

D I A L O G U E

The Corporate Role in the Environmental Protection Enterprise

Summary

With real-time diagnostics, cutting-edge compliance management systems, and an underlying focus on sustainability as a good economic and reputational practice in many industry sectors, environmental compliance is increasingly self-policed and self-corrected by regulated entities. There is also much discussion about “cooperative federalism” and the need to ensure that program administration reflects the significant expertise and experience state agencies now have after decades of administering environmental protection laws. What would changes to the cooperative federalism model mean for the business community? More fundamentally, with private governance systems increasingly finding and solving compliance problems, how might the government role be re-envisioned in a way that aligns with, reflects, and harnesses this phenomenon? Last October, ELI’s 2017 Corporate Forum convened an array of experts to consider these and other questions. Below we present a transcript of the discussion, which has been edited for style, clarity, and space considerations.

Benjamin Wilson is Managing Principal of Beveridge & Diamond, P.C. and Chair of the Board of Directors for the Environmental Law Institute (ELI).

Alexandra Dapolito Dunn (moderator) was the then-Executive Director and General Counsel for the Environmental Council of the States (ECOS).

Cassie Phillips leads the Private Environmental Governance Initiative at the Environmental Law Institute.

Richard DeSanti is Chief Environment and Safety Counsel at Chevron Corporation.

John Lovenburg is the Environmental Vice President for BNSF Railway.

Todd Parfitt is Director of the Wyoming Department of Environmental Quality.

Janet Peace is Senior Vice President for Policy and Business Strategy at the Center for Climate and Energy Solutions.

Martha Rudolph is Director of Environmental Programs at the Colorado Department of Public Health and Environment.

Benjamin Wilson: This forum continues ELI’s recent exploration of federal-state relationships aimed at identifying law and policy solutions for optimizing government roles going forward. This effort, which we have entitled the Macbeth Dialogues, is a partnership with the ECOS and has the support of the American College of Environmental Lawyers. It’s undertaken in honor and memory of a great friend of ELI and many of us, Angus Macbeth.

The starting point for the dialogues is “Cooperative Federalism 2.0,”¹ a document put out by ECOS this June. An initial Chatham House Rule gathering was held this summer that convened experts and key stakeholders, and in the past few weeks, we’ve conducted a broader survey on this topic, and that was sent out far and wide to get the input of multiple stakeholders. ELI will put out a policy paper that synthesizes today’s exchange and other ideas that are being shared through the Dialogues.

Based on the input to date, we think there may be room for consensus on the following ideas: the idea of moving environmental protection in the direction of an environmental protection enterprise, with the public and private sectors both having important roles to play; the notion that interstate dimensions still matter and warrant greater federal attention than intrastate issues; that consistency in implementation remains important as a means of ensuring fairness among states and a level playing field for business, but that greater state flexibility should be possible without compromising the goal of overall consistency; that when a state can do as good a job or perhaps better than the feds, that the feds should stand down, consistent with the principle of subsidiarity; and that agreement may be possible around an audit approach that can serve as a primary system for federal oversight of delegated programs in lieu of routine case-by-case review and intervention.

I think we’re all very much aware that a lot of the power has shifted to market forces and consumers, with private environmental governance mechanisms increasingly driving “beyond compliance” behaviors without the intervening hand of government. This last point is of particular importance.

Now, it’s my pleasure to introduce Cassie Phillips to tell us about the initiative she’s spearheading at ELI focused on private environmental governance. She’s going

1. COOPERATIVE FEDERALISM 2.0: ACHIEVING AND MAINTAINING A CLEAN ENVIRONMENT AND PROTECTING PUBLIC HEALTH, ENVIRONMENTAL COUNCIL OF STATES (2017), available at <https://www.ecos.org/wp-content/uploads/2017/06/ECOS-Cooperative-Federalism-2.0-June-17-FINAL.pdf>.

to identify the biggest opportunities and most pressing challenges facing the use of voluntary standards, eco-labels, and other market mechanisms to promote environmental stewardship. Cassie has negotiated a number of complex, multistakeholder environmental agreements implemented through voluntary means. She's an expert on the law and policy issues associated with voluntary standards. Prior to ELI, Cassie was vice president of sustainable forestry at Weyerhaeuser.

Cassie Phillips: As Ben mentioned, private environmental governance is the market-driven world of voluntary standards, both formal and informal. It fits very nicely with the subject of the Macbeth Dialogues, which is cooperative federalism, or how to integrate the relationship between different levels of government. To which I would add, between government and voluntary standards bodies.

Now, I hate to be the skunk at the picnic, and in general we should be very positive about the idea that companies use voluntary standards to go above and beyond the law, to have a "green" reputation, and maybe even to earn a price premium. But the world of standards and private environmental governance is not quite that simple. Sometimes "mere" legal compliance can be an important goal of a voluntary standard. And achieving consistent legal compliance, especially globally, can be an important accomplishment. How to do this—how laws and standards fit together—is thus an important topic.

In my experience, "just" using a third-party-audited environmental management system, preferably International Organization for Standardization (ISO) 14001,² to get consistent compliance with environmental laws and standards, especially at an international level, can be a huge boon to both the environment and business.

Companies, especially U.S. companies, are often attracted to voluntary standards because they present the opportunity to level the playing field with international competitors, perceived as operating under less-demanding laws. But "comply with the law" raises challenging questions when working across jurisdictions. Some laws in some countries exist on paper but are never enforced, and some may even be excessive and shouldn't be enforced, but are called out occasionally for corruption purposes. So, coming up with consistent legal norms is necessary. But when the norms are established, then actually holding everybody accountable for meeting them can make a huge difference.

I will provide a couple of examples. The American Chemistry Council's Responsible Care program requires a third-party-audited environmental management system, which requires, among other things, consistent legal compliance internationally. I'm confident it has made a difference.

In my world, in forestry, a good example is Brazilian pulp. The Brazilian pulp industry is based on planted euca-

lyptus trees, not on native tropical forests. The industry needed to differentiate itself from tropical forestry, however, which had a reputation for corruption and illegality. The companies were able to do that by agreeing to voluntary standards requiring, among other things, full legal compliance, which let them gain access to markets internationally that are very different from those of their counterparts managing native tropical forests.

This leads to policy and legal questions on both sides. How does a regulatory system take account of and give credit to implementation of legal requirements through a voluntary standard? And the flipside is how does a voluntary standard take into account the existence and enforcement of legal requirements? These are very challenging and important questions.

