**Policy 360 – Episode 93 – Jackson Ewing - Transcript**

Judith Kelley: Hello, and welcome to Policy 360. I'm Judith Kelley, Dean of the Sanford School of Public Policy at Duke University.

Judith Kelley: Jackson Ewing has written a provocative op-ed for the hill. The title is China's Foreign Energy Investments Can Swing Coal and Climate Future. The article detail something that many Americans might find surprising that China is investing heavily in coal around the world, even going so far as to build the coal sector from scratch in a variety of developing countries. Jackson writes that coal plants are either being planned or constructed in 14 countries that currently have no coal power to speak of. Plants are also being planned for 19 other countries, and those new coal plants would more than double each country's existing coal fired capacity. Jackson Ewing is with me today to discuss this.

Judith Kelley: Jackson has long focused on the topic of climate change in Asia and he's a Senior Fellow at Duke University's Nicholas Institute of Environmental Policy Solutions. He also works closely with the Sanford School of Public Policy's International Master of Environmental Policy Program. That's a program that's based in DKU, that is Duke Kunshan University in China that the Sanford School offers in collaboration with the Nicholas School of the Environment at Duke. Previously, Jackson was director of Asian Sustainability at the Asia Society Policy Institute.

Judith Kelley: Welcome to Policy 360, Jackson.

Jackson Ewing: Thank you for having me.

Judith Kelley: So let's talk about these Chinese investments in coal abroad. So why is it happening, especially now that there's so much at stake with climate change? Seems an odd time to be building coal plants.

Jackson Ewing: It is an odd time. I see a couple of driving forces at play here. The first is China's squeezing of coal at home. While coal continues to make up a substantial portion of China's energy mix, it is seeking to fairly aggressively diversify away from it. Doing so, it'll allow it to address some of its conventional air pollution problems, which have become increasingly politicized and a real hot button issue for the public in China, particularly China's large metropolitan areas which suffer many of the effects of the-

Judith Kelley: Suffocating.

Jackson Ewing: ... coal fire power pollution.

Judith Kelley: Right.

Jackson Ewing: Exactly, and has been the source of numerous protests and real disenchantment with government policy over the past decade. I think we do ourselves a disservice if we think that because China has some authoritarian governance tendencies that it doesn't pay attention to that sort of public backlash-

Judith Kelley: For sure. Sure.

Jackson Ewing: ... and in fact views this as a security issue in terms of the future of the Communist Party's control and leadership in China, and views it as a real top priority to try to really wean itself off of its basis on coal.

Jackson Ewing: Coal also creates a couple of other problems domestically for China, one of which is that it has increasingly had to rely on imports. China has enormous domestic production of coal, has large coal resources at home, but because its appetite is so veracious it has moved from only beginning to export coal... excuse me, import coal around 2010 to becoming by far the largest coal importer in the world, importing roughly equivalent to the rest of the world's importers combined. This costs a lot of money.

Judith Kelley: Right.

Jackson Ewing: And so, these expenditures also make it more appealing for China to move further into hydro sectors, further into nuclear, further into solar and wind, and particularly into gas for its baseline power production and industrial activities.

Jackson Ewing: The third real force behind weaning off of coal domestically for China is that it is seeing a glut in some of the really coal dependent industries like steel and construction. So as too many of those products to absorb in its domestic markets or through exports, you see a lower demand for coal that dovetails with these other forces that I describe.

Jackson Ewing: So what do these domestic factors have to do with China's investment internationally? It is really the case in which you have powerful state owned enterprises and policy banks as they're called in China, the China Development Bank and the China Export-Import Bank, which need a place to put their capital in the case of the financiers and a place to utilize their expertise and equipment and capacity in the case of the state owned utilities and electricity companies, and so they're going abroad and they are building these coal fired power plants, and really as you mentioned in your opening remarks, entire sectors, sometimes in countries with large populations, high energy and electrification deficits, are real potential for growth in their coal fired power consumption for decades into the future. These are going to have really lasting effect.

Judith Kelley: So the analogy that comes to mind for me is when the tobacco industry in the United States, once the discoveries was made about how harmful tobacco was as the tobacco industry was heavily clamped down upon by the federal government, but what they did instead was start heavily exporting, creating dependencies among youth in developing countries on tobacco. But there you see sort of a direct profit link. We're simply transferring our production and now we're going to be exporting what would have been domestically consumed, and we're now going to make sure we have a market elsewhere. It sounds a little bit like it in the sense that what they're exporting you say is their expertise. But surely much of that expertise could be tweaked to more friendly, climate friendly technologies and certainly the capital itself should be fungible and not necessarily... So why are they choosing to invest in coal where they know they're going to be up against a fight in some ways?

