Greg Dalton: I'm Greg Dalton. And today on Climate One our topic is the international politics of carbon pollution. Our guest is Todd Stern, America’s top climate diplomat. Five years ago, efforts to cut a global deal on climate protection crumbled at the United Nations Summit in Copenhagen. Next year, the heads of nearly 200 countries will try again in Paris. Cheerleaders say an international agreement is necessary to get countries moving on stabilizing the climate that supports our economy and our quality of life. Skeptics say 200 countries will never reach a deal with teeth.

Over the next hour, we will talk about the technologies, policies and cultural deviances and others of trying to negotiate a cleaner brand of capitalism. We’ll also touch on what China and India and other countries are doing to clean up their economies.

Joining our live audience at the Commonwealth Club in San Francisco, we’re pleased to have with us Todd Stern, United States Special Envoy for Climate Change. He served in the White House under President Clinton for six years and was a senior negotiator on the Kyoto Protocol. Please welcome him to Climate One.

[Applause]

Todd Stern, welcome.

Todd Stern: Thank you. Thanks, Greg.

Greg Dalton: So we’re seeing lots of severe weather increasing around the world. 2014 is an election year in a lot of countries, an important year for climate negotiations. Tell us where we are in this moment in time on climate negotiations with all these wild weather going on and people realizing that climate might be something that’s real?

Todd Stern: Yes. Thanks very much. I’m very happy to be here.

We are right in the middle of a four-year process in the negotiations that was started at the Durban climate meeting at the end of 2011. And at that time, among other things, these big meetings are called COPs, Conference of the Parties, so that was the COP in South Africa. And there was a decision to start a new negotiation that would cover the period of the 2020s, that would be a post 2020 focus, in which the parties would negotiate an agreement, legal in some way.

I’m not clear what the exact legal form would be but it was supposed to be a legal agreement of some fashion and applicable to all parties which is very important. Kyoto was effectively applicable just to the developed countries. This was going to be an agreement that was going to be applicable to all countries, and that’s quite a central part of it. So that was 2011. The agreement was supposed to be finished in 2015. As it turns out, the big climate meeting at the end of 2015 is going to be in Paris. So we sit right in the middle of that process, about halfway through. I think that there has been some good progress made and these negotiations are always difficult.

Greg Dalton: And I believe the state department recently put forward some suggestions for a durable and ambitious deal. So explain what that means, durable and ambitious.
Todd Stern: Yes. Well, ambition is the buzz word in climate negotiations. That just means that countries are promising to do a lot with respect to reducing their emissions. The ambition is absolute critical part of any climate agreement. So yes, we wanted to be ambitious. It starts with everybody but it most certainly includes the United States. And durable means – actually, there’s another word I would add. I would say ambitious, inclusive and durable. Inclusive gets back to that idea of applicable to all that I was talking about. We have to get all of the players, all of the main players, and even players who are less than main to be part of the agreement to agree to take action and so forth.

And durable, we’re looking to have an agreement where we don’t go through this whole process every five years or really even every ten years if we can. We would like to see an agreement that sets out a framework that all countries are part of that sets up processes to every X number of years, let's says every five years, need to put in new commitments to say - if we say, just for the sake of argument because we don’t actually know what the end point is going to be for this one, but let’s say that we’re making commitments to 2030. Now, you’d have an agreement that would say each five years or conceivably each ten years but probably more like each five countries are putting new commitments. And that you would have provisions in there about transparency, about reporting on what countries do, and about review, about accounting for emissions and so forth that you wouldn't keep renegotiating. You would have an agreement that sets that out and that lasts for a long time. Whether we get that or not, I don’t know, but if you ask what the United States is interested in, that’s what we want, ambitious, inclusive and durable.

Greg Dalton: And inclusive, I think you're really talking about China, India, the big emerging economies which were in a separate class at the end of the Cold War when this construct was first conceived. Now they are the biggest – China is the largest current emitter. So is China on board to be part of a legally binding treaty?

Todd Stern: Well, I was about to say yes until you said legally binding treaty. So China is [laughter] - China, I think China and other countries are onboard to be part of this new agreement. So let me just stop you for a second on the legally binding. What was agreed to in Durban - with respect to the legal nature of it is – I’m going to tell you what the exact words are because it's fairly convoluted but you’ll see that it's not exactly clear how this is going to work. The agreement was to negotiate a protocol, another legal instrument or an agreed outcome with legal force. Okay. As you can imagine, those were closely and carefully negotiated words, particularly that last little clause which was done in a huge and growing - sort of started small but could have mushroomed out, huddle on the floor of the plenary in the middle of the night at the last day because basically all countries were ready to accept just the first two pieces except India. And so language had to be found, and we were right in the middle of that, actually helped to find the language that got the deal done.

It is an agreement that's going to have legal force, that's going to be legal in some fashion but it might be legally binding in every respect or it might be something or somewhat different from that. And countries have put forth different ideas on that, actually. To get back to your basic question, I think China and other countries are conceptually on board with doing an agreement but there are a lot of devils and a lot of details.