And I could talk all day about them, but you'll be relieved to hear that instead I'll turn the subject over to our very able panel and moderator, Alex Dunn. Alex is the executive director and general counsel of ECOS. ECOS is an organization of state environmental directors and federal environmental leaders. It's nonpartisan, it's respected, and there's nobody better to tackle this question of the integration of state and federal requirements, and perhaps to throw in voluntary standards to boot.

Alexandra Dapolito Dunn: Before I introduce the panel, I'll pick up where Cassie and Ben started, which is that we are at a pivotal moment in looking at our system of environmental protection in our country. The Administration has arrived. The president has strong views about the role of the U.S. Environmental Protection Agency (EPA). His EPA Administrator, Scott Pruitt, has very strong views about the role of the federal EPA and the states.

The states have been thinking a lot about what this new dynamic might mean for implementation of environmental protection. And really, as we've been thinking about it, not just the states, but with other bright minds, we've confirmed that we need a system of environmental protection that doesn't rely on just one party—the federal government or the state government or citizen suits or the private entities or third-party pressure to make results. We need a system.

I think of it as pulling a wagon, a very heavy wagon. The public expects clean air, clean water, beautiful forests to hike in and to have access to, and if we want to provide those things to the public, no one party can pull that wagon alone. I think we all know that. The idea of private environmental governance is to explore the role of one of those particular parties that can help us pull and deliver the clean and healthy environment that people want—and that is the corporate sector.

My second job was at American Chemistry Council. I worked there right after Responsible Care launched, so I got to see what it was like in the early days of corporate environmental standards and how companies were starting to use these codes of conduct to run defensive plays, to run offensive plays, to brand themselves with their com-

2. *ISO 14000 Family—Environmental Management*, INTERNATIONAL ORGANIZATION FOR STANDARDIZATION, <https://www.iso.org/iso-14001-environmental-management.html> (last visited Jan. 4, 2018).

petitors, and to distinguish themselves in the marketplace. And then, as we fast forwarded into the George W. Bush Administration, there was talk about whether some of these stellar actors, the A students in the classroom, might be entitled to less oversight? Would those certification programs, those compliance standards, allow perhaps a regulator with limited resources to turn his or her attention to another party in the system? We tried approaches like this.

Some of you might remember Project XL³—a national pilot program to test innovative approaches to environmental protection, which allowed some companies to increase compliance, reporting, and transparency and receive some reduced oversight—and projects like it. We have toyed with these concepts for a long time, exploring the role of the private environmental governance system and most specifically, how can we use private environmental governance as a collective society to change how we deliver environmental protection. Is it an add-on? Is it the dessert after a meal that you can take or not take, or is it part of the main course of delivering the protection?

The U.S. Senate was supposed to vote this week on the EPA Fiscal Year 2018 budget; it's been deferred. But we know that the amount of resources that our federal government plans to invest in EPA and the states has stayed flat, and there's a potential, depending on how politics go, of it declining.

Does that mean that we should look at private environmental governance in a different way and take more advantage of what it has to bring? How do we build the credibility and the trust into private environmental governance that could allow the public to view it as an acceptable substitute, if we want that, for traditional regulation? We have just the right mix of people on the panel to kick this off.

Richard DeSanti is the chief environment and safety counsel in the Environmental and Safety Law Group in the Chevron Corporation Law Department. He leads the 26-lawyer Environmental and Safety Law Group that provides advice across Chevron's businesses, both in the United States and worldwide. I think that global component is something that we're going to want to touch on because that is part of environmental governance. There are also other forces outside of these 50 states.

Next is Janet Peace. She is the senior vice president for policy and business strategy at the Center for Climate and Energy Solutions, or as some of us fondly refer to it, C2ES. C2ES has the largest U.S.-based group of companies devoted to climate policy and corporate strategies as an advisory council. Janet works closely with their Business Environmental Leadership Council; mainly Fortune 500 companies with combined revenues of more than \$2 trillion and more than 3,500,000 employees.

Our next speaker is John Lovenburg, environmental vice president for BNSF Railway, another company that's almost a household name. BNSF Railway is a Berkshire

Hathaway company. It operates in 28 states and two Canadian provinces on 32,000 miles of track. They have 40,000 employees and more than \$20 billion in annual revenue. John brings not only the domestic, but also the global perspective working with our North American neighbor, Canada, as well as working in so many states, and has probably had a chance to compare and contrast between different states and how they might approach private environmental governance.

We are also joined by two state environmental regulators. Martha Rudolph is the director of environmental programs at the Colorado Department of Public Health and Environment. She serves as the director of all environmental programs for the department—air, water, hazardous materials, environmental health, and sustainability. Martha is also an environmental attorney and previously spent 14 years with the Colorado Attorney General's Office and has been in private practice, as well as a past president of ECOS.

Todd Parfitt is the director of the Wyoming Department of Environmental Quality (DEQ). Gov. Matt Mead appointed Todd the director of the DEQ in 2012. He previously served as the deputy director and head of the Industrial Siting Division and he has also been in private environmental consulting. Todd currently serves as ECOS' president.

I'm going to kick it off with a question that will start by going down the line. For each of you, you've heard Cassie talk about private environmental governance and how she frames it, and you've heard me frame it in a way, so, when you hear private environmental governance in your role, what comes to mind?

Richard DeSanti: I think of engaging and harnessing things like environmental management systems to enable and assure compliance. I also can't help but think, as soon as you raised that concept, about issues of sustainability. My concern is that if you take our current system of environmental governance in the United States and try to think about it 50 or 100 years from now and just extend out the current trends, we have right now 35,000 pages of environmental rules in the *Federal Register*. It's twice the size of the federal tax code. Most people think the tax code is pretty complex. You extend that out over pick-your-time frame, it just becomes an unsustainable burden.

You add that to changes in the workforce, young workers coming in who think e-mail is too long and complex and want to do everything with instant messages, and you try to marry those two trends together; it just doesn't work. So, it comes to me that you have to think about private environmental governance. To your point about is it the dessert or is it part of the entrée, I think it's got to be part of every course in the menu.

Janet Peace: That's a good analogy, and I will try to build on that, but I come at this from two different vantage points. First, as somebody who has worked on environ-

3. *Project XL*, U.S. ENVIRONMENTAL PROTECTION AGENCY, <https://archive.epa.gov/projectxl/web/html/index.html> (last visited Jan. 4, 2018).

mental policy for more decades than I care to admit, and second, as somebody who has always worked with large companies. I think that private engagement and corporate involvement in policy is critical. They bring a lot of on-the-ground industry and technology experience. This experience can improve the effectiveness of environmental efforts, reduce the cost, and increase the flexibility for both government and industry. With industry cooperation, you can test and pilot not only new ideas, but different processes and even alternative technologies, all of which can significantly help you in the long haul. I think these are just a few of the reasons to have companies involved in policy discussions.

