This webinar was given on Thursday, March 10, 2021 by Amy Sinden, Professor of Law at temple University Beasley School of Law. It was given as part of the Regulatory Policy Program’s weekly webinar series.

Joe Aldy:
Welcome to the Regulatory Policy seminar. I’m Joe Aldy, the Faculty Chair of the Regulatory Policy Program, at the Mossavar-Rahmani Center for Business and Government at the Harvard Kennedy School. Let me open with a few reminders regarding the logistics of our online seminar.

Joe Aldy:
We are recording this seminar and posting it online. If you know someone who is interested but could not attend the talk live, please let them know that they can access the seminar at the Mossavar-Rahmani Center for Business and Government’s YouTube channel. I’ll post the link that in our chat in just a moment.

Joe Aldy:
You can also remind friends and colleagues to register for Zoom links for each seminar at the RPP webpage, and we'll include a link for you in the chat in a moment as well. We will take questions today through the Q and A function in Zoom. Please click on Q and A, the bottom of your screen and type your questions. The end of the presentation, I'll take the questions and pose them to our speaker.

Joe Aldy:
We're excited to have Amy Sinden join us in the Regulatory Policy seminar to present regulatory review, progressive-style suggestions for the Biden-Harris administration. Professor Sinden is a professor of law at the Temple University Beasley School of Law, and on the board of directors of the Center for Progressive Reform. She writes and teaches in the areas of environmental, climate and natural resources law.

Joe Aldy:
She's written about the misuse of economic theory and environmental law and about the application of classical human rights norms to climate change and other environmental conflicts. Before joining the Temple faculty in 2001, she practiced law for 10 years, including representing citizens groups in Clean Water Act and endangered species litigation with Earthjustice and PennFuture. Amy, welcome to the Regulatory Policy seminar.

Amy Sinden:
Joe, thank you so much for having me. I'm really delighted to be here. I wish I could be here actually in person in Boston with you all. But instead I am reporting from my daughter's bedroom here in Philadelphia. She's in school so she won't be joining us as she sometimes does.

Amy Sinden:
Our system of centralized regulatory review and its primary tool, cost benefit analysis, dates back to the Reagan administration and it's rooted in a political narrative, first popularized by Reagan, but that really took hold and dominated our public policy for the next four decades.
Amy Sinden:
This is the story that says regulation is an unmitigated bad. It's red tape. It's a job killer. And that regulation is something that needs to be reigned in, cut back and defend. But today the world and the political landscape that the Biden administration has inherited has shifted radically.

Amy Sinden:
In the face of a raging pandemic, increasingly urgent calls for racial justice, a widening wealth gap and an accelerating climate crisis, that anti-government, anti-regulation narrative has lost a lot of its salients. It's become pretty clear to a lot of people, but government regulation is the only thing that's going to keep us safe from disease, address racial and economic inequality and stave off climate apocalypse. The Biden administration, I think really gets that.

Amy Sinden:
In its executive order on modernizing regulatory review, this was one of the ones that Biden signed his very first day in office, made clear that he's rejecting that old narrative of regulation is red tape or a job killer. Just look at some of the language in this executive order. "Regulations that promote the public interest are vital for tackling national priorities." He says. Instead of talking about relieving burdens on industry, Biden's executive order talks about revamping regulatory review to ensure that it does not have harmful anti-regulatory or deregulatory effects.

Amy Sinden:
That is really a radical shift in perspective and not just from previous Republican administrations, but from prior democratic administrations as well. I think the Biden team really gets that in this current landscape, we need an entirely different vision of regulation and a regulatory review. One that's up to meeting the challenges of the day. It's in that spirit, I think, that this executive order directs OMB to begin a process, to produce a set of recommendations to improve and modernize regulatory review.

Amy Sinden:
That of course is what I want to talk to you about today, are some ideas that I have about how they may want to go about doing that. But before I get to that, I want to back up a little bit and talk about how our current system of centralized regulatory review originated, how it's evolved over the past 40 years and what's wrong with it. Then with that foundation in place, I'll talk about some ways in which I think the Biden administration will want to reform the process, if its ambitious public policy agenda is going to succeed.

Amy Sinden:
Our story starts in the late 1970s. Now, in the early part of that decade, the country had just witnessed an explosion of federal legislation on air pollution, water pollution, endangered species, hazardous waste, worker safety, consumer protection and so on and so forth. Industry was really for the first time being held accountable for the various public harms resulting from their activities and they didn't like it.

Amy Sinden:
They were looking for some tool that would help them push back against all of these new rules coming out of federal agencies that were costing them money. They found that tool and an idea that had been
percolating for a decade or two among a set of conservative economists at the University of Virginia, University of Chicago, London School of Economics.

Amy Sinden:
The idea was that rather than just assuming that government should step in and regulate any time the free market produces an extra analogy, you should instead put the burden on government to prove before they issue a regulation, that it's going to produce the same results that a theoretical, perfectly functioning free market would produce. That is that it would maximize net social benefit.