Jackson Ewing: I really appreciate the tobacco comparison. When I was based in Southeast Asia in the late 2000s, I remember arriving for one of the first times in Jakarta and seeing this big billboard with the Marlboro man and the horses riding across the plane, and I thought, wow, that reminds me when I was a kid in America when tobacco companies could still advertise like that and it really did feel like, from a public health perspective, they were a couple of decades behind and that the squeezing of the tobacco sector in the U.S. had opened up, or I should say, amplified the importance of these developing [crosstalk 00:06:37]-

Judith Kelley: Deliberately targeted actually. I mean-

Jackson Ewing: Certainly, certainly. And of course, smoking is an enormous public health problem in many of those countries as is coal.

Jackson Ewing: Your question though about why coal investment, given all of its problems and given potential alternatives, is an essential one and I should say, I do think that there is room for China to pivot towards investments in other sources of energy, and that that is not beyond the pale or unreasonable to expect in decades to come, but we do have to keep in mind that some of these interests at the state owned enterprise level in particular are fairly specific. It is not so easy for them to transition their activities that have been predicated on the kind of scientific and technical basis of developing coal fired power stations into another sort of energy sector, into another sector altogether. And so, from that level, we can understand similarly to how coal transitions are working in the west in debates in the United States, debates in Germany. We need somewhere to try to shift that labor, that expertise, that material toward, and that can be a rocky process.

Jackson Ewing: But I think that your question also hence at another part of China's impetus for this investment and for this activity, which I should note, spans really the gamut of what it takes to create a coal fired power station, investment, underwriting, actual technical expertise, actual materials at times being auctioned off, some of which are older and far beneath the most technically advanced coal fired power stations, which China's more apt to build at home, and that it's also part of China's geopolitical play to bring the developing countries, particularly those in its near abroad, further into its sphere of influence, and that building such infrastructure might not always be profitable in a conventional sense, but it can indirectly help to build markets through the industrialization that it elicits and through the help that it can provide to these countries to bring their populations into middle income where they can become better purchasers of Chinese goods.

Jackson Ewing: Diplomatically speaking, I think does get into some of the economic dependence arguments, and some of the loan structures in particular can create rentier states or states that are at the very least beholden to China's continuing largest and continuing investment, and that in many ways is in China's foreign policy interests as it conceives of them.

Judith Kelley: Right. So is it the case then that these investments in coal are sort of picking the lower hanging fruit of energy development in those countries then?

Jackson Ewing: You know, there's something of a volleyball being hit back and forth across the net. If you speak to many Chinese officials, and they are very much on record as saying this, about why invest in coal when you could be investing in hydro, nuclear-

Judith Kelley: Air.

Jackson Ewing: ... air, certainly-

Judith Kelley: Solar.

Jackson Ewing: ... solar and wind, they say, "Well, we're happy to invest in those technologies, and we have the expertise, and we have the production capability, and we have the capital," but they want coal. It's steady, it's baseline, it's more understood, it is in some cases potentially quicker to bring onto the grid, although building a coal fired power station is no quick prospect.

Judith Kelley: Right.

Jackson Ewing: And if you speak to many of the recipient countries, they say, "We would love to have investment in these other sources, but China's coming with coal, and they're coming with coal first and they're promoting coal out in the front." This is a conversation that's been ongoing for years, and I think that the reality is going to be case by case and it's going to be somewhere in the middle.

Judith Kelley: So what countries are we really talking about?

Jackson Ewing: The countries that I've focused on and that I mentioned in the piece are fairly large population countries with those sorts of electrification deficits, so Pakistan, Myanmar, Vietnam, a number of the larger African countries, there's a very large coal fired power station in Kenya, for example. And while there's discussion of further investment into energy production and corridors in central Asia and further afield, it's really the large population countries in southeast... south and Southeast Asia, excuse me, and in Africa.

Judith Kelley: Are they building like in conjunction with other infrastructure projects partly to power those, or is it just those are the markets they...?