But I also worry a little bit that there could be too much emphasis on corporate self-regulation, if that's the right word. I think you can get a problem of self-selection. Leading companies step to the front and take pride in doing the right thing, but you can also have others step to the back, who may not be as good at protecting the environment. The leaders take the spotlight or focus, and the worst environmental actors don't get noticed, which, of course, isn't good. It's also not good for these corporate leaders because they incur the costs of protecting the environment where others get a free ride. If, as a company, you really take environmental protection seriously, you may incur higher costs than perhaps a rival business, and that could make you less competitive. Requiring that every company achieve a specific level of environmental performance can help avoid that, and most companies, I believe, desire a level playing field.

In addition, I think there's a danger in relying solely on voluntary efforts because you can end up with performance only at the corporate average baseline level, if you will. With only voluntary efforts, you likely will not get the same level of innovation that you would from a regulation or a set of subsidies that can pull or push new technologies into the market. So, while there are a lot of pluses for having companies involved in policy, I believe there's also a role for government and mandatory policy. To continue with the previous analogy, private environmental governance should be part of all the courses on the menu, but not the only thing on the menu.

John Lovenburg: For corporate governance, I'll take that internally and then externally. We do a lot of benchmarking. I would say our system starts with an environmental and safety stewardship culture. That's the bedrock of where we start. And we layer on enterprise risk management systems and then sustainable solutions on top of that. Building on what Richard was saying, within our management system, we have close to 1,000 permits at our facility. It's not an easy task to manage that volume of facility permits.

Thus, having a good environmental management information system to help you stay on top of all those permits is important. Having a continuous improvement system, which means having some best practices. Having an environmental audit system, a continuous improvement

system, I think is part of having a good, solid, sound environmental management system; that's our internal system to get better and better.

From an external standpoint, part of good governance is having good partners. That's original equipment manufacturers, it's agencies, it's nongovernmental organizations. C2ES is a member of the Global Logistics Emissions Council, which is a global group looking at carbon footprints across the transportation chain.

Alex mentioned global pieces. We have thousands of customers that are moving their freight and they're operating globally. So, trying to get that information and integrate carbon emissions across the global supply chain is part of what we do externally.

Alexandra Dapolito Dunn: Excellent. And then, we have our regulators who interface with private environmental governance in probably a very different way than our first three speakers.

Martha Rudolph: In listening to the other speakers, you're really looking at how to ensure compliance with the minimum regulatory requirements and how to reward or recognize achievement that goes above the minimum environmental regulations that are out there. In my view, they go hand-in-hand. You want to make sure that there's accountability, that you have a way of trusting but verifying that the companies that say they are environmental leaders are really environmental leaders.

I'll be up-front: every company out there says, "We care about the environment. We care about public health. We've got all these programs in place to ensure that our company is on top of things and is really in compliance." They all say that; they don't all do that. That's just a fact.

It really has to be part of the company's ethos. It really has to be something that is embedded in the company's systems, and we're talking about some kind of environmental management systems. From my perspective, every large entity has a hard time getting the desires and the direction of the leaders down into the field, down to where it really counts, to the staff that really implements the programs.

We have issues with that in my department. I'm sure it's the case having been in private practice and having been in-house. It certainly is the case in companies. You really need to make it part of the management systems that go all the way down in the company that make it part of an employee's responsibilities that they'll be evaluated on, and not just how many widgets did they get out the door, but how did they comply with the environmental requirements. And maybe rise above that depending on the particular company: how did that individual employee achieve those environmental goals? I think that's what's really important, to see how it is embedded within the company.

Because it is the case that as budgets get tighter, as requirements get more stringent and there's more of them, you have to develop a means of building the relationship and trusting the companies that you're looking

at to do the right thing so that you can focus on those companies or those entities that are struggling more to come into compliance.

Todd Parfitt: Picking up where Martha left off, she mentioned the budget and the resources that the agencies have to deal with, and we all realize that we're facing tighter times in terms of budgets and so forth, and so we need to look at innovative ways to get to the outcomes that we all want. What's the most efficient way to deliver that service? And it's important for the states and the federal agencies to embrace the idea of innovations. That's a really important concept, not that that hasn't been adopted or incorporated already. For example, in Wyoming, we have a self-audit program that has been used and is very beneficial to companies to identify where they may have shortcomings from compliance with the environmental rules, but allows them to get back into compliance without penalty or repercussions.

We're working on information technology, environmental permitting, environmental reporting, making things easier for the regulating community, easier for the states in terms of how we manage that data and making the data relevant. Often, you see programs where we may have been collecting data for years and years and years and somebody asks why we're collecting that data and nobody really has a good idea and it's not being utilized in the way maybe that it was originally intended.

Martha touched on the trust issue, and I think anytime you set up these innovative programs, you have to ensure that there's trust by EPA, trusting the states, because the states have primacy for these programs and EPA plays an oversight role. The states have to trust the regulated community and, vice versa, the regulated community has to trust the state's role or whatever programs that are established. But most important on the trust issue is the public trust. There's a public expectation that we achieve the outcomes that we all set out to achieve in terms of protecting the environment and public health, and that's in the public interest. That's key because I think we can all envision where that trust is lost or violated; it only takes one instance and that affects the entire universe of the regulated community moving forward.

Lastly, it's a matter of keeping things simple. It's really easy for the requirements to get very complicated, but we need to keep it simple. It was mentioned that there are 35,000 pages of rules that we have to deal with. We had an initiative in Wyoming in which we were directed to look at our rules and reduce them by one-third. And you'd be surprised. It seemed like a daunting task, but there are a lot of redundancies in existing rules and finding those redundancies and making the requirements simpler will help with the compliance regulations.

Alexandra Dapolito Dunn: I think we've established through this initial conversation that private environmental governance is valuable, and a part of every course at the

table. Do you have examples or can you share an experience where private environmental governance actually supplanted or freed up the resources of a regulator? Maybe it was in presenting information to a state agency, whether it was an audit or disclosure, where the private environmental governance system resulted in lifting a burden off a stretched regulator.

John Lovenburg: We do a lot of permitting. We get maybe 300 wetlands permits per year on the railroad on average. And so, one of the things we've done is we've built some geographic information system (GIS) tools. There are a lot of great federal databases for doing National Environmental Policy Act⁴ permitting. We've worked with Esri, a software vendor for GIS, and we've imported all the federal databases into a single format to overlay them with our tracks on our projects. What that allows us to do is to do siting at the same time we do permit constraint analysis. So, if I'm putting in a siding at a railroad track, I might tell the designers, "Why don't you put the siding on that side rather than putting it in the wetland?" Then, we avoid having an impact. What we've done with this GIS tool in working with the U.S. Army Corp of Engineers, EPA, and the states is to share that information from the GIS databases.

