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## Panel I State Initiatives to Reduce Greenhouse Gas Emissions

Dale Bryk\* Jared Snyder<sup>†</sup>

James Tripp<sup>‡</sup> Sean Donahue\*\*

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<sup>\*</sup>Yale Law School

<sup>&</sup>lt;sup>†</sup>New York State Environmental Protection Bureau

<sup>&</sup>lt;sup>‡</sup>Environmental Defense

<sup>\*\*</sup>Washington and Lee School of Law

# PANEL I: STATE INITIATIVES TO REDUCE GREENHOUSE GAS EMISSIONS

#### **Panelists**

#### DALE BRYK

Senior Attorney, National Resources Defense Council Director of Environmental Law Clinic at Yale Law School

#### JARED SNYDER

Chief of Affirmative Litigation at the Environmental Protection Bureau, Office of the NYS Attorney General

### JAMES TRIPP General Counsel, Environmental Defense

#### SEAN DONAHUE

Private Practitioner, Appellate Litigation and Environmental Law, Visiting Professor of Law, Washington and Lee School of Law

#### Moderator

#### PAOLO GALIZZI

Marie Curie Fellow, Imperial College London Visiting Associate Professor, Fordham University School of Law

PROFESSOR GALIZZI: First of all, thank you all for coming. I think this is a very important event. The Law School has been very supportive of our initiatives. I think I will just make a few remarks and then I think we should get started because we have some very interesting topics to hear and we have excellent speakers to enlighten us on what is going on in the United States on climate change.

First of all, let me thank Carol Richman. Sometimes we tend to forget that without certain key individuals things could not happen. I have been working very hard with Carol. Carol had the vision and the ideas to put this Symposium forward, and I really would like to extend to her my personal appreciation for all the work she has done.

Without further ado, I just wanted to introduce the first speaker. The first speaker is Dale Bryk. Since 1997, Ms. Bryk has been a senior attorney with the Natural Resources Defense Council, which heads the organization's state climate policy work. Her expertise is in the area of state energy and climate policy, including utility regulation, energy efficiency and renewable energy programs, greenhouse gas emission registries and regulation, emissions trading, green building and smart growth. Since 2002, she has directed the Environmental Protection Clinic at Yale Law School. Before joining the NRDC, Dale practiced corporate law at Davis Polk & Wardwell in New York. Dale has a J.D. from Harvard Law School, a Masters Degree in international law and policy from the Fletcher School of Law and Diplomacy, and a B.A. from Colgate University.

Dale will be talking about "The Regional Greenhouse Gas Initiative: How to Reduce Global Warming Pollution and Reduce Energy Bills While Washington Sits on Its Hands."

Dale, the floor is yours.

MS. BRYK:

[Slide] I am going to talk about the Regional Greenhouse Gas Initiative<sup>2</sup> (RGGI), which encompasses the Northeastern states, but we will start globally.

[Slide] I am sure many of you have already seen this picture. It indicates why this is such an urgent issue that we really need to start taking much more serious action to address. As someone who just bought a house below sea level in Brooklyn, I really hope that the rest of you spend as much of your time as I am trying to address this problem.

[Slide] Much of the activity at the state level is happening in the Northeastern states, and California and the West Coast, even though we do expect leadership from the feds on a lot of things. It is not unusual for those states and regions to be progressive, but there really is a lot more happening than in those two areas which I think we will spend a lot of time on today.

This map is too far away for me to use my hands, as I usually do, but you can see the leaves are the ten states that are following the Pavley Rule<sup>3</sup>, which Jim will talk about in a little while. The light

<sup>1.</sup> See Regional Greenhouse Gas Initiative, available at http://www.rggi.org (last visited Oct. 3, 2006).

<sup>2.</sup> Id.

<sup>3.</sup> The Pavley Rule is legislation introduced by Assembly member Fran Pavley to the California State Assembly. The official title is AB32 - Global Warming

blue colored states are the states that have one or two senators that have already voted for a mandatory cap [on carbon emissions] at the federal level. Of course, we had a majority vote in the Senate last summer saying, "We don't know exactly what the mandatory cap should look like, but we understand that we absolutely must do that."

And then, of course, we have our 200 mayors — more than 200 now — who have signed on to a commitment to address global warming pollution at the local level.

But you also have some very interesting things happening not in the sort of "lunatic fringe" environmental states of the Northeast and the West Coast. You have New Mexico and Arizona — New Mexico is a big coal state, of course — and now Montana, maybe the biggest coal state taking steps. These are the oil, gas, and coal-rich states that are the heart of where we really need to change what we are doing in the economy and in the energy sector. Those three states are all initiating statewide programs to figure out how to reduce emissions and develop the policies that eventually will have to be national and international in scope.

So there is a lot of activity happening, in addition to all the litigation and other matters we will be talking about later with some of the other panel speakers.

[Slide] Why are we doing things at the state level? Well, obviously, they are not doing anything at the federal level, and, of course, we want to reduce global warming pollution.

In the Northeastern states, the initiative that they are creating has to reduce pollution in the Northeastern states in the power sector. That's the focus. But, of course, we are not going to solve global warming by doing that. The real underlying objective is to influence the scene at the federal level.

How are we going to do that? Well, we can start with successful programs at the state level, especially in a region like the Northeast, where you have a much lower emissions profile than the rest of the country.<sup>5</sup> If the Northeastern states can figure out how to reduce

Solutions Act of 2006, available at http://democrats.assembly.ca.gov/members/a41/factsheet/AB32.pdf (last visited Oct. 3, 2006).

<sup>4.</sup> See S. Amdt. 866, 109th Cong., 109 CONG. REC. S7089 (2005).

<sup>5.</sup> See generally U.S. Envtl. Prot. Agency, Global Warming, Emissions, State, http://yosemite.epa.gov/OAR/globalwarming.nsf/content/EmisionsState.ht ml (last visited Oct. 3, 2006) for informational tables relating to individual state greenhouse gas emission profiles.

their emissions in a smart way (a way that is good for the economy, that is not going to break the bank), and they don't have nearly as much low-hanging fruit as some of the other states — that is going to undermine arguments by opponents in Washington who are saying, "We can't do this; it's too difficult; it is too expensive." It is going to be increasingly difficult for them to make those arguments as the states demonstrate successful ways to do this.

These states are going to create some of the programs that are, in microcosm, exactly what we want to see happen at the federal level. So they will start answering some of the very difficult design questions — and I'll go through a couple of them — that the stakeholders at the federal level will have to tackle when they decide that they are really going to take up this problem in earnest. That should give an advantage to the early state actors, because they are shaping a program that they know is going to be a beneficial precedent if it is adopted as the federal program. That will be the only successful model to go kick the tires, and we will say, "Well, we know this works," and everything else will be speculative.

And then, cultivating new advocates is also an important piece of the puzzle. There already are a lot of companies that are supporting having a mandatory cap or other federal action to address global warming pollution. But when you start regulating chunks of the country, you start creating more of them. Because now they are regulated, they want to create an even playing field, they don't want their competitors in the next-door region to have an advantage over them because they are not regulated.

And then there are some who have been saying, "I don't want to deal with this issue; I'm not looking at it; I'm going to drag my feet and fight tooth and nail because my knee-jerk reaction is 'any new regulation for me is bad." When they are forced to grapple with it at the state and regional level though, a lot of companies actually start to realize that they could have a competitive advantage in a regulated economy, and then they become supporters.

And then there are all the new business opportunities that crop up because of the policy. These opportunities arise through new business actors who are saying, "I'm going to create a new business; I'm going to bring jobs to the state," and they become advocates for a policy as well. The obvious ones for that, of course, would be clean energy, energy efficiency and renewables. Also as we get out of the power sector into more economy-wide models, we are looking at biofuels, which encompasses the whole farming community. There is a whole set of opportunities there that I think new constituents are

just starting to take a look at and think about how that could affect them.

And then, of course, one effect that all of these different state activities have is this drum beat. Every week it seems like something new. Some new major company, some new city, some new set of states, is stepping up and saying, "We have got to do something" or "We are going to take action and we think we can do something in a smart way that is good for our constituents." It signals this inevitability.

Already the debate has changed in some of the national trade associations for the big industries that are going to have to change the way that they do business, because this problem is not going to go away; there is going to be a solution at the federal level at some point.

[Slide] So what is the Regional Greenhouse Gas Initiative, the real point of my talk? The Regional Greenhouse Gas Initiative is a capand-trade program. It is just for power plants. It is just for carbon dioxide. It is modeled on the acid rain program that many of you are familiar with. It is very similar to what the Europeans are doing in order to implement Kyoto in Europe. But there are lots of new wrinkles that make it fun and interesting, since carbon dioxide is not sulfur dioxide and this problem is completely different in nature. But the framework is the same.

What these states are doing is saying, "We're going to figure out what our emissions are now and we are going to reduce them by 10 percent by 2019."

What has happened so far is the states have spent three years designing the framework of the program. The governor signed an MOU just before the end of the year. Now they are finalizing the Model Rule, which is coming out on Wednesday; it will be finalized by July. Then each state has to implement the Model Rule either through a rulemaking proceeding or through legislation. Different states are doing it different ways. By 2009 all these states will implement the same program.

Because it is a state action and there is no regional governing body, there is no EPA to come in and run the program. They cannot have an interstate compact because Congress would have to approve that.

For more information on Cap and Trade programs, see U.S. Envtl. Prot. Agency, Clear Air Markets, Cap and Trade, http://www.epa.gov/airmarkets/capandtrade/.

<sup>7.</sup> See Regional Greenhouse Gas Initiative, supra note 1.

This is the whole problem and is why we don't have anything going on. Congress is basically recognizing the currency that is created by each state.

New York State is saying, "Okay, I'm going to have a cap" — for New York it's about 65 million tons — "so I'm going to create 65 million allowances. I'm going to get them out into the marketplace. Each power plant has to have an allowance for each ton of pollution." But New York is saying, "Well, if Connecticut adopts the same Model Rule, I will recognize Connecticut allowances." So that is how the trading will happen.

[Slide] Why are the states doing this? They are trying to figure out how to design a program that they can do at a regional level and not create a competitive disadvantage for the region. That's the number one criticism that they get from opponents — "You are going to regulate our region; the other regions will not be regulated; and we will have a competitive disadvantage."

They are saying: "No. We're going to figure out how to do this in a smart way that actually doesn't increase energy prices — or if it does, it's just a tiny bit, and it's going to bring all these other benefits that will bring a net economic benefit to the region."

Of course, while they are doing this, they also have to make sure that they are not doing anything to the electric system that would harm reliability. To do this, they have to keep customers and electricity costs at the forefront. This is already a very high-electricity price region, relative to the rest of the country. As I said, the most common criticism is: "You are going to drive up electricity prices and companies will leave this region and go elsewhere."

The worst thing that could happen for the states is for this program to result in economic harm, and then the opponents in Washington can say: "Look, see, we can't really do this." So they have to be able to meet these goals.

[Slide] The key items that they have to create rules for as they are designing the program:

• Of course, the level of the cap. They have already decided that. It goes into effect in 2009. It is a flat cap for a few years to get everybody used to the idea, and then it starts to go down. It goes down quite sharply, 2.5 percent per year, after the decline starts. That is much, much more ambitious than anything that is on the table in Washington. So that is the sort of framework.