Amy Sinden:
This would essentially require the government agencies to conduct a grand cost benefit analysis of all the social costs and benefits of a regulation before they could assure. Industry and their political allies on the right latched onto this idea and tried to get it incorporated into law.

Amy Sinden:
They figured at a minimum, it would bollix the agencies up and delay things, and then would also tend to make regulation weaker by overemphasizing regulatory costs, which would be relatively easy to quantify while under emphasizing the benefits which are far harder to quantify.

Amy Sinden:
Initially their attempts weren't very successful. Congress rejected the idea in virtually every one of the statutes they passed in the 1970s. Instead they directed the agencies to set standards for clean air, clean water, safe workplaces and so on, at the level necessary to protect the public health, or based on something called a feasibility standard. Which essentially says, "Reduce pollution levels as much as you possibly can within the limits of technological and economic feasibility."

Amy Sinden:
The courts generally read the statutes written and rejected industry arguments that they should be read to impose a cost benefit standard. But then in 1981, industry found a friendly ear in the newly inaugurated President Reagan. Even though most of the statutes, as I said, directed the agencies to set standards using a fundamentally different framework.

Amy Sinden:
They got Reagan to sign this executive order that imposed a requirement on agencies that they conduct a cost benefit analysis of all major regulations. It's created a administrative overlay on the existing statutory process. And it led to this crazy anomalous situation we have today, whereby an agency might actually be prohibited by the statute from basing its regulation on a cost benefit analysis, but then be required by the executive order to do a cost benefit analysis that it then has to pretend not to consider. The Clean Air Act, National Ambient Air Quality Standards, which the Supreme Court confirmed EPA has to set without reference to costs, for example, is a case in point.

Amy Sinden:
Reagan's order remained in place until 1993 when Clinton replaced it with Executive Order 12,866 which remains in effect today. With this order, Clinton really tried to implement a course correction from the Reagan bush years. This order emphasizes the importance of unquantifiable variables, the imperative to
consider distributional impacts and equity and the primacy of Federal agencies and their mandates in regulatory decision-making.

Amy Sinden:
But the progressive and high-minded language in that executive order wasn't enough to overcome an entrenched agency culture, OIRA. The reality is there's a lot of different ways to rationally analyze the costs and benefits of a regulation. But over the years, OIRA has drifted away from the progressive vision of 12,866 and instead congealed on this highly formalistic version of cost benefit analysis, grounded in the paradigm of Kaldor-Hicks efficiency.

Amy Sinden:
This kind of analysis involves a comprehensive, quantified accounting of all costs and all benefits to society as a whole, and it emphasizes the calculation of net benefits in order to identify the alternative that maximizes the overall social welfare.

Amy Sinden:
What's the wrong with this formal version of cost benefit analysis? Particularly to problems I'm going to talk to you about today. The first one is that cost benefit analysis is inherently and fundamentally incapable of examining issues of fairness, justice and distributional equity.

Amy Sinden:
In fact, obscuring these issues is really built into the design of cross benefit analysis because it measures social welfare in the aggregate. If Jeff Bezos has 99% of the wealth and the rest of us are all fighting over the remaining crumbs, that's not going to be apparent from a cost benefit analysis.

Amy Sinden:
It's not even like the data that you collect for cost benefit analysis is in most instances going to be useful to you if you're trying to look at distributional impacts. Because of this, cost benefit analysis is simply not the right tool for this historical moment. Because it's tone deaf to the racial and economic justice issues that are literally tearing this country apart right now.

Amy Sinden:
Then the second thing is that this formal brand of cost benefit analysis assumes a world in which all or nearly all relevant values can be quantified and expressed in monetary terms. But that's just not true. In the real world, when it comes to regulatory benefits like public health and safety, ecosystems, economic wellbeing, we just don't have anywhere near sufficient data to undertake that kind of precise accounting.

Amy Sinden:
We know that various forms of pollution or unsafe working conditions, consumer products or risky financial practices are causing harm and that curtailing them will prevent harm. We just can't say precisely how much. The EPA actually provides a really good example for this. Because it's often held up as one of the agencies where the practice of cost benefit analysis is the most advanced and sophisticated.
Amy Sinden:
Two years ago, I completed an empirical study that looked at the major EPA rule-makings over a 13-year period, spanning the George W. Bush and Obama administrations. This study found that in 80% of its cost benefit analysis, the EPA was unable to quantify whole categories of benefits that the agency itself described as either important, significant or substantial.

Amy Sinden:
The fact is that of the dozens of pollutants that EPA regulates, there's really only one particulate matter for which the EPA has extensive data. There's a whole set of reasons why particulate matter has been much easier to study than the others. But the result is that for the vast majority of the benefits that EPA is able to monetize, for all of its regulations as a whole or 94% in my data set, are attributable to this one pollutant, particulate matter.

Amy Sinden:
For most of the other pollutants, they're simply unable to quantify any of the impacts and even the relatively big numbers that the agency generates on particulate matter are actually far from complete. They leave out cancer and other long-term effects that are associated with human exposure but a lot trickier to measure.

