BROOKINGS

The Scouting Report: Climate Change

Earth Day is an opportunity to discuss global environmental issues including climate change, conservation and sustainable development.

Brookings expert Bryan Mignone and Fred Barbash, senior editor of *Politico*, took questions in this week's live web chat on Wednesday, April 22 at 12:30 p.m. (EDT).

Transcript of the live chat follows.

11:56 Brookings.edu:

We are getting ready to start today's edition of The Scouting Report. Please check back at 12:30 to participate.

12:29 Fred Barbash-Moderator:

Welcome all.

Bryan K. Mignone is Director of Research, Energy Security Initiative Fellow, Foreign Policy at Brookings.

Working at the intersection of climate, energy and technology policy, he uses quantitative, process-based models to evaluate climate change and energy security policies. A former staff member on the U.S. Senate Committee on Energy and Natural Resources, he is also interested in the politics of energy and the environment.

Bryan is here today—Earth Day I believe, to take your questions. He'll answer as many as he can until 1.30.

Welcome Bryan.

12:30 [Comment From Carlos]

In all my reading on climate change, I haven't seen a discussion of this ultimate question: could an increase in greenhouse gas ultimately make our planet unlivable, perhaps because earth's atmosphere changes to an extent that it no longer supports life?

12:32 Bryan Mignone

I think that there are plenty of impacts of climate change that could be rather extreme, although they are unlikely to make our planet unlivable. For example, there are a lot of

questions about the stability of ice sheets as the planet warms over a couple degrees C—that could have profound impacts on coastal communities.

12:33 [Comment From Arman (Atlanta)]

I'm wondering if you have an opinion on why global warming science (as opposed to policy) has become so politically charged here in the U.S. as opposed to Europe. Do you think the U.S. press has somehow affected or perception of the quality of the science?

12:34 Bryan Mignone

There is a tendency in the media to report both sides equally—that is to give equal weight to both arguments even if the evidence supports one side more than the other. I also think that for a long time that was a useful argument for those who wanted to delay action. More recently, the argument has turned to the economics of climate change rather than the science. There is similar posturing around that issue now.

12:35 [Comment From John]

Why is global warming seen as such a destructive process? Are there any good outcomes of a warmer Earth? What is the soonest date that the effects of global warming will have a significant negative impact on the economy? What is the cost, in terms of dollars for each degree recovered? Are there any guarantees that we can, as a nation, actually manipulate this climate change?

12:36 Bryan Mignone

At lower values of warming, there could be some positive effects, for example on agriculture in some regions. But as you get to larger values of warming, the climate system starts to change in more profound ways, with the possibility of more severe impacts. One that a lot of people worry about is the disintegration of ice sheets, which becomes more likely above a couple degrees C.

12:37 [Comment From Peter Wütherich]

President Obama has invited 16 countries to participate in the Major Economies Meeting on Climate Change next week in Washington. What's the significance of that meeting, and which results do you expect?

12:39 Bryan Mignone

The major emitters process was started by President Bush to get together a subset of the most important countries. It was met with mixed reviews, but I generally think that having a meeting of a smaller collection of countries is a good idea because it allows negotiations to proceed more easily. That said, the real UN process is still the most important and everyone will be looking to the meeting in Copenhagen later this year.

12:41 [Comment From Maia]

Cap & Trade now looks unlikely to pass in 2009. How have climate deniers won again, and how can we turn that around?

12:42 Bryan Mignone

I agree that cap-and-trade is unlikely to pass in 2009, but I wouldn't necessarily say that the debate is over climate science any longer—it's more about getting a bill passed in tough economic times. I think things are moving in the right direction, but it will simply take some time to get a large number of members on board, particularly when you think about coal and manufacturing state concerns. Provisions related to costs, trade, revenues all need to be worked out. I'm confident that we'll get there, but it will take some time—we're probably looking at 2010 for enactment.

12:43 [Comment From Eric]

Wouldn't a cap on carbon be bad for struggling businesses in this tough economy?

12:44 Bryan Mignone

It's true that there will be a price tag associated with cap-and-trade. It will be large in absolute terms but small in relative terms—maybe 1% of GDP. Policymakers will have to work thought the details of the bill to make sure that the impacts are borne equitably. But keep in mind that even if we enact in 2010, the compliance market won't start for a few years later, so we will hopefully be out of the recession by then.