The idea is if the states never expected a federal program to supercede them — which, of course, they hope will happen — I believe they would have just had that indefinite ramp-down. This action would send the signal to the marketplace that "if you invest in carbon-reducing technologies, you will always have a market here, because we know that this cap is going to ratchet down progressively, indefinitely, until we get to where we really need to be, 75 percent below current levels in fifty years," or whatever number you want to pick.

That is not what we did with acid rain. In acid rain, we had that Phase I, then there was a big period of time; then there was Phase II; and Phase III did not happen. So they do not want to make that mistake again.

• The second item is offsets. This is the idea that we can make emission reductions outside of the power sector and figure out how much emission reduction different investments create, and then allow that as really the different currency to be used, right along with allowances, for the power plants that are the regulated entities.

The allowances are the money. So if I am creating in New York a cap of 65 million tons, I am going to issue 65 million allowances. That seems like a boring technical permit, but that is the biggest, most interesting, most contentious issue, because that is where all the money is. Each one of those allowances is the currency. So what happens to those allowances, how the states distribute them, is one of the biggest questions that this program will have to answer.

Historically, in acid rain and in Europe, the government gave almost all the allowances away to the generators for free. In RGGI they have already decided that they are going to use at least 25 percent of that value to benefit customers — and I'll talk more about what that means — and then, each state decides what they are going to do with the other 75 percent. That is already an enormous change, something that has never happened in the history of cap-and-trade programs at this magnitude.

There are several states — Vermont already has legislation that is in the works, which would require 100 percent of the allowances to be used to benefit customers. Basically, what it means is somebody would sell the allowances; then you have a pot of money, which you could just give back to customers as rebates on their bills, or, more wisely, you could spend it on energy efficiency, which would reduce the cost of the program for everybody. So it will be very interesting to watch how that unfolds in each of the state rulemakings.

• Complementary energy policies really mean policies separate from RGGI, from the cap-and-trade program, but it is in the MOU, an agreement among the states, that they know that they have to work on energy policy at the same time. That is the only way that they are going to be able to deliver this program in a way that doesn't have any impact on energy prices — or, better, has an impact of lowering energy prices in the region.

They have to look at things like the way we regulate our utilities — which is totally wrong. Luckily for you, that's not the topic of conversation for today, but just take that as an article of faith. We have so many perverse incentives for industry, and especially for the electric utility industry, and we do not have as ambitious minimum standards for efficiency and for building codes as we could. So there are a lot of areas where the states know they could work together and reduce the demand for electricity, which would reduce the demand for allowances, which would of course reduce the price of allowances. It is a very simple equation of supply and demand, and yet very, very complicated and difficult to get through in the policy negotiations.

• The last big-ticket item that they were dealing with is the issue of leakage, which is a problem specific to doing something at the state level. That is basically the idea that if the Northeastern states regulate carbon dioxide emissions but they trade with, for example, Pennsylvania who is not part of the program. We do not want the states to just reduce the amount of power that they generate and then just buy more dirty power from Pennsylvania. Then, if emissions are increasing outside of the region, even if they are decreasing inside of the region, you get nothing. And, of course, it hurts the companies that are inside the region. So that is a very major concern both for the companies and for the environmental communities because it could completely undermine the program.

But there is a plan, not as fleshed-out as the Model Rule for RGGI, but there is a plan for at least some of the states to regulate emissions associated with imports, so it would look kind of like an emission portfolio standard. That is the kind of cap program that the West Coast states are looking at, because they already import most of their dirty power. So if they are going to regulate carbon dioxide emissions, they are going to regulate the sale of electricity, not the generation of electricity, because then they can effectively regulate emissions that are coming from the power that they are buying in Montana. We will need to do the same thing in the Northeastern states.

[Slide] Offsets are an interesting topic for all the companies that are not power plants who want to get into the game of emissions trading. I always hear people talking about how they want to do emissions trading, and emissions trading is so interesting, and can't New York City be the capital of emissions trading? But they are not always in favor of a mandatory cap-and-trade program, which is of course what creates the value for whatever the currency is.

As I said, offsets is sort of making emission reductions outside of the electric system within the Northeastern states. These are the types. The way that the Northeastern states are doing this is, again, very different from what happened before.

In the Clean Development Mechanism<sup>10</sup> that is part of Kyoto — and also in other programs that you might have heard of, like the Oregon Climate Trust<sup>11</sup> — in those instances, the rules are very general and vague. The reductions that are happening off-sector have to be real, surplus, verifiable, and what does that mean? So that is why the initial round of CDM proposals were all rejected, because they had very nonspecific guidance.

Instead, what the Northeastern states are going to do is create very, very specific protocols for specific types of offsets, which they will expand over time, but then anybody who makes those investments will know that their investment is going to count.

From an environmental perspective, the environmental community can be very involved in developing those protocols. Then they don't have to watchdog every single proposal that comes in the door, which is really impossible, and something we haven't been able to do for Kyoto.

So this is going to be an interesting development to watch, and hopefully a model, if there is going to be an offset provision, for the federal program.

<sup>9.</sup> For general information on offsets, see Regional Greenhouse Gas Initiative, Q & A: Regional Greenhouse Gas Initiative, http://www.pewclimate.org/what s being done/in the states/rggi/rggi.cfm.

<sup>10.</sup> The Clean Development Mechanism is an arrangement under the Kyoto Protocol allowing industrialized countries with greenhouse gas reduction commitments to invest in emission reducing projects in developing countries instead of reducing their native created emissions. For more information, see United Nations Framework Convention on Climate Change, Clean Development Mechanism, http://cdm.unfccc.int/.

<sup>11.</sup> The Oregon Climate Trust (later simply the Climate Trust) invests in projects that reduce atmospheric carbon dioxide levels. For more information, see The Climate Trust, http://www.climatetrust.org.

[Slide] This is the allowance issue that I mentioned earlier, where the states have already agreed that they are going to use at least 25 percent. Our whole goal for the next couple of years is to get that up to 100 percent in all of the states.

This is very, very counterintuitive. The basic idea is: whether you give allowances for free to a power plant or you make them pay for the power plant, they are going to include the value of that allowance in the price that they bid into the marketplace, because it is an opportunity cost. If the states gave them their fuel for free, they would still customers for fuel, because they could sell that fuel to someone else.

It took us three years to get this issue fleshed out and get some of the regulators to really understand it, and to understand it ourselves. But the beauty of this, once you realize it — and you have to spend a lot of time with Ph.D. economists to figure it all out — is that it allows you to then design this program in a way that really could save money for customers, because if you sell the allowances, then you have this pot of money that you can use to keep the cost of the program low.

[Slide] That is what I am going to get into now. The states have done a huge amount of analysis, almost a ridiculous amount of analysis, to make sure that they feel confident that when they go forward with this program it is not going to send energy prices through the roof. This is a very, very modest program to begin with. I mean we are talking about a tiny, baby step.

The blue bars are the projected electricity price increases if they just do the program without doing anything else. The yellow or white bars, which you can't even see because the number is so tiny, is if they do energy efficiency. They would then increase the amount of energy efficiency that they are promoting in the region at the same time that they roll out the cap-and-trade program — and this would be using only a fraction of the allowance money for energy efficiency — and reduce the cost of the program almost to nothing.

That is our goal, to set that up as a model, where you are doing these two things simultaneously. They are integrated with each other, because you are using the allowance money to reduce the demand for energy, and then you can reduce the cost of the program, which becomes even more important as you go down that reduction curve.

[Slide] So what is energy efficiency? I am not going to walk through this in tremendous detail, but the point of this graph is to

show that, I think, five of the states have done analysis of what the technical potential of energy efficiency in each state is. Even though all of these states have what are called system benefit charge programs, where they charge a tiny bit on your energy bill, they collect a pot of money, and then they use it for things. In New Jersey they gave an incentive to developers to get them to build all their homes EnergyStar<sup>12</sup>, so in New Jersey all new homes are going to be built to EnergyStar standards. They do things like you call because your hot water heater is busted, and usually you just get whatever the guy has on the truck because you need a hot water heater right now; but they work with the distributors so that when they show up at your house they have the most energy-efficient models and they can explain to you why you should buy them. Working with retailers, they do the same thing to promote energy-efficient products.

So all these different choices — energy efficiency programs, improving building codes, improving efficiency standards; this is basically making it illegal to sell the worst-performing products in the state — all of these areas reduce demand for electricity over time. So they are showing that by doing about half of what is technically and economically feasible and sort of practical to implement over time, they could reduce projected demand growth to zero, which just means as our economy develops and more people move here and we are demanding more and more energy services, we wouldn't actually need any more electricity; we would just become more efficient through all of these programs.

The projected increase is 1.2 percent per year. So if you keep needing more electricity at the same time that you are capping the pollution, that is what makes it expensive.

[Slide] So because we have this great energy efficiency resource, the modeling that the states have done for RGGI shows that if they do the cap-and-trade program and they pursue these energy efficiency policies at the same time, the net impact would be \$100 a year annual energy savings for the average residential household. You know, \$100 a year is not a lot of money, but compared to what the critics are saying in terms of how much it is going to cost, to say that you could actually deliver a benefit if you do this in a smart way

<sup>12.</sup> EnergyStar is a United States government program to promote energy efficient consumer products. *See* EnergyStar Homepage, http://www.energystar.gov/.

will be a huge, huge achievement. So that is what we are hoping the states will be able to deliver in the next couple of years.

PROFESSOR GALIZZI: Thank you, Dale. Very well done.

I think what is interesting to note is that very often there is a perception that the environment is always a negative. I think this initiative is particularly important because it shows that we actually can use the environment in a positive way. If we can show people that their electricity bills may actually go down by doing something good for the environment, maybe we can get the political support to move the environmental agenda forward.

Our next speaker, I presume, is a very happy person today, I think extremely happy for his victory in overturning the Bush Administration position on a specific aspect of the Clean Air Act. <sup>13</sup> I think it is a victory for all of us. Again, it is important to stress how the environment really matters to all of us and how it is important. There are people in the United States that have different views on how to move the environmental agenda forward. So thank you, Mr. Snyder, for taking the case on, and thank you to the court, which is not here, for deciding in that way.

Let me introduce Mr. Snyder. Since 1995, Jared Snyder has been an Assistant Attorney General in the Environmental Protection Bureau of the New York Attorney General's Office. He is the Chief of the Affirmative Litigation Section in the Bureau's Albany office, where he is responsible for enforcement of state and federal environmental laws, as well as litigation regarding federal rulemakings and other federal actions. From 1990 to 1995, Mr. Snyder was a trial attorney with the Environmental Enforcement Section of the U.S. Department of Justice, where he was responsible for developing and litigating federal enforcement cases. Mr. Snyder is a graduate of Harvard Law School in 1984 and Cornell University in 1981.

Mr. Snyder's presentation topic is "Climate Change Litigation: States and Citizens vs. the Federal Government and Industry."

Thank you very much for coming.

MR. SNYDER: Thank you.

I would like to just start my comments by joining the chorus of thanks to Carol Richman, who was one of our excellent law interns last summer, for organizing this conference.

The RGGI program, which Dale just described, is a prime example of states playing their role as laboratories of democracy. There are

<sup>13.</sup> See 42 U.S.C. §7401-7671g (2000) passim.

other examples regarding global warming. Several states are adopting California's motor vehicle CO<sub>2</sub> emission standards, which Jim Tripp will be talking about. And the states are adopting these renewable portfolio standards, which also will result in significant reduction of CO<sub>2</sub> emissions in the states.