Greg Dalton: It sounds like – yes, some lawyers are going to be kept busy by all of that. One other question is whether this needs to go through Congress or can this be done in a way that doesn’t have to be ratified by Congress?

Todd Stern: So the answer I always give to that question is that any agreement that we do that
requires Senate ratification will be taken to the Senate for ratification but it all depends on what the nature of the agreement is. So the agreement that we did with the Copenhagen Accord in Copenhagen, and then the essentially expanded version of that that was done in Cancun, by their nature they were not the sort things that needed to be taken to Congress. So it all depends on the nature of it and on what elements of the agreement are legally binding and what aren't. So yes, we will if that’s the nature of the agreement, and if it's not, then, of course, we won't.

Greg Dalton: But is it your intention to design something that doesn’t need to get through Congress because right now the time of day couldn't get through Congress.

Todd Stern: No. It's our intention to negotiate an effective and good agreement that certainly from the point of view of the United States with respect to our interest, but also with respect to the whole world and with respect to, again, to get an agreement that can draw in the participation of all of the major players. So no, I really don’t have any specific intention in that regard but we just want an agreement that can work and that's strong and good and that people can be part of.

Greg Dalton: As President Obama recently said he's basically going to go around Congress to use executive action but this is not part of that sort of going around Congress executive action, do whatever he can with his own power.

Todd Stern: Well, I wouldn't exactly characterize what the President said that way. I think what the President said is he was looking for Congress to act if Congress wasn’t going to act. It’s not so much that he was going to go around Congress; he was going to use authorities that he had. And don’t forget, with respect to the most important of those authorities - look, the biggest single thing in the President’s very strong climate action plan are probably the new regulations that EPA is working on with respect to power plants. It's not that – we’re not going around Congress on that and the President is not just using his pure executive authority of the kind that you would use if you were doing an executive order, for example, if the President was doing executive order.

He's relying on congressional previously passed law, the Clean Air Act which the Congress passed, and relying on the interpretation of the Clean Air Act by the Supreme Court. That is sort of what the President is doing with respect to domestic action, but we're not in the going-around Congress mode.

Greg Dalton: And on domestic action, when you're talking to negotiators from other countries, often – of course, the U.S. is the largest historic emitter, there were some press reports in the last couple of months about the 20 largest emitters. There’s like a lot of the emissions have come from a handful, a dozen or so entities. What do countries say about is the U.S. doing enough? Has the U.S. established climate leadership, climate credibility on this issue when we have been the biggest creators of this problem?

Todd Stern: Right. The reception that I have seen and the discussions that I've had since the President's speech and announcement of his climate action plan in I think it was June, June or July, has been very, very good. I think, actually, the standing of the U.S. internationally with respect to what we’re doing is quite good right now. And I’ve heard that from, really, from any number of countries including some countries who have not been hesitant to be critical in the past. Look, everybody’s got to do more. There is a lot to do and this is a huge challenge. So everybody’s got to do more. But yes, I think the short answer is that we are in – I think we’re in the best standing we've been in in awhile.

Greg Dalton: And what exactly – so you're saying U.S. has become more of a climate leader, it's
earned some of that. And aside from the coal regulations –

**Todd Stern:** We've been a climate leader internationally. I was just talking domestically.

**Greg Dalton:** Okay. So what particularly has U.S. done because some climate advocates would say the U.S. is not a leader?

**Todd Stern:** Well, I think that the President – it's a broad based plan and, as I said, I think the sort of single most important element of it are the power plant regulations, but it also has to do with, I think – The standards that the President already put in place back in I think announced in 2009, I think, for the broad vehicle fleet are hugely ambitious. I mean, basically took our - is in the process of taking our vehicle fleet from 27 miles per gallon, a number which it had basically been stalled out for about 20 years, and is going to 54. I mean, that's a huge move for the transportation sector which is about a third of our emissions. Moving into the power sector, we've done a whole lot and there's more in the President’s plan about applying standards in - just like the buildings. Basically everything that makes buildings work, heating and cooling and all the appliances within buildings have all been subject to significant new standards.

And there are provisions in there about producing renewable energy on federal lands. There's really dozens of elements in this plan. I think in terms of what a president can do when you have a congress that is not prepared to act very strong.

**Greg Dalton:** A few hours ago, California Senator, Barbara Boxer, was sitting in this chair and she talked about Keystone Pipeline as a health issue. Right now up the street Billionaire Tom Steyer has Harry Reid and other senators at his house talking about Keystone. How do you think Keystone will affect U.S. credibility abroad if it goes ahead with Keystone as it looks likely? Will that affect U.S. stature on the kind of climate leadership you're talking about?

**Todd Stern:** I don't know where Keystone is going to come out. I can tell you where Keystone is in the process. There was a long period of time which just ended very recently where an environmental impact statement was done and then a supplemental environmental impact statement was done. All of that runs through one kind of particular part of the state department. That's done now so it goes to the next stage which is where national interest determination needs to get made. That's delegated by the President to the Secretary of State. And that process will get going but I'm not going to speculate on which way it's going to go because I honestly don't know.

