reduction by 2050, which is an 80% global reduction in developing countries by 2050.
Paris simply buys time till the next conversation. Again, it was very important what occurred, but it is way short in terms of the ambition of
those who support Paris. That also then lies in front of us with some built opportunity and some shoals.

Chris Mooney: So, and this was, of course, really made possible by negotiation bilaterally between the United States and China, which
preceded the Paris Deal, bringing those two to the table when the United States agreed to specific cuts and China agreed to peak its
emissions by the year 2030, which means that is when they will start going down at the latest, and they will try to make them go down
earlier. Do you think that is not the best deal that could have been gotten or do you think it is just not enough of a deal, because that in
that sense was then written into the Paris Agreement?

Jim Connaughton: So, I believe it was the best deal that could have been gotten in the current environment and I don’t believe that the
deal is at all adequate to the task. Actually, I don’t know you guys are studying public policy, I don’t know if you have studied the moral
hazard. I think there is embedded in that deal and the sort of over emphasis on how great the deal was it was very good, but by saying that
this deal was the great deal, it will make it actually harder to do the big next step that has got to happen because everyone is content with
the current arrangement. Okay, and so interestingly if you sort of, you know, you are all online, pull up everything Mr. Trump has said
about climate change and read the second line of everything he has said, not the first line, the second line. He has been zeroing in on an
essential half-truth of the challenge in front of us, which is this miss match between developing country emission abatement and the lack of
consequential emission abatement in the major emerging economies which creates something called carbon leakage. So we squeeze our
emissions, but it comes at a cost, and that causes investment to occur in countries that don’t impose proportionate costs -- they are starting
at different levels. If you are in a place like China, it’s emissions depending on sector are anywhere from 3 to 10 times more per unit of
production so we are squeezing our emissions but they are going up proportionately even greater in other countries. That does not address
the global carbon load, that is a really hard problem to get at, and we haven’t gotten to it. So again, some up sides but some pretty
significant challenges that we have ahead. Again, for those who want to see very aggressive emissions abatement in this next 20-30 year
period.

Chris Mooney: I think we could say more about China but I would like to move on. You brought up the President-elect and I think a key
question I have is, insofar as you are offering a bit of a counterpoint to the Obama Administration you seem to agree about some things on
some places and not agree as much. How representative do you think you are of where the Republican Party is right now, or do you think
you are not so representative?

Jim Connaughton: Well so, let’s start first with the political economy of what’s in front of us. This 2007 energy bill I mentioned, the state
renewal portfolio standards, the technology investments and innovations, sustained funding for energy R&D, sustained funding for climate
change science programs, all that has occurred Republicans and Democrats. There is a tendency to paint things with a stereotypical brush,
but all of that has been sustained in states led by Republican governors and states led by Democratic governors. You know, George Bush
with the Democratic Congress. So, look at what is actually on the books, and so my views are actually quite representative of this broad
political economy of reasonable action on reasonable time frames at a reasonable cost. And so it is very important, and again with you as
students of public policy, that the divide is partly around disagreement on how much of the science should drive public policy. If you look
at the science -- read the IPCC summary -- it’s a bell curve of the humans aren’t playing a big role which is way out here, this big bell curve
of humans are probably playing a substantial role and then at the other end, it’s pretty alarming, this is an alarming problem at this end --
and so if you look at the political process, it is actually sort of hanging on to the bell, the big piece of the bell, and then you’ve got some
strong views at either end. So I find myself hanging on to the bell and figuring out first where can you get profitable emissions abatement
because the more profitable it is the faster it will happen. Then where can you get emission abatement on a benefit cost? You may be
imposing some costs but you get a substantial return benefit either vis a vis carbon or its co-benefits -- there is a lot that can be done there.
The political battle is over excessive costs for limited return. And that's really a surrogate for the science debate. If you look at a lot of the people that challenged the science, what they are really saying is, we don’t know enough to put a lot of people out of work -- that is what they are saying politically. And by the way, I think said that starkly how many people do you want to put out of work for something you are not quite so sure you know enough about? That’s a very salient political debate to join and Mr. Trump has joined it quite starkly, and there’s others who have joined. But at the end of the day, President Obama failed to pass cap and trade legislation with 60 votes in the Senate and a significant majority of Democrats in the House -- so it is not just a Republican set of concerns that I am talking about, maybe quieter on the Democratic side but he had the complete control of the U.S. Congress and could not pass two bills; cap and trade bill and then he came up with something later which was a little bit more creative, a little less potentially harmful -- something called a clean electricity standard, he put that in his second State of the Union address and that failed, too, with the Democrats leading in both the Senate and the House. So these are not singularly Republican concerns and the concern that Mr. Trump is pushing on is a very, very real and still persistent public policy question, how far, how fast and at what cost to mainly U.S. workers and poor people who have to pay high energy bills? And you have to confront that again and again and again.