But these efforts only reduce emissions in the state or states that take the initiative, which is of limited value. Therefore, several states, in many cases joined by citizen groups, are using the courts to obtain emission reductions beyond the borders of the state. These lawsuits are against the federal government, to force it to take action, and against the polluters themselves.

Now, one way to look at our litigation is to imagine a pie with three equal slices. If I knew how to do PowerPoint, you would see a pie up there, and there would be three slices — one would be red, one would be blue, and one would be white. The red slice would represent the electric power industry, which obviously emits CO<sub>2</sub> when it generates power. The blue slice would be motor vehicles, which is another third, approximately, of the CO<sub>2</sub> emissions in the United States. The third slice, the white slice, would be all other manmade sources of CO<sub>2</sub> emissions.

Our litigation is directed at the red and the blue slices, where emissions are more concentrated, allowing for economies of scale in reducing emissions. Dale referred to the low-hanging fruit. That is really what you have with the power industry and the auto industry.

Now, our lawsuits are really of three different kinds: we have lawsuits against the federal government to force it to act; we have also sued the polluters directly; and we are defending state initiatives against lawsuits brought by industry. Unfortunately, I expect if I give this presentation a year from now, defending the RGGI program will be one of those that I will be talking about.

I will start with the power plant slice of the emissions pie. In a case called *Connecticut v. American Electric Power Co.*, <sup>14</sup> New York, seven other states, and the City of New York, joined by a group of land trusts, sued the top five contributors to global warming in the United States, under the federal common law of public nuisance.

The emissions share of these five companies is really pretty striking. Together, they emit more carbon dioxide from their power plants than the total emissions of all but six nations worldwide. I don't mean the total emissions combined. There are only six nations in the world that emit more CO<sub>2</sub> than these five companies together.

Now, the lawsuit is based on the longstanding principle that federal common law is available for interstate nuisances. That has two doctrinal roots.

One is the principle that interstate disputes require the application of federal law. Until there is a federal statute that governs the area — in this case, emissions of CO<sub>2</sub> — federal common law must apply.

The second root is that the states have a special right of access to federal courts based on our federal structure. The states gave up their right to settle their disputes through diplomacy — or even war — in exchange for access to federal courts to resolve those disputes.

Nowadays, of course, this federal common law authority has been largely displaced by statutory law. But not in the case of carbon dioxide, thanks to the inaction of Congress and the EPA.

Wading through the century-old interstate nuisance cases, we observe that they address a variety of injuries that look a lot like the injuries that we are suffering, and will suffer, from global warming: harm to public health, harm to water supplies, flooding, harm to forests and other natural resources. Those are the harms that are alleged in this public nuisance case.

Now, defendants moved to dismiss the case last year on a variety of jurisdictional grounds. We believe we had good responses to all the arguments that they made.

The one argument they did not make is that the case was barred under the political question doctrine, and that was the basis on which District Judge Preska<sup>15</sup> dismissed the case on last September. Now on appeal, we think we have a winning response to that issue as well.

The political question doctrine has been limited to a few types of cases where judicial action would clearly intrude in the exclusive business of other branches — things like declaration of war, recognition of foreign countries, training the military, things like that. Those are the types of cases that the courts have held to be political questions. This case fits into none of those categories. This case, while maybe having tremendous political implications, we believe does not qualify as a political question under the case law.

<sup>15.</sup> Judge Preska is a District Court Judge for the Southern District of New York.

Now, I could spend an hour on the details of our arguments, but let me just mention a few of the defendants' overarching arguments and give a quick response.

One is causation. Defendants argue that we cannot show that a remedy against them will end global warming. Now, of course, that is true. But that is not what we have to show. We need to show that they are contributing to our injuries, and we allege that a reduction in their emissions will reduce the pace of the harm that we will be suffering.

Second — and really this is related to the first — is the argument that we should be going to the political branches, we should be seeking a top-down solution from Congress and the Executive Branch. Well, that may be nice, but we don't have to wait. That type of solution may be committed to the political branches, but all we are seeking is a remedy against the contribution of these five defendants, and that is a remedy that we believe is committed to the Judicial Branch.

Third is an argument that requiring any emission reductions from these five defendants would deprive the Bush Administration of a bargaining chip in trying to negotiate reductions from the developing world. In other words, this argument assumes that the Bush Administration is playing a global game of chicken, withholding reductions from American sources in order to get India and China to reduce their emissions. This argument is not only legally unsupportable, but it is just not true factually. First, the official position of the Bush Administration, to the extent you can find one, is to encourage reductions, albeit voluntarily. Second, the Administration's official position with regard to getting commitments from other countries is that the United States is not looking for any binding international commitments whatsoever. So it is unclear what this bargaining chip would be used for.

Now, as you can tell, I am not impressed by industry's arguments, and let's hope the Second Circuit isn't either when we argue the case in two months, in May.

Now, also relating to the power plant slice you see up there are lawsuits against the Department of Energy that will reduce energy demand. Of course, if energy demand is reduced, power plants burn less fuel, less CO<sub>2</sub> emissions result.

In the case of NRDC v. Abraham, 16 we joined with Dale's colleagues at NRDC in suing the Department of Energy (DOE) over its

attempt to roll back energy efficiency requirements for air conditioners. The Energy Policy and Conservation Act<sup>17</sup> (EPCA), requires DOE to set emission standards at "the maximum level that is technologically feasible and economically justified." Notably, the statute does not allow DOE to weaken existing standards.

In 2001, seven years later and in the last days of the Clinton Administration, DOE issued standards requiring central air conditioners to be 30 percent more efficient. Within a couple of weeks of taking office, DOE first delayed and then withdrew the rule. New York and NRDC led a group of eight states and environmental groups that challenged that action as illegal, and they eventually won.

That stricter standard is now in effect. Now, as these more efficient central air conditioners get phased in, this standard will avoid the need for really a tremendous amount of power. The data I have seen is that it will avoid the need for construction of close to forty new 400-megatwatt power plants.

Based on the success of that case, New York and fourteen other states joined with NRDC recently in the case of *New York v. Bodman*, <sup>18</sup> to sue the Department of Energy to require it to issue updated standards for twenty-two major products, such as ranges, furnaces, and transformers. DOE is four-to-fourteen years late in issuing these standards.

Now again, assuming we are successful here, these standards will increase energy conservation even more. Roughly the amount of energy used by the entire New York residential sector in a year will be the annual reductions that would be achieved through these standards. Again, from the data I have seen, that would be roughly equal to the amount of annual reductions under the RGGI program.

So that just sort of goes to show how these efforts complement each other — RGGI gets reductions in the Northeast; these other cases get reductions out of the Northeast.

Now, going on to the blue slice up there, the primary case regarding motor vehicle emissions is Massachusetts v. EPA. 19 Massachusetts v. EPA is a lawsuit brought by states and citizen groups to require EPA to regulate motor vehicle CO<sub>2</sub> emissions. Section 202 of the Clean Air Act requires EPA to regulate "the emission of any air pollutant from motor vehicles that may reasonably be anticipated to

<sup>17. 42</sup> U.S.C. §6201 (2000).

<sup>18. 449</sup> F.3d 1254 (C.A.D.C. 2006).

<sup>19. 415</sup> F.3d 50 (C.A.D.C. 2005).

endanger public health or welfare."<sup>20</sup> "An air pollutant" is defined as "any physical or chemical substance emitted" and "welfare" is defined to include weather and climate. So it sounds like EPA should be regulating CO<sub>2</sub> emissions, right?

"Well, not so fast," said EPA. Reversing the interpretations of two prior EPA General Counsels, EPA determined that CO<sub>2</sub> is not a pollutant and that it wasn't going to regulate CO<sub>2</sub> for various policy reasons, including the bargaining chip idea I talked about earlier.

In November 2003, a coalition of states and citizen groups sued to reverse that decision. In July 2005, the D.C. Circuit denied the petition for review by a two-to-one vote, but only one of the three judges reached the key question posed by the statute.

Judge Randolph,<sup>21</sup> in what would be called the lead opinion, ducked the question of whether CO<sub>2</sub> is a pollutant, and held that EPA had justified its failure to regulate based on various other policy reasons that really are not reflected in the statute, including buying into the bargaining chip argument. Judge Randolph also expressed a fair amount of skepticism regarding the scientific proof of global warming.

He was joined in the majority by Judge Sentelle,<sup>22</sup> who expressed a view that none of the parties had standing: because global warming hurts everyone, no one has standing to sue to obtain relief in a global warming case.

In dissent, Judge Tatel<sup>23</sup> issued the most comprehensive opinion. Judge Tatel, fortunately, was also one of the judges in the decision we had just last Friday. Judge Tatel held that CO<sub>2</sub> is a pollutant, and he emphasized the impacts of CO<sub>2</sub> on climate.

A rehearing petition was denied by a four-to-three vote. This time Judge Tatel was joined by Judge Rogers<sup>24</sup> in a dissent. Noting the standard for en banc review, Judge Tatel wrote that: "If global

<sup>20. 42</sup> U.S.C. §7521 (1990).

<sup>21.</sup> Judge A. Raymond Randolph is a United States Court of Appeals Judge for the District of Columbia Circuit.

<sup>22.</sup> Judge David B. Sentelle is a United States Court of Appeals Judge for the District of Columbia Circuit.

<sup>23.</sup> Judge David S. Tatel is a United States Court of Appeals Judge for the District of Columbia Circuit.

Judge Judith W. Rogers is a United States Court of Appeals Judge for the District of Columbia Circuit.

warming is not a matter of exceptional importance, then the words have no meaning."<sup>25</sup>

Well, in the hope that the Supreme Court may share Judge Tatel's view, the states and citizens filed a petition for certiorari a few weeks ago, and EPA will be responding in the next month or two. We will keep our fingers crossed on that.

Now, obviously, this case, whether or not EPA has the authority to regulate CO<sub>2</sub>, has implications for regulation of stationary sources also. The question of whether CO<sub>2</sub> is a pollutant is still open. Judge Tatel is the only judge who reached a decision on that, and we know that at least Judge Rogers shares his view in the D.C. Circuit.

Now, the Clean Air Act has very similar language in a provision called the New Source Performance Standards<sup>26</sup> provision, which governs the regulation of new stationary sources. Under a consent decree a couple of years ago, EPA committed to update the NSPS for power plants. EPA issued revised standards last month and determined, once again, that it did not have the authority to regulate CO<sub>2</sub>. But this time it doesn't provide any other justification — it doesn't make the bargaining chip argument; it doesn't have the EPCA law to fall back on, like in the motor vehicle cases — and so this time the D.C. Circuit will probably have to review that issue head-on when that rulemaking is challenged.

Another similar lawsuit that I would like to mention is a lawsuit recently brought in the D.C. Circuit by a number of citizen groups challenging EPA's determination that states may not require something called IGCC technology<sup>27</sup> when permitting new plants. The IGCC technology essentially converts coal to a gas and enables a concentrated CO<sub>2</sub> stream to be captured and then disposed of.

Considering that hundreds of new coal-fired power plants are being planned and these plants are going to be around for forty to fifty years, it is really essential that these plants be designed in a way that enables the capture of the CO<sub>2</sub> emissions. So that IGCC lawsuit, which I believe — is NRDC a party to that in Environmental Defense? I think so — has very important implications.

<sup>25.</sup> See Massachusetts v. EPA, 433 F.3d 66, 67 (2005).

<sup>26. 42</sup> U.S.C.A. § 7411 (1990).