Amy Sinden:
The problem is so severe, that in many instances, the EPA is entirely unable to quantify the impacts associated with the pollutants that the regulation is actually aimed at controlling. In most of EPA's hazardous air pollutant regulations, for example, 100% of the agency's monetized benefit estimate is attributable instead, to the fact that the rule also has the ancillary effect of reducing particulate matter emissions.

Amy Sinden:
Now, this is perfectly legitimate as a matter of economic theory, but the EPA has heavy reliance on these co-benefits, as they're called, has really landed the agency in some political hot water as the right wing has latched on to this practice as a sign that the agency is resorting to subterfuge, to skew its cost benefit analysis by inflating its benefit numbers.

Amy Sinden:
In all of these instances that I'm talking about, the lack of quantification stems from inadequacies in the data. But that's to say nothing of the many values that resist quantification altogether, but nonetheless arise with some frequency and regulatory decision-making. Things like protecting the dignity of people using wheelchairs or reducing incidents of rape in prison, or reducing the occurrence of back over crashes in which parents accidentally kill their own children.

Amy Sinden:
Benefits that can't be meaningfully quantified represent a significant and pervasive problem that makes the hyper formalistic variety of cost benefit analysis that now dominates agency practice unworkable much of the time. The point of a highly formalized cost benefit analysis and the source of its purported advantage over other decision-making tools is its theoretical ability to identify the economically-efficient, i.e, welfare maximizing level of regulation.
Amy Sinden:
But where significant benefits can't be reliably quantified and monetized, net benefits can't be meaningfully calculated. That means identifying the alternative that maximizes net benefits is therefore impossible in. Such circumstances, actually in the words of OIRA itself, cost benefit analysis is less useful and can even be misleading.

Amy Sinden:
But nonetheless, despite these yawning data gaps, agencies feel enormous pressure to monetize both sides of the equation and hesitate to submit rules unless they can make their case on the numbers alone. Making that case is made even more difficult by the practice of applying high discount rates that have the effect of drastically shrinking the benefits that will accrue to future generations sometimes down to almost nothing.

Amy Sinden:
The result is to impose on agencies and often insurmountable burden of proof, putting a chilling effect on the implementation of regulatory safeguards and leading agencies astray from their statutory missions. This flies in the face of the precautionary principle, the idea that we should prevent harm before it happens, even if that requires acting before all the data are in.

Amy Sinden:
What's the solution? I think the most important thing to recognize here is that there are other ways besides this hyper formal cost benefit analysis practiced by OIRA to rationally analyze regulatory decision-making and to consider costs and benefits. In fact, as I mentioned earlier, virtually all of our health safety and environmental statutes directed agencies to use one of these other methods.

Amy Sinden:
One of the most prevalent methods, for example, is often referred to as feasibility analysis. But the way feasibility analysis actually operates in particular statutory contexts, I think it's really best thought of as one component of what can be called a sequential cost benefit analysis.

Amy Sinden:
Statutes that take this approach usually direct the agency first to make a threshold finding, usually non quantified, that the pollutant or other hazard issue is harmful such that there will be some significant benefit from regulation. It then makes a more granular examination of the technologies available for reducing the pollution levels, the costs and the financial capabilities of the industry, using this information to set a standard, the most stringent level that's economically and technologically feasible.

Amy Sinden:
Like cost benefit analysis, this approach ensures that the cost and benefits of a rule are accounted for and that some check exists for keeping benefits appropriately balanced against costs. It's method for striking this balance, however, reflects Congress's judgment that we should base regulatory decision-making on the information we have rather than on the information we wish we had.
And that reducing significant risks as much as feasible will ultimately serve the public interests better than a quixotic attempt to produce a comprehensive accounting of social costs and benefits. These ability standards have a strong track record in U.S. law. They’re credited with bringing about dramatic improvements in air and water quality during the last four decades and their ability to produce on-the-ground results, I think is attributable in large part to the feasibility principles recognition of existing data gaps and its ability to work within them.

Amy Sinden:

Now, there are other well-established decision-making tools for considering costs and benefits as well, including cost-effectiveness analysis, a qualitative Ben Franklin cost benefit analysis, multifactor qualitative balancing, and for situations where outcomes are really unclear, a method that’s actually been practiced by the military for decades, scenario analysis.

Amy Sinden:

Recognizing that formal cost benefit analysis is fundamentally incompatible with attention to questions of distribution, distributional equity, that pervasive data gaps make it unworkable in many contexts and there’s no one-size-fits-all tool for regulatory decision-making.

Amy Sinden:

I think OMB’s new modernized system of regulatory review should direct the agencies to use the context specific methods that Congress called for in their organic statutes for considering costs and benefits. This new order, the Biden administration should also implement a set of specific practices aimed at elevating unquantified benefits to the same level of attention and consideration that’s accorded to quantified effects, and also aim to bring distributional impacts front and center. Including consideration of cumulative burdens and frontline community.