**Chris Mooney:** So, I think what you are saying is, and actually I looked up in some of your past speeches, I think you are saying the same thing that in 2006 when you said [inaudible], “climate change is a serious issue that warrants a serious and sensible action is where everybody is,” is the quote. I guess it seems to me that it does minimize to some extent the degree to which there is real denial of the reality of climate change, which is scientifically affirmed, almost across the board. President-elect Trump has tweeted several times saying or implying it is a hoax.

**Jim Connaughton:** Yeah so this is why I say read the second line of that famous tweet.

**Chris Mooney:** Which one, the China one?

**Jim Connaughton:** The China one. The second line, it is a hoax perpetrated by the Chinese to put Americans out of work, I am paraphrasing. He is zeroing in with a high level of deafness, the anxiety about the excesses of climate regulatory policy, and that is what he is zeroing in on. And it is not just the carbon, it’s a surrogate for the trade imbalance, it is a surrogate for low cost labor versus high, it’s a surrogate for a whole bunch of different things and he is using climate as an umbrella for tapping into that anxiety. I’ve been in a lot of these factory towns, I have been in a lot of these factories. Those anxieties are real, and the imbalances are real, and the shifting of manufacturing to other sides -- steel to China. That is real. And the climate piece of it is a piece of that broader ongoing debate, and that one by the way also does not cut neatly on partisan lines. There are as many industrial state unions representing Democrats who have got the same level of anxieties and concerns, and what Mr. Trump did in this election is he co-opted a lot of that by saying I’m going to take a hard, I’m going to take a new look at this -- which in my view is not necessarily a bad thing!

**Chris Mooney:** But if it is an economic debate, why don’t we have an economic debate right. We still debate the science. I fully understand your point, I believe debating the science is a proxy for different views of government and value systems and views of economics but we don’t debate the economics when we debate the science.

**Jim Connaughton:** But we don’t debate it at your level…

**Chris Mooney:** What do you mean?

**Jim Connaughton:** The Washington Post reporting on the political debate which gets reduced into sound bites and has all the color of the recent election cycle. However, the fuel economy statute that is now the fuel economy regulation. That is explicitly driven by benefit cost. Oil prices are high, $3/$4 a gallon, the regulation is very strong because you can justify a lot of cost into a new vehicle if the cost is offset by reducing expensive gas. Now that statute and regulation is about to be reviewed going into the new administration and the price of gasoline, the pump is now half of what it was in 2007. Under the current policy design that is going to mean less progress driven by regulation on fuel economy because the benefit cost is going to be flipped. Now I would propose that we should review the structure of that policy because it’s kind of outdated in its design -- it looks backwards. Now the question is, we are going to review it now that it looks like gas prices are low and that OPEC made a consequential decision the other day, maybe this is a time for all of you to be creative, people like me, and the media to be creative and say alright that worked. Got us a lot of emission reduction, got us a lot of fuel economies, avoided a lot of gasoline from foreign entities coming into America. But now what’s the next more creative more market driven thing we can do to sustain that work rather than the conventional approach that we are currently doing? That is what’s coming, we’ve got great friction coming up.
Chris Mooney: Well let’s make that turn actually.