12:47 [Comment From Ron]

What's your take on a cap-and-trade program vs. a carbon tax?

12:48 Bryan Mignone

This is an interesting question, but it looks like we are going down the road of a capand-trade system. This is the case for a couple of reasons. First, there is a good reason to regulate quantities rather than prices if we do believe that we need to hit certain emissions targets. Secondly, there is political momentum for cap-and-trade from both industry and the environmental community. Given that this seems to be the way that things are heading, I would generally say that we should use our energies to figure out how to make a cap-and-trade system as efficient and effective as possible.

12:49 [Comment From Inna]

Which country (in your view) leads the world in climate policy - how and why? Does the USA intend to lead the world on this issue?

12:51 Bryan Mignone

I do think the US leads the world in one sense, namely that unless the US passes something, other countries are unlikely to follow suit. So all eyes are on the US and what we are doing domestically. I think that fact is recognized by many in the administration and in Congress, and so I think it is safe to say that they do intend to

offer domestic action as a means to catalyze international action and to offer leadership going forward.

12:52 [Comment From Emily Li]

What do you think that emerging economies like China could do to participate in the global cooperation of climate change and environmental issues? And what do you think of related innovative policies on conservation from Europe and what the potential implications on the US environmental and energy policy-making?

12:55 Bryan Mignone

It remains to be seen whether China will take on binding commitments as part of an international agreement. Obviously unless China reduces its emissions in some way, it will be difficult to curb the effects of climate change. The biggest concern with China is the tremendous availability of cheap coal, so one might to look to various ways to mitigate emissions from coal as one path toward a partnership with China. Technology cooperation might be a good place to start and could be worked on in parallel with an international agreement.

12:56 [Comment From Leonardo Lima]

The Federal administration has declared itself contrary to adopting border measures under such legislation, even if it is approved by Congress (according to USTR letters to congressmen, dated April 14th). Are these intentions really feasible? What could the Executive do to avoid border measures if "cap and trade" mechanism is passed into law?

12:59 Bryan Mignone

It's true that Congress has considered various forms of border protectionism in the context of cap-and-trade, whose legality under WTO is questionable. The basic idea is to charge border tariffs for the carbon content of imported goods. Of course, this would be unnecessary if our major trading partners also had climate policies in place, so an international agreement is far preferable. There might be other ways to lessen the impacts on trade-exposed industries—for example one could simply give away some free allowances as "transition assistance." In any case, you are right that this is a big political issue on the Hill.

1:00 [Comment From Jen]

I'm confused about the recent initiative by the EPA to consider regulations on CO2 and how that relates to the Obama administration's proposals. Is this a regulatory matter or a legislative matter?

1:03 Bryan Mignone

EPA has declared that CO₂ is a pollutant that endangers public health, which sets into motion a complex regulatory process. At the time, President Obama and Administrator Jackson have both said they would prefer that Congress generate new legislation to deal with climate change. So you can think of the EPA process as a threat lever on

Congress. The administration is willing to wait for Congress to get its act together, but it's not willing to wait forever—if Congress fails to act, then it's possible that EPA could take the lead on writing regulations that would cover greenhouse gases.

1:04 [Comment From Christina Lakatos]

What is the best way for Congress to ensure that climate change and energy legislation provides financial support for adaptation to climate change in developing countries?

1:06 Bryan Mignone

One way would be to directly include adaptation support in a climate bill. This would come up against the same constraints as any attempt to increase foreign aid, so will probably be somewhat limited. Another indirect way to connect our actions to actions in developing countries would be to allow some amount of US compliance to be met with international offsets related to things like forest protection. There are some problems with operationalizing this, but various provisions have been included in US cap-and-trade bills, including in the Waxman-Markey proposal.

1:08 [Comment From Alan]

What's to stop Wall Street from turning "cap and trade" into another kind of instrument for derivative trading? Considering that they've even turned to "weather futures," what about carbon futures?

1:11 Bryan Mignone

There are dangers involved in creating a market for carbon and those dangers are obvious given the current problems with our financial markets. However, there is an easy solution, which is the same solution to the problems we have witnessed already—greater oversight of the trading regime. The details about position limits, margin requirements, OTC transactions, etc still need to be worked out, but the good news is that people are thinking about this as we speak, and these issues will be addressed in climate legislation.

1:12 [Comment From Ian]

How much would legislation and regulation on carbon emissions affect ordinary lifestyles?

1:15 Bryan Mignone

Cap-and-trade would effectively put a price on carbon and thus a price on energy. This would mostly show up for consumers in larger electricity bills. The key question is then how will policymakers recycle the revenue from a cap-and-trade system? Many are advocating that such revenues be directly returned to consumers, so consumers would not necessarily see any net impact on their budgets.

1:16 [Comment From Andy]

What do you suppose Boehner meant when he gave this response: "George, the idea that carbon dioxide is a carcinogen that is harmful to our environment is almost comical.

Every time we exhale, we exhale carbon dioxide. Every cow in the world, you know, when they do what they do, you've got more carbon dioxide. And so I think it's clear..."

1:19 Bryan Mignone

It's true that carbon dioxide is not a pollutant in the way that we ordinarily use that term. Inhaling slightly more carbon dioxide will not endanger human health. But EPA was asked whether increasing emissions of carbon dioxide endanger public health. I think it is reasonably straight-forward to conclude that they do, because emissions contribute to climate change and climate change does endanger human health, in the form of heat stress, stronger storms, etc.

1:20 [Comment From Sally]

Aside from urging Congress to act, what can voters do to address climate change? Do hybrid cars and new lightbulbs really make a dent in the problem?

1:23 Bryan Mignone

There are certainly many things that individuals can do and these things are all worthwhile—smaller cars and CFL bulbs are good examples. These actions reduce energy demand and thus carbon emissions. But the magnitude of the problem is so large that these individual actions alone will not be enough. We also need to focus on getting the carbon out of the energy that we do use. A price on carbon will force big energy suppliers (for example, utilities) to change their long-term investment decisions in favor of lower carbon technologies, and this can have a profound impact on emissions in the long run.

1:24 [Comment From Christine Pelosi]

Hi Bryan, how would you recommend structuring the return of cap-and-trade revenue to consumers? Would you have targeting by income, region, industry, or something else?

1:27 Bryan Mignone

This will obviously be one of the most politically fraught decisions—it's a very difficult equity issue. We will probably see some revenue returned to industry in order to make up for some of their lost revenues in the short run. When it comes to consumers, I think policymakers are right to think about low and middle consumers, whose lives will be most directly impacted by higher energy prices. I do think that the recycling could be done in a way to make whole the budgets of those citizens.

1:27 Fred Barbash-Moderator

Just a few more minutes left folks...one or two more questions.

1:27 [Comment From Frank]

Why do you say cap and trade legislation is unlikely this year? Don't the Democrats have a sizable majority in Congress and an inclination to support Obama?

1:30 Bryan Mignone

They do have a sizable majority, and cap-and-trade may very well pass the House in 2009. The Senate of course requires a filibuster-proof majority of 60 votes, so this will be more difficult. That will require the support of centrist democrats and a few republicans, many of whom hail from coal and manufacturing states. So there are host of issues that will need to be confronted to get that additional support, and it will probably take a bit more time to arrive at a bill that can gain the support of such a supermajority.

1:30 [Comment From lan]

Are the extra costs worth it to combat warming? Also, will the Government use the issue as an excuse to increase the size and interference of government?

1:34

Bryan Mignone

Many studies have looked at the impacts of warming and concluded that the benefits of avoiding climate change exceed the costs that we are going to pay in the form of higher energy bills. It's a difficult calculation because the benefits are in the future and the costs are in the present, but some have used the analogy of insurance to explain it: Most of us are willing to pay a fairly sizable premium to protect ourselves against possibly dramatic future losses. So on Earth Day we might think about what it takes to "insure the climate."

1:34 Fred Barbash-Moderator

Okay. That's it for today.

Bryan: Thanks very much for being here today and for clearly explaining these very complex issues.

And great thanks to all the readers who participated. The questions were smart and thoughtful.

Finally, thanks to Brookings (and POLITICO) for sponsoring these chats.