Amy Sinden:

Now, I have this. This last slide here is some more specific proposals for the Biden administration along those lines. But I’m think I’m going to stop here because I’ve talked at you all long enough, and see if you have questions.

Joe Aldy:

Great. Thank you, Amy. Let me remind everybody that you can use the Q and A button at the bottom of the Zoom window to submit your questions. I have a few questions and I've received a few from colleagues via email. One question for you, Amy, just in terms of the logistics of the seminar, do you want to keep this slide up or should we take this slide down?

Amy Sinden:

Take it down [crosstalk 00:25:05]. We can just go to regular mode.

Joe Aldy:

Okay. Let me start with what I think is a big-picture question, about how we think about what role the current regime has played, as you noted through the history, dating back to the Reagan administration. The role of conducting benefit cost analysis has played in regulations. And be useful to tease out from this, where we think regulatory policy has been affected and been directed one way or another by the
status quo and how it will be different under this proposed alternative that you discussed at the end of your talk.

Joe Aldy:
Because as you noted, regulatory agencies in a sense have two bosses. They have Congress which gives them the statutory authority. They've established objectives. You do it in a number of these environmental statutes. There's not any weighing of benefits and costs and driving or authorizing agencies on how to pursue a regulatory action.

Joe Aldy:
Then there's the White House in one form or another, getting back to 1981 saying, "We want to see some weighing of benefits and costs." Whether it's a really strict benefit cost standard, like in the original Reagan executive order. The one that was a little bit more nuanced of benefits of needing to justify costs and some language about why there are some perhaps, non-quantified or non-monetized categories of benefits could be used to justify costs that's in the Clinton executive order.

Joe Aldy:
But it'd be helpful to get a sense of where we think regulatory policy is different today, because of regulatory review, how it's different. Is it different in the ambition? Is it different in the way we've structured regulatory approaches? And how might we see things evolve if the Biden administration adopts this sequential approach that you described?

Amy Sinden:
Well, there's certainly examples of OIRA review resulting in actual weakening and certainly delay, both weakening and delay, of regulatory safeguards. Now, some of this is sometimes hard to piece together because there's been such a problem with transparency at OIRA, and I think this is another thing that the Biden administration is at least talking about trying to improve, which would be all to the good.

Amy Sinden:
Sometimes it's a little hard to see exactly what's going on, but they have for a number of years, tried to release redlined copies of the regulation before and after so you can get a sense. For example, I did a case study of the cooling water intake rule for big power plants, which was a big deal. I don't know, gosh, I guess that was 10 or 15 years ago now.

Amy Sinden:
But that's one where you could see a very clear weakening of the regulatory protections put in place by that rule as a result of the OIRA review, that stemmed basically from the difficulty that EPA was having in quantifying the benefits there. By the way, water, I was talking primarily about clean air regulations with EPA, that's the place where they're the best at quantification. When it comes to water, it's a mess. It's really hard.

Amy Sinden:
Because there you're talking primarily about ecological harms that are even less studied and less well understood and more difficult to quantify than harms to human health. That's one example, but other thing that's really important is that based on what we hear from people who have spent time within the
administration, so for example if you look, actually both at Cass Sunstein's writings and Lisa Heinzerling's writing, after they spent time in the Obama administration. Sunstein as OIRA director and Heinzerling was in the corresponding office at EPA that was interfacing with OIRA. Ironically, because Heinzerling used to be like a protege of Sunstein, so it was a funny thing.

Amy Sinden:
But you get the distinct impression from them that there's a chilling effect of the cross benefit requirements. You're absolutely right, that the Clinton order that is still in effect today, really tried to soften the edges of the Reagan order, as I said. One of the important things it did is it changed that word, outweigh, to justify, which obviously allows... The idea there was to allow a little bit more wiggle room and then talked repeatedly about unquantified benefits and the importance of considering them.

Amy Sinden:
The problem is that in practice, it doesn't work out that way. I think there's a lot of different ways you can try to explain that. Some of it maybe comes from the institutional culture at OIRA, where the staff are predominantly economists who have a very quantified way of thinking. I think some of it comes from what has been called the cognitive law of numbers and their tendency to just crowd out non-quantifiable variables and bring all the attention on themselves, so that even when agencies tried to talk in narrative terms about non-quantifiable variables, they inevitably get left out in the summaries and soundbites that get used to describe regulations.

Amy Sinden:
Because of a whole mix of forces like that, what's happened is that the agencies feel chilled and are basically afraid to put forward a rule to OIRA. Unless they can show that the monetized benefits are going to exceed the monetized costs. What that means is there's a bunch of things that never even make it to OIRA review because of this chilling effect that the entire process has had on the agencies.

Joe Aldy:
It's probably fair to say that applies under some statutory authorities and not others. Because as you noted, the Supreme Court's rule that in the context of the National Ambient Air Quality Standards at EPA, they can't actually take costs into consideration. As we've seen some in the past, where environmental groups will take EPA to court if they are failing to meet a statutory deadline and say a provision like a National Ambient Air Quality Standards, there is supposed to be a periodic review of those standards.