Jackson Ewing: The majority of the coal fired power production is for electrification itself. I would hesitate to say it's in conjunction with other infrastructure projects, but it's certainly adjacent and it's certainly part of a larger whole. China's Belt and Road Initiative is at once kind of a vague umbrella under which a number of different infrastructure projects are captured, which have very little to do with each other, and at the same time it's kind of a core part of China's foreign policy vision that does have some degree of strategic coherence on what it's trying to achieve, which is no less than to help connect to the world and have that connectivity run through China.

Judith Kelley: Right. And some of these countries just have nothing already in terms of coal or little-

Jackson Ewing: In some countries, there's... and Pakistan here is a great example, there was virtually no coal fired power production the very recent past, and we are quickly moving into the 40%, 50% range of their overall energy mix coming from coal. That is of course not just because of China. These are national decisions that they've made, and it's important to keep in mind that these electrification deficits are real. It is absolutely essential for them to continue to improve the quality of lives of their citizenry for them to bring power into their country, to have to be reliable, but they have decided to go with coal and China is by far the primary, if not sole financier in many of the cases.

Judith Kelley: So you're saying that these countries that are not taking up coal that they should account sort of more fully for the cost of coal? So without getting sort of too deep in the weeds on that, could you talk a little bit about how they would do that?

Jackson Ewing: Sure. I think a more complete valuation of coal is in the interest of the recipient country and in the interest of China.

Judith Kelley: How so?

Jackson Ewing: The recipient country, if we do factor in the public health costs that are likely to attend coal, leaving aside completely climatic changes that it would be contributing to, because that's more difficult to kind of disaggregate from the global picture, then we see its financial viability in the longterm really decline significantly. And with the time horizons that we're talking about, if you build a coal fired power station, you want it to operate for decades into the future. And so if we do take a kind of a more life cycle sort of economic and strategic approach to valuing what that plant will do for you economically and socially for your country, it becomes a fairly poor prospect relative to other energy sources, including energy sources that can offer baseline energy, and including fossil fuels like natural gas in particular.

Jackson Ewing: And so, if these countries were to use some kinds of policy tools, whether it be pricing the externalities of coal, or whether it be having-

Judith Kelley: And by that you mean finding out what the actual public health costs amount to, the decline in quality of life, how much people value that and putting prices on that.

Jackson Ewing: Certainly. And public health I think is chief among them, but work absenteeism is part of that kind of longer term economic prospects. The ability to really move your country into middle income and beyond, I think it's not the appropriate or wisest approach to use the energy sources of the past rather than the energy sources of the future. We have this opportunity to do this kind of build. And so finding ways, whether it's through valuing those externalities and inputting that into your decision making processes, or having more top-down approaches that will put some standards on how many renewables and what percentage of gas you'll use, what percentage of hydro, et cetera, in your energy mix, can also lead to some curtailment of that onboarding of coal.

Jackson Ewing: Now, for China side, I think it's more indirect but still quite relevant. If we take China's interest at face value as to what they say they are, connecting these countries and building these markets, then those sorts of public health costs and problems that can arise from decades of coal fired power production in the future will indirectly impact them in the ways in which they achieve the goal of having vibrant middle income and rise in countries on their periphery.

Judith Kelley: So in some ways this kind of cost benefit analysis has already been done. I mean, the UK and others have done the math and have said, "No, thank you." So why are these countries just not reading up on the facts? Is their discounts, the way they think about the future just not appropriate because they're too desperate to get up and running on something, or what's going on this though?

Jackson Ewing: I would hesitate to paint with too broad a brush on the recipient countries. I think that the individual contexts are all different and there's not an enormous amount of uniformity throughout recipient countries on the Belt and Road. But with that said, I think that you kind of hit on the answer in the final part of the question, which is there is an urgency to the need for electrification and the needs of industrialization in the eyes of policy planners. And like many parts of the world, and we're certainly not immune to this in the west, those needs of the day are taking precedent over some of the longer term strategic imperatives.

Judith Kelley: Right. And let's just say there're maybe discounted pieces of old plants and other things available. It's kind of like what we did for a long time with selling our old buses or whatever to developing countries. I remember traveling in parts of the world and having... Dana is writing inside the bus and going, "Why is this bus here?"

Jackson Ewing: In the Philippines, they have this really highly used motor transportation called the jeepney.

Judith Kelley: Yeah.

Jackson Ewing: And it began with converted U.S. army jeeps at the time which the U.S. was the colonial power roughly between 1900 and the end of World War II. They've since began constructing them themselves, but it is that same kind of vestige of the past.