<sup>27.</sup> More information on The Integrated Gasification Combined Cycle (IGCC) can be found at www.worldbank.org/html/fpd/em/power/EA/mitigatn/igcc subs.stm (last visited on Oct. 1, 2006).

Let me just mention a couple more things.

One area of cases I mentioned are the defensive cases. The states are defending challenges to their motor vehicle emission standards, the states that have followed California. Jim Tripp will be talking about that.

One other case that I would like to mention is a case brought by some environmental groups, led by Friends of Earth. They challenged the decision of two federal agencies to fund oil pipeline and other projects overseas without going through environmental review. That case is still in the courts. They survived a motion for summary judgment on standing grounds and other grounds.

That case I think is very important because at the same time as the Bush Administration is saying that they are not going to take action because they need action from developing countries, there are these federal agencies that are subsidizing projects overseas that result in emissions from developing countries. So that case has been moving along; hopefully, it will continue to progress.

Let me just wrap up. Five years ago, this would have been a very short presentation, as all this activity has occurred in the last five years. Now, undoubtedly, other creative lawyers in the private sector will come up with additional theories of liability. Maybe there will be litigation regarding a company's obligation to disclose risks related to global warming; maybe shareholder derivative suits based on a company's mismanagement of its risks relating to global warming.

While all of this litigation is very exciting, a comprehensive solution that limits CO<sub>2</sub> emissions from all sources is certainly preferable, an approach that would spur technological growth, job growth, help air quality, help public health, encourage energy independence, and have many other positive side benefits. But until the federal government and industry wake up and smell the coffee, the states will continue to use the courts to reduce the harm they face from global warming and to force federal action.

Thank you.

PROFESSOR GALIZZI: Thank you very much for your presentation. I think the lack of a federal initiative is obviously forcing American lawyers to be very creative, and you are coming up with

<sup>28.</sup> See Friends of Earth, Inc. v. Watson, 2005 WL 2035596 (N.D. Cal. 2005). More information on Friends of Earth can be found at www.foe.co.uk (last visited Oct. 1, 2006).

some very interesting solutions to challenge the apathy of the government on this issue.

Our next speaker is going to talk about another interesting initiative that really challenges the lack of any action, or any meaningful action, at the federal level.

James Tripp has served as Counsel for Environmental Defense since 1973 and as General Counsel since 1983. Mr. Tripp is responsible for the review of all Environmental Defense legal action initiatives. Through Environmental Defense's Living Cities program, Mr. Tripp works on a wide range of land use, environmental, and energy issues in New York. He has been appointed to the New York State Department of Transportation's Advisory Panel on Transportation Policy for 2025, New York Governor George Pataki's Greenhouse Gas Task Force, and to Governor Pataki's Superfund Work Group. Before joining Environmental Defense, he was Assistant U.S. Attorney for the Southern District of New York from 1968 to 1973. Mr. Tripp received his L.L.B. from Yale University, and he also holds an M.A. in Philosophy from Yale University.

He will be talking about "The Pavley Rule: The Impact of Federal Law on State Transportation Greenhouse Gases (GHG) Reduction Strategies as Part of Their Efforts to Address Global Warming."

MR. TRIPP: Thank you very much.

Jared Snyder in his PowerPoint pointed to the blue third of the pie, the transportation sector. Yes, transportation may be responsible for about a third of the greenhouse gases in the United States, but more than that, it is by far the fastest growing. The utility sector has grown, but not a whole lot — I think in New York it really hasn't grown at all since 1990 — but transportation has been growing fast. If we are going to do something in this country and worldwide about greenhouse gas emissions, we must deal with transportation and motor vehicles.

In the summer of 2002, the California Legislature passed what we have referred to today as the Pavley Law<sup>29</sup>, named after Fran Pavley, the Member of the California Assembly who introduced the bill. That law authorized, and really mandated, the California Air Resources Board to establish greenhouse gas emission standards for motor vehicles that would represent the maximum feasible and cost-

<sup>29.</sup> Cal. Health & Safety Code §§ 42823, 43018.5 (2002). More information on the Pavley law can be found at www.leginfo.ca.gov/pub/01-02/bill/asm/ab\_1451-1500/ab\_1493\_bill\_20020722\_chaptered.html (last visited Oct. 1, 2006).

effective reduction of those greenhouse gases from motor vehicles. The California Air Resources Board adopted a Rule that reduces emissions somewhere in the neighborhood of 25-to-30 percent between 2009 and 2016 in September 2004.<sup>30</sup>

An alliance of automobile manufacturers, both domestic and international, brought a lawsuit in the Eastern District of California in Fresno. Why in Fresno? Because they had won a case against the California Air Resources Board a couple of years ago there. They liked the judge.

The lawsuit challenged the California action on a number of grounds. The two principal claims have to do with the Clean Air Act and the Energy Policy and Conservation Act (EPCA). You have heard about both of those laws. There is also a claim that it interferes with the foreign policy powers of the president of the United States and so on. I am not going to deal with those because I think they are sort of silly claims. But the first two, the Clean Air Act claim and the EPCA claim, are real claims.

Now, why is California doing this? California was the first state, as far as I know, to adopt emission standards for motor vehicles. It goes back to the 1960s. At the time, Los Angeles in Southern California had by far the worst air pollution in the country, and in recognition of the special problems in California and California's leadership of the Congress, in the Clean Air Act in 1970 and 1977 they recognized California's special status.

Section 202 of the Clean Air Act — and Jared talked about this — is the section of the law, dealt with in the *Commonwealth of Massachusetts v. EPA* case, which authorizes EPA to establish emission standards for motor vehicles.

Section 209(a) of the Federal Clean Air Act preempts all states from setting their own emission standards for motor vehicles, and certainly where EPA has set standards. But in any case, the states are preempted from acting.

Section 209(b) provides the one exception to that, and that is the exception for California. California is allowed to adopt tougher standards than the federal standards. In order to do that California has to obtain a waiver from the U.S. Environmental Protection Agency. Under the wavier provision of Section 209(b), California has to meet or EPA has to find that California satisfies three criteria: that the rule is not arbitrary and capricious; that California has com-

pelling and unusual conditions or circumstances that justify the adoption of the rule; and that the California standard or rule is consistent with Section 202 of the Clean Air Act.

So in any event, California has over the years adopted progressively tougher standards for vehicle emissions. It did so in a big way in the early 1990s, as Congress was adopting major amendments to the Clean Air Act, which were adopted in 1990. Sort of concurrent with that, California adopted the Low-Emission Vehicle/Zero-Emission Vehicle (LEV/ZEV) program, which really set the bar on emission standards. Of course, California is a big state and a major part of the economy of the United States. What California does, in fact, makes a difference for the country. The automobile manufacturers cannot simply walk away from California. What California has done has certainly forced technological advances. The federal government usually has, every once in a while, tried to catch up with California, but California always speeds ahead. So California adopted that program around 1990–1991.

Under the Clean Air Act, under Section 177, other states may adopt the California program. That is an option: you either stick with the federal program or you can adopt the California program, although you have to adopt the entire EPA program.

New York did adopt in 1991 and 1992 the California LEV/ZEV program. New York's adoption was challenged. The Second Circuit ruled that what New York had done on the whole complied with Section 177 of the Clean Air Act. 32

So now we come to these new greenhouse gas emission standards. California has, in fact, recently applied for a waiver. EPA has not yet acted on that waiver. We expect that there probably will be some kind of an opportunity for public comment on that waiver application.

Why would one think that EPA might not grant California a waiver? Well, for the reasons that Jared has already discussed in the Commonwealth of Massachusetts v. EPA case. In September 2003, in denying a petition that it set federal greenhouse gas standards for motor vehicles, EPA ruled that it did not have the authority under the Clean Air Act to deal with global warming, and ergo carbon dioxide was not an air pollutant for purposes of the Clean Air Act. EPA had

<sup>31. 6</sup> New York Comp. Codes R. & Regs. § 218-4.1 (2006).

<sup>32.</sup> Motor Vehicle Mfrs. Ass'n. v. N. Y. State Dep't of Envtl. Conservation, 17 F.3d 521 (2d Cir. 1994).

all kinds of reasons for coming to that conclusion, but EPA's finding basically was that Congress had not granted it the legal authority through a legislative act to deal with global warming.

It is that decision which was the subject of the D.C. Circuit decision that Jared described. The D.C. Circuit decision that came down in July did not deal, through any majority opinion, with the basic authority issue. It found that EPA had policy reasons for denying the petition, but it is kind of an unusual, bizarre opinion, if you read it, where the court does not deal with the fundamental authority issue. So that issue is still open.

But the EPA has itself already found that it does not have the authority to deal with global warming and to deal with carbon dioxide. So we can all sort of speculate as to what the EPA might do with the waiver application, and you can get into all kinds of sort of esoteric interpretations of the different sections of the Clean Air Act. The EPA could conceivably grant the waiver; EPA could deny the waiver; the EPA, I suppose, could find that it just cannot act on the waiver at all because it has no authority to deal with that issue, it's just not a Clean Air Act issue. We can all expect, if and when the EPA makes any kind of a decision on the waiver, there will be an appeal to the D.C. Circuit and life will go on. So that will be one more case that will go to the D.C. Circuit, and then maybe go up to the U.S. Supreme Court.

I suppose legally the only hopeful note — this comes from the D.C. Circuit opinion on the New Source Review Standard late last week, which relied on the doctrine of "the plain meaning of the law," you just look at the law — and this is sort of the argument in the carbon dioxide case that went up to the D.C. Circuit, where you look at the definition of carbon dioxide, and it talks about any addition of a chemical substance to the air — chemical dioxide is a chemical; ergo, it is an air pollutant. So we will see if judges of various bents, philosophic bents, give precedent to the plain meaning of the law when the D.C. Circuit, and maybe the U.S. Supreme Court, once again deals with that issue.

Well, what about the Energy Policy and Conservation Act issue, the EPCA issue? We have already heard about EPCA, but one of the provisions of EPCA authorizes the National Highway Transportation and Safety Administration to set fuel economy standards for

motor vehicles.<sup>34</sup> Basically, Congress has set the fuel economy standard for cars, ordinary cars, but the National Highway Transportation and Safety Administration has the authority to set standards for light-duty trucks and so on. In fact, there is a proceeding underway right now to do that.

But in addition to that, that provision of EPCA says that no state may set a standard for motor vehicles that is related to fuel economy. In other words, the fuel economy standard is a national standard and no state, including California — no state, none of the fifty states — may set their own fuel economy standards. What is the rationale for that? Well, the industry wants a uniform federal standard, and it would cause chaos if every state went around setting its own fuel economy standard. So, no exception for California.

In this challenge brought by the automobile manufacturers to California's adoption of the standard setting greenhouse gas emission standards for motor vehicles, we are in a rather unusual case. In fact, I asked Sean Donahue and Jared if they could think of any other example of this. We are in an unusual situation, where we are dealing with two federal statutes that have state preemption provisions: the Clean Air Act, which has a general federal preemption — only EPA may set emission standards for motor vehicles, with the one exception of California with a waiver provision and criteria, so EPA plays an administrative role, but an exception for California; and then the fuel economy standards law, which has a universal preemption — no state may set fuel economy standards.

So, as you might imagine, the automobile manufacturers are arguing that not only does California have no authority under the Clean Air Act to adopt greenhouse gas emission standards, but they are arguing that the Pavley Rule is for all intents and purposes a fuel economy standard — you burn fuel, it produces carbon dioxide; you regulate carbon dioxide, it's like regulating fuel economy. Thus, argue the plaintiffs in that case.