Joe Aldy:
It seems like that may be a case where they may not necessarily have the same chilling effect when where there's perhaps more discretion on the timing and perhaps even of the form of a regulation that EPA may have. Is that a fair assessment that there's some cases where EPA's hands get tied when they realize they're behind schedule or we can think about this in other contexts like department of energy has minimum efficiency standards for appliances.

Joe Aldy:
The law is very unambiguous. They're supposed to review them every six years and in fact, one of the things happening that was on Steve Chu's plate on day one when he became Secretary of Energy was a consent decree basically, or they were the negotiations of a consent decree that was agreed to a couple
of months into the Obama administration, on how they were going to meet that statutory requirement to actually review and update those minimum efficiency standards because the Bush administration had led that schedule lap.

Joe Aldy:
Are there some cases where we've got both a clear understanding, especially say under the Clean Air Act, that we're not going to weigh benefits and costs and we've got this schedule that provides a hook coupled with the citizens supervision and Clean Air Act that ensures that the regulations can still be brought forward but there may be other regulatory contexts under other statutory divisions where that may be a chilling case? Or do we think this has a chilling effect throughout everything that's being done in the regulatory agent?

Amy Sinden:
Well, I completely take your point. That's part of my point, is to say, there is no one-size-fits-all tool. We have to look at this contextually. And that what works for one agency may not be what works in another agency, or even within an agency under a particular statute or particular provisional statute. Absolutely context matters.

Amy Sinden:
But I guess what's interesting is you've got... Lisa Heinzerling was the one who was at EPA, who was most clearly saying this, that there's this chilling effect going on. And EPA is the place where you have this really clear. You've got Scalia saying for the Supreme Court, "You're not allowed to consider costs at least for the National Ambient Air Quality Standards." And yet her sense is there's still this chilling effect.

Amy Sinden:
It'd be interesting to ask her specifically is it happening with the enact, and hear what she would say. My sense is that it does, because when you look at the enact that they put forward, they usually are able to figure out a way to make the numbers work out. Maybe not every single time, they're usually able to find a way.

Amy Sinden:
The notion that the statutory deadlines and the specter of all those big environmental groups out there coming to sue the agencies is somehow creating an opposite chilling effect. A force in the opposite direction. I'm a little skeptical of, only because there's certainly a lot of empirical work out there from Cary Coglianese at Penn and others showing that the influence of industry on the regulatory process is just vast in comparison to the amount of influence that these handful of scrappy environmental groups getting their 25 bucks from each of us are able to put forward.

Joe Aldy:
Let's take a look at this sequential process that you described. I'd like to understand a little bit more of that threshold finding of harm where you say, if this was a significant benefits, this is how we think about our accounting or consideration of benefits and costs as we do this sequential approach. And we first say, is there a threshold of harm?

Joe Aldy:
Then we go through and figure out technologically what's feasible to address that harm. What's the kind of information that we would want for that and what kind of holes would that identify in say our current knowledge, or the current practice at the agencies, since as you noted, there's a lot of either unquantified or unmonitored categories of benefits in current practice? It seems to me, there may still be some prospect that those holes could apply for this threshold finding. If that's the case, how would we go about trying to remedy that problem?

Amy Sinden:

There's a universal call among proponents of cost benefit analysis. When they talk about the problem of unquantified benefits, usually the end of what they say is to say, we need to do more research. Perfect. Great. I'm all in favor of research. I think I'm a little less sanguine that the research is necessarily going to get us where we would need to be to have the level of quantification that is required to do this direct comparison of society-wide costs versus society-wide benefits.

Amy Sinden:

And not as important to you with what's special about particulate matter. It turns out that particulate matter, because of its chemical nature, it is literally a particle of a certain size as opposed to a chemical that has a particular makeup of atoms that we learned about in chemistry and so forth. Which means that monitoring for particulate matter is significantly easier than it is for say benzene or some other kind of pollutant.

Amy Sinden:

There was this whole slew of particulate matter monitoring stations that went up in the '70s, pretty quickly after the Clean Air Act was passed throughout the country, that gave accurate results of how much of this particular pollutant is there in various localities. This produced a wealth of hard data that epidemiologists, all of that generation of epidemiologists, so we're trying to get their PhD in the '80s and '90s. We're able to dive into this great dataset and do some real regression analysis and come up with some real results with respect to particulate matter.

Amy Sinden:

The other thing that made particulate matter easier is that it has these really immediate health impacts. Now, it also has some longer-term health impacts like cancer and other stuff, but that's not the stuff we've quantified. What we've quantified is the respiratory impacts that hit you pretty quickly, like your asthma gets worse or you get as much to begin with, and the cardiovascular impacts. Where you dropped out of heart attack like next year.