Judith Kelley: Exactly. Yeah. So does China at least not have to worry about the international backlash against this strategy? I mean, we have the UN Climate Change Summit, will be in Chile later this year. Is this not likely to be something that's put on the table? China, you need to own some of the responsibility for this. If you're inducing these emissions in other countries strategically now, that's on you. Is that not likely to happen, or what's your thought on that?

Jackson Ewing: There are avenues in the international arena for criticizing China's behavior on this issue and for trying to engender a dialogue about its impacts on climate change and how if China is to truly meet its international commitments, it needs to alter this behavior. But it's important to note that when talking about criticisms of Chinese investment abroad, I think that this is probably third or fourth on the list at best right now.

Jackson Ewing: The criticism around China's geopolitical interests in building infrastructure that could be used for military purposes is certainly, I think higher on the international agenda at present in conversations in the UN system as well as in the G20 and in other regional dialogues. Issues around China's loan practices and the ways in which it can get the recipient developing countries into debt cycles, issues around labor and social justice for the workers involved and some of the infrastructure projects, also I think takes precedence over the pollutive impacts of some of the infrastructure in the energy sector. But it is certainly on the agenda.

Jackson Ewing: There is a track in the UN Framework Convention on Climate Change, which you mentioned will be meeting later this year in Chile that is called enhanced transparency measures, and it is meant to capture some of these investment flows and the emissions impacts that they have. At this point, and this is really well entrenched after two and a half decades almost of one form of negotiation or another, that emissions are calculated nationally and they are calculated based on production, not based on consumption. So while we could take an approach in international climate dialog try to-

Judith Kelley: Trace investors and... Yeah.

Jackson Ewing: Right, trace investors, but also to say... One of China's long held arguments is, well, sure our emissions are very high, but we're the manufacturer of the world. So you consumer that's consuming all of our products, you're culpable for some of those emissions itself. And I think something similar could be said here in a countervailing way toward China on this investment into the coal fired power production in a recipient country. Yeah, sure, this is happening in our country, but we've had this built by China. The emissions blood is on their hands as well. That's simply not the way the system works though. We talk about what is being emitted domestically, and that is the way that we go about measuring, and that's the way that we go about assessing what our own commitments are. And I think that at its core is unlikely to change.

Judith Kelley: And is that what's going to propel change over the long run, or is that... You sound like you don't think that's the right metric.

Jackson Ewing: Well, I don't think that it should be absent from the conversation. I think a broader discussion of investment in coal specifically, and let's leave the other fossil fuels out of that for now, at those sorts of forums, the G20 certainly, the UNFCCC and Enhanced Transparency Track are completely appropriate and should not single out China. South Korea and Japan also invest in coal. We continue to have western financial organizations and even development finance organizations investing in coal, not to the extent that I'm describing from the Chinese side, but to a significant extent as well. That should not be ignored, and I think that we could get more parody and more productiveness out of a conversation that speaks more broadly about coal investments internationally, and the need to roll those back and truly start to wean ourselves off of this most polluted source of greenhouse gas emissions and conventional pollutants.

Judith Kelley: In your view, how is the U.S. doing on this now?

Jackson Ewing: Well, the U.S. of course is facing a declining coal sector at home. We continue to have large coal reserves that could hypothetically be exported in the future, and the U.S. has not gone that direction at present. But I do think that with some of the embrace of coal that we've seen from the current administration, that the U.S. exporting coal is a more likely prospect than it has been in years, in decades past, although still at this point, unlikely on a large scale.

Judith Kelley: I wonder whether sort of geopolitically with the U.S. having pulled out of the Paris Agreement and then the administration being rather friendly towards coal in general, this lessens China's worry about their investments.

Jackson Ewing: The U.S. has, at the federal level, no legitimacy to criticize Chinese investments into the coal sector abroad because of that decision to withdrawal from the Paris Agreement. It's important to note that the U.S. can't officially withdraw until 2020 because of the stipulations in Paris, and having been there, I can recall that that was very much with an adversarial potential future presidency in mind that that withdraw language and stipulation was created. But that said, the U.S. can and has, at least at a federal level, began to ignore its commitments under the Paris Agreement and there's nothing to stop it from doing so moving forward. The sub-national picture in the U.S. is different, but perhaps a conversation for another day. But as far as trying to pull any levers in the international arena on Chinese behavior on this topic, I don't think that the U.S. is in good standing to do so [crosstalk 00:23:45]-

Judith Kelley: To do so right now.