**Greg Dalton:** If it's approved, will your job be harder?

**Todd Stern:** I'm not going to engage in hypotheticals.

[Laughter]

**Greg Dalton:** They're so much fun. Keystone Pipeline is linked to a change, a sea Change, in which the U.S. – partly linked to a sea change in which the U.S. is becoming a large energy producer. The International Energy Agency says the U.S. will be perhaps the largest oil producer surpassing Russia before too long. How is that going to affect the international politics of this where the U.S. has traditionally been the largest consumer? I don't know many people who would have predicted that we'd be the largest - few years ago, U.S. would be such a large supplier. How does that change the oil equation internationally with climate?

**Todd Stern:** I think if you step back and think about what needs to be done with respect to climate
change over time and where we need to be trying to push things now, fundamentally there needs to be a transformation of the energy base of our economy to much less reliance on coal and oil in particular. And that’s - I mean, this isn’t going to happen tomorrow but over a period of time, that’s where things need to go and so that’s why renewable energy and energy efficiency alternatives, that’s why natural gas, at least, as a transitional fuel is important as well. So clearly that’s what needs to happen.

Now, oil is still going to be around for quite some time. While oil is around, is it a useful thing to be able to produce the oil here rather than just import it for national security and other reasons? Probably yes. So I don’t think the fact that we can produce a bigger chunk of the oil that we use is, in any sense, a negative with regard to climate change. The use of oil in general, we’ve got to reduce significantly over time.

**Greg Dalton:** Climate doesn’t care where it comes from or where it’s burned.

**Todd Stern:** Not fundamentally. Would I rather have oil that we produce here rather than to have to buy it in some of the places that we have to buy it? Sure.

**Greg Dalton:** And moving away from oil, the G-20 a few years ago pledged to reduce subsidies for fossil fuels. Is that happening, by some estimates, half a trillion dollars? Nicholas Stern was here recently to talk about direct and indirect subsidies. That’s a lot of money. Are those going down? Is that in your purview to –

**Todd Stern:** It’s a huge amount of money. And I’ve heard numbers that higher or even higher in terms of how much money is devoted to fossil fuel subsidies around the world. And it’s important to note that a pretty small percentage of that is really directed to poor people. So you think, well, fossil fuel subsidies but you need to subsidize poor people to be able to get kerosene or fuel or whatever. Yes but I don’t remember what the exact number is but I think it’s in the vicinity of 15 percent or so that is devoted, really, to taking care of poor people who could be taken care of in a different way, right? You could have income transfers that – you don’t need the fossil fuel subsidies.

The fossil fuel subsidy agreement in the G-20 in, I think it was 2009, was driven by the U.S. It was really a U.S. initiative. So we are 100 percent behind it. We push it hard but it's not happening in terms of the actual results aren't really happening yet for a lot of reasons. There's a great deal of resistance from countries who agreed to it. And we have our own problems again because getting rid of a lot of these things requires Congress.

**Greg Dalton:** And the companies like it and a lot of members of the Congress like it. Exactly. Another aspect of this is money flows from developed countries to developing countries. In 2009, the United States pledged, I believe it was $10 billion a year. Now there’s a green climate fund setup in Korea. It has very little or no money. So tell us about how rich countries can flow direct funds to developing countries which developing countries say, “Hey, we need money to fix this problem.”

**Todd Stern:** Right, right. So this is the big issue in the negotiations. There were two pledges made in Copenhagen. The first was – it wasn’t just a U.S. pledge but all the developed countries agreed as something that was referred to as fast-start financing to produce a collective amount of more or less approximately $30 billion over a three-year period from all the developed countries together. And this was understood to be essentially public money from public government coffers. And we did that. I mean, the developed countries produced that funding. For the U.S. it was, I think, about $7.5 billion over that three-year period. These were not an easy – they weren’t easy budget times then and they’re not easy budget times now.
There was also an agreement by the developed countries to mobilize from all sources, public, private, carbon markets, any sources, $100 billion a year collectively by 2020. So the fast-start piece is done. We’re continuing to provide funding kind of consistent with what we did in fast-start on a year by year basis, the U.S. is.

**Greg Dalton:** How much money is that?

**Todd Stern:** So that was about $2.5 billion a year from the U.S. And that includes – there are different sorts of different flavours of money there that includes the appropriated money, that includes money that our Development Finance Corporation OPEC provides and so forth. We are also engaged and we are actually playing a quite active role with other developed countries to try to coordinate what we’re doing in the effort to mobilize large amounts of money, and in this case, to use public funds to leverage larger amounts of private funding. At the end of the day, a very significant amount of 100 will have to come from private. It’s not that it’s purely private. Think of a private investment that’s made possible by risk insurance guarantees that OPEC provides or counterpart in France or the U.K. or whatever. Anyway, it is important and we are working at it hard.

**Greg Dalton:** At the end of the day, isn’t it private markets and private capital that has to move.

**Todd Stern:** Absolutely.

**Greg Dalton:** I read something that actually the money that’s moved to protect forest in developing countries is already a lot larger from private sources and from government sources because governments don’t have enough money.