Do we have a response? Does the State of California have a response? The answer is, of course, yes. But the litigation is in an

<sup>34.</sup> See National Highway Transportation and Safety Administration, Fuel Economy and Annual Travel for Passenger Cars and Light Trucks: National On-Road Survey, http://www.nhtsa.dot.gov/cars/rules/regrev/evaluate/806971.html (noting that EPCA gave responsibility for administering the program to the Secretary of Transportation who, in turn, delegated it to the Administrator of the NHTSA).

early stage. No dispositive motions of any sort have been brought. Discovery is at a very early stage.

A number of other states, though, have adopted the California Pavley Standard, including New York, Vermont, Rhode Island, Maine; I think Oregon and Washington are in the process, have or are about to; Connecticut I think has adopted it; and there is an effort underway to get some more states outside of the Northeast and the Northwest to do it. But the states that have already adopted it represent together with their populations a fairly significant portion of the population and the economy of the United States.

The automobile manufacturers have brought lawsuits, I think, in all those states that have adopted the standard. At least in two states, in Vermont and Rhode Island, the cases have been brought in federal courts; in the other states, I think, in state court.

We have, with NRDC and the Sierra Club,<sup>35</sup> intervened in the California lawsuit; we filed a motion to intervene in the Vermont federal court action; and if we have not done it already, we are about to file a motion to intervene in the Rhode Island case. So there is a lot of litigation going on, lots of opportunities for lawyers on the various sides to get involved.

But let's just get back briefly to the issue, because it is sort of fundamental to the lawsuit. You can imagine that California and the environmental groups will argue in the California Pavley case that the Clean Air Act really controls, that California is granted this exception – carbon dioxide is an air pollutant – and therefore, California is not preempted from setting standards; and the EPCA, therefore, does not really come into play; the fuel economy standard law doesn't come into play.

But there is always the possibility that a judge or a court might find that it really has to look at the fuel economy standard law. So we have to be prepared, or at least respond to that claim, that the Pavley Rule is tantamount to a fuel economy standard.

There is law dealing with the scope of federal preemption laws. There is a general rule that they are to be narrowly construed because of our interest in letting states do what they want to do. Certainly, the purposes of the two laws are quite different. If you read through the Pavley law, it is all about global warming and the damage that global warming is doing to the economy of California. If

<sup>35.</sup> For information on the Sierra Club, see Sierra Club Home Page, www.sierraclub.org/ (last visited on Oct. 1, 2006).

you read through the EPCA, it certainly does not say anything about global warming, and it does not say anything about carbon dioxide or greenhouse gases. It deals with oil, security, independence, and those kinds of things. So the laws are certainly quite different from that point of view.

The other difference is that the California law has a provision for what is called "alternative compliance." There are different ways, particularly relating to fuels, that the automobile manufacturers may use to comply with the standard.

But as I have said, this litigation is at an early stage. The trial date for the Pavley litigation in California is sometime in the spring of 2007. There is a lot of discovery to be done.

All I can say is it is an unbelievably important case for California, for the country, and for the world. If California wins, other states will follow, the federal government will follow, and the automobile manufacturers know that it is important. So while the price of oil is going up and the world is consuming more oil than can possibly be produced, and China and India are producing more and more cars and doing more and more driving, GM and Ford and some foreign automobile manufacturers are fighting a rear guard action in the courts in California that ultimately they are going to lose in the real world, if not in the courts. It is very sad.

PROFESSOR GALIZZI: Thank you very much again for a very interesting presentation. As you said, there seems to be a lot of work for lawyers on every side on global warming.

The final speaker on our panel is Sean Donahue. He is a private practitioner in Washington, D.C., who focuses on appellate work. He has represented a variety of environmental groups and public agencies in environmental and natural resource cases. He has been Visiting Professor of Law at the University of Iowa College of Law, and, from 2002 through 2006, he has been Visiting Professor at Washington and Lee University School of Law, where he has taught courses in environmental law, natural resources law, and environmental federalism. Between 1997 and 2001, he was an attorney in the Appellate Section of the Environmental and Natural Resources Division of the U.S. Department of Justice. He graduated from the University of Chicago Law School in 1992 and clerked for Judge Ruth Bader Ginsburg at the D.C. Circuit Court and for Justice John Paul Stevens at the Supreme Court.

He will discuss "State Global Warming Measures and 'Traditional' Areas of State Regulation."

Thank you for joining us.

MR. DONAOHUE: Thank you, and I'd like to thank Carol and Scott for having me.

I debated Professor Patrick Michaels of the University of Virginia, author of *The Satanic Gases* and other works questioning what seems to be the premise of our discussion this morning, which I take to be true, that this is a really serious problem. The debate was about the science. It was a bit of a joke to have a lawyer debating him. He really has a Ph.D. in climate science and stuff; but, fortunately, his views are so marginal within the scientific community, that I could just kind of quote what other scientists have said.

But during that debate Professor Michaels had a PowerPoint and I did not, another disadvantage for me. On one of his slides he showed — and I wasn't exactly sure what the point was — he put his own stock portfolio up. I think the idea was not that he is investing in green companies and that the private market will handle this, individual decisions to go with a more clean energy approach; it was more that he is going with the stocks that are going to promise the highest earnings, and those are going to be the companies that identify the technologies of tomorrow.

[Slide] But anyway, I decided that I thought that, whatever the rationale, that that's an effective technique, which is why I have put my stock portfolio up. I hope it does not distract you during my talk.

As I think is established, and probably especially those of you who are law students are well aware, there is a real shift going on here. When I put together a seminar on environmental federalism maybe five years ago, a lot of the course focused on the question: What are the limits on federal power? Can the federal government regulate isolated wetlands in the interest of protecting the national system of the waters of the United States? Those issues, of course, remain vital and controversial, and there are a couple of very big cases in the Supreme Court right now on that precise thing.

But the state greenhouse gas laws that we are seeing, and others that we are going to see, represent something that is both old and new. It is old because there is a long tradition of states taking the lead in the environmental area. California's early efforts to regulate motor vehicle emissions in the 1960s were, of course, a major spur toward the ultimate enactment of federal legislation, and they earned California the special status under the Clean Water Act to continue to move out in front if it so chooses.

But I think many of us — and, certainly, my own thinking about this, having been a federal lawyer — came to think of the federal government as the one that was really out front, that had the best

science. We used sort of a civil rights model: that the federal government would be out in front and that the battles were about getting the federal government to prevail against recalcitrant, backward states that didn't want to do anything about the problem.

Well, we are obviously seeing something of an inversion of that. The federal government is not only not doing very much, but I think there is a pretty good argument it has been, at least for a few years, an actively obstructionist, obfuscatory force in these areas, not only not enacting federal legislation, but also trying to raise doubts about the science that are not warranted by the science. What I am going to talk about is the more direct legal obstacles that federal law and the enforcers of federal law, and potentially federal courts, could raise to some of the initiatives that we have been talking about.

What Jim just addressed is probably the most important; that is, federal preemption, the idea that there is some federal law on the books that is inconsistent with what the states are trying to do—like, as the manufacturers are claiming, the federal CAFE Standards law is alleged to preempt states from enacting any measures that might have a bearing on auto fuel economy. But that is just one of many areas in which preemption arguments may be raised to try to invalidate, typically in federal court, state initiatives.

But the Supremacy Clause, the source of the preemption doctrine, is not the only federal law obstacle that may be thrown up in front of some of these initiatives. There is also the Dormant Commerce Clause, the idea that some of these measures may have an impermissibly burdensome impact on interstate commerce. There is this argument that: "This is, after all, global warming; what is a state doing meddling with it? This is an international problem and, therefore, the province of the federal government alone." And there are potentially some other arguments, potentially First Amendment arguments, commercial speech objections to laws that would require disclosure of greenhouse gas emissions in products.

For all of these, in defense of state laws against all of these arguments, it is important, although the doctrine of course differs from area to area — there is a big difference between commercial speech doctrine and preemption — for all of these, it will be important to explain why it is legitimate and consistent with our constitutional traditions and with good sense for a state, in particular a state as a state, to be taking action.

One might think that it is a dispositive objection, or response, that: "Well, the federal government is not doing anything, and we all know that this is a grave threat to civilization in the medium term,

not in the very long term. So somebody has to do it." And that has some force, but it is not necessarily a dispositive objective.

In preemption law, the whole tenor of the foreign affairs argument is: "Well, the federal government has made a deliberate decision that this is not the thing that we should do. For example, our federal government now believes that voluntary measures are the way to go." And so one might think: "Well, that means that if a state is imposing some kind of mandatory restrictions on emissions, that is inconsistent with national policy, or will interfere with our foreign affairs power." So it might not be enough to persuade a court of the propriety of state action.

In preemption law particularly, but in these other areas as well, often one gets a lot of purchase from the argument that: "This is a traditional form of state activity. This is the state exercising its police powers to protect the health and welfare of its citizenry, and that's what states are all about, and they retain sovereignty." That argument links up with sort of the conservative versions of federalism.

We have to remember that we have a judiciary that is increasingly composed of people who are not going to automatically assume that "Oh yes, global warming is a terrible problem; we have to do something about it." In fact, they are going to be skeptical. I think that would have been true ten years ago, and I think it is increasingly true.

And, of course, greenhouse gas measures do bear a close similarity to some forms of traditional state regulation, like California's regulation of air pollution. This is a form of air pollution, from one perspective. To the extent states are trying to protect their beaches and their water supplies, as the Pavley law recites on its face, they are doing something that states have always done, and so of course it should be legitimate to do that. Maybe that has some purchase, and that is an important ingredient of the defense in many cases.

But it also may be that defenders of these laws need to go further, because in the preemption area and in some of the other areas, it is important to acknowledge the ways in which global warming is a new and distinctive problem. It may be important to do that to justify what the state is doing.

The attackers of these laws will certainly point out the ways in which the problem is different. One obvious way in which it is different is when the City of Los Angeles or the State of California took action to try to limit auto emissions in the 1960s, it was because the smog in L.A. was terrible, and you could see it, and there was a sort of logical inference that "if we do something to require people to put

some technology in their cars that will limit emissions, then maybe the smog will dissipate a little bit"; or "if we tell a factory that it cannot dump its industrial waste in the river, the river will clean up."

Of course, here the link between regulatory action and a concrete local benefit is much less difficult to establish, because this is global warming, and the causal connection between California or Rhode Island taking some action and achieving a benefit for the citizens is much more complicated and remote, and in some cases it would be impossible to show. California perhaps could show it because it is so big, and if it were a separate country it would rank high in terms of the size of its economy. But Rhode Island probably could not do it.

So there is an objection: why is the state, which lacks the power to ultimately affect global temperatures, even if it went back to a subsistence economy — if Rhode Island, or maybe more plausibly Vermont, decided that it wanted to do that — it is not going to improve global warming. And so this is both a political argument but also a legal argument, in areas like preemption and the Dormant Commerce Clause: Why are we imposing these burdens when the benefit is so remote?

And, so I think we need to think about ways to respond to that. I guess some of them have been touched on.

They include things like: "Well, the state is not acting alone." And as we have seen this morning, there is all kinds of activity. So it is a false assumption that the state is going to be acting alone, and that Vermont, if it imposes restrictions, is going to be the only one that is doing that. In fact, we have seen historically and with this problem, there is a domino effect, and so one state's adoption of policy may influence others. That is especially true with California because the Clean Air Act allows other states to adopt California's standards, but it is true in other areas as well.