Amy Sinden:

Those are so much easier to follow for obvious reason in studies because a study doesn't have to be so long. That's part of why I'm less tangled about the notion that, we're going to do more research and we'll get better and better at quantifying all these other pollutants as well. But in terms of this first step of what I'm calling the sequential cost benefit analysis and what would it involve, again depends on context, is going to be different in different statutory contexts.

Amy Sinden:

Certainly, one of the examples I put on my slide of course was the Occupational Safety and Health Act and its standards for toxins in the workplace. That's certainly a place where the Supreme Court's famous
opinion on the Benzene Case in 1980 had a chilling effect on that agency, on OSHA. They freaked out after that opinion and were like, Oh my God, at this threshold finding stage, we have to quantify everything. We can't do anything unless we can quantify it.

Amy Sinden:
I tend to think actually that was a somewhat of an overreaction to Justice Stevens's opinion in that case, but that's a different story. But the notion is that this shows up in lots of places throughout the Clean Air Act, the Clean Water Act. We've got some threshold finding and the idea here is I'm not against data. To the extent you have data and you're able to quantify things, like the number of people that are going to die of heart attacks and respiratory problems from particulate matter. It's great to use them.

Amy Sinden:
But the beauty of not requiring the direct comparison between cost and benefits is that you don't get into that whole monetization business and you don't absolutely have to have things quantified in order for them to work in the calculus. When you have numbers, you can use them but you use them in their natural units. You talk about number of lives lost. Instead of trying to translate everything in dollar terms. You talk about acres of wetlands lost or whatever it is, that's fine. But you do it in the natural units.

Amy Sinden:
If you think about a lot of the big... In my view, virtually all of the big, controversial aspects of cross benefit analysis that have caused so much controversy in the literature for five decades now, they really all come down to this monetization business, on some level. The willingness to pay, willingness to accept conundrum, wealth effect, from a wealth effects, the problem of discount rates, all that stuff is happening because you're doing this bizarre thing of trying to shoehorn particular values that don't actually have prices because they're not traded in markets into monetary terms.

Joe Aldy:
You mentioned near the beginning of the talk the importance to think about the distribution of outcomes and the distribution of impact and how this is typically not accounted for in the standard benefit cost analysis. My sense is, and we've had some colleagues here at the Kennedy School had done some work on this in the past, is that Circular A-4 from OMB does talk about the value of distributional analysis. But the practice at agencies is that this gets, we'll be polite and say second fiddle, if it gets done at all. I'm wondering how in this sequential process, how you would try to incorporate a consideration of the distribution of impacts in that analysis.

Amy Sinden:
No, that's right. Again, I think part of the problem is that cost benefit analysis and its vision of this comprehensive rationality that's going to take into account all social costs and benefits at once and going to put everything in this mathematical calculation, it has this tendency to crowd out everything else. I would attribute some of this, the distributional impacts piece getting second fiddle to that phenomenon.

Amy Sinden:
I actually think that some of these other methods that I had up on several slides that Congress has made use of in many of our existing environmental health and safety statutes, really give more room to the
kinds of narrative descriptions that need that need to happen in the context of distributive impacts. Taking this sequential cost benefit analysis with its initial step of a threshold finding of harm from the pollutant is a perfect example.

Amy Sinden:
Because that step of the analysis would allow, for example, the kind of zeroing in on let's say a community in Cancer Alley in Louisiana, some of these communities that are suffering all kinds of cumulative impacts from a whole series of industrial facilities that have been cited down there. Some of emit toxic, hazardous air pollutants that are almost specific to that particular plant in Cancer Alley.

Amy Sinden:
There's some of these toxic air pollutants that are just emitted in a few places in the country and we're down there in Louisiana. If you look at that pollutant through the cost benefit lens where you're looking at overall social costs and benefits in the country as a whole, that pollutant looks really insignificant.

Amy Sinden:
If you towed up the number of lives you could save by reducing levels of that pollutant, it's like it's not that significant because it's just some black and brown people in one community down in Louisiana. But if you've switched to this other way of doing things, where you no longer try and look at society as a whole in the United States and putting a dollar value on everything, but you're just saying, what is the harm here, I think that's much more compatible with a zooming in on particular communities. Funds on communities and so forth, that really need more attention than they've gotten up to this point.

Joe Aldy:
We spent some time talking about executive orders from the Reagan administration, from the Clinton administration. We've not talked about executive orders from the Trump administration. I'd like to get to this question about deregulation, and it reflects a question we received in the Zoom chat as well.

Joe Aldy:
You noted in the Biden presidential memorandum on modernizing regulatory review, an interest in ensuring that we avoid harmful deregulatory efforts. Deregulatory efforts can take a number of different flavors. I've talked to regulators before where some of it is in a sense mechanical or good housekeeping. The example is, this for example, the department transportation, they review every regulation at least once over 10 years, to just see if a lot has changed. There's some cases where they actually had rules on the books that actually no longer had an underlying statutory authority.