These are not our databases. These are all federal databases: endangered species, wetlands, tribal lands, and land use information. So, we see that as a good way for us to play a facilitating role in helping to provide information that's publicly available to facilitate the permitting process.

Alexandra Dapolito Dunn: That's fascinating because you're sort of harmonizing information that might be available to the state regulator if the regulator had the time to check six different sources of federal information and then has the technological capability to, as you said, overlay those layers. You can bring something that's a step ahead. Then, from a credibility standpoint, we talked a lot about trust and accountability for our regulators. If a company is relying on publicly available government data, does that put you in a better place?

Martha Rudolph: It certainly does. And I was going to mention something that actually dovetails with this, which are the innovations that technology brings or the capabilities to bring all that data together to then share with the government or with the public at large. I think that is really where this needs to go in many respects. For example, in Colorado, we started using infrared (IR) cameras. It's a relatively new technology, but it's really not that new.

What IR cameras do is they allow the viewer to see emissions coming from a valve, from a smokestack, from whatever you're pointing the camera at. It doesn't quantify the emissions. It doesn't speciate—meaning it doesn't tell you what the specific chemical makeup of the emission actually is, but it does show you that there are emissions.

4. 42 U.S.C. §§4321-4370h; ELR STAT. NEPA §2-209.

What this has done is enabled us and the inspectors to go out to oil and gas facilities in particular and do an inspection and very quickly see where there are issues.

But more importantly, the industry itself has been using IR cameras on their own to detect leaks that they can just go out to with a wrench and shut down. And so, when we get reports of that and when we go out and inspect, we also see much greater compliance with our requirements regarding leak detection and repair than we ever have before. Thus, I think technology can assist both the regulated community and the regulators as well as provide valuable information to the public at large regarding the status of compliance or just how a particular facility is operating. Are they in good stead? I think innovation and technology can also be a great assistance to everyone who is involved in environmental regulation and just promoting good public health and environmental outcomes.

Janet Peace: I have a different example that illustrates the importance of private environmental governance. There was a recent effort by the Financial Stability Board, who put together a corporate task force to examine what types of climate risk should be disclosed in financial statements. They came out with recommendations that, among other things, outlined how companies should report their overarching governance of climate risks, their corporate strategies, and suggested metrics.

This guidance will be helpful for industry. I also think it's helpful for the public, which is actually looking for that kind of information. Right now, we have some pretty generic guidance from the U.S. Securities and Exchange Commission (SEC), and I can tell you, as someone who has looked at these disclosures, some reports have one sentence that says, "Climate is not a material risk," and others have six pages or more of stuff that's not really relevant. Nevertheless, those six pages took somebody a lot of time to create, so guidance about what to include will improve the consistency and efficiency of reporting.

These recommendations are not just important for financial disclosures. They are also important because there are well over 200 different platforms for disclosing climate risk information. Some of the companies I work with have two or three people whose sole jobs are working on those disclosure reports. Some consistency would be good across those reports including what's being asked, how it's being asked, and how you're actually reporting it. I think that's helpful for stakeholders, it's helpful for industry, and, in the end, it's going to be helpful for regulators when they look at what should be in these financial reports.

Alexandra Dapolito Dunn: You're making me think that with private environmental governance, you could just keep adding on to it. Especially if you have a large company, you keep adding on, adding on. But if the add-on has no value, then private environmental governance just becomes background noise, right? So, you want it to

be something that is meaningful, that helps people make decisions, helps regulators, and helps the public.

Richard DeSanti: I agree with you completely: it's got to add value. You can spend a lot of time on an environmental management system and not get great results, but you can also spend a lot of time and get great results. And one question is, how you do that?

Alexandra Dapolito Dunn: Janet, you mentioned earlier that private environmental governance may lower the bar in some way, that everybody out there says, "Oh, this is now the standard. This is what we do. This is what good companies do," but instead we may want to see regulations that pull forward progress, or you mentioned subsidies that incentivize progress. And we've been talking a little bit about innovation. Is it your sense that private environmental governance becomes like a club that actually disincentivizes forward progress?

Janet Peace: It could be. There's quite a bit of empirical evidence that says that regulatory pressure strongly and specifically influences the decisions of many firms, especially as they think about capital investments, or even moving forward with voluntary programs. And similarly, there's quite a large body of evidence that suggests you need policies to both push and pull technologies into the market. Especially if you have a big environmental issue that you want to deal with like climate change, you need regulation or policy, not just voluntary action. Policy, like a pricing mechanism, can pull those really innovative technologies into the marketplace. Without that, there is a danger that you've got companies who are going to put a lot on the line to come in with this new technology to address an environmental issue and nobody's going to want it because the additional cost could make them uncompetitive.

Todd Parfitt: When you look at innovation and creating incentives for those innovations, one of the things that we've explored is having on- and off-ramps. For example, with the frequency of monitoring, it makes sense to say, "If you meet these certain criteria, we'll allow a less frequent monitoring," which is an incentive to the company upfront. But the incentive to maintain compliance is that if you fall out of compliance, then you go back to the more frequent level of monitoring. So, building in those incentives tied to frequency can have quite a significant savings.

I also wanted to add one other example. Say you have an oil field and they have a large number of spills throughout the course of the year but they have a finite budget to address their infrastructure. We've actually had programs where we sat down with the company, identified where their most frequent events occur from spills, and then have them focus their limited resources in updating the infrastructure in those areas. Not that they don't address the other spills—eventually, you'll build out the whole infrastructure—but you do it in a more environmentally

protective manner just by being innovative on how you approach the issue.

Alexandra Dapolito Dunn: That's sort of an example of the regulator. And I'm going to turn this one to Richard because I wonder how you would feel if you went into a meeting with a state regulator and they said, "Well, Chevron. Here is where we'd like you to invest in your infrastructure over the next couple of months." It strikes me that you might have other plans.

Richard DeSanti: We might. But I would hope that we would've done the kind of analysis you're talking about; that is optimizing, if you have a limited amount of resources to bring to bear to a problem, where you can do it best. And if there are companies that don't have that mindset or need help with implementing it, to the extent that regulators can help, I think that's great.