Jim Connaughton: Out of good friction often comes good policy.

Chris Mooney: And I do want to turn in that direction and ask what you expect to see policy wise from the incoming administration where you’ve had some pretty strong statements about getting rid of the Clean Power Plan and Paris. A lot of things are less explicitly laid out at this point in time. I’d actually like to start by something that has gotten less attention which is what will happen do you think with the office that you directed, -- the Council on Environmental Quality -- under a Trump Administration? In particular, the Obama Administration made this very big move just this year, they’ve been building up to it for a long time, with this NEPA guidance, and I’m sure you can explain to everyone better than I can what it means. But essentially it said you have got to take climate change into account when you make decisions in the government, and they have to fill out these large environmental reports before they do all kinds of actions, and they say that now you’ve got to put climate change on all those reports and they’re doing this constantly so it’s kind of a very sweeping directive. So I would like to hear what you think about that?

Jim Connaughton: Okay so should I go in order of the things that will actually make a big difference or go in the order of things that would be the most sensational? Which do you guys want, big difference or most sensational?

Audience: Sensational

Chris Mooney: You are going to say that NEPA is going to make a big difference.

Jim Connaughton: There you go, no NEPA is not going to make a big difference, it is a marginal change from the guidance that I issued when I was on the job, an extremely marginal change.

Chris Mooney: You think they’ll get rid of it?

Jim Connaughton: … and a hell of a lot of paperwork and it will not consequentially drive decisions at all but it will become fodder for litigation and because of the way the criteria is being set up it will just be one more additional thing to go into the court system with to say the study wasn’t done adequately enough. But from my perspective, and by the way, I am the world’s biggest champion of NEPA’s the environmental process. It is one of the bedrock things we do, all the other nations follow us it is very, very, very important process. When it comes to carbon emissions, it will have almost no consequence of it abating emissions but it will have a lot of consequence in stalling investment in new stuff. I’ve got concerns if that occurs because you are all on your phones, and your computers. We all know in our lives when I replace something old with something new, I tend to replace it with something that’s much more efficient and has a much smaller environmental footprint because stuff just gets better. And if I have a regulatory process and a permitting process and a litigation process that makes it 5, 6, 10 years longer to replace the old thing with something new, I am not getting the benefit of all that efficiency and I can show you all the studies on that. And so I think there is a real trap in that guidance that we are going to have to see what becomes of it. Again, please understand I think it is important that the project proponents understand the greenhouse gas profile of what they are doing. I think this is very, very important but if you are just inserting roadblocks to get to a decision to go forward in the project or not, not very helpful from an environmental perspective.

Chris Mooney: And this could be changed relatively easily by the new administration?

Jim Connaughton: Yeah its guidance, and there’s talk that the Congress could overturn it but as I said, it is sensational so please study outcomes as well as methodologies. The big things that are coming is this CAFE review, that’s the big thing that’s coming. A big thing that’s coming is the Renewable Fuel Standard review. President Bush proposed an alternative fuel standard that would be weighted by energy content of the fuel and by its emissions. The Congress did not like that form so much and they said ‘X’ amount should be corn ethanol and ‘Y’ amount should be another form of ethanol and by the way natural gas doesn’t count and efficiency doesn’t count and electricity doesn’t count. So, that was a compromise, we have made one step forward. But now with this new round, there is a huge opportunity to make this renewable fuel piece an alternate fuel standard and be technology neutral, and just emission weight the standard and let the market figure out the cheapest most effective fuel alternative to oil that can come into the system. Now that to me is just big, that’s really, really big. You have all these states with renewable portfolio standards.
Chris Mooney: You would have to do a new legislation to do what you’re talking about.