Joe Aldy:
They're some where, as technology has evolved, say on just reporting, we think about the technology of reporting by regulated entities to go from paper, which is not all that useful now, to electronic reporting can both save costs and provide that information in a more useful format for the regulators.

Joe Aldy:
We have some deregulation or revisions regulation that are probably not... they're probably not related to the Trump administration. They're probably not what we would find all that controversial. But there is a question though there was what end of the day do we think is a harmful deregulatory effort? How
do we identify what may be harmful as a deregulatory effort? And what are your thoughts on any
lessons that can be drawn from what was the regulatory cost budget and a one-in-two-out approach in
the Trump administration under their executive orders.

Joe Aldy:
If I recall correctly, when reading the language about which executive orders are now struck by new
Biden executive orders, I don't think those are actually enforced anymore. But I'd like to hear your
thoughts about how we think about deregulation and what are benign good housekeeping, deregulatory
efforts. What may be... The world's really fundamentally changed. This may make some sense, certainly
on reporting that may make sense, but there may be other contexts where that may start to make
sense. What may be truly harmful? How would we go about identifying those that are harmful
deregulatory efforts? How would we help a regulator make sure they don't go down that route?

Amy Sinden:
I think you're right to divide deregulatory efforts into those categories. I think there's a lot to that. I think
you're also absolutely right that the housekeeping deregulatory measures is not something that I don't
think either side is particularly concerned about. I don't think anybody's going to argue that of course,
we should update the books and make sure it reflects the current state of the law.

Amy Sinden:
That's fine and that's not controversial and I think you honed in on the word that the Biden team
carefully put in that executive order, which was harmful deregulatory effects. What are the harms? I
think it's the same harms that we look at in a cost benefit analysis or in one of my alternatives. It's like
more people are going to die from air pollution or the climate crisis is going to be exacerbated. It's all of
those harms that these regulations are put in place to try to forestall or to reduce.

Amy Sinden:
I think in some ways, the harms that you're looking at... Sometimes it goes back to what I'm saying
about making primary, the agency's statutory missions. Because that's where we look to see what are
the harms that Congress had in mind when it put this statute in place and delegated authority to this
particular agency to implement that statute.

Joe Aldy:
Can I ask something specific on that? Sorry, go ahead. [crosstalk 00:49:36]

Amy Sinden:
I was going to talk about the two for one, but let's talk about this first.

Joe Aldy:
No, no, let's do two for one because it's an important question and given your expertise in
environmental law, and we've already talked some about the climate crisis, how do we actually use the
Clean Air Act to deal with climate change? Because there are some we don't argue when we think about
these provisions that are in the statute of the Clean Air Act. Very few of them... Well, many of them
were written before we even had a decent feeling, I think among at least those in Congress writing law
about climate change.
Joe Aldy:
When you think back to the 70 amendments and the 77 amendments, it was just dawning on them when they wrote the 90 amendments. Of course this part of the question as we go forward on whether it's some future clean power plan under the Clean Air Act or other regulatory approaches that people have talked about, do you consider CO2 enacts or criteria pollutant under the enacts? Do you think about using some provisions of the Clean Air Act we haven't used before?

Joe Aldy:
I'm curious your thoughts on how will we face new environmental threats? Or new relative to when many of these statutes were written, how do we make sure that we're actually reflecting what we think is Congress's objectives that they laid out in that statute? I'm curious in what you have to say but that I'm also curious about the two for one as well.

Amy Sinden:
Yeah, well let's take the climate thing first. There's a lot of pieces to that. The first thing is I really hope that the Biden administration doesn't have to rely primarily on the Clean Air Act in the way that Obama ended up doing by the end of his second [crosstalk 00:51:08] term. I really hope that for example, that the Biden administration is able to do a lot with this infrastructure bill that they say is next on the list now.

Amy Sinden:
To that point, one of the things that I have found most refreshing and optimistic about the approach that Biden has taken so far is this all-of-government approach that is reflected in almost everything they say. Almost all of the executive orders coming in now make really clear that he is not just making climate a priority, but it's front and center in everything and everything that every agency is doing.

Amy Sinden:
He recognizes that it goes to absolutely, the mission of every single department and agency of government. That's how it needs to be and it's good that it's not pigeonholing it or ghettoizing it as this is just CPA's problem, right?

Joe Aldy:
Right.

Amy Sinden:
It takes some of the pressure off of EPA. There's a lot of other stuff that's got to happen in other departments here. That's one thing, but in terms of the Clean Air Act, I think that the D.C. Circuit's opinion that came out literally the day before Biden was inaugurated, striking down the ACE rule, the Trump administration's PowerPoint rule, and in so doing, basically endorsing the fundamental approach that the Obama administration had taken its clean power plan, regulating greenhouse gas emissions from power plants.

Amy Sinden:
Their reasoning made a lot of sense to me. Yeah, the Clean Air Act was passed in 1970, before most people were talking about climate change. But you know what, Congress does this thing. They get that
the world is going to change in the coming decades and when they write legislation, they often use broad language. Precisely in order to try to new developments that may happen both in terms of scientific understandings and in the way that the world develops and that's what they did in the Clean Air Act.