We've been to some extent mixing two streams here. One question is incentivizing good behavior that's beyond regulatory requirements. And that's a piece of private governance. There's another stream that is more of what we heard from our state regulator friends of how you manage limited budgets or, from my perspective, how you manage the world of 35,000 pages of things to comply with. And I have to add that it's not just 35,000 pages. It's 35,000 pages where you can almost pick a paragraph at random and three lawyers can debate for two hours what that paragraph means. So, there's a real level of complexity and difficulty in compliance. Somebody used the phrase "mere compliance." Well, if your job is compliance, ensuring compliance with that 35,000 pages plus the state stuff on top of that, that's not "mere."

That's a big job and it's a big job for the regulators to comprehend and implement their side of the equation of assisting compliance and ensuring enforcement of all those pages. There's a piece of environmental compliance separate from going beyond, that is how do we simplify and manage that whole compliance issue and maybe allow regulators to focus their resources where they can do the most good.

Alexandra Dapolito Dunn: You have to take care of the baseline compliance before you can really be about "look at our water reduction and our global target for this or that," that may be sort of smoke and mirrors if it's detracting from a company that is in its basic day-to-day operations having some compliance problems. All of that window dressing doesn't really get away from the compliance issues.

John Lovenburg: Two things come to mind. Maybe riffing off the state agency lead, Todd and Martha. One perspective on regulations is looking at more of a performance-based regulation approach. And I think that gets at some of the streamlining. If you get to a little bit less prescriptive and a little bit more visionary and that's the path you're going directionally, I think that's one way you can get sim-

pler regulation. I think the other thing that enables that is leveraging technology.

I'll give you a good example. This is not an environmental regulation example, but on the railroad, we spend a lot of time installing sensors: we have ground-penetrating radar, infrared, acoustic, and thermal sensors. And we get millions of readings a day and we have a couple dozen data scientists that will crunch that data and use that information for proactive maintenance of the railroads, trying to drive down any kind of risk issues.

Separately, we have a whole prescriptive regime that's very manual, go-in-the-field, visually looking at the things. We're using drones, advanced sensors, and big data. We are eons beyond some of the very prescriptive safety regulations. It's in our best interest to be safe, to not have a derailment. So, if you have more of a performance-based standard that said we want you to be safe and get safer, we'd be leveraging all that innovation without also having to do all the redundant prescriptive things that aren't really adding any value at this point given how far the technology has come.

Martha Rudolph: Let's talk about Cooperative Federalism 2.0. I think you're hitting on an issue that the states collectively are very interested in looking at, and that is to come up with more flexible ways of assuring the outcomes that we're after in protecting public health and enhancing the environment. How can we do this in a way that is measurable and actually allows those goals to be achieved without the checkbox—you know, have I done all the things that historically perhaps had to be done when the environmental programs were new and nobody quite really knew how to implement them or where the flexibility should be?

The states have become much more sophisticated. By and large, industry and companies have become much more sophisticated as well, and I think recognize that we need to protect public health and the environment. How can we do it in a way that collectively achieves those goals?

That's what we're talking about in this cooperative federalism, allowing the flexibility so that you're not just making sure that you're complying with requirements that do not help achieve environmental and public health goals, let's look at the underlying requirements themselves. Are all of them actually something that achieves the ultimate goal of improving and protecting the environment and public health, these are the metrics that we're trying to measure and we're trying to get to. That's exactly where the conversation needs to go forward: let's get away from checking the boxes for requirements that are largely ministerial and really look at how we can move the environmental programs forward, looking for how individual states can take steps within their own programs, looking at their unique circumstances, to meet the larger goals.

And yet, what you do in one program, say, hazardous waste, may have a profound impact on the water quality program. Shouldn't you try to figure out how to make them work together in a way that really achieves the ulti-

mate goal of protecting health and the environment rather than making sure that the hazardous materials are dealt with this way and the water quality's protected that way? We should also look at things more holistically.

Alexandra Dapolito Dunn: Looking at things holistically is exactly how many companies work, right? You look at the big picture and then there's the microprocesses. I think a lot of the public takes comfort in the microprocesses. They take comfort in every box getting checked and every notice being filed. So, how do you say to the consumer of the clean and healthy environment out there, which includes all of us in this room, "Don't ask us how we got there. Just be glad we got there. We achieved the goal. We achieved the net ton reduction"? Any thoughts on how to build the credibility?

John Lovenburg: I was describing our governance around sustainable solutions; that really is the integrating function. I'll give you a good example for the railroad. We burn about 1.3 billion gallons of diesel per year, so a very sizeable amount; and volume would be tripled if the freight was moved by truck. So, fuel efficiency: we've doubled our fuel efficiency in 30 years. That would've been 2.6 billion gallons. And for us, fuel efficiency is also greenhouse gas efficiency. So, you can figure out, if I'm getting 1% efficiency per year, I just saved 13 million gallons. I am using fewer resources, I've got lower greenhouse gas emissions, I've got lower particulate and nitrogen oxide emissions. I've got a lot of win-wins there. It's a very compelling and easy internal business-focused driver and it also has a lot of co-environmental benefits. That's an easy place where you say, "Well, I'm going to try and turn the screws on John," but you don't need to turn the screws on me on those. I mean, it's in my business interest from a cost, from a greenhouse gas, from a social license, all those aspects. Trying to find those sustainability sweet spots in every organization is part of helping business get that traction and driving environmental stewardship.

Richard DeSanti: Let me riff in a different direction. When you said the public likes to have the boxes checked rather than the results, I think you have to be careful or maybe more nuanced talking about the public. Certainly, if a particular community, let's say, is opposed to a particular permit or a particular project, then yes, they're going to look to see that every box was checked because that's what they want to see. I think when you talk about the public generally, the millions of Americans, I think they're more interested in the results and not in the check-the-box process. I'd be interested in particularly what some of the state regulators feel about that. It's, are you concerned about the project, a particular project? Yes. Then, I think you'll check the box. If it's, are you concerned about environmental quality? I think it's more the end product. And if we check all the boxes but we don't improve environmental quality, I don't think the public's going to accept that.

I think there's also a bit of a disconnect—I haven't seen the statistics in the past few years—but there used to be surveys about environmental quality, kind of nationwide surveys, and people would, year after year, put deteriorating air quality as a major concern when Americans are breathing air that is cleaner than they've ever breathed in the lives of anyone here. Somehow, all the incredible environmental progress that's been made with lots of effort by regulators, by regulated entities, by everyone, lots of money, somehow that isn't coming across to the public. And I don't think you're going to make huge progress in either private environmental governance or decreasing complexity of regulation or anything else until you get a better understanding by the public of all the benefits that have been achieved. You can still say there's way more to be done, but I think there is less acknowledgment of the road that's been traveled than there probably should be.