Jim Connaughton: Sure. And by the way, you better have legislation, and whatever the compromise is, is the compromise but then the world can bank against it. The challenge with regulations is that they always get litigated, and so if you are trying to invest, you know I’m want to put up a new factory and I can’t know because the regulations litigated and are going to change over 3-5 years and then somebody else would come in and change it again, it is very hard for me to put a 100 million or a billion dollars into something consequential if I don’t know if my profit will be increased or will be taken away. And this is the hidden story of progress that could have been even more consequential over the last eight years was this idea of tying up massive amounts of capital into factories, into roadways, into smart grid because you have to wait for permission to do it and because you have to price a lot of risk. There are projects that would go forward with 12% profit but I have to price and discount it by 5% because the rules might change on me -- the project never happens. Again, so all this stuff you don’t see it, but you don’t see it nobody writes about it, it’s not like there’s a report, the Labor Department or the Commerce Department, it’s all this silent absence of investment. Now what gets me excited about our President Trump is actually as a president he uniquely understands that dynamic. So for any of you that have high anxiety for Mr. Trump coming in look at the places where he is strong, maybe not so much in the places that you believe he is weak, and then dare him to do what he does well. I mean I am a person, I go forward with whatever field I am given, and so look for the strengths of what is in front of you. You can spend a lot of time on the weaknesses of what’s in front of you, but I see real opportunity for some pretty rational and some pretty big steps beyond what we currently have on the books.

Chris Mooney: So how do you see this saving the coal industry idea working out? What does that look like?

Jim Connaughton: So President Obama made a lot of promises to coal country that he did not keep, and Mr. Trump has now made a lot of promises to coal country so his challenge is to keep it. Coal is a viable and vital resource that America has an abundance of. We have through smart regulatory policy, market-based policy, we have found a way to clean up coal, we have now air pollution controls on coal such that it has the same low effect as natural gas which has cost a billion dollars per plant. So we have induced all these power companies, to invest tens of billions of dollars to clean up the coal emissions such that the air quality we see out here is pretty nice in America, but it does not explain the carbon. Just when all the utilities were revitalizing all these coal plants with tens of billions of dollars of investment, Democrats and Republicans got into a huge clash and said we are not going to agree to agree on carbon abatement which brought investment on coal to a grinding halt. And then the Clean Power Plan made that worse because either way the plan works, look at this design it takes years to get the final rules in place during that entire time nobody will invest in new coal. These coal miners, they really are suffering and needlessly suffering, because as you said the Clean Power Plan in its form is finally finalized there would be 20-30% of the energy mixed could still be coal and we could still cut a lot for emissions, but until the two of the rules are decided the big utilities are not going to invest in a mine, such that you would have a new ban on coal and old coal plants running. So the whole thing is upside down and inside out.

So Mr. Trump will come in he has said he will put an end to the Clean Power Plan, which I think is a good thing. I don’t think the Clean Power Plan in its current form is going to do what you wanted it to do and it’s got a big negative consequence. The question for the Trump Administration -- I’ll be really interested to see what they develop is how do we then respond to creating a stable investment environment for new coal, more highly efficient coal that allows it to be part of the overall effort to reduce carbon and then by the way there are technologies that can capture the carbon from coal but if coal is a dying sector, I don’t know you tell me -- are you going to go into that business to come up with the technology to capture carbon from coal if coal is a dying sector? I don’t think so. If coal has a place in the energy mix and is part of an overall effort of carbon abatement, I will take that bet -- now that’s a good and fun one to invest in because to mine coal and put it into power plants is pretty cheap.

So we’ve just got all of the incentives are all backwards and it’s unfortunate and I hold both sides of the political conversation accountable for the mess we are in because we don’t have the accommodation we need because you won’t get everyone to agree. It’s just good old fashion, what is a reasonable goal and a reasonable time frame at a reasonable cost is a really good benchmark by which to do regulation.

Chris Mooney: You have gotten into one of my favorite subjects which is carbon capture, but I think that as much as I would love to dive in, I think we should take some questions from students at this point. So let’s go ahead and do that. If you wouldn’t mind raising a hand and asking your question. Make sure your question is phrased in the form of a question so that we can then get a response going right away and I will probably have to restate the question just for the benefit of the recording that is going on. So is anybody interested?