**Todd Stern:** That’s absolutely true. And the amount of capital in the capital market is absolutely vast so what you’re really trying to do is provide incentives to get essentially a risk and return ratio that is attractive enough to private investors to move a little bit of that vast pool into these purposes.

**Greg Dalton:** I recently interviewed someone from Microsoft. They have internal price on carbon. They’re doing offsets in the forest. Other companies are doing that but not enough. I want to know what technologies do you see that are promising, that are exciting? I know you’re not a technology specialist. You’re a negotiator. But what technology area do you see as being, you’re here in Silicon Valley, key to really moving this forward and bending the carbon curve?

**Todd Stern:** Well, I think there are a number and there’s probably a number that we don’t know about yet that somebody is dreaming up. If you think about these in terms of the big sectors, transportation, you have a very important technological thing going on right now in not too far from here with electric cars, right? I mean, the –

**Greg Dalton:** Some people probably came here today - anyone came here today in your Tesla? One. Okay.

**Todd Stern:** The electrification of a fleet, the auto fleet, if that can happen, would be a big, big deal particularly if it can then be combined with the reduction in the CO₂ intensity of the power supply. So less use of coal, more use of, in some cases, natural gas but even better if you can get more and more renewables into the mix.

And that’s happening. So solar, obviously, the cost differential between conventional fuel and solar
has dropped just dramatically over the recent years. There are innovative companies who are getting solar panels on people’s roofs without any upfront cost, for example, so greatly expanding the reach of that kind of thing. Wind is actually pretty developed. There are all sorts of further work being done on things like battery storage. When you have solar and wind, they're good when the sun shines and the wind blows but you also want to be able to store power so that you can get energy even when that's not happening. So there’s a tremendous amount of interesting stuff going on.

Greg Dalton: More electric cars. Winners and losers, there will be some winners in a warmer world, the disrupted world. Canada often comes to mind. Resources will be accessible. They can soon be growing corn in Canada which is a little strange. Certainly some losers in the Pacific Island states. So when you travel and negotiate with all these countries, how do you see the winners and losers shaping up?

Todd Stern: I don't think about it too much in terms of winners. I mean, you're right that there will be some benefits in a few places. But I think that you're talking about - if we don’t take the kind of action that we need to take, you’re talking about a fundamentally - the risk of a fundamentally disrupted world, certainly not all - if you're a low-lying island, you've got a huge more existential problem. But the sorts of extreme weather that we’re seeing all over the world, that we’ve been seeing now for any number of years, the risk to the food supply, the risk of extreme events or the draught, the floods or storms is serious enough that I think there are not going to be that many countries who you would actually look at and say, “Well, they made out like bandits.” I mean, it's not going to be good.

Greg Dalton: Some people would be less worse off or less -

Todd Stern: Yes. I really don’t think people look at it very much, certainly not in the world that I inhabit as there's kind of clear winners and clear losers.

Greg Dalton: One striking example that some people know about from the film ‘Island President’ is President Nasheed from the Maldives. He was in New York on the David Letterman Show in, I believe, 2012 and said, “Look, what happens in Maldives could happen here in Manhattan.” Then came Hurricane or Super Storm Sandy, very prescient, so I'd like to - is there a moral dimension to this in terms of some countries are just going to go away pretty soon.

Todd Stern: Well, I think, sure, there is. And I mean, I don’t know how soon soon is but there certainly are countries, islands are the ones that people focus on the most readily. And there aren’t large numbers of islands in this position but there are a number of them that are so low-lying that over time, and not a huge amount of time, they're going to be threatened. So sure, I think that there's a moral dimension to it but it's not confined to the islands. I mean, if you’re Bangladesh and you have like large numbers of people living within a short distance from a low-lying coast, you've got a huge problem too. And there are many countries that are going to have problems like that.

Greg Dalton: You mentioned the talks in South Africa. We interviewed a college student who went there and actually spoke up during one of your talks. Abigail Borah, a student from Middlebury College. And I want to share this clip of that. Let's if we can share that clip and then I’m going to ask you two questions about it.

[Recording]

Abigail Borah: 2020 is too late to wait. We need an urgent path to a fair, ambitious, and legally binding treaty. You must take responsibility to act now, or you will threaten the lives of the youth
and the world's most vulnerable. You must set aside partisan politics and let science dictate decisions. You must pledge ambitious targets to lower emissions not expectations. 2020 is too late to wait.

[Applause]

Female Speaker: What is your name?

Abigail Borah: Abigail Borah.

Female Speaker: From which group? From which group?

Abigail Borah: The United States Youth.

Female Speaker: Why did you just interrupt this forum?

Abigail Borah: The United States government does not speak on my behalf.

Male Speaker: Excuse me. Excuse me.

Greg Dalton: So that's Middlebury College student Abigail Borah at the United Nations climate talks in South Africa a couple of years ago. Not to make you uncomfortable. I just want to ask the question. Number one, a lot of people in that room clapped when she spoke up, and those were diplomats in that room. What do you make of that reaction to her saying, “It's not happening fast enough”?