Janet Peace: I think that's really interesting. I co-teach a class on environmental policy and I often bring up to the students, "Do you know that we have more forest cover today? Do you know the air is cleaner?" And most of them don't. So, I think that's an interesting perspective, that you have to realize that we have made a lot of progress.

And I also want to riff off of what Martha said, which is give people the road, tell them what you need, and let them figure out how to get there. I think that gives companies a lot of flexibility. Because there are many different innovations you could use. I'm thinking in particular about greenhouse gases. Tell people what the long-term goal is and then go ahead and let them figure out how to get there.

We have a lot of experience with policies like market mechanisms that provide a financial incentive, flexibility, and certainty to move forward in a particular direction. If a company needs to invest in a large 30-year facility, they want to know what policy is going to look like over the life of that investment. Therefore, giving people an indication of what's going to be expected is really important.

Todd Parfitt: On the issue of checkboxes and the silo, I agree with Martha; sometimes we do get into these silos, and I always enjoy the phone calls that I get from a company because in a week they got a visit from the air quality folks, from the water quality folks, and from the solid and hazardous waste folks, but all on different days. You'd think we'd do a better job of coordinating that for the company and for the agency to be a little more efficient with the work we do and I would tend to agree. When I think about this idea of you've got the general public and you've got this subset of the public that may have a more focused awareness of the environmental programs that we have, for me it comes down to trust and relationships.

We have to ensure not only from the state and the federal agencies, but from the regulated community that we build that trust so that they feel more comfortable as we implement innovative approaches to compliance. Because if we don't build that trust and establish those relation-

ships, there's going to be that question in the back of their mind: "What are they getting away with this time?" And that is always a challenge to innovative approaches.

Alexandra Dapolito Dunn: Is there anyone in the audience who'd like to start a conversation?

Audience Member: I think any of us who've worked on environmental management programs over the years have recognized that if you're managing primarily for compliance, you have a lousy management system. If the management system is integrated, is part of the operations, then compliance follows. One of the areas that makes the biggest difference, and some of the speakers have already talked about that, is risk management. Particularly looking in terms of maintenance—preventive maintenance, predictive maintenance, management of change. I guess it'd be interesting to see how the corporate speakers use those techniques in terms of their own operations and also as part of the culture. And from the regulators' standpoint, in terms of how many of the issues that they face really are a result of lack of adequate preventive and predictive maintenance and management of change—in other words, when things are changing in operations, it hasn't exactly been managed appropriately.

Alexandra Dapolito Dunn: That's a great point. It makes me think about someone at a recent ECOS meeting, who said we're very big on how quickly we responded to the incident and how quickly the public expectation is becoming "why didn't you prevent it? You have all those sensors on your tracks. You have all that GIS mapping. Don't tell me how fast you got there to the spill. Tell me why you didn't know there was going to be a spill." So, let's talk a bit about the risk management component.

Richard DeSanti: I'll start. I agree with you completely about a management system being focused on the good results, not just compliance, and the role of risk management or risk analysis in a good environmental management system. I think that's extremely important. That's speaking from the perspective of environmental performance. The issue is, as a lawyer, for a company with a very strong compliance policy, risk management just doesn't come into that. I mean, you can't risk-manage compliance. You can't say, "Well, this one, we have a low risk that anyone will ever find out so we don't have to pay as much attention to that." Compliance is compliance, so you've got to stay focused on the whole suite of issues.

That's why I talk about the 35,000 pages, because if you've got to comply with all of it and you've got to have a strong level of insurance of compliance, that's a lot of effort and a lot of detail. But again, I agree with you completely that if you're talking about managing environmental performance, that risk analysis is extremely important. It goes to some of your comments about the state level and focus-

ing of a regulated entity on where they can put resources to reduce the most impact.

John Lovenburg: I would say the same thing: part of a good management system is embedding a good environmental and safety culture, and pollution prevention. A lot of it is going from a very reactive approach to a proactive approach. If you're going to operate something until it breaks versus putting in diagnostics and doing condition-based maintenance systems, those are things that we don't call environmental, but they're all things that have environmental benefits. So, that's part of how running a good business helps you with your environmental compliance and risk reduction.

Janet Peace: We did a study a few years ago where we called companies listed in the Standard and Poor's Global 100 Index and other companies in our Business Council, and we asked them how they're managing their risk of climate change. Almost all of them talked about their enterprise risk management systems. But when we asked about how they were managing risks that were changing because of our changing climate, there was more uncertainty. We heard "Well, we're not factoring that in because we don't really understand it." Not all said that, but many did. Others suggested they were struggling with how to actually account for those changes. The U.S. Department of Energy (DOE) now has a voluntary Partnership for Energy Sector Climate Resilience⁵ and that's trying to help companies think about the risks associated with climate change. That's a public-private partnership and a good option for building credibility and knowledge that I think is really helping industry actually understand and manage their risks.

Alexandra Dapolito Dunn: I'm going to reflect on Donald Rumsfeld's "known knowns, *known unknowns*, and unknown unknowns"⁶ analysis. In order to do it, you have to know what it is. So, you're saying if you don't understand it, you can't manage it.

Janet Peace: And large companies, by and large, have way more capacity to figure this out. They have scientists and experts in different areas. But if you're a small to medium sized company, that risk is pretty significant and you often don't have that kind of capability in-house. That is where these public-private partnerships and voluntary programs are really helpful; they help build capacity.

Martha Rudolph: Our experience—my staff may have a different take on this—is when there's an issue, it's either that you don't have a system or the system failed. I mean, it's pretty simple. I would say that most of the larger, sophisticated companies have systems in place. And when

5. *Partnership for Energy Sector Climate Resilience*, U.S. DEPARTMENT OF ENERGY, <https://energy.gov/epsa/partnership-energy-sector-climate-resilience> (last visited Dec. 12, 2017).

6. Quote by Donald Rumsfeld, YOUTUBE (Aug. 7, 2009), <https://www.youtube.com/watch?v=GiPe1OikQk>.

something goes wrong, it's usually because of human failure, and it could be human failure in not recognizing that a piece of equipment needs to be upgraded or replaced, but it's basically human failure.

And this gets back to one of my earlier comments: you need to make sure that all levels of staff really appreciate the need to do what it takes to be in compliance and that is part of their job. Then, in the smaller companies, a lot of them either are hand-to-mouth or they just don't have those kinds of systems in place to look at all regulatory requirements or they only look at the ones where somebody brought it to their attention because they got caught or something happened.