Jackson Ewing: ... those decisions.

Judith Kelley: So you've been going to these global talks for a long time and will be headed to Chile, you're going to go there. So how bullish are you on those talks on how in general bullish are you on planet earth?

Jackson Ewing: Now we get down to it, Judith. Thank you. So the recently concluded negotiations in Katowice, Poland, were interesting on a number of fronts. It appeared... Well, first of all, let's backtrack just for a moment to what the Paris Agreement, which is the agreement that really drives current efforts to address global climate change is based upon, and it's based upon a reversal from past efforts, which were viewed as at least partially a failure. Those past efforts really pitted develop... Well, excuse me. Those past efforts really divided quite explicitly efforts that were made by developing and developed countries, which were placed in quite explicitly in well spelled out different categories, and the developed countries were expected to meet quantitatively negotiated emissions reduction targets and provide finance to the developing countries which face no similar reduction targets themselves.

Judith Kelley: Right.

Jackson Ewing: What the Paris Agreement did, and this really began to take force after the failures of an earlier conference in Copenhagen to-

Judith Kelley: Thank you.

Jackson Ewing: Yeah, of course, There we go.

Judith Kelley: In which they had the whole city lit up with Christmas lights during the

Jackson Ewing: You know, the weather was bad, people were in a bad mood-

Judith Kelley: It was just not that kind of day.

Jackson Ewing: It didn't go terribly well.

Judith Kelley: Yeah.

Jackson Ewing: The calendar date had been circled for too long. Everyone was feeling the pressure.

Judith Kelley: Yeah.

Jackson Ewing: But really when Copenhagen failed to deliver on what it sought, the subsequent years leading up to Paris said, "Okay, let's take a new approach. Let's ask countries to voluntarily determine what they can do to address climate change, spell that out and bring it to the table. We will then discuss those..." initially called Intended Nationally Determined Contributions, "and we will aggregate them and see what they mean for global emissions reductions over time. We will then go about developing methodologies to create some uniformity among these nationally determined contributions at least in their style and at least in their modes of measurement, and we'll also attempt to, through diplomatic peer pressure, have countries ratchet up their ambition over time.

Jackson Ewing: And through coming together year after year and reviewing what folks are doing, and talking about how we can measure this, and talking about how we can increase efficiencies, and we could potentially trade emissions credits across borders, and we can transfer finance to places where it can be most advantageous, and we can provide the sorts of resources that are needed to adapt to climate change, that we will remove some of those kinds of classic diplomatic loggerhead moments that we had really plague the previous generation of climate negotiations and move into a place that while imperfect and while not legally binding, does put us all on kind of a playing field that we can be happy with and that we can move forward upon."

Jackson Ewing: What happened last year was arguably, I think the most important climate conference since Paris, in that it's sought to develop a rule book for how this would all work. And it's sought to really codify what I just described as some sort of uniformity among efforts to reach the Paris Agreement goals and kind of clear and more specific pathway forward for how we will review over years and how we will ensure that the emissions reductions that are being declared by countries have veracity, and that we are looking at the different sources of emissions reductions like planting of trees, or the preservation of forests, or shifts in land use or reductions in the consumption of fossil fuels in a way that makes a ton of greenhouse gas emissions in one location, the same as a ton of greenhouse gas emissions in another, and that we can continue to try to find some synergies among countries.

Jackson Ewing: The debate that ensued there though did reveal some of the old rifts, and there have been calls from a number of powerful developing countries to have more differentiation among the different processes that will be used to reach these nationally determined goals, not just the goals themselves, but the actual methodologies and approaches. And there are justifiable concerns about the capacity of some of those countries, and not just in a cynical way that outsiders are saying we can't believe what they're saying, but also with the countries themselves raising their hand and say, "Hey, we have difficulty on a capacity level in actually measuring all this stuff and getting these reports done in a way that you are calling upon us to do. We need to help."

Jackson Ewing: And so much of the dialogue was around that set of issues and ultimately a transparency agreement was hammered out over time. There was great debate about how to deal with a recent IPCC, that's Intergovernmental Panel on Climate Change report that put a fairly kind of fine point on what it would take to keep global warming-

Judith Kelley: And the urgency-

Jackson Ewing: ... to a 1.5 degrees centigrade over preindustrial levels, and ultimately in part, because of opposition of the U.S., that report was only recognized rather than welcomed, which in diplo speak means that it can't be viewed as binding for yeah of activities in the future, and ultimately the kind of larger shortcoming, which will loom large moving forward, is how we will manage international transfers of emissions reductions through markets. And that led to an impasse in Katowice and will be kind of front and center on the table in Chile.