Todd Stern: Well, I think a lot of people feel it's not happening fast enough. I sympathize with that. I mean, it's the – no. I mean, I –

Greg Dalton: We have some young people here.

Todd Stern: No, no. Look, I mean, I think that that's – I think it's true. I think it's true that it's not happening fast enough. I think that it's not easy to move the system, right? It's not easy to move the system domestically. And let me say just as a kind of observation.

The most important thing that can be done with respect to taking action on climate change needs to happen at the national level. The international agreement is important. I mean, that's what I spend my time doing. I know I wouldn't do it if I didn't think it was important. But action, real action gets driven at the national level. The international agreement stitches countries together and gives countries confidence that others are also acting and so forth. So it's got a real role. So it's difficult at the national level as we've seen and as we've already talked about with respect to challenges with Congress, and it's very difficult at the international level for a whole host of reasons. So yes, I think progress is being made. And I don't think progress – I agree, progress is not being made quickly enough.

Greg Dalton: If you're just joining us on the radio, our guest today at Climate One is Todd Stern, United States Special Envoy for Climate Change. I'm Greg Dalton. You talked about action at the national level is what matters. What about the sub-national level?

Todd Stern: Oh, yes. Certainly.
**Greg Dalton:** Governor Brown and Governor Schwarzenegger have done a lot with China regions trying to make things happen at that level, states and regional.

**Todd Stern:** Absolutely. I actually didn’t mean national as distinguished from sub-national. I was talking about national as distinguished just from focusing on international negotiations. No. I think that – look, first of all, it is often true in areas that touch the environment that what happens in the country starts in California. So California has got a wonderful tradition in that regard. And what California is doing and what Governor Brown and the state have been doing with respect to, essentially, the cap and trade program here and a whole host of other laws and regulations respecting climate change is terrific.

And California is not alone. There are a lot of states who have portfolio standards that require certain amount of renewable energy in their power systems. You have the Northeast Governors and the Reggie Group that have a trading program of their own, and a lot of mayors who are acting. So all of that, I think, is really important. By the way, sometimes there's an international dimension too. You'll see cities, U.S. cities paired up with Chinese cities, for example. And I saw that California has just recently linked up its system with Quebec, and also has a lot of interaction with China, just as another example. So sub-national is very important.

**Greg Dalton:** And California and China are also doing some things on cap and trade, sharing technical knowledge, that sort of thing, it's not political. China’s key to all these – people certainly will have some questions about China, could the U.S. and China do a bilateral deal like in the old days when Reagan and Gorbachev got together? There are other countries with nuclear powers but two big countries coming together and do a significant deal. There's been some fair amount of movement recently on China.

**Todd Stern:** Yes. So I wouldn’t say that U.S. and China will go off and kind of do a soup to nuts climate deal. There's not going to be a G2, and I think China wouldn't want to do that, and I think other countries - we wouldn't want to do that, per se. And other countries wouldn't appreciate it, I think, if we did. On the other hand, I think other countries would quite appreciate the notion of the U.S. and China collaborating more closely together. And we’re trying to do that. I was in China with Secretary Kerry and he announced a short joint agreement that includes the notion of the U.S. and China collaborating, essentially, in the development of our post 2020 plans, obviously, relative to the 2015 agreement.

And I think that’s – we’ll have to see how that collaborative effort plays out but I’m very hopeful about that. I think that's a really good thing. I mean, something that we proposed to the Chinese and they were interested and quite open to accepting it. So I think that working together in what we’re planning to do, working with them on what they're planning to do is all to the good. And so very active collaboration, very active working together with China, I think, is a very good idea. Going off from the corner to do our own climate sort of overall climate agreement – not quite that.

**Greg Dalton:** But building trust, developing some leadership, that sort of thing.

**Todd Stern:** Totally, totally, totally.

**Greg Dalton:** How about India? India is a little more complicated in terms of its governance. It’s a messy democracy. It's an election year. Maybe not quite so much there. What about India in that regard?

**Todd Stern:** Well, India - so two things, first of all India is obviously very important but we can't –
it's important to keep track of the scale of importance of countries with respect to emissions. China at this point is something like 25 percent of global emissions. They're a lot bigger than us at this point. Together, we're probably a little over 40 percent. India, I don't know the exact numbers but they're probably in the range of three or four. So it's an order of magnitude difference between India and China.

Okay. So that said, it doesn't mean India is not important. They're quite important. They are having elections now. I think that we have very cordial relations with India. There was a period in 2009, 2010 when India was a real leader in climate negotiations, quite a progressive force. They have been not sort of pursuing quite that path in the same way in the year since but we are very, I think, positive and kind of cordial working relations with them. And I think when they come out of their election cycle, they have a new government, whichever party it is, and new people at the helm of their climate effort, we will work closely with them, I'm sure.

Greg Dalton: Our guest today at Climate One is Todd Stern, U.S. Special Envoy for Climate Change. I'm Greg Dalton. Let's go to audience questions. Welcome to Climate One.