We assume that the larger, more sophisticated companies know what they're doing, so we prioritize our programs to focus our attention on the small and medium sized companies because they may not have the processes in place, or they don't even know what they're supposed to be doing. We try to help them out. But from my perspective, it's largely human error that ends up being the issue for us.

Todd Parfitt: I'd say we have some similarities to Colorado, but clearly it's very evident when a business has adopted the culture of environmental protection. I would wholeheartedly agree with that. I don't know that I would go so far as to say that all the larger companies that we have in the state have maintained that culture. I think the culture is there, but sometimes for a variety of reasons that culture may erode over time. And that is when we run into some really serious issues. We do the same thing in terms of focusing on those that have a lesser ability to incorporate the programs, the medium and small companies. But when the big companies have a problem, it's a big problem.

Audience Member: I find the conversation very interesting and I'd like to throw a bit of a different perspective on it: the invisible versus the visible. I work in Europe a lot and one of the big incentives for the Environmental Liability Directive,⁷ for example, is the emphasis on prevention. And we've had lots of discussions on whether the Environmental Liability Directive, just as one of the many directives of Europe, is successful because you can line up all the cases that have been brought or not by the Member States and judge it on that basis.

Or is it in fact that the emphasis on prevention, which is incentivized in Europe and not well in the United States, brings a very different perspective and in fact is demonstrative of the success of the directive and is still nascent in its development because it in fact emphasizes this? All companies do preventative activities, particularly the large companies, but obviously the midsize and the small too, and they get almost no credit for that. There's no mechanism in the regulatory arena to give companies credit for that. So,

I would say that a system that would work better would be one that truly measures the invisible and gives them credit for that and incentivizes good behavior that would negate the need for regulations.

Alexandra Dapolito Dunn: That is the ultimate question: can private environmental governance completely replace the traditional role of regulation? I think we started there, and I'm glad you brought us back. If you have some thoughts, especially those of you who work in other countries, on rewarding the good behavior, the invisible, please share.

John Lovenburg: When I think about sustainable solutions, if you look at a more sustainable society and sustainable development—I think of sustainable freight development—it's not just looking at issues through an environmental lens. It's an environmental, social, and economic lens. EPA commissioned a National Research Council study focused on looking at altering the EPA mission to more of a sustainable solutions mission.⁸

If you're redesigning it from scratch and saying, "Those are the outcomes we wanted. We wanted pollution prevention. We wanted less resources used. We wanted efficiencies. We wanted to address climate change"—if you look at all of those sustainable outcomes as the goal, I think you have potentially designed a different regulatory system. So, it may not necessarily be that incentivizing natural resource damage assessments is the equivalent of the Environmental Liability Directive here in the United States, I'm not sure if you would come out in the same spot, but again the way I describe sustainable solutions, it's purposely a win-win. I'm not necessarily looking for an agency to reward me for things that I'm doing because it's good business anyway. So how do we get to a more sustainable regulatory system that rewards sustainable solutions that balance social, economic, and environmental outcomes?

Janet Peace: It seems like environmental oversight is shifting more toward the states. States may have more ability and flexibility to take advantage of corporate good behavior than perhaps EPA does. For example, Todd talked about how if a company does certain things, maybe they won't audit them as frequently. And I think that's good from a corporate perspective. Martha also mentioned several similar things where the state may have more flexibility to reward good corporate behavior than the federal government does.

Martha Rudolph: I'm going to put a big caveat on that. About 10 years ago, we tried to come up with our own environmental management system permit system and reward those companies who had good systems in place, who had been compliant, and were going above and beyond, and found that because of the delegated nature of

7. Memorandum from the European Commission on the Environmental Liability Directive (Apr. 27, 2007), available at http://europa.eu/rapid/press-release_MEMO-07-157_en.htm?locale=en.

8. NATIONAL RESEARCH COUNCIL, SUSTAINABILITY AND THE U.S. EPA (2011), available at <https://www.nap.edu/read/13152/chapter/1>.

the programs, we were unable to offer the incentives that were desired by the companies because of the restrictions in the federal laws. We couldn't make the permits any longer than five years. There were requirements that had to be in the permits. There were minimum things that we had to do and from a perspective of what would provide the needed incentive for companies to pursue an environmental management system permit, we were not able to offer them what they were after because of the restrictive nature of the delegated programs.

Alexandra Dapolito Dunn: The 35,000 pages.

Richard DeSanti: Or to echo an earlier comment, it's requirements that once upon a time we thought were integral to achieving environmental performance, but technology, attitudes, environmental management systems, everything has gone beyond that. But now the need to check the boxes is preventing you from taking the next step.

Alexandra Dapolito Dunn: There are some executive orders that President Donald Trump has signed, and lest one think this regulatory review is only done by the current Administration, recall we were asked to submit burdensome regulations that were not as productive as we'd like them to be under the Barack Obama Administration—ECOS submitted on that. I think if we combined our lists, we have a very extensive list, it could total close to 35,000 pages of regulations that have been identified as problematic or not achieving the goal, the outcome that we want. But getting that system to change, rebuilding it from scratch, John, as you suggested, is wishful thinking on all of our part—we're kind of tinkering around the edges.

Todd Parfitt: I'll add on to the previous statements about state agencies having the capabilities. As much as I hate to admit it, the states are typically the last to adopt new innovations. Businesses are typically ahead of where the states have the capacity to go, and so we're reactive in a lot of ways to the innovations that are coming out of industry. Now, there's more we can do I think to find ways to have those discussions and see how we can integrate that faster, but right now I think we are always lagging behind.

John Lovenburg: I think the Interstate Technology and Regulatory Council is a wonderful organization. It's a state-led agency around remedial technologies and it's a great place for benchmarking, a great place of common ground. Many states, just like industry, are taking on liabilities in terms of orphan sites, underground storage tank funds, operations and maintenance for Superfund sites. I think there's a lot of common ground to be had among the regulated industry and states in that form. I think that's a great example of a partnership that works very well.

Audience Member: I've been thinking about how these vague concepts get operationalized. Speaking broadly, historically, in the environmental and occupational safety and health areas, we've done voluntary opt-in programs: voluntary protection programs in the Occupational Safety and Health Administration world, Project XL, Performance Track, and sustainable sectors. The one that's being revived by EPA today is sector strategies. And some of these have been studied and there is a lot of literature about whether they're really very viable. Also, in the securities world, we sort of allowed private entities to devise a consensus standard gap and then we've delegated a lot of the compliance job to these hired consultants, auditors to evaluate, and the SEC almost manages by exception.

And I guess that's happening with site cleanups, states have been licensing private parties. I'm curious in terms of how this would actually happen. Do you see one or the other of those approaches being more promising or should there be a combination of approaches?