Jackson Ewing: How optimistic am I?

Judith Kelley: Yeah.

Jackson Ewing: I think that the new approach is a better approach than the old one. And many of my friends and colleagues disagree with me about this because they say that it can be a paper tiger and everyone is just allowed to voluntarily shift what they do and what they say over time. And to that I'd respond, well, the old system was like that, too. It just pretended it wasn't. Countries were demonstrably able to pull themselves out of commitments that they'd signed up to that was seen in cases in Canada and Japan. Other countries that are the most conspicuous being the United States, was never able to get domestic support for what it would sign up for in international arena, so they never became legally binding in the way that they were meant to be. This does equalize a lot of those issues, and it does remove some of the classic loggerheads between two very large camps, developing and developed countries. And I think in that sense, it is a better system for achieving real emissions reductions in the future.

Jackson Ewing: But that said, in these early years since Paris, emissions continue to rise, consumption of some of the most problematic fuel sources, coal chief among them, continues to rise. Many of the forecasts that we see from leading groups like the International Energy Agency suggests that that will continue to be the case for decades into the future. There's plenty of debate about whether those trajectories will bear out or not. But certainly we have not seen, since this new approach really took hold, the kind of reversal of greenhouse gas emissions growth that we need to.

Jackson Ewing: I think that over the next decade, really until 2030, we face an inflection point that's even more severe than that, which we realized we faced 10 years ago. And because of the cumulative effect of greenhouse gases in the atmosphere and the time horizons with which they operate and continue to have impacts on our societies, this is going to be the time when we do need to see that peaking and we do need to see that decline, and that decline has to become much more rapid in the future. I tend to hedge toward optimism, and so, myself and I think roughly about 20,000 others will be there to do what we can.

Judith Kelley: So if you were sitting in our adjacent solar system looking down on planet earth, watch share of your stocks would you put in?

Jackson Ewing: What, sorry?

Judith Kelley: What share of your stocks would you put on planet earth if you were sitting there in the adjacent solar system and weighing your options?

Jackson Ewing: I guess I have to give you a number. I'm doubling down.

Judith Kelley: Okay.

Jackson Ewing: I'm doubling down on earth, and I do think that if we do get to a truly critical period and we do face the acute challenges of runaway climate change, that we're going to start taking some fairly extreme measures. And we capture many of those extreme measures under the moniker of geoengineering, which essentially says, all right, instead of trying to reduce our impact on these systems, let's actually try to impact them proactively in ways that will get a result that we want. So this could be shooting sulfates into the atmosphere that will reflect some sunlight back and keep it from reaching earth and a number of other measures that could trap more carbon in oceans, et cetera. They all have very significant impacts beyond climate change that are quite confronting and that make them problematic, and that make us not want to rush into doing them. But if we get there, I think that's what it would ultimately look like.

Judith Kelley: We're pretty creative species. In any case, you can double down and if it doesn't work out, we'll be going down with the ship. So we have every incentive to all double down.

Jackson Ewing: We have every incentive, but incentives are a funny thing. I think that there are so many near term incentives that drive the status quo and that really matching up some of the kind of cross-generational interests and incentives with those incentives of profitability, and of employability, and of just the kind of inertia of business as usual in the near term is really the crux of the climate challenge. And we've been facing that from the first day that we began to understand this, and we still face it right now

Judith Kelley: Well, Jackson, thanks for joining me today.

Jackson Ewing: Thanks for having me.

Judith Kelley: Jackson Ewing is Senior Fellow at Duke University's Nicholas Institute of Environmental Policy Solutions. And as I mentioned, he's also working closely with an exciting new master's program that is offered by the Sanford School and the Nicholas School of the Environment, and that's an International Masters of Environmental Policy and it is offered in China. So hopefully we'll be able to educate a cohort of folks who can interact with the Chinese government and speak precisely to the issues that we've been discussing today.

Judith Kelley: And I also want to say this is our last Policy 360 episode for the academic year. It's been a pleasure taking over as host this year, and I hope you will make your way through our archives this summer. Think of us as a twist on beach reading. Thanks for joining me. I'm Judith Kelley.