Question: We had a question on this topic previously in the discussion, during president-elect Trump’s victory on November 8th the
Marrakesh Climate Conference was taking place at the same time where they discussed some of the implications of the Paris Agreement. There was a lot of worry about President-elect Trump’s victory about the future of the Paris Agreements. My question is: what do you see as the future of the Paris Agreement with President-elect Trump? Do you see America backing out and then China meeting that call to withdrawal or do you see maybe China taking the lead in Asia and resuming a regional hegemon role?

Chris Mooney: So let me just restate that well stated question.

Jim Connaughton: Good question!

Chris Mooney: What happens to the Paris Agreement under Trump essentially, and what does that then lead other countries like as China to do?

Jim Connaughton: Well so the Paris situation is very similar to the domestic one I described, there’s just a lot of activity already baked in, and a lot of it is quite good, quite constructive and I don’t see, I mean I would be surprised if Mr. Trump and his administration was to affect any of that. We are still a member of the UN Framework Convention on Climate Change. Read it and then read the Paris agreement and see how different those two are. By the way they are not very different. There’s only one binding piece to the Paris Agreement and that is an agreement to have a shared system of transparently measuring and reporting on emissions, something that the major emerging countries have resisted for decades and that we still don’t have, and Paris still… They are talking about finalizing on an agreement and agree on that in 2018. I mean this is nuts. We know how to measure and verify emissions, this is just posturing.

Whether it was a Trump Administration or a Hillary Clinton Administration they were going to have to deal with this piece which is still remains unresolved, and it is going to be very hard. Now when you get to actions, Paris doesn’t have binding requirements. It is based on what the nationally declared contributions (NDC as they’re called). Each country submitted their plans of NDCs which has all the things I told you about in it. Most of it is locked into law and Mr. Trump in the campaign did not say he was going to abandon any of that. Now maybe he will change his mind or he will have something more to say on it, but it did not come up in the campaign. The campaign was really about carbon and coal country, the limited amount he talked about this. I don’t see a lot change there because there is a lot of political acceptance with that.

Now, the China piece of the question is very important. You say China is leading, I have been to China at least twice a year for the last fifteen years. How many of you have been to China? Okay. In that period, air pollution has gotten worse, not better and every five years the Chinese government puts out a five year plan going back twenty five years about all the wonderful things they are going to do to cut their harmful air pollution. That’s the stuff that actually sickens, hospitalizes and kills people. Okay, let’s be blunt. It’s gotten worse. So when you ask about China being a hegemon and a global leader on carbon abatement, how can I even respond positively to that statement when they will not take the autocratic action to stop sickening, hospitalizing, and killing their people with their uncontrolled air pollution? So, I think this is way over hyped against the reality of what’s occurring. Now China knows they have an air pollution problem. See the China Olympics -- when they managed to shut down everything and clear the air for a little bit, and nothing of consequence has happened since. So there’s a huge…this is still U.S. and China. And under Trump, it’s going to be U.S. and China, and I say give the guy a chance with lots of different levers to see if he can extract a little more balance in not just the economic equation but the environmental equation. Because it’s been hard, and we made limited progress when I was in the White House, very limited progress. We thought we were making more because the rhetoric got better, but it didn’t happen. And again I don’t criticize President Obama because he tried really hard too, and made a little bit of progress.

This is the political and geopolitical debate in front of us but it is not limited to environment. It is environment relates to jobs relates to poverty eradication, I don’t like all that coal getting burned the way it’s getting burned but it is lifting a lot of people out of poverty. That’s something China is telling you about. Now is it a bad thing to have a few hundred million people come out of abject poverty? I don’t think so, but it is coming at a cost as well. This is what these debates are about, you never see a reporter reporting on it, there’s not academic studies on it -- I found that fascinating. You should be writing on this, it’s great area to write about. So carbon leakage, poverty eradication, the balance of the poor and access to energy these are the issues for the next twenty years.

Chris Mooney: And India is the next one.