Alexandra Dapolito Dunn: I'm glad you brought that up. There's New Jersey's Licensed Site Remediation Professional Program—this concept that some other party could perform this service and then allow us to then more efficiently use the resources here?

Richard DeSanti: I think a combination of approaches for incentivizing and facilitating. The model I like best is the Transportation Security Administration's TSA PreCheck. I would like to see a version of Performance Track or Project XL or OSHA Star that is modeled on TSA PreCheck.

Alexandra Dapolito Dunn: We have previously talked about the fact that some states have companies within the state that they call frequent flyers, and this is how we got to our airport analogy. There are companies that are well-known. They've operated in Wyoming for 100 years. They've been coming to you for permits, Martha or Todd, for x number of years—can you treat those entities slightly differently, like a TSA PreCheck? The people who come through the airport all the time, they know to take off their shoes, use three-ounce bottles, and so on, and we instead put our resources on entities that might not know those things.

Richard DeSanti: You mentioned three-ounce bottles, and I think that's an important point. TSA doesn't say if you want to do PreCheck, you have to use one-ounce bottles, for example; that you have to be beyond compliance. It's just "we trust you that you're actually using a three-ounce bottle."

Audience Member: A lot of what you've been talking about has been oriented toward the large companies, on the regulatory side but also it seems to me possibly on the private environmental governance and the voluntary standards side. I want to ask whether the voluntary standards,

private environmental governance, is a potential method of reaching the small and medium sized enterprises. Because in my experience, and I've been a proponent of the voluntary standards, particularly environmental management standards but also greenhouse gas emissions, they are things that reach large and maybe medium sized, but not small. Is it possible to extend this to the smaller?

Janet Peace: I'll jump in and not on the emissions side, but on the resilience side. The voluntary DOE partnership that I mentioned includes small companies and large companies. And the large companies actually mentor some of the smaller companies in terms of what's worked, how to talk about it, and even how to work with public utilities commissions. I think it's been very helpful for the companies, both large and small.

Martha Rudolph: It made me think, we have an environmental leadership program in Colorado and I think most states do have some kind of environmental leadership program where you're rewarding those environmental leaders who have, depending on the level, done a one-time thing or are consistently above average. But you know you're achieving things that are greater than compliance, just in compliance.

When we surveyed the companies that are routinely in that program, one of the things that they have asked for is the ability to mentor other companies, which is really interesting to us. We didn't ask them to do this. They want to do this. And so, we have been pairing them up with smaller and medium sized companies to help them with environmental issues that they may have. It's something that has actually worked, and is working very well.

Alexandra Dapolito Dunn: It's sort of the one bad apple spoils the bushel, right? So, for those leading companies, they want to lift everyone up so that the entire sector is performing as best as possible. Anyone else want to comment on that?

Janet Peace: I will just add that there's pretty good evidence that rewards matter. If you give someone an award, or a pat on the back, then they can go back and talk to their senior management about that recognition—"Look what I got for this. Look at the recognition for our company,"—I think that matters.

Alexandra Dapolito Dunn: And I've heard that recognition by government is where it does matter. Recognition by your peers is important, but recognition by a regulator might just get a few extra points.

Richard DeSanti: I think that Responsible Care covers a pretty wide range of different-sized companies. So, that would be an example of how you can go about diversifying the number of companies or the size of companies involved.

Alexandra Dapolito Dunn: Todd, having seen all the mineral extraction work in Wyoming, do you have some small entities that can survive in that market or is it mostly large?

Todd Parfitt: Depending on which sector you're talking about—on the mining side, it can be fairly large. But on the oil and gas side of things, we run the gamut. During the boom times, you'll have 100-plus companies, but I would say probably the top 10 typically are the majority operators and then the others are coming in at a much smaller rate.

We do have a voluntary remediation program that is helpful in terms of the liabilities that one might face, but you're still doing the same type of work that you will be doing if we were taking an enforcement action, it's just under a different umbrella.

Audience Member: I work with a lot of companies that operate in multiple states, and one of the biggest challenges for them developing an environmental management system is all the varieties of regulations in different states and even in local jurisdictions, and many of them advocate for more harmonization across state regulations. I'm curious what your thoughts are both from the regulatory side and from the business side. Now that we're looking at more state leadership on environmental regulations, how does industry continue advocating for some greater harmonization to make it easier for them to develop a corporate management system?

John Lovenburg: We own 25,500 miles of track and operate another 7,000 miles. So, if we're sending loads from southern California to Chicago, for us, we're very mindful of the different systems among the states. It's a lot easier for us to have one set of rules rather than multiple sets of rules. And what it ends up forcing is sort of this lowest common denominator approach, so it gets very tricky. It's not an easy thing to do when you're moving across states, and I will say we're big advocates in those situations for having a solid role for the federal government and a single set of rules. There are other areas where it's not as critical, where parts of the infrastructure aren't interstate, then a state system is much easier to manage. But, you're right, that is a big challenge.

Alexandra Dapolito Dunn: In fact, in the ECOS cooperative federalism paper, the widely acknowledged role of EPA is to set those national standards because they are critical. But then, of course, states can go above and beyond. So, Martha and Todd, you are neighbors, if I remember my map well enough. To John's point, do you ever look to each other?

Todd Parfitt: I was just going to say that we've been fortunate that Colorado follows the lead of Wyoming.

Martha Rudolph: I think that's a really good question because we're advocating for flexibility so states can do things sort of on their own. That does create the issue potentially of now every state doing their own thing and therefore you've got 50-plus different requirements that you might have to meet. I will say that I think with all the states, whenever we're doing certainly statutory changes but also regulatory, the question always comes up, "What are the states around us doing? How does Wyoming and Utah do it?" And, "What are they up to?" and "How do they regulate this?" Then, we try to figure it out. And, frankly, the programs can be so very different and it's not that our air program is like their air program, only that we've got greater requirements or fewer requirements. It's that it's like apples and oranges.

It can be really hard to try to figure out what another state is doing in a particular program because their organi-

zation of their program is very different. But I think it's a really good question. And maybe what comes out of this, if we don't have the federal even playing field or the mandate that the states can do something different, is that this'll force the states. Maybe the companies can go to the states and say, "Can you work this out so that we can have a common set of requirements across all the states and here is what our proposal might be for that."

Janet Peace: I was thinking it could be ECOS.

Alexandra Dapolito Dunn: I love a discussion that lands with more work for me and my colleagues. In all seriousness, I enjoy a discussion that leaves us wanting more because I think we could keep going. That was a great last question. Thank you to our panel. It was a lot of fun.