Then there is also the idea that: "This is really in the economic self-interest." I think this is a key thing in winning the national argument, that this is actually in the economic self-interest of all of us to take steps that are going to get us to a form of economic life that is environmentally sustainable, that if we identify new cleaner technologies, we will end up being richer as a result. And so a state might decide: "We want to be a leader in this area. We want to develop our economy in that direction." That is an argument that doesn't depend on, "Well, we are Rhode Island we are going to single-handedly reduce greenhouse gas concentrations and, therefore, abate global warming."

But I think maybe the most powerful argument, or the one that is most faithful to what is distinctive about global warming, is that: "This is quite different from the chloro-fluorocarbons problem. This is not going to be a simple technical fix, where we know that if we just put some kind of device on our coal-fired power plants the problem is going to be solved, because global warming affects almost every form of economic activity, from driving your car, to types of fertilizers that are put on fields, to land use, the patterns of development. Arriving at a solution to the problem is not going to be kind of unitary, something that the federal government is just going to pick. It is going to involve fundamental transformations throughout society in all different areas of life. This is something that really having states take the lead on makes a lot of sense, in the oldfashioned Brandeisian laboratory sense, that states can adopt measures that fit the preferences of their citizens; they can try things out. If something works in Vermont, maybe Oklahoma will want to adopt it, or maybe Oklahoma will want to go in some other direction."

Thinking about what a solution will look like is part of defending these laws, in a way that is plausible, and it is certainly the case that shoehorning it into traditional categories is not going to be a complete answer, because this really is unique in lot of ways.

I think one does not get a lot of great news about this topic or about the science, and I think in a way that is helping to drive this, the drumbeat of scientific reports and news reports about the current adverse impacts of global warming. I think that whole movement will be furthered when the Intergovernmental Panel on Climate Change<sup>36</sup> comes out with its next report next year, which is going to have some sobering news.

So I think what we have seen is a kind of reinvigorated progressive tradition. It is something that is unfamiliar to a lot of us, but it is not new in American history. We saw this with a lot of other problems in the past.

It is not going to be adequate to the problem. Nothing that we have talked about is even a partial solution to the problem, but it is at least a first step. I think, ultimately, the central thing is going to be to persuade skeptical people of the merits of the scientific case that if

<sup>36.</sup> See Intergovernmental Panel on Climate Change, About IPCC, http://www.ipcc.ch/about/about.htm (noting that the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), are "recognizing the problem of potential global climate change," established the IPCC in 1988).

we don't do something about it we are doomed in the medium term, that this is a really serious problem.

I think the pattern that you saw of where the action has been is not entirely surprising. This has been to a large degree a sort of "blue state" federalism. What we have seen so far is that in the states that one would expect would be more receptive to this kind of thing there has been action. That has to end. This has to be something that is a national priority. I think the efforts that states are making now is an important ingredient of that.

Thanks a lot.

PROFESSOR GALIZZI: Thank you very much for your presentation as well. I think we have a lot of food for thought today.

What I want to do is to open the floor for questions. Global warming is something that is going to affect us all. As Sean was saying, the next report of the Intergovernmental Panel on Climate Change is not going to be pleasant reading for anybody.

There are tough choices that we all need to make, and I think it is important that we all get engaged. I think a way of starting to get engaged is by participating in the debate, so I am opening the floor to questions. Go ahead.

QUESTION: Thank you. I have two quick questions for Dale Bryk regarding the RGGI standards. The first is: How do you reconcile their objective of a ten percent reduction by 2019 with most scientists' position that we have to reduce it by 80 percent over that period, if not sooner?

The second question is: you had up there in the PowerPoint "market-based solutions." How do you reconcile that with the need to keep consumer prices down? One would think that full-cost pricing would be a market-based solution.

MS. BRYK: I will take the easier, first one first. Actually, the New England states already have a commitment, that they know they need to reduce their emissions in the eighty five percent range over the long term; they didn't put a year on that. And as I mentioned, if they never thought there was going to be any federal action, they would have made a longer-term target. They made a short-term target in hopes that they are going to be superseded by a federal program.

They are saying, "We have a tanker, and we are just starting to turn that tanker, so let's get ourselves on the path." They are going to be reducing at a 2.5-percent-per-year reduction rate, once they start that decline. So they are sort of sending the signal: "This is the way that we are going." Nobody thinks that 2019 and 10 percent is the end-

ing. Every single state will tell you, "This is a very baby, baby step."

They may in the five years before that set another target for themselves for the longer term that is getting them to that 85 percent number. They are hoping that they will not have to do that because what they are doing will prompt enough action at the federal level to take that off their plate. But that is definitely on their radar screen. I mean everybody talked about those kinds of numbers in the development; they just didn't — you know, the states don't want to be making this policy for fifty years. They are hoping ten years will get them off the ground.

On the other issue, there are so many problems with the way that the electric sector is regulated and the way that sector conveys price information to customers. There are ten other policy initiatives underway to try to give people better price signals.

But this is a political issue. The states are run by politicians, not by economists, so they are very, very concerned about showing people electricity prices. Voters freak out when their electric rates go up, not even bills — I mean just getting the conversation to be about bills, as opposed to rates, is incredibly difficult. And yes, higher electricity prices would signal to people that they need to reduce consumption.

QUESTIONER: But please be honest. Don't say "market-based solutions"; just say, "We want safe energy." Be honest and then take the flak for that. That is basically misleading the public about it, to believe that energy prices are going to go lower or stay level, they're not going to go higher. If it's not market-based, it's not an honest statement.

MS. BRYK: Well, the market-based element of the program is the cap-and-trade aspect of the regulation, as opposed to that the energy sector is some sort of pure market, which I don't think anybody is pretending that it is. The market-based element of RGGI is really trying to correct some of the market errors through overcoming the market barriers on the energy efficiency side of the equation.

QUESTIONER: They're just missing full-cost pricing? PROFESSOR GALIZZI: Sorry. Another question.

QUESTION: Sean, how would you express arguments such as economic self-interest of general welfare in legal terms as an answer to suits on preemption or the Dormant Commerce Clause?

MR. DONAHUE: Of course, for the Dormant Commerce Clause, economic self-interest is a perilous argument sometimes, because the whole purpose of the doctrine is we don't want states trying to bene-

fit themselves at the expense of the national system of free trade. Not all the considerations I was laying out are ones that easily fit into doctrine, although I think that is okay, because I think a lot of times what you are trying to do in any case, whatever the law is, is persuade judges that what you are doing is reasonable and not capricious.

But I think in countering the argument that because it may be difficult, especially for a small state regulating only a sector or one specific area, to have any discernible impact on the overall problem, explaining that really what this is, in part, is an effort, it's a kind of economic development, a form of economic regulation, that is trying to push the state toward new industries, new forms of organization, that are more compatible with where we think things are going when we start doing something robust nationally on this.

In the preemption area, I think you can probably do — maybe just linking it up with economics, that the state has decided that it wants to go in the direction of clean energy. States have always regulated utilities; that is a really rich history. You would just say, "It is not just clean air regulation; it is also public utility regulation."

QUESTIONER: So the federal government hasn't fully occupied this area of the law?

MR. DONAHUE: It would depend on the case. It is still the case that the federal government hasn't occupied the field on electricity regulation.

MR. TRIPP: To ask you a practical question, is there a body of law dealing with what you call "economic self-interest" on the part of a state to move in a direction of becoming economically clean and sustainable?

MR. DONAHUE: Yes. I think in a lot of areas, like in takings, it is relevant that here is what the state is trying to do, here's the interest we are trying to serve, this is why there is a substantial state interest here, I think in a lot of different areas — and with the Commerce Clause, with commercial speech, pointing out there is an important state interest that justifies requiring disclosure of certain information, establishing that as a key part.

PROFESSOR GALIZZI: Thank you.

QUESTION: Do you see a wave of lawsuits coming by your traditional class action lawyers against corporations for not addressing climate change proactively now as the specter arises before them and impacts on shareholder value in corporations?

MR. TRIPP: Maybe.

MR. DONOHUE: I know there have been shareholder resolutions, not lawsuits, saying "this is something we ought to do." But I think it would be pretty hard. The kind of causation thing would be hard to win a case.

PROFESSOR GALIZZI: There are some interesting developments in Europe on that account. A lot of companies are now signing up voluntarily to not invest in climate change polluting activities because they are afraid of potential lawsuits. So there is actually some sort of self-policing within the industry going on in Europe. But I think in Europe in many ways this is a different kind of debate than what we are having. I think the debate here is very much about trying to do something against the odds, whilst in Europe at least there is some political consensus to move forward, and I think business has a different attitude. But I think that is also changing in the United States, at least slightly.

MR. TRIPP: Well, if you look at the history of litigation over acid rain, as one example that went on in the 1980s, there were lots of lawsuits, almost none of which the environmental groups ultimately won. But one can imagine that there would be enough lawsuits of different sorts so that industry might actually be more amenable to a federal solution. You know, the pain would become great enough, or the legal pain when added to the political pain. That's one reason that we might expect different kinds of lawsuits. After all, writ large, all corporations are responsible for what is going on. The question is how you sort of chew at it and go after sectors or individual companies.

PROFESSOR GALIZZI: Yes? Go ahead.

QUESTION: I would like to address the cap-and-trade aspects of the RGGI, given that the RGGI has initiated a formal structure for the trading of carbon. I would just add that there is a Website for cdproject.net, which is a carbon disclosure project by \$151 trillion worth of investments. In that report, it shows that there will be windfall profits for the utilities once there is a trading program initiated. So my concern with the RGGI, one of the many concerns, is that, one, it doesn't improve global air quality, for example; but, given that I am structuring my conversation around the cap-and-trade structure, I fear that, given that there will be some type of precedent through these mechanisms that the expansion of it, either through a possible signature to the Kyoto Agreement by the Bush Administration — which I think is not impossible, as long as they structure the cap and trade which will profit the utilities — it seems

like the focus should be to reduce carbon through mandates onto the utilities and other pollution emissions.

So I am bringing to the table that this discussion of a reduction through an incentive to the utilities is maybe not the most effective way of reducing emissions. I think that there are many potential technologies that we can use so that we can enforce and mandate the utilities and other industries to reduce their carbon by law, and that they don't necessarily need an incentive to make money to do that.

MS. BRYK: The cap-and-trade program that is proposed in RGGI is a law, and it would mandate by law that collectively all the power plants that are regulated have to reduce their emissions over time. So you are absolutely requiring emission reductions over time.

QUESTIONER: But the profits —

MS. BRYK: Let me get to the windfall in a second.

I think our experience with other programs is show that it is a very cost-effective way. If you give companies flexibility to figure out — "You guys figure out the cheapest way to reduce emissions. We are not going to tell you to buy this technology or that technology" — this is a structure that drives technological innovation. That's what we want. We want lots of different ideas in the marketplace.

There is an issue with windfall profits. The Europeans have already discovered that the way that they allocated allowances has resulted in enormous windfall profits for power plant owners.

The RGGI says, "We are going to try not to do that. At a minimum, we are going to sell twenty five percent of the allowances, and we may sell all of them."

I mean there are going to be winners and losers. Some companies are going to increase market share and some are going to decrease market share. That's the whole point. We want the dirty guys to run less and the cleaner guys to run more and get more clean guys into the marketplace.