Amy Sinden:
Now, that's not to say there aren't awkwardnesses in the fit. Which is part of why I really hope that Biden can use a lot of other means to do it. But that being said, I think... And back when the Obama EPA first started doing this, they had choices to make. As you said, they could have tried to go down the next route and said, we're going to have a National Ambient Air Quality Standard for CO2, for example. It certainly fits within the endangerment finding you would have to make under the statute. That would be a problem. The fit is awkward stuff for a whole bunch of reasons.

Amy Sinden:
I think they made the right judgment call by going under Section 111. I think that made sense. I think it's really doable, but I think again, it's one tool in what needs to be a much broader arsenal, even with any EPA regulation. This was part of, I think the Obama EPA strategy as well, is that they can use other relations under the Clean Air Act that go after conventional pollutants to also put pressure on the coal plants to close. Because that's what needs to happen.

Amy Sinden:
Some of that pressure came from, for example, the mercury rule during the Obama administration, and other rules that are aimed at the coal pollutants that go along with climate. That's also a big, important part of the strategy there.

Joe Aldy:
Of course, the mercury rule is an interesting example where almost all the very sizeable monetized benefits are the fine PM go-benefits that you referenced earlier.

Amy Sinden:
Yeah. Well, that's true of all the hazardous air regulations of which marketers is one. In fact, the mercury rule is the only one where they have managed to monitor some, a tiny, tiny sliver of the health impacts associated with the actual hazardous air pollutant that is mercury. Although that's not the only one that that regulation regulate.

Amy Sinden:
On the two for one, I'll just say briefly, you'll notice, I didn't mention Trump much in this talk. I don't really see the Trump administration as all that relevant in that. I had the one picture of him cutting the red tape, which I like. But I don't see it as that relevant. I see this cost benefit debate as more of a trajectory that began back with Reagan and goes through Obama. Then this crazy things happens in the next four years and then now we're back to it.
The two for one order, it's a funny thing because it shows the extent to which the right wing itself and the really hard edge of the right has itself backed away from cost benefit analysis. Michael Livermore, I think, was talking about this a little bit in your seminar a couple of weeks ago.

Amy Sinden:
I actually attribute some of that and I wrote an article about this in The American Prospect a few years ago. I attribute some of that actually to the whole particulate matter thing that we were talking about. Because remember how I told you about 94% of the total benefits that EPA is able to monetize, all are attributable to particulate matter? Well, that has not escaped the notice of the right wing think tanks. In fact, in some ways they were the first ones to notice and you can find some white papers going back a good decade now, maybe a little more, where they actually point that out.

Amy Sinden:
For that reason, they have launched a campaign against particulate matter, that involves the two for one approach, which is the departure from cost benefit analysis, but it also involves this whole fight against co-benefits and it involves the fact that some on the right have begun to literally question the very solid epidemiological science behind the fact that particulate matter causes health impacts, taking a playbook out of the climate change denial movement to try to just say, "No, no, no, the science is wrong, or something." It's interesting because-

Joe Aldy:
I think that I find it that the cynical use of the term transparency to justify discarding all of this epidemiological literacy, so the raw data can now be put into the public domain. Which they know well what they're doing there because of course the original agreements to get those individuals into those cohorts studies, we're going to ensure the confidentiality of those data. We can't put those in the public domain and it's something that is standard practice, even though we've had many replications.

Joe Aldy:
When we think about what may constitute good science is that you can undertake some interesting research, you show something and people are like, "Wow, that's a big deal. Can we replicate it?" We have. We've done this a number of times, but it is... You're right, we had back in 2017, in the spring of 2017, Ricky Rives, visit the seminar. He actually was highlighting this as something that would be a target for the Trump administration.

Joe Aldy:
I think it's clear over some of the things they attempted to do over the next few years, we're trying to remove from consideration a bit of a cost analysis, one way or another, fine particular matter benefits.

Amy Sinden:
No, I'm glad you mentioned the science transparency rule, because that's a big part of that. I will also say that since you mentioned Ricky Rives, he and a co-author at the Institute for Policy Integrity did a great article that talks about the particulate matter thing and debunks the whole co-benefits argument. They really [crosstalk 00:59:04].

Joe Aldy:
Right. Unfortunately it's one o'clock. I'd like to continue this conversation, but we need to wrap up now. I'm reminding everybody, we're going to keep a Philly theme, because we'll meet again in two weeks with Cary Coglianese of the University of Pennsylvania School of Law, Thursday, March 25th at 12 o'clock. He will present algorithm versus algorithm, a framework for governmental use of machine learning. If you're into AI, you're into machine learning this is a seminar for you. Finally, please join me in thanking Professor Sinden for her presentation and discussion today. Thank you so much, Amy.

Amy Sinden:
Thank you so much. Thanks, Joe.

Joe Aldy:
And for everyone else, I hope you enjoy the rest of your day. Take care.