Male Participant 1: Mr. Ambassador, thank you for your service. I would imagine that it's difficult and perhaps somewhat embarrassing for you to go into these negotiations with a congress that can't even decide that climate change is real and caused by humans. I don't envy that position. You also said that the most important thing is to get action going on in national level.

So my question to you is would you be happy with and would it make your job easier if the U.S. were to pass a carbon tax, a 100 percent revenue neutral carbon tax like the kind advocated by former treasury and Secretary of State, George Shultz, and numerous other Republican economists that's progressively rising, revenue neutral. So families are happy, they get the money back with border adjustments to induce, not force, but induce other countries for sound financial reason to pass their own tax.

Todd Stern: Thanks very much for the question. So first of all, I do want to say that I don't ever feel embarrassed about representing the United States. Certainly, I get asked questions about Congress. I don't even get embarrassed about Congress. I worked up there for several years before I went to work for President Clinton. So we have our challenges but embarrassment is not one of the things that I feel.

Look, a price on carbon is an important thing. And a price on carbon is what President Obama sought in the cap and trade legislation that the Waxman Markey Legislation that made it through one house but not the other house back in 2009 and 2010 period. So conceptually, I think that there is a lot of openness to price on carbon. You're asking the particular question about a carbon tax and revenue neutral and various elements that you included in it. And I guess I'm not going to comment on that one way or another but as a conceptual matter, a price on carbon is a good thing. And that's something that we sought at one point.

Greg Dalton: Some other countries have put prices on carbon, maybe you could talk before we go to the next question, a little bit about other countries that are putting prices on carbon. Australia had a tax for a little while and China is experimenting with cap and trade, Europe had a trading system that kind of went bust.

Todd Stern: Yes. Well, the European trading system has had problems. I hope it's not bust. It certainly has had problems and they're trying to fix it. Fundamentally, the problems with Europe is if you have a cap and trade system and you have – and you miscalculate how many allowances are out
there, then like any other supply and demand situation, you drive the price down. So that's essentially what happened in Europe.

China has, I think, seven pilot cap and trade programs at the city level that they're working on. So I think cap and trade, obviously, can work if you get it right. There are lots of arguments that economists will make back and forth about the benefit of — or policy people in general about the benefits of cap and trade versus the benefits of a tax with cap and trade. You, theoretically, know what your cap is, that's fixed. And the thing that you're not sure about is your price. And in the case of a carbon tax, you know what your price is but you're not sure what your cap is. And there are good and valid debates about the policy merits of both.

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

Male Participant 2: Recently Edward Snowden leaked that there was spying going on in Copenhagen on the delegates by the United States. How has this damaged U.S. credibility? Were you aware of this? How are we going to fix it? Thanks.

Todd Stern: I most certainly was not aware of it.

Greg Dalton: Let me clarify. This was the U.S. who's spying on climate negotiators. Is that what –

Todd Stern: The gentleman is referring to a story that was — yes, that there was that kind of thing going on that was revealed in the Snowden papers or whatever we're calling it. So no, I mean, that's not — that isn't anything that we were focused on.

Greg Dalton: Did you get grief about it?

Todd Stern: I haven't gotten any grief about it. I'm not sure — I think that came out — I feel like that came out recently enough that — it was certainly after the Warsaw, the big Warsaw meeting at the end of the year, so I haven't had grief about it. I don't actually think there's going to be a lot of focus on that but I might be wrong.

Greg Dalton: Let's have our next question at Climate One for Todd Stern, U.S. Chief Climate Negotiator.

Holly Coffman: Hi, Todd. Holly Coffman. It's great to see you. Thank you for being here. My question is how ambitious do you think the next agreement will be, specifically in terms of greenhouse gas emissions by, hopefully, a certain date or a series of dates. Historically, usually, countries are sitting around in a series of rooms trying to give away as little as possible. Will there be some kind of goal as an organizing principle for companies to figure out how they will meet that and how much they can do?

Todd Stern: So I'm glad you asked the question because it occurs to me that one really important feature of this agreement that we're negotiating hasn't come up in the discussion yet. So I should explain that. One of the elements of the agreement that where there is probably more consensus than most in this period, as I said, in having been right in the middle of this for years, is the notion that the structure of the agreement should be based on what is in, the lingo it was being called, nationally determined commitments which essentially means countries make their own determination of what they're going to do.

With various suggestions — I won't go into all the details just because of time unless somebody wants
me to – but to try to encourage and push those commitments to be as robust as possible. But it's not the case, as was the case, for example, in Kyoto where you're going to have countries sitting around the table trying to negotiate targets and timetables. And it's not because in Kyoto – and I was in Kyoto, I was part of this, that was a three-way negotiation fundamentally between the U.S., Japan and E.U. You get dozens and dozens and dozens of countries now. You couldn't possibly do that now. So the notion of nationally determined is key.