You know, some people, like nuclear plants for example, are not going to be regulated; but if electricity prices go up, they are going to earn more money. You could have a tax to take that windfall back. But at least let's not give extra money in the form of allowances to companies that is just going right to their shareholders, if you could use that money to reduce the cost of the program in order to keep going down that road, to keep the political road to go down the emission reduction trajectory to the 85 percent number that you need to get to.

So they are tackling that issue. I agree that there have been huge windfall profits in the past. But they are two separate things: one is

the design; and the other is: are you having a cap that makes you go down or not?

QUESTIONER: I'm sorry. I'd just like a follow-up questions, if I am allowed.

PROFESSOR GALIZZI: Just one follow-up, a very quick point.

QUESTIONER: It seems to me that this structure is setting up the market for the emission trading. Given that that is what it really achieves, it will achieve some kind of reduction, but it foremost sets up a structure that will be utilized for many generations to come. I think that is the real initiative, the force and the vision behind what is the RGGI. That is my opinion. Thank you.

PROFESSOR GALIZZI: Thank you very much. There is a question down here.

QUESTION: Thank you. With regard to regionalism and RGGI, and even some of the other cases that cross over multiple states, there has been a lot of experimentation in the last twenty-five or thirty years of trying to put some of these multistate pacts together in the absence of federal control or regulation.

I am curious, particularly in the RGGI instance — not so much the economic or constitutional viability, but the political and managerial, for several reasons. One, we have already seen a couple of states opt out of the negotiations. A lot of this depends on cooperative political goodwill and, no matter what, after November there is going to be a lot of change in a number of these states' governors, legislatures, and the like.

As I have begun to examine this case, I have been struck by at the agency level how much tension there seems to be between some states — smaller states, larger states; a sense of whether or not — I don't mean to be impolitic — whether New York is the 800-pound gorilla in these negotiations. And on and on it goes.

MS. BRYK: We know who they are.

QUESTIONER: So I am wondering if you can comment on the difficulty of sustaining a regional entity like this in the absence of a very, very strong, rigid kind of structure, given some of the breakaway issues that we are already beginning to see.

MS. BRYK: Yes. That's a great question. It's huge. This is a huge, complex negotiation. You can't imagine how many players are here. The stakeholder process has like fifty official people in it, and then there are another 250 people. All these people are having negotiations with one another.

We have already had turnover with governors, which actually wasn't part of the problem for Massachusetts and Rhode Island

dropped out — and they will both be back in way before 2009, so don't spend time worrying about that. But, you know, Governor Romney<sup>37</sup> is running for president and he is actually competing against a pack of Republicans who are all fighting to develop a global warming policy. Pataki<sup>38</sup> — well, Schwarzenegger<sup>39</sup> is not actually in the running — McCain<sup>40</sup>, even Hagel<sup>41</sup> — I mean Republicans are all over the place working on this issue.

So yes we have to do more in red states, but this is a bipartisan issue. It is a political agreement. In my view, the way that you strengthen that political agreement — right now we have an MOU among governors, many of whom are going to flip over. You have to have a political foundation that supports that so that when the new person comes into office it's incredibly politically difficult for them to back out; they have to keep moving.

You have to have support from industry. In Massachusetts, there was enormous support from industry. National Grid, their biggest utility, was a huge supporter of this. As soon as Romney — I mean the legislature has something in right now to require Massachusetts to join. Whoever replaces him, Massachusetts will be in in two seconds. In Maryland, there is a similar negotiation going on with the legislature.

So I think it is a matter of having depth and breadth of commitment broadly among the stakeholders, so that whoever is the political person in power, that's the political choice that is going to be right for them. I think it will be very interesting to see how global warming plays in the 2006 elections, how people who are supporting strong policies fare against people who are saying, "Let's not deal with this." I think that is also going to influence choices going forward, when they see how many people win because they have a strong position on this issue.

But you have to have industry and consumer support, I would say, in addition to the environmental community.

PROFESSOR GALIZZI: Thank you. Your question?

QUESTION: Thank you. The question I have is more on the judicial end. One of the things that has come to mind is the Bush Administration packing the courts with more conservative candidates.

<sup>37.</sup> Governor Mitt Romney of Massachusetts.

<sup>38.</sup> Governor George Pataki of New York.

<sup>39.</sup> Governor Arnold Schwarzenegger of California.

<sup>40.</sup> Senator John McCain of Arizona.

<sup>41.</sup> Senator Chuck Hagel of Nebraska.

Has there been any outreach to educate the judiciary about the effects of global warming? I would think, with the tsunami and Katrina, you might not need to hit people over the head with this issue. But, then again, some people will say, "Something else caused that." Has there been any effort to educate the judges on the federal level about these issues?

MR. DONAHUE: I don't know.

MR. SNYDER: Let me just first start from our perspective. We see that that is important, and so we try to when we file papers in the papers go into great detail on the impacts, the harms. If you look at our complaint in our nuisance case, it goes on for pages and pages on that.

Also, the fact is newspapers are doing the job for us. It seems like every week there is a front-page article in *The New York Times* about the latest study, the Greenland icecap disappearing, or the Arctic. The judges read the papers.

With the number of cases that we are filing, that are in litigation, more and more judges are going to become aware of this issue. The education happens in that way.

I think as far as anything formal, like a presentation to a body of judges, I am not aware of any such thing happening on that level.

MR. DONAHUE: I think it has probably happened on the other side, that is, seminars that have been a bit controversial. This is a little bit anecdotal, but I had a hearing before an eighty-something-year-old federal judge last week that had to do with regulating fisheries. The judge volunteered that maybe global warming was affecting the health of the stock of fish. So I don't know. At least one. He is not someone I would have been surprised to hear say that anyway.

I think that is crucial. That is ultimately when everybody becomes persuaded that this is as a matter of fact an urgent problem that we have to do something about. I think that is happening. It is happening slower than it should. But then, hopefully, you will get consensus. There will be disputes about methods, but not about whether it is a problem, which has been an enormous barrier so far. People have been able to say with a straight face, "Do we really need to be doing anything about this?" That is changing.

QUESTION: A real quick follow-up. The reason I asked the question is because I was certain that the other side had done exactly that. What I am thinking is it's like only being presented with one argument. I think a lot of times if we are not aggressive and at least meeting the arguments — you can spend a lot more time looking at

the papers, but if you have a live person in front of you discussing those issues, I think it does make a big difference. I like to think that they read everything that they get, but that's not reality.

PROFESSOR GALIZZI: We have a question here.

QUESTION: Thanks. Actually I have a question of clarification. To go back to RGGI, I think one of the issues about RGGI is that it is a nonbonding agreement, right? This is an MOU that has been signed by the seven party states. So I think the overall cap is not a binding cap in that sense. Correct me if I am wrong. You're talking about the individual state caps, right, that it is anticipated that the states would pass regulations and new statutes?

MS. BRYK: Right, right.

QUESTIONER: Part of the rationale was the Compact Clause issue. Is there more that you could say possibly? I don't know how much you have been involved in these negotiations specifically and the analysis of why this is not a Compact Clause issue.

MS. BRYK: It's what I do.

QUESTIONER: To me it is not at all clear that this does not necessarily raise Compact Clause problems actually.

MS. BRYK: I don't want to get into all the legal arguments, but we have researched the Compact Clause issue. They still have to be careful as they go forward, but I think they will do it in a way that there won't be a legitimate Compact Clause challenge to them.

But you are absolutely right, the cap is and all the benefits — I mean the whole program only comes into existence when each state either adopts it through a rulemaking process or passes legislation.

PROFESSOR GALIZZI: There is a question there.

QUESTION: It seems that both RGGI and the movement of many states towards adopting the Pavley Regulations is based on the premise of no possibility of short-term federal action to cap and then reduce greenhouse gas emissions, whether from the stationary side or the mobile side. Implicit in both of those is that there is some number of states, or some percentage of the market, at which point a tipping point is reached and federal action would occur. We have certainly seen that with other tailpipe emissions in the car sector, although not yet with fuel economy or greenhouse gas emissions.

I'm wondering whether you have a sense of what that number is, whether it's a number of states, whether it's a market penetration, whether it's a percentage of market going forward, or some other sense that you have that could inform us to where is the point at which Congress says, "Okay, we have to deal with this"; or, alternatively, the industry goes to Congress and says, "Hey, we need a na-

tional plan here. We don't want RGGIs or Pavleys or West Coast versions of those. I was wondering just what your insights are on that.

MR. TRIPP: Rich, I don't have any particular insights. It may be the case that, with the states that have already adopted it, and then you include a couple more states that are considering it, it might be a third of the population, a third of the economy of the country. Will that cause the automobile manufacturers enough of a problem in terms of the kinds of vehicles that they are selling so that they would have an incentive to go to the Congress? Maybe. It will certainly help.

Certainly, with Pavley, you can then look at what Canada is doing and may do in the future, you can look at the European Union, what China is doing. I think it is probably not only what is going on this country but what is going on elsewhere. Possibly, in the case of Pavley, again combined with oil markets, and fuel markets. The world has changed a lot for the automobile manufacturers over the last year and a half, since the Pavley law was adopted. And changing oil markets, increasing prices for oil, may affect what consumers want in ways that would be helpful to Pavley. So there are a lot of things going on.

MS. BRYK: On the electricity sector – you know, I'm the eternal optimist — I think we are already there. You've got the whole Northeastern market and the West Coast market and everybody who sells to them. If they are going to start regulating sales, which both regions are planning to do, then everybody who wants to build a coal plant in the interior west and sell to California and everybody in Pennsylvania and Ohio who wants to sell into the RGGI states, they all have to start meeting those standards.

You already have Jeff Sterba, 42 the head of PNM, 43 the New Mexico utility, saying to EEI, the industry group, "We have got to cut a deal with this Administration. We are not going to get a better deal with the next Administration." So the industry association for power plant owners is already saying, "We have to figure out"—

<sup>42.</sup> Jeff Sterba is Chairman, President, and Chief Executive Officer of PNM Resources. He is active in national energy policy and is a leader in the utility industry.

<sup>43.</sup> PNM is an electricity and natural gas utility serving the state of New Mexico in the United States. For more information, see PNM Homepage, http://www.pnm.com/home.htm.

It is a concern, because the follow-on to your question is: What do you do when a weak federal program comes into place; is that going to preempt the better things that are happening at the states? That is a worry. But I think things are already changing in the industry, and that is changing the federal negotiation.

We can't lose momentum, we have to keep momentum, but I don't think we need tons of more states to come on board.

MR. TRIPP: You know, all the states that have signed up for it are states that predominantly burn oil and gas — there are some coal-fired plants, but not a whole lot. Pennsylvania burns a lot of coal, and then you go to other parts of the country — I think in the country still 50 percent of our electrical energy comes from coal.

MS. BRYK: It does.

MR. TRIPP: How do you see RGGI influencing the coal states; and, in turn, the federal government, what the federal government might do about that?

MS. BRYK: Well, Pennsylvania and New Mexico are two coal states that are looking at a cap-and-trade program as one of their choices. They are trying to figure out how to address emissions statewide. Pennsylvania is an observer to RGGI, even though they haven't stepped up yet.

Both on the West Coast and in the Northeast, part of what they have to be thinking about is: What is the future for coal as part of a national program? I think what it is going to be is using some of that allowance money to spur investment in IGCC, which was mentioned earlier, gasification with carbon capture and storage. That is the future of coal.