Jim Connaughton: India is hiding behind China.
Chris Mooney: India is expected to be the next China in terms of how much energy it needs in order to lift people out of poverty.

Jim Connaughton: Okay. So let’s talk about that. Energy access for the poor is a critical issue. Now what really kills me about the climate change issue is that we actually know how to abate carbon in the power sector by 80% because we’ve done it. See France: 70-75% nuclear, 15% renewable, supplemented by gas and coal and purchases from other countries, existing technology. It is safe. France has been running nuclear power for fifty years. The United States of America has been running nuclear power for 50 years. So we have an available technology for power that gets us to 80% and the major developing countries of the world won’t do it. Germany is pulling out. Japan can’t get restarted. Sweden is pulling out. The U.S. has stopped. Huge failure by the Obama Administration by the way, there was a huge nuclear renaissance coming and they killed it. Not intentionally, by mismanagement. Here is a great example, if you want to drive electric vehicles I have an electric vehicle. It’s carbon profile is only as good as the carbon profile of the power plant that is giving it electricity. But if I have nuclear, with renewable, I want them both. I am feeling really good about that electric car. Now I have solved the three corners of that equation. But, this is what I am saying, China is building nuclear power plants at a breakneck pace. They are trying to build 50. When they build 50 do you know how much power that will represent in China? 4% of their power. These are enormous scale challenges and there has to be, just as we’ve seen, 90% of our conversation about wind and solar as it rushes headlong to be 4% of the global power mix. We have this huge resource of nuclear available to us that requires just as much effort and is lying dormant. Okay now there’s a good example of some real failures of the last decade.

Chris Mooney: There’s a lot to unpack there.

Jim Connaughton: You got me going.

Chris Mooney: Nuclear is another great topic, but let’s see if we have any more questions.

Question: There is a frequently political pressure to win favor of agriculture, especially ethanol. What do you think about ethanol’s role in emission reduction, energy independence, and is it a viable energy source in the future or has it become so politicized that we have to win that Iowa caucus?

Chris Mooney: The question is about the future of ethanol in the energy mix.

Jim Connaughton: Yeah so, let me start with, I am a competition guy. I am a free market guy. Government must set environmental standards. The private sector will not do that. Government’s essential job is to say what is my clean air level? What is my carbon level? What is my water pollution level? The government has got to do that because of the commons problem -- you are all studying public policy. I hope you have read the tragedy of commons. Even libertarians will agree that the role of the government is to set the standard, but once you set the standard the best role of the government is get the hell out of the way. I give you that as the prelude to ethanol, I am neither for ethanol nor against it. It is one fuel that could be a really good part of the mix and I would love to see the oil companies face a little competition for fuel. So, and I would like to see natural gas in the mix as a competing fuel and I would like to see electricity in the mix as a competing fuel. You should all want that. It’s called consumer choice. But there is huge barriers for entry, there are huge issues of incumbency, that has prevented that. So I’m all for when I started my job back in 2001, people were fighting over whether we could support a billion gallons of ethanol a year, and then the fight was oh maybe we can get to 3 and then we passed this bill in 2007, 35 billion gallons of renewable fuel. That’s consequential. That is market shaping and market shaking. Now, does ethanol have its downsides? Sure. Does petroleum have its downsides? Does natural gas have its downsides? Does electricity have its downsides? They all do.

What I would like to see is more full, free and fair competition for fuel alternatives in our mix and there has got to be some policy to create the market environment for that, but it needs to be a well-regulated market not a well-regulated fuel source. You don’t favor the farmers for corn. You don’t favor the agricultural interest for cellulosic ethanol, which has a much higher CO2 footprint by the way. You don’t favor the natural gas guys. You just try to create a policy and infrastructure framework that lets these guys compete because maybe for 10 years petroleum is better and in another ten years some big breakthrough happens and we are all doing biofuels -- that is what happened with power. One decade was gas, one decade was nuclear, the 1990s was coal, this decade has been about renewables, and what’s the next decade? I can’t predict that. The government likes to try to but can’t. And so ethanol is important.

One more point about ethanol -- because we put in place a market based mandate however clunkily it was designed, we crushed the price of producing ethanol so it is largely blended into the mix at no net cost to the consumer. Ethanol used to be 25% net energy inefficient i.e. you put 25% more energy into making the ethanol than you got out of it. But in the period there was a market based mandate because it
was getting crushed in competition for price, ethanol is now 25% more energy positive. That is a huge swing in productivity and not directed by the government because these ethanol guys are just beating each other up to blend their fuel into the market and get it sold. These are powerful forces if you just set the policy design and then back up, if you put on the umpire jersey and then just make sure people do not commit fraud, the market is really going to tackle these compliance requirements with much more zeal and creativity that the government directed version ever could. And that is a clash of our time. In the Obama Administration we have fallen back into more of a permission based, I am going to tell you if you can do something good, you have got to get a permit from me, you have got to get a grant from me, and that’s why things have been much slower than they could have been, and interestingly the objective is much largely shared. You know with some outliers on each side, these methodologies can make a big difference. So I say give the Republicans a chance, see if they can step up to the plate and if not hold them accountable for it.

Chris Mooney: Let’s get another question. We have one. We’ll go over here next, yeah right here.

Question: Thank you for coming here to speak with us today. Much of your presentation focused on what can be done on the federal level, but I was wondering what can be done on the state level, and secondly what states do you think have been most effective in creating sort of energy and environmental policy that embraces clean energy and also strong economic growth as well?

Chris Mooney: So let’s shift to talking, the question is about state policy and what states have best promoted clean energy.

Jim Connaughton: What is great about the states is they are all engaged. Every state is pushing forward on energy efficiency standards, on improvements to their building codes. 37 states have renewable portfolio standards. Almost all of them are badly designed, but you know, good start. My boss George W. Bush was one of the first two governors to put in place a renewable power standard in Texas. Now if you ask me to point at two states, look at what California is doing well and what they are doing disastrously. Well intentioned just bad policy design, look at what Texas is doing really well. I mean I think the big two powerhouse states in all of this is Texas and California curiously enough and what they are doing not so well. Why is Texas doing great? Texas has renewable power standard they have gotten a big push on efficiency, but they also have a restructured electricity market so their utility is incentivized to innovate. Their utility is incentivized to partner with transportation sector with the building sector and other things because they have to compete. Whereas we still have 34 states that are regulated monopoly states and there is limited incentive or political permission, and that is probably the better point -- political permission to innovate. I could go through a canvas of all the states now you don’t want that. It is important that there is a layer of state activity and here is the key politically to it: California wants to do 50% renewables, Maryland wants to do whatever their current number is 20%. Those are pretty good choices to be made by the local state people as to what balance, if they are going to direct the balance, what they think that balance should be and the cost they are willing to absorb over a certain period of time by their rate payers to achieve that policy goal. That is better done at the state level. Okay, and states are different, California looks very different than Maine than Minnesota than Iowa, when it comes to some of these geographically relevant decisions about mixes of fuel and mixes of power and then the use of agriculture. So that’s a very important question. So, that’s another thing. When I was in my job people wanted a federal renewable power standard and we resisted it and George Bush was decried as an anti-environmentalist. We resisted it because we wanted states to develop their own standards that are relevant to their own conditions, and what happened in the 8 years of the Bush Administration? You went from 3 renewable portfolio standards to 37. You got a national outcome but tailored to each state with political buy in from each state. So that’s a good thing too, don’t overlook the states. I really appreciate that question.

Chris Mooney: We have time for one more question, sir.

Question: Thank you. Very nice to hear your thoughts. Full disclosure for my colleagues audience here, I am one of those government regulator types, I am a career civil servant and I work on many of these issues. One in particular happens to be the maritime sector, a big sector but as I think you pointed out very nicely, the energy sector is just about the biggest thing going economically, politically both domestically and worldwide so it is very important sector. So my question involves maybe one thing we heard an awful lot about is the president administration both from the agency side and the executive side from the President Donald’s cabinet and that is the project the keystone, the pipeline project that had great promise, the agency is responsible for regulating that, took a good look at it…

Chris Mooney: So I’m going to have to ask you, the question is about keystone?

Question: The question is about keystone, I would like to know your thoughts and it seemed like everybody was on board with it and for reasons mostly political I would think, is that something that might go forward perhaps in the next administration is that a dead issue and where do we stand?
Chris Mooney: So the question is what happens with the Keystone XL Pipeline, and you might enlarge that to talk about [inaudible].

Jim Connaughton: First of all I guess I won’t ask a poll. Some of you quote “oppose” the Keystone Pipeline and some of you did not and some of you don’t really understand what the issue is. But the Keystone Pipeline is a surrogate for big oil development you know coming in pipelines in America to feed our habit of driving around vehicles. So if you don’t do the Keystone Pipeline, we are still getting oil from somewhere provided by someone as long as we are allowed to drive our vehicles and use the amount of fuel we are “allowed to use.” So as a climate policy, the Keystone Pipeline was very valuable in fundraising and getting people excited about the environment, oil and gas development and everything, but zero effect on controlling for greenhouse gas emissions, zero. And if you block ten more Keystone Pipelines, zero. Because we are allowed to drive our cars and fill them up at the pump and as the prices rise, we are allowed to pay more for that privilege and by the way we do because the value of that vehicle for personal pleasure for getting kids to school, for going to work, for taking an ambulance to the hospital is worth more to us as a society than the environmental footprint of that.

So, my view is the Keystone Pipeline did go through all the processes, did go through all the environmental reviews, and was approved. And if the government is going to assert itself and again this is permission based government piece, give me a standard. If I know that the national emissions profile for SO2 needs to be ‘X’, then let me organize around how to make sure I stay below ‘X’, and then punish me if I don’t as a sector. I say I do the same thing with oil, let’s decide on the emissions profile for oil which we have done through CAFE, for the fuel economy rule, which we have done through the renewable fuel standard, in Congress 87 senators Republicans and Democrats said here is how much we want to achieve when it comes to carbon abatement from fuels, that’s what those laws were about. And once we have decided that, then we should let the oil companies go about their businesses of delivering that to us most efficiently, so the role for the government should be at the other end of this—is to be clear what the environmental standards are and to clear the ratchet as they go down and down and down and don’t use permissive based, extortive government processes to drive up costs for consumers, for mothers, for firemen, for the fleets of our cities. It’s really, really madness. And to add to that the safety, a pipeline is so much more safe than all the train cars and trucks that are bring the stuff in still because it’s still coming in and it’s a lot more expensive too -- that’s madness. I feel very strongly about this, where you are trying to regulate the tail instead of having the collar on the neck of the dog. Just decide the bulk of what we want to do and let the marketplace deliver it efficiently, effectively, and safely because the market is pretty good at that.

Chris Mooney: Okay well there’s much that we didn’t get to explore here.

Jim Connaughton: Oh I want to make one comment we didn’t explore: the carbon tax. Last piece, bipartisan opposition to the carbon tax. George Bush never proposed one. Barack Obama never proposed one. Donald Trump didn’t propose one. Hillary Clinton didn’t propose one -- if you have read the emails, her advisor they debated it and said there is no way we are going to propose one. So again things may seem black and white but universal, political opposition to carbon tax. I just want to end with that because you are the students you are studying these cross currents especially in climate change policy run much more along economic, regional, industrial lines than they do along partisan lines. Just the noise levels are sometimes different, and that is what you want to get good at if you want to make progress and I want to keep making progress but you have to understand those crosscurrents in order to make progress and do it effectively. So, I wish you all great success in your careers.

[Applause]

Chris Mooney: Thanks to everybody for coming. And we do need to wrap there but we have covered a lot of ground so thank you so much for doing this.

Jim Connaughton: Thank you. Great.