I think that what we do is going to be quite important. And I'm hopeful that what we do is going to be very strong. And what China does is going to be very important. And I hope we can all work together to try to make sure that the Chinese target is strong. And I think that the – we sort of know already, at least notionally what the E.U. is talking about because they've already said they were planning on something in the order of 40 percent reduction below 1990 by 2030. They haven't submitted that but they're talking about that internally. So I think that there's going to be - I'm hopeful that there'll be a set of targets from the main players that add up to something pretty significant but I also don’t pretend that it's going to be the last word on what we need to do.

**Greg Dalton:** So it sounds like there's going to be agreement that people need to go on a diet but how they lose that weight, diet, exercise, change their food, et cetera, it can be up to each country, but we all got to shave some – lose some weight. Let's have our next question.

**Male Participant 3:** Thank you. I was pleased to hear you reference California’s cap and trade program and the work that’s been going on here in the state for some time where the state has achieved a reduction of about 17 percent of its emissions since 1990. And last November, the first compliance-grade forest carbon offsets credits rated in California’s cap and trade program. And I wondered to what extent that transaction, the role of forest offsets in California has any impact, if any, on the role of forest and international agreement and the status of forest in that.

**Todd Stern:** And can I just ask you a question? Were those forest offsets domestic or were those purchased abroad?

**Male Participant 3:** They're only domestic. They're only allowed for a project scale activity within the United States.

**Greg Dalton:** Let's just briefly describe what a forest offset is so that – some people might be familiar with it.

**Todd Stern:** Well, it's essentially the idea – so trees are good things for many reasons but they're also good for as long as they're standing for climate change. And if you cut the tree down, then the carbon that has been stored in the tree gets released. So you want to avoid deforestation for climate reasons as well as all sorts of other reasons. And you can – I mean, the issue of developing a system where countries, whether it's Brazil or Indonesia or any other forested country, could sell credits essentially for preserving forests that might otherwise be cut down.

This is an issue that's part of the discussions. It's been part of the discussions for a long time. And it's complicated. It's not – they're not close yet to a point where actual international carbon credits from forestry are ready to be sold, but there are a lot of people who have been working on it. And I think to the extent that there is some successful kind of models there to look at. If there is some of that going on in California, people could point to it and point to the way in which it's being done and can be done with integrity and can be done in a way that make sure that after the credit comes, the trees aren't cut down five years later and things like that. I think that could potentially be useful.
Greg Dalton: We’re talking about international climate negotiations with Todd Stern. Let’s have our next question in Climate One.

Male Participant 4: Hey. So the thing I fear the most about these talks and things is it seem like, from what I hear and what I read, they’re very insulated from the systematic understanding of ecological systems. And I’m trying to understand the vision that is developing between the countries of where the world is going to go. I mean, I hear “Oh, yeah. Yehey! Trees. We get to – we can save some forests” and things like that, but there’s hardly ever anything said about the ocean which very few of us actually spend time in.

What is the developing vision between the countries?

Todd Stern: What is what?

Greg Dalton: Developing vision. I think I might partially interpret that. Some people have interpreted that biodiversity has been downgraded in some of the recent talks. You mentioned oceans as one thing that we haven’t talked about.

Todd Stern: Well, on oceans per se, I think oceans are actually a source of a great deal of concern. There were actually - one of them, actually, many years of focus in the Rio, this isn't climate now but the Rio+20 talks that happened in, I guess it was 2012. And Secretary Kerry at the state department is very focused on oceans and is going to be - state department’s actually going to be doing an oceans conference. I think in the fall. I don’t have the exact dates but it's been some – it’s one of the first things that Secretary Kerry came in. I think his very first meeting with senior staff he said he wanted to do an oceans conference. So it’s been difficult to schedule but that's going to happen.

I think there was another part of the question about negotiators not being deeply steeped in the way ecological systems work. I’m sure that that's true, actually, with respect to many negotiators, although I think it is also true that teams of - I mean, I wouldn’t describe myself as an expert in that regard. But on the teams of people from, certainly, any of the major countries, I think there are folks who are quite knowledgeable and expert in those areas. And biodiversity, again, biodiversity, per se, is not - there's a different treaty that deals with biodiversity as a negotiating matter. Certainly, climate change has an effect on that. It could have a profound effect as it could on so many other things.

Greg Dalton: Let's have our next question for Todd Stern, U.S. Climate Ambassador/Negotiator.

Nestor: Hello. My name is Nestor. I'm actually visiting from Los Angeles. And I'm here - two part question, very short. One being on technology transfers. What’s the talk right now about that? I understand some - like Germany doesn’t quite like the idea of giving solar technology to China which they can make it much cheaper and affordable. The second part is more about agriculture. I understand agriculture requires a lot of fertilizer, what have you, and a lot of developing countries use that. So how is agriculture playing in the talks or may play?

Todd Stern: Yes. Thank you for the questions. Technology transfer is an issue of a lot of interest to many developing countries. We played a big role the U.S. in developing an idea starting back in 2009 really, and it was adopted in 2010 to create a technology center and network which is meant to provide technology assistance to developing countries in ways that we'd like to – dealing with climate change. And that is going to be housed in or kind of guided by UNEP, the UN Environment Program. So I think it’s important. I think we have tried to be quite positive in working on that. On agriculture, agriculture is actually a big, big issue.
There's something like 30 percent of global emissions come from the land sector. This is a combination of forest and agriculture. Agriculture is – we have tried to make headway with some specific agriculture provisions in the negotiations over the last few years and have run into some blockages. So we’re still working on it. There are a number of – we work with a number of other countries in some agricultural efforts, agricultural climate efforts that are kind of outside the convention itself. But it’s an important issue, and I don’t have anything definitive to say about it other than we’re quite aware of it.

Greg Dalton: Let’s have our next question in Climate One. Welcome.

Male Participant 5: Thank you, Ambassador Stern. My name is Kenneth Fax. I’m aligned with a few international organizations in U.S., Brazil and China, and also with the [can’t make out] Peace Institute. It seems to me that it might be more effective to contribute on the micro level within communities when you’re working with solutions, working data innovation, collecting that data, getting the semantics and such. So what direction could you lead us in as far as identifying the KPIs or key performance indicators to having results and semantic solutions?

Greg Dalton: Key performance indicators. How are you going to measure success and measure progress?

Todd Stern: Well, I think that the main thing at the level of the broad negotiations is to have countries take on significant commitments. There’s a whole system of transparency that we proposed and negotiated in the context of agreement in 2010 that will need to be amplified and carried forward into the new agreement.

But that has to do with countries reporting on all of the things that they do, also countries reporting on the systems they give to others. So that whole system of transparency based on reporting and then a review of the reporting is quite critical part of the agreement. So I think that countries are essentially reporting against their pledges, against their commitments. I don’t know about – I don’t know the specific notions about key performance indicators behind this.

Greg Dalton: Sometimes more in companies. Let’s have our last audience question. Welcome to Climate One.

Female Participant: Hi, Ambassador Stern. I’m Priscilla [can’t make out last name] and I work as a U.S. correspondent for Swiss Public Broadcasting. I have a question about something you said in the beginning of the talk where you mentioned that it might not be a binding agreement that it has come to, but maybe another form of agreement that might not have to go through Congress. How likely do you think that will be to avoid a situation like we had in Kyoto where we have a president who signed the agreement but it was never ratified by the United States?

Todd Stern: I don’t want to be misunderstood. I think this agreement will be legally binding in some ways. I think it’s not – I’ll give you a concrete example so nobody is confused. Different countries put forward submissions proposing different ideas, New Zealand has proposed, as an example, an agreement where there would be a legally binding commitment to put forward your commitment, a legally binding agreement with respect to some other aspects like reporting that I was just talking about, and review and things like that. But the content of, they call it a schedule, so they say a legally binding commitment to put forward your schedule, but the content of the schedule in the New Zealand proposal would not be legally binding.
There's still a kind of another variation on that which would say that much of the content might be legally binding at a domestic level even – so you would put forward your laws and regulations and things like that in the – but it would not be internationally legally binding. So there are all different variations on this. On the question of Congress, it really is going to depend on precisely what the shape is because in some cases, absolutely, it would be an agreement that would need to go to Congress, and in some cases that might not be the case but we just don’t – it’s way too early to know yet.

Greg Dalton: We have to wrap it up. I’d like to end by asking you what do you do to manage your own personal carbon footprint and then what can people listening to this and the audience do on something that seems so big? How can they walk out of here after listening to this and take a meaningful action themselves?

Todd Stern: Well, I drive a hybrid car and I try to drive it to get the maximum amount of miles possible. And we have good insulation and light bulbs and all of that sort of thing in our house. And I try to get my three boys to turn the lights off as much as possible.

Greg Dalton: You fly a lot which is tough too but, yes.

Todd Stern: You can't avoid it. Yes, I do fly a lot. Actually I would like to fly less. If anybody’s got a good idea for how I can fly less, just send me a note.

Greg Dalton: What can an average person do – they've done those things. What could you do next? What could people in this room do?

Todd Stern: Look, I think that there's - just conceptually, I would make one point on this. The first is that certainly these things it's great to do in your own lives. I would encourage people to buy highly fuel efficient car and to get - the light bulbs are completely - they give you good light now and they're very cost effective, cost efficient because you spend a little bit more upfront but they never burn out. They go on and on and on.

So there are all sorts of things like that that you can do. But the big ticket is that we've got to have a political system where our representatives recognize that this is something that needs to be acted on. And so our legislatures, members of Congress, hearing the message that voters care about this is - at some level, the biggest thing. So I think it’s a combination of that, and obviously some things that you can do in your personal lives.

Greg Dalton: We have to end it there. Change your light bulbs and then go run for Congress. I think that’s what you just heard. So our thanks to Todd Stern, United States Special Envoy for Climate Change. I'm Greg Dalton. I’d like to thank our audience here in the room at the Commonwealth Club and online and on air. Thanks for coming today at Climate One.

Todd Stern: Thanks, Greg.

[Applause]

[END]