So one piece of the puzzle is keep suing and prevent the construction of new coal plants that are using old technology, where you can't really do carbon capture and storage; and then, on the other side, say: "If you want to sell into California or RGGI, you have to use that technology. If you join, New Mexico, then you will have this allowance money that will be part of a way that you can create incentives so that your state is first state to get into that market." The same thing with Montana. I mean these states are looking at exactly those kinds of things.

MR. TRIPP: If California argues effectively that it is covered by Section 209 of the Clean Air Act, then a weak federal program would not interfere with at least California's ability to adopt a tougher program and other states to opt in. I suppose that is a potential advantage on the transportation side.

PROFESSOR GALIZZI: Any other questions?

QUESTION: This is just a follow-up on the California proposed model. What is the legal basis that California would use for regulating emissions coming from Montana coal plants? How do you do that? What is the statute?

MS. BRYK: They would regulate the sale of electricity in their state, the emissions associated with that electricity. It is basically an emission portfolio standard that you would adjust so that it ends up being a solid cap. They are saying, "We can regulate what is sold in our state. We are only regulating suppliers that are operating in our state. We are not regulating anybody in Montana; we are regulating people who sell in California." So they are not actually regulating power plants out of state.

PROFESSOR GALIZZI: I have a question. I think some of the questions that the students have written actually are challenging us. They tend to be not following the green consensus. I think it is important to address those issues as well.

The first question that one of the students had is: What role do NGOs play in the effort to control global warming? In particular, I think this is what they were getting at: What attributes do they posses that allow them to be more or less effective than either government or private companies in doing that? I think it is a question of legitimacy, or why the NGOs are taking this on and why do they think that they are better than the government. That is a question for the two of you.

MS. BRYK: Well, I don't think I am better than the government. But this is a huge, huge problem. The government doesn't have the resources to do it. In the RGGI negotiation, you have all of the states. Some of the states, like New York, had a lot of staff. Some states had one or two people working part-time. That is not enough people to do a complex negotiation with five different industry sectors and dozens and dozens of companies, plus the environmental community, plus consumers, and you've got electricity consumers as well as electricity generators. I mean there just are not enough resources within state government to do it alone.

And also, I think a lot of people in state government, or in government generally, don't think it is their role to be proactively reaching out to industry to find the national grids of the world and figure out how to negotiate with them and bring them in to be partners in developing really ambitious environmental programs. Some of the companies like that are already at the table with their sleeves rolled up, but some you have to go knock on their door and find them. I think that is another role that environmental groups play.

And then there is the whole sort of grassroots public education, getting this to be newsworthy, and putting political pressure on the states to keep doing what they are doing, and on the governors to stick with their commitments. Even though state people might want to do that and support that, the pressure on themselves to get their job done is part of what makes them be able to explain to their governors why this is a package that he has to really move forward with.

MR. TRIPP: In the way you framed it, there was the whole question of legitimacy.

PROFESSOR GALIZZI: Yes.

MR. TRIPP: If you look back, part of the answer is historical tradition, and then there is also a partial legal answer.

The historic tradition goes back to de Tocqueville and the role that groups of citizens getting together to do things played, even then in the 1830s, in the development of this country. The Abolitionist movement was largely citizen-driven for years, if not decades. A lot of the reform movements of the late 1800s/early 1900s — the civil liberties movement with the American Civil Liberties Union after World War I, the women's movement, the civil rights movement to a large degree citizen run, and the environmental movement, and there are many others. However, there certainly is a political tradition in this country of legitimacy for nongovernment organizations banding together to influence decisionmakers.

In terms of the structure of American law, at least some of the laws, including the Clean Air Act, has citizen supervision, as does the Clean Water Act<sup>44</sup> and so on. So there is sort of a legal recognition that nongovernment groups have a role to play — whether it is as private attorneys general or whatever — but have a role to play in terms of spurring the proper interpretation of laws, the proper enforcement of laws.

I suppose a third response in terms of legitimacy is economics. There are people in the country willing to give money to groups like NRDC and Environmental Defense. That is a source of our legitimacy. It is kind of a market argument. You know, companies exist because people buy their products, and we exist because people give to support our services.

PROFESSOR GALIZZI: Thank you very much.

<sup>44. 33</sup> USC § 1251, full text available at http://www.epa.gov/region5/water/pdf/ecwa.pdf.

I think another argument in support of NGOs that do environmental work is that nobody seems to ever challenge the legitimacy of the other NGOs. The business community — they don't call themselves NGOs, but they have their own lobbies, which are actually very powerful. If it wasn't for many of the NGOs that are represented here, most of the activities and the actions that are taking place in the United States would not be taking place. So I think that is another argument to say, "We need another voice that can only be the voice of the people, meeting in spontaneous groups, to, as you say, continue with the longstanding tradition of American involvement in the political process and in the legal process."

But we do have another question there.

QUESTION: Thank you. I am with an NGO as well. I was wondering if there is a mechanism in RGGI and programs like it to prevent minority and low-income communities from becoming pollution sinks?

MS. BRYK: Ah. Well, this is less of an issue with CO<sub>2</sub> than it is with other pollutants where you have like "hot" spots. There is definitely a concern with market-based programs that the trading doesn't mean that the worst-polluting places all end up in poor communities and that's how you're solving the problem. With a global pollutant like CO<sub>2</sub>, that is less of an issue, although there are sort of collateral impacts. If you are dealing with carbon, you don't care, but there are some other impacts in terms of where those other pollutants are congregating.

The issue in RGGI that has come up has been more on the money side, like how do we make sure that we protect them? You know, you might say, "Oh, a little five percent increase in your electricity price isn't such a big deal." Well, it is if your electricity bill is where all your disposable income is going. So making sure that the pot of money that I talked about that the allowances represent is used to make sure there is zero impact on any low-income communities has been the main issue that we have been discussing there.

I think people really haven't gotten up to that level of detail yet, but the assumption and the hope and the plan for working on the issue that you talk about would be in other fora where we are dealing with the other pollutants.

MR. TRIPP: If you look at — just another response — the kinds of facilities that may be built in response to RGGI, it could include, one might think, wind turbines, which is a siting issue, where are you going to site wind turbines. There have been no proposals that I have heard of to site wind turbines in the South Bronx. There cer-

tainly have been proposals to build wind turbines off the south shore of Cape Cod, very disturbing to rich people; to build wind turbines off the south shore of Long Island, of concern to some people; to build wind turbines on ridges of hills, including in the Adirondacks. So, at least insofar as wind is the renewable energy of choice economically, one would think that traditional EJ kinds of siting concerns would not be foremost. The concern is going to be that rich people with political power are going to, one way or another, influence it, have their special concerns, and try to get them recognized.

PROFESSOR GALIZZI: A quick follow-up.

QUESTIONER: The way that the regulations are constructed now is you have specific filters and things like that to protect from the emissions that are spewed out by power plants and such. With RGGI, I am not sure that those particular control mechanisms would necessarily be mandated anymore. So I guess my question is: How does RGGI fit in with controlling emissions to EJ communities?

MS. BRYK: I don't think there is an answer there. Any power plant that is going to be regulated by RGGI is also going to continue to be regulated by the other programs that regulate those other pollutants. So if I have to put a scrubber on to deal with some other pollutant, I can't just take it off because now I am being regulated by RGGI.

But it is true that RGGI is unlikely to — there isn't a tailpipe or smokestack fix that you would just put on top of a power plant, other than the idea that if you build a new coal plant that is gasified you could capture the CO<sub>2</sub> and sequester it underground. Until that is happening, you are basically having plants either improve the efficiency of the plant, which could reduce other pollutants as well; or they are going to do fuel switching; or they are just going to run less, even using the same plant. Those things would all actually create collateral benefits for the other pollutants, especially for the community around that plant.

PROFESSOR GALIZZI: There is another question?

QUESTION: Thank you. Do you see any potential lawsuits coming out of Hurricane Katrina relating to climate change? I understand some of the levee breaks are really from Lake Pontchartrain and are not the result of sea level rise. But certainly, coastal Louisiana and Mississippi, which suffered so much from previous wetlands loss, it was indirectly caused in part by sea level rise. So it's a clear place where there has been an extreme weather condition, and we are going to see more of it as the climate changes. How can that be made? There is certainly personal injury there to a great degree.

MR. DONAHUE: The problem is the large number of defendants, I think. The problem of identifying — and Jared talked about identifying a group of utilities that control coal plants that are such big contributors that you can really point to them and say they are a discernible part of the problem. But for something like sea level rise, it is not just the United States, although we are the biggest contributor. But breaking it down into a fairly discrete cause/effect relationship would be extremely difficult.

I think there is some talk, some scholarship, about the plight of small island countries that are disproportionately affected by sea level rise and their ability to go after the big emitters through some sort of international mechanism for not doing anything. There you might be able to say, if you think of the United States as a whole or China as a whole, that there is at least a cause/effect problem. The problem there is going to be finding some sort of enforceable mechanism for the countries and the fact that they don't have much power.

MR. SNYDER: Let me just add a couple of things. There is really, I think, a difference between a forward-looking lawsuit and one that is trying to allocate the blame for something that happened. It is both the issue that yes, global warming contributes to hurricanes, contributes to storm intensity; but to be able to say that this particular storm was caused by someone that contributed to global warming is really a more difficult proof than just a forward-looking lawsuit saying "you need to reduce your emissions to prevent worse hurricanes."

It also goes to the number of defendants, because in our case we can argue that reducing emissions from these five companies will reduce the risks posed by global warming, it will have a benefit going forward. But again, it is hard, for the reasons that Sean described, to say that five companies' emissions caused that particular hurricane.

That said, I believe there is at least one lawsuit out there regarding Hurricane Katrina, but I believe it is against insurers rather than against the polluters.

MR. DONAHUE: Right. Insurance companies are the ones. Because they have a whole lot of policies, they kind of aggregate whatever increase of risk of storm damage, they are going to see that. It is less that they have become litigants, but maybe that they have become supporters of action because they face big payoffs.

MR. TRIPP: As just sort of another aspect of it, I do serve on the Louisiana Governor's Commission on Coastal Restoration. If you

are looking for people to sue, you might not first and foremost go after companies because of their greenhouse gas emissions.

There are all kinds of reasons why Louisiana has lost 2,000 square miles of coastal wetlands in the last eighty years. A lot of it has to do with the federal government, the Corps of Engineer programs, and the oil and gas industry — not because of the oil and gas industry's role in emitting greenhouse gases, but because of the thousands of miles of canals they have dug through the marshes and the withdrawal of shallow deposits of oil and gas that has contributed to the subsidence in certain areas of coastal Louisiana, and the Corps' navigation channels. So I think there are easier targets if you are going to do that.

PROFESSOR GALIZZI: You had a question?

QUESTION: We spoke briefly about what happens with different administration changes. I am curious, especially Mr. Snyder, where you see, with what you have been doing, regarding your next new boss coming up, whether the administration will be less aggressive, and whether in any other states that have been aggressive in this area you see any backing down or other states stepping up?

MR. SNYDER: I can't really guess what will happen in the Attorney General's office.

As far as other states, Dale mentioned Maryland has a possibility of getting more involved. Do they have a governor's race this year?

MS. BRYK: Yes.

MR. SNYDER: That could be a place to look to.

In Pennsylvania there is also an election this year, which could be important.

MS. BRYK: Yes, and Massachusetts.

MR. SNYDER: I'm sorry I can't give you any more than that.

PROFESSOR GALIZZI: I think we have no more time for questions. I just wanted to say thank you for all your input to the participants, to the public, that joined us